THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF HEALTH

NATIONAL HEALTH ACCOUNTS FOR FINANCIAL YEARS 2020/21 & 2021/22

USAID FROM THE AMERICAN PEOPLE
World Health Organization
Investing in our future
The Global Fund
To Fight AIDS, Tuberculosis and Malaria

UNITED REPUBLIC OF TANZANIA

MINISTRY OF HEALTH

NATIONAL HEALTH ACCOUNTS YEAR 2023

USAID
FROM THE AMERICAN PEOPLE

World Health Organization

The Global Fund
To Fight AIDS, Tuberculosis and Malaria

Acronyms

CHF	Community Health Fund
DGGE	Domestic General Government Expenditure
GDP	Gross Domestic Product
GGE	General Government Expenditure
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
ICD	International Classification of Disease
ITN	Insecticide-treated bed net
LGA	Local Government Authority
LLIN	long-lasting insecticidal nets
MOFEA	Ministry of Finance and Economic Affairs
MOH	Ministry of Health
MSD	Medical Stores Department
NBS	National Bureau of Statistics
NCDs	Non-communicable Diseases
NGOs	Non-Governmental Organizations
NHA	National Health Accounts
NHAPT	National Health Accounts Production Tool
NHIF	National Health Insurance Fund
HAPT	Health Accounts Production Tool
NMCP	National Malaria Control Programme
NPISH	Non-profit institutions serving households
NPS	National Panel Survey
OECD	Organization for Economic Co-operation and Development
OOP	Out of Pocket Payment
PORALG	President's Office-Regional Administration and Local Government
SHA	System of Health Accounts
STDs	Sexually Transmitted Diseases
TACAIDS	Tanzania Commission for AIDS
TGDHE	Total Government Domestic Health Expenditure
TGFHE	Total Government Foreign Health Expenditure
TGHE	Total Government Health Expenditure
THE	Total Health Expenditure
TZS	Tanzanian Shilling
WHO	World Health Organization
USD	United States Dollar
CHE	Current Health Expenditure
HK	Capital Formation

Foreword

Healthcare has been a focal point for Tanzania for over a decade, beginning in 2009 when the country made a deliberate commitment to reform its health financing systems. Recognizing that health financing serves as a backbone for all other aspects of the healthcare system, Tanzania developed a draft Health Financing strategy informed by various policy studies. These strategies aimed to reform the entire health financing system, including the development of mandatory health insurance, the improvement of payment mechanisms from input-based to output-based, and the strengthening of public financial management at all levels.

Within the Health Sector Strategic Plan Five (HSSPV), health financing reforms were stipulated, designed to address critical aspects such as assessing the current level of total financing for healthcare, mobilizing additional funds for optimal health services, understanding resource allocation and utilization within priority health programs, and among different population groups through strategic purchasing. The National Health Accounts (NHA) emerged as an invaluable tool, providing essential health financing data and indicators for informed policy decisions and planning.

The Tanzania (mainland) National Health Accounts (NHA) 2021/22 undertakes critical analysis to monitor fund flow in the health sector for the financial years 2019/20, 2020/21, and 2021/22, marking eight consecutive years of NHA updates since 2014/15. This institutionalization of NHA studies and the provision of recent updates on health financing data positions Tanzania as one of the leading countries in Africa with the most recent health financing updates. Gratitude is extended to key partners, particularly WHO and the USAID-PS3 Plus Project, for their crucial technical and financial support, which made this accomplishment possible.

The entire health sector is appreciated for their willingness to share valuable information, upon which this exercise is built. Assurances are given regarding the confidentiality of this information, and cooperation is encouraged for future NHA assessments. Stakeholders are urged to utilize the gathered information for planning future interventions and to provide feedback for continuous improvement.

Special recognition is given to the local NHA team for their unwavering commitment throughout the process. Other professionals are invited to join the NHA team, recognizing the need for diverse specialties to complement the existing team. This collaborative approach ensures a more comprehensive and effective execution of future NHA assessments.

Ummy A. Mwalimu (MP)
MINISTER FOR HEALTH

Executive Summary

Introduction

The National Health Accounts (NHA) serves as a critical policy tool, offering insight into health spending patterns across diverse funding sources. This report covers health spending updates for Tanzania mainland for 2021/22, spanning three years from 2019/20 to 2021/22 whereas 2019/20 serves as a base year. The report includes both Current Health Expenditure(CHE) and Capital Health Expenditure (HK).

General Findings

In 2022, the Total Health Expenditure (THE) reached Tsh 6.83 trillion (equivalent to USD 2.9 billion), showing an increase from Tsh 5.35 trillion (equivalent to USD 2.3 billion) in 2020—an increase of 26 percent. THE encompasses both Current Health Expenditure (CHE) and Capital Formation Expenditure (HK), with CHE representing 97 and 98 percent for the years 2021 and 2022, respectively.

In 2022, Total Health Expenditure (THE) accounted for 5 percent of GDP, greater than 4 percent recorded in 2020. The government's expenditure on health, as a percentage of total government expenditure, rose from 6 percent in 2020 to 8 percent in 2022. Per capita health spending reaches 114,752 TZS (50 USD) in 2022, reflecting an increase from 95,292 TZS (40.9 USD) in 2020.

Health Financing Dimensions:

Over the span of three years, the government's share of contribution to the health sector has shown a consistent increase. In 2022, government funding accounted for 34 percent of the Total Health Expenditure (THE), which has increased from previous years. Similarly, in Current Health Expenditure (CHE), government contribution rose to 32 percent in 2022, a notable increase from 23 percent in 2020. Conversely, the contribution from donors has declined over the same period, dropping to 23 percent of THE in 2022, down from 33 percent in 2020. Meanwhile, the proportion of health insurance in total expenditure has seen a significant uptick, reaching 17 percent. However, Out-of-Pocket expenses remain substantial, constituting 27 percent of CHE. In general, domestic contributions make up three-quarters of health expenditure,

with foreign spending accounting for approximately a quarter of the total health spending.

Health Financing in Service Provision:

Expenditure at Referral Hospitals, covering from district hospitals to national facilities, increased to 40 percent in 2022, up from 36 percent in 2020. However, spending on primary health care experienced a decline, partially due to challenges in accurately allocating salary expenses. A notable portion of spending comes from self-managed agents or managers of health resources, indicating their direct involvement in service provision. There has been a significant rise in health systems administrators, increasing to 14 percent from 3 percent in 2020, due to improved methodologies for expenditure categorization. The primary inputs in service provision, including materials and services, accounted for 45 percent in 2022, a rise from 32 percent in 2020, with compensation witnessing a substantial 74 percent increase between 2020 and 2022.

Health Financing in Consumption:

A significant portion of health resources focused on curative services, but there's been a notable shift in recent years. Spending on curative care decreased from 86 percent in 2020 to 67 percent in 2022, while spending on preventive care has doubled during the same period. This increase, particularly in 2021, may be linked to pandemic response measures. Expenditure on health administration functions has risen from 1 percent to 11 percent, which is mainly due to improved methodologies in capturing administrative costs.

On the side of disease specific spending, non-communicable diseases (NCDs) have seen a significant increase in expenditure, doubling between 2020 and 2022. This rise mirrors the growing burden of NCDs in the country. Infectious diseases still account for a higher amount reaching 52 percent in 2022 an increase from 26 percent in 2020.

Financing in Capital Formation:

Purchase of medical equipment dominated in 2021, while infrastructure took precedence in 2022. Infrastructure investment surged by 106 percent between 2021 and 2022, accompanied by a 15 percent increase in transport equipment spending.

Recommendations

- Implement strategies to enforce the newly established act mandating every citizen to join Universal Health Insurance so as to reduce out-of-pocket expenditure while ensure sustainable domestic financing

- Allocate more government funds through earmarked taxes to ensure equity in access to healthcare.

- Enhance donor coordination to align partners with sector priorities and promote transparency between the government and donors.

- Maintain increased financing for preventive health interventions to reduce the demand for curative care.

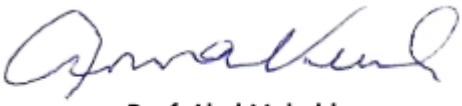
- Improve public financial management at all levels to ensure accurate expenditure tracking.

- Allocate more investment towards primary healthcare services to reduce the burden on hospitals.

- Focus on enhancing the productivity of community health workers by emphasizing health promotion activities.

- Prioritize building national capacity for non-communicable disease (NCD) prevention and health promotion approaches.

- Promote the use Electronic Records at the facility to ensure proper capturing of diseases spending utilization



Prof; Abel Makubi
PERMANENT SECRETARY
MINISTRY FOR HEALTH

Content

List of Tables

List of Figures

1. Introduction and Background

The National Health Accounts (NHA) system serves as a valuable policy tool, offering a structured depiction of financial transactions within the health sector. Ministries of health have utilized this tool to monitor the flow of funds in the health sector, examining various perspectives on health financing over time. Since 2015/16, Tanzania Mainland has been dedicated to institutionalizing NHA studies exercises. Therefore, the country has consistently provided updates on health spending for the fiscal years spanning from 2017/18 to 2019/20. Currently, the focus is on the 2022 update, encompassing the Financial Years 2020/21 and 2021/22.

The primary incentive for these periodic updates lies in the usefulness of NHA for planners and policymakers, particularly in the context of effective resource allocation. This report considers the base year as 2019/20, acknowledging that certain data, such as Capital formation for that year, were not analyzed due to limitations in available data.

The NHA for the year 2021/22 will act as the reference point for assessing the comprehensive performance of health financing, given the recent endorsement of the Universal Health Insurance Act, which mandates the enrolment of every citizen in health insurance schemes. Conducting NHA studies will play a crucial role in monitoring the influence of health insurance on supplementing domestic financing and entire health financing reforms. Simultaneously, it will allow for the examination of the impact of these on out-of-pocket expenditures.

1.1. Policy Objectives of the 2021/2022 NHA

The NHA report for the 2021/22 has specific objectives and goals. The objectives stipulated for the 2021/22 are as follows:

- Generate estimates of total healthcare expenditure (THE) within the country, offering a breakdown of sources of healthcare

financing categorized by different financing schemes.

- Serve as a foundational year for the evaluation of the effects of health financing reforms implemented by analyzing the financing flows from the source to the end user.

- Provide recommendations for additional improvements necessary to strengthen health financing in the country.

1.2. Tanzania Mainland health financing systems

Healthcare financing in Tanzania Mainland is financed from government contributions, donors, households, and health insurance. Since 2010, the country has been committed to reforming its entire health financing systems, leading to the development of the draft National Health Financing Strategy (HFS). This strategy encompasses various proposed reforms, including resource mobilization, where the primary focus is on introducing mandatory health insurance for all citizens. Another key aspect is the purchasing side, recommending a shift from input-based approaches to more strategic purchasing. Additionally, reforms target improvements in public financial management and governance of health insurance systems, aiming for better coordination due to identified fragmentation in regulations.

The strategy reached finalization in 2016, with some components pending inter ministerial approval. Nevertheless, some strategies such as strategic purchasing and improving public financial management have been actively implemented. Recently, the country approved the Universal Health Insurance (UHI) Act, mandating every citizen to have health insurance. This marks the conclusion of the entire Health Financing Strategy.

During the study period, Health Insurance played a pivotal role, significantly contributing to overall health spending. Thus, the approval of the UHI Act necessitates effective enforcement for mandatory health insurance enrolment, alongside the allocation of funds to facilitate the inclusion of indigent individuals in health insurance. The forthcoming NHA studies will serve as a crucial tool for monitoring the progress of

these reforms over time.

1.3. Organization of the Report

The 2022 National Health Accounts (NHA) report comprises six main chapters. The second chapter explains the methodology and analysis used, while the third chapter presents General Health Financing Findings. In the fourth chapter, attention shifts to Health Financing in service provision, and Chapter Five probes into the analysis of Health Financing in consumption. Finally, Chapter Six offers' conclusions and recommendations.

Throughout the analysis of Current Health Expenditure (CHE) and Capital Expenditure, the focus remains on examining CHE, which accounts for nearly 100 percent of Total Health Expenditure (THE). Data pertaining to CHE is accurately analyzed based on NHA dimensions. However, the discussion on capital formation is reserved for the last but one chapter, as its expenditure is not categorized in alignment with CHE financing dimensions.

2. Methodology

The 2021/22 National Health Accounts (NHA) was prepared using an internationally recognized and standardized methodology known as System of Health Accounts (SHA) 2011. The methodology was developed by WHO, OECD, Eurostat, and other development partners to facilitate tracking of health spending and establish comparisons over time within and across countries. The system allows countries to customize minor modifications to ensure compatibility with the country's health financing system.

NHA framework defines classifications for health care expenditures and presents health expenditures in the form of matrices linking sources of funding, institutions managing funds, providers of health services, uses of health services and factors of provision (inputs) used to provide the services.

2.1. Data Sources

In estimating health expenditures, primary and secondary data were collected from employers, health insurance schemes, nongovernmental organizations (NGOs), development partners, government ministries and institutions in the health sector. Collection and analysis of health expenditure data was National Health Account Production Tool – (NHAPT). The NHAPT supports production of standardized data collection instruments, data mapping and cleaning. The software also produces the NHA Tables/Matrix which are used for final analysis.

I. Primary Data

Primary data were collected from the following sources.

- **Private Employer**: It is common across sectors for employers to provide different incentives to employees and one of these incentives is health benefit as a part of attraction and retention strategy. To estimate the employer's contributions to health, a list of firms with more than 100 employees was generated from the 2010 NBS master employer list. A total of 97 private

employers were drawn from this list and were supplied with the employer data collection tools. The response rate was 64 percent for 2020/21 and 2021/22.

- **Health Insurance**: The survey was administered to 7 health insurance agents whereby 6 responded, implying a response rate of 85%.
- **NGO**: Data collection tool was administered to a total of 83 NGOs in FY 2020/21 and 2021/22 with a response rate of 72 percent.
- **Donor**: Given that the principal source of funds for NGOs are donors, the study also administered a donors survey. A total of 27 donors have a response rate of 75 percent for FY 2020/21 and 2021/22. The donors who have responded are the major one's accounting for more than 80 percent of total donor financing in the health sector.

As most employer funds are overseen by health insurance entities, the reported funds were tallied in correlation with those released by health insurance agencies/funds. Given that donors are the primary funding source for NGOs, a triangulation process was conducted , cross-referencing funds from donors with those reported by NGOs to identify and eliminate any occurrences of double counting. Data from donors and employers, not originally reported by NGOs and insurance entities, were retained to uphold the accuracy of the estimated expenditure.

II. Secondary Data

Government Ministries/Departments Data

The information from government (Ministries and Institutions) health expenditures was collected from the MOF, MOH, PORLAG (Health), Regions, TACAIDS, and other ministries. Data were extracted from the national itemized reports produced by MOF and validated using the itemized reports from specific ministries. To get more details on the inputs used and uses of funds (factors of provision and function) the itemized files were linked with the Medium-Term Expenditure Framework (MTEF) using Stata.

Local Government Authorities and Regional Authorities Data

Health expenditure for all 186 local government authorities were obtained from all LGAs itemized reports which were extracted from LGAs Epicor system that is maintained by PORALG. To get the detailed information on the inputs and uses of funds, the itemized files were linked with Plan Rep using Stata.

Household Data

The 2021/22 NHA report relied upon estimates from the 2017/18 National Household Budget Survey to establish Out of Pocket health spending (OOP). The data were inflated by factoring in the rate of population growth to provide realistic estimates of OOP health expenditure in 2020/21 and 2021/22.

Utilization Data

Utilization data were extracted from health information systems (HMIS) which were used to establish allocation keys for health functions, specific diseases and age groups. To get the weight for each function, disease, and age, the costs data from the 2012 costing study was applied. The allocation key is mainly used for LGA, MOHCDGEC, OOP and Health Insurance data.

Allocation of Spendings

All spending within the supportive departments (DAHRM, CA, DPP, CIA, PMU, GCU, DLS, and ICT) within the ministry was categorized under health system strengthening. Expenditures associated with or falling under the Curative department were connected to the provider and curative functions using allocation key. Likewise, all expenditures within the preventive department were linked to preventive services as a function. Concerning Local Government Authorities (LGAs), expenditures related to Council Health Management Teams (CHMTs) were recorded under health system strengthening, while the remainder was recorded under providers using allocation keys.

2.2. Data Cleaning, Mapping and Analysis

Filled questionnaires from donors, NGOs, insurance, and employers were reviewed to correct errors and amend them accordingly. The data

were imported into the HAPT tool and checked through triangulation of sources to remove double counts. Government Health expenditures that could not be directly allocated by disease were distributed using expenditure which was established from utilization and costing data. After finalizing, mapping and data cleaning tables/matrix were exported from the HAPT to Excel for detailed analysis. To get the summary of key indicators in health spending the analysis was conducted using Excel tables.

2.3. Validation

Validation exercise was done by comparing government spending summary with health spending reports from various sources. On the other hand, tables were shared with the donors for validation of expenditure share. Lastly, the report was shared with the National Bureau of Statistics for the final validation and approval before publication.

2.4. Limitations

There were various challenges faced in the overall process of constructing the 2021/22 as follows:

- Responses from all parties, including NGOs, donors, health insurance, and employers, were delayed.
- Improper completion of the data collection instrument affected the mapping exercise of the NHA classifications.
- Salary data for primary healthcare facilities was consolidated at the district level, leading to inaccuracies in reporting expenditures for primary facilities.
- NGOs did not provide disaggregated information necessary for error-free mapping by functions, providers, factors of provision, age structure, and diseases.
- Some ICD 10 diagnoses were grouped under the category "other," possibly due to clinicians' limited capacity to classify diagnoses specifically.
- Data for Vertical programs were not integrated into DHIS2,

necessitating manual work to combine the data.

- The costing study used to develop the disease allocation key is outdated as it was conducted in 2012.

3. General Health Financing Findings

The System of Health Accounts (SHA) 2011, an accounting framework, encompasses three analytical dimensions in health financing: health financing schemes (HF), revenues of financing schemes (FS), and financing agents (FA). These dimensions serve as distinct perspectives, allowing for a comparative examination of health financing strength in expenditure tracking. Together, they form a comprehensive framework that systematically accounts for healthcare financing and defines the flow of financial resources within the health system. The SHA 2011 health financing framework helps in addressing questions related to:

- Collection of revenue from various sources of funds.
- Mobilization of revenues from institutional units.
- Role of financing arrangements in the health system.
- Management of healthcare financing.

This chapter presents the findings from these dimensions alongside key health financing indicators.

3.1. Health Financing Indicators

In 2022, the Total Health Expenditure (THE) reached Tsh 6.83 trillion (equivalent to USD 2.9 billion), showing an increase from Tsh 5.38 trillion (equivalent to USD 2.3 billion) in 2020—an increase of 26 percent. THE encompasses both Current Health Expenditure (CHE) and Capital Formation Expenditure (HK), with CHE representing 97 and 98 percent for the years 2021 and 2022, respectively. Thus, Capital Formation Expenditure constitutes a minimal proportion within the Total Health Expenditure.

In 2022, THE accounted for 5 percent of GDP, greater than 4 percent recorded in 2020. The government's expenditure on health, as a percentage of total government expenditure, rose from 6 percent in 2020 to 8 percent in 2022. Per capita health spending reached 114,752 TZS (50 USD) in 2022, reflecting an increase from 95,292 TZS (40.9 USD) in 2020. Table 1; shows selected economic, demographic, and health-related indicators for the period 2020 – 2022.

Table 1: Selected Economic, Demographic and Health Expenditure Indicators

	2020	2021	2022
Population	57,637,628	57,724,380	59,551,347
Gross Domestic Product - at current price	148,522,111,000,000	156,375,000,000,000	170,256,000,000,000
Gross Domestic Product - at base price	129,095,844,000,000	135,478,000,000,000	141,873,000,000,000
Per Capita GDP at Market Prices (basic Prices)	2,306,682	2,346,986	2,464,812
General Government expenditure	24,450,598,500,000	26,585,000,000,000	31,816,000,000,000
GGE (excluding external resources)	21,755,080,300,000	24,135,000,000,000	28,385,000,000,000
Exchange Rate (NCU per US$)	2,306	2,309	2,315
Current Health Expenditure (CHE)	5,385,265,146,640	6,996,985,150,430	6,718,539,686,850
Capital Expenditure (HK)	22	221,339,932,920	145,966,225,580
Total health expenditure	5,434,792,655,030	7,218,325,083,350	6,864,505,912,430
Health Financing Indicators			
Total Per capita Capital Health Spending	94,292.44	125,048	115,270
USD	40.90	54	50
CHE Per capital spending	93,433.15	121,214	112,819
USD	40.52	52	49
HK per capita spending	859.29	3,834	2,451
USD	0.37	2	1
GGHE as % of GGE	6%	9%	8%
THE as % of GDP	4%	5%	5%
Share by Source of fund			
Government	23%	31%	34%
Corporations	12%	15%	17%
Households	32%	24%	27%
Rest of the world	33%	29%	23%

3.2. Health Financing sources

Health revenue has diverse origins across various institutions and sources within the economy. Acknowledging the importance of health in socioeconomic development, the mobilization of funds for health financing plays a pivotal role in a country's overall development. Revenue stands as a critical resource, empowering the health system to effectively fulfill its functions and achieve its objectives. Multiple stakeholders contribute to health financing resources, with contributors encompassing the government, health insurance schemes, households, and donors. In analyzing the sources of financing, all domestic funds and internal and external loans under the government are considered as Government funds. Foreign grants and aid compute donor financing, while funds originating from Health Insurance schemes and those spent directly by corporations for health purposes are classified as corporations. Table 2; shows CHE by financing sources.

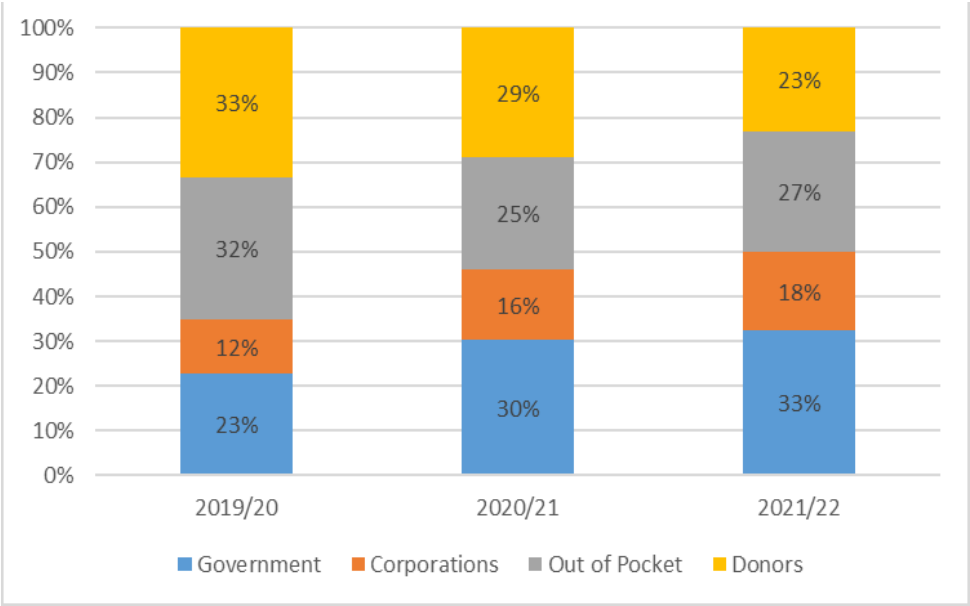
Table 2: Sources of Funds (in million TZS)

	2019/20	2020/21	2021/22
Government	1,220,892	2,117,603	2,180,380
Corporations	653,625	1,095,401	1,171,807
Out of Pocket	1,712,709	1,749,422	1,818,500
Rest of the world	1,798,040	2,031,730	1,547,853
	5,385,265	**6,994,156**	**6,718,540**

Government's contribution to healthcare financing has experienced a substantial rise, increasing from 23 percent in 2020 to 33 percent in 2022. The role of health insurance in funding healthcare has also become more prominent, with an increase from 12 percent in 2020 to 18 percent in 2022. While donor financing remains significant, there is a noticeable

declining trend, dropping from 33 percent in 2020 to 23 percent in 2022. Throughout the study period, out-of-pocket contributions are at an average of 28 percent. The increase in the share of health expenditure financed by the Government, coupled with a reduced share from households and donors, suggests diminished uncertainty and inequity. Government financing tends to be more predictable than other sources, signifying a positive stride towards narrowing the resource gap for universal health coverage (UHC) by decreasing the share of health financing from households. Figure 1: shows Health Expenditure by source of fund.

Figure 1: Trend of Share of Source of Funds



3.3. Funding Source by Category

Increased proportion of Government and Health Insurance contributions has, resulting in an increased share of domestic financing. This increase in domestic financing indicates a promising step towards achieving self-sustainability. The increase in domestic financing is primarily attributed to expenditures related to the COVID-19 pandemic and the enlarged share of Health Insurance, driven by increased service utilization among health Insurance schemes members. Although the household share has slightly declined, it remains above 25 percent,

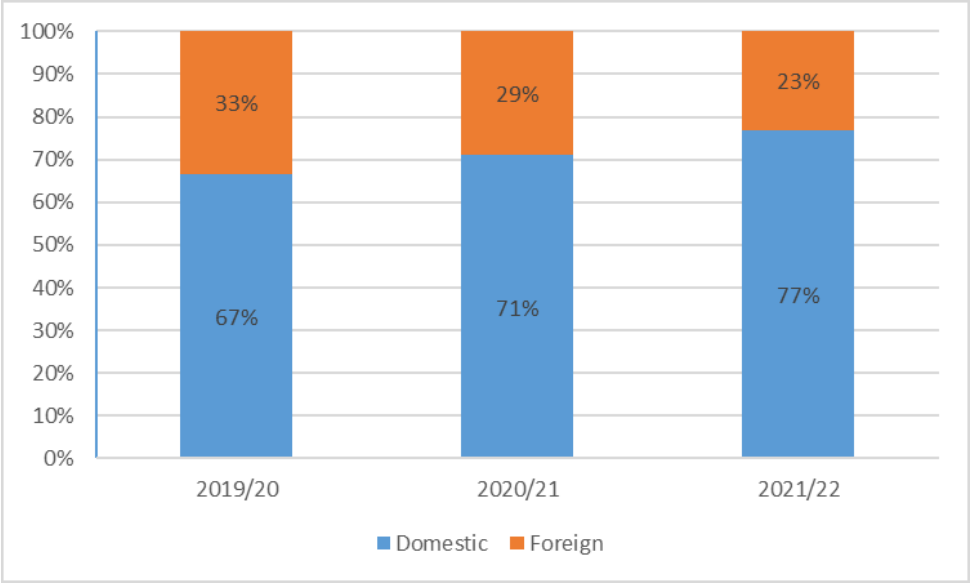
indicating a continued rise in demand for services within insufficient growth in resources from alternative sources and limited accessibility to insurance schemes for a considerable portion of the population. This underscores the need to strengthen other domestic financing sources, particularly Government and Health Insurance, to mitigate the risk of catastrophic health spending.

Foreign financing has witnessed a decline of over 10 percent from 2020 to 2022, causing donor financing to shift from being the primary source of finance in 2020 to the third-largest source in 2022.Table 3; and Figure 2; present a breakdown of funding sources by category and their respective shares.

Table 3: Funding by Source Category (in million TZS)

	2019/20	2020/21	2021/22
Domestic	3,587,225	4,962,426	5,170,687
Foreign	1,798,040	2,031,730	1,547,853
	5,385,265	**6,994,156**	**6,718,540**

Figure 2: Share of Funding Source Category



Between 2020 and 2022, domestic health financing showed a substantial increase of 44 percent, while foreign financing for health experienced a notable decrease of 15 percent during the same period.

However, the noteworthy rise in the domestic share of financing has also included household contributions, a factor that poses challenges related to financial protection and equity. Addressing this challenge necessitates a significant shift, emphasizing the enforcement of recently mandatory health insurance act and an increased allocation of government funds so as to restructure domestic health financing, thereby diminishing reliance on out-of-pocket financing. Additionally, a rising share of domestic financing for health becomes imperative to mitigate the risk associated with potential reductions in support from donors to the health systems.

3.4. Distribution of Health Funds

Funds from these financing sources are distributed using different channels that can affect implementation of health sector activities in different ways. Government funds are usually distributed by government, while donor funds are distributed by government through collective and part of it is distributed directly to programmes/Implementing partners. Health Insurance is used as a channel of distributing Insurance contributions. Table 4; shows the trends of funds distributed by different agents from 2020 to 2022 while Figure 3; shows the share of funds distribution.

Table 4: Funds Distribution by categories (in million TZS)

	2019/20	2020/21	2021/22
Government funds distributed by Government	1,340,297	2,162,730	2,185,892
Foreign funds distributed by Government	1,403,186	773,320	869,025
Foreign funds distributed by foreign	255,154	1,231,120	673,251
Insurance distribution	592,254	633,914	715,669
Household	1,794,374	2,193,072	2,274,968
	5,385,265	**6,994,156**	**6,718,805**

Figure 3: Share of Fund Distribution

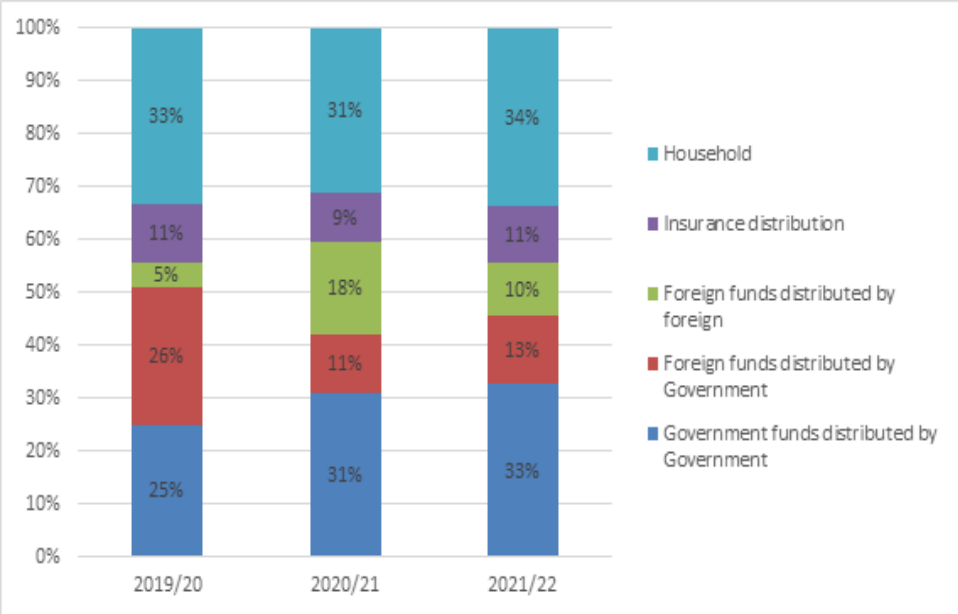


Figure 3 illustrates that most funds allocated to the health sector originate from the government, sourced both domestically and internationally. As the government enhances its financial commitment to healthcare, its role in fund distribution proportionately expands. Notably, the government remains crucial in health funds distribution, distributing for over 40 percent of health funding during the study period. However, the share of foreign funds distributed by the government declined from 26 percent in 2019/20 to 13 percent in 2021/22, primarily due to a reduction in foreign funds.

Meanwhile, health insurance distributes an average of 10 percent of health funds. On the other hand, household roles have risen to 34 percent, underscoring the necessity of implementing mandatory health insurance to ease the burden of out-of-pocket expenditures.

3.5. Health Financing Agents

Financing agents are entities and organizations tasked with overseeing, managing healthcare funding and making decisions regarding its allocation. They play a crucial role in formulating and executing health interventions aimed at achieving sectoral priorities. The entities

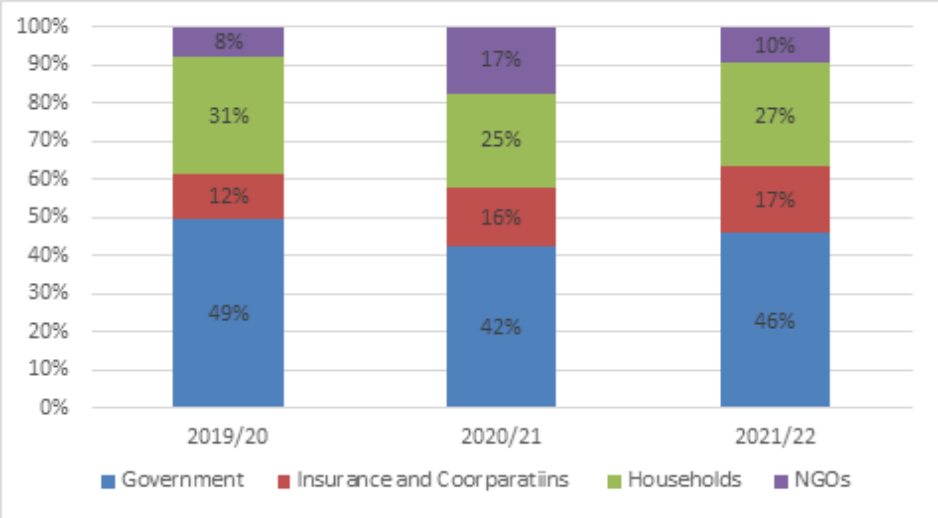
responsible for managing healthcare funds in the country encompass various actors such as the central government (including the Ministry of Health and other ministries), regional/local governments, insurance corporations, non-profit organizations serving households (NGOs), and households.

Table 5 displays the total healthcare expenditure (THE) categorized by financing agents, while Figure 4 illustrates the percentage share of THE controlled by each respective financing agent.

Table 5: THE by Financing Agents (in million TZS)

Financing Agent	2019/20	2020/21	2021/22
Government	2,660,709	2,950,855	3,080,297
Insurance and Corporations	650,601	1,093,527	1,171,781
Households	1,649,128	1,731,585	1,818,164
NGOs	414,568	1,218,191	648,298
	5,385,265	6,994,156	6,718,540

Figure 4: Share of Financing Agents



In 2022, the government took charge of the largest portion of total healthcare expenditure comprising 46 percent, a silently decline from 49 percent in 2019/20. NGO role as managers of the fund was 10 percent in 2022, a rose from 2020 that was 8 percent but a declined from 17 percent when compared with 2021.

The role of Health Insurance in managing health has a noticeable increase to reach 17 percent in 2022 which is an increase from 12 percent in 2020. Households is the second largest financing agent, which managed 27 percent of CHE in 2022, down from 31 percent in 2020. It is a risk as HH manages a considerable portion of funds, which may leave them vulnerable to catastrophic health expenditures. Hence, accelerating the enforcement of the Universal Health Insurance Act is necessary, along with implementing interventions to accommodate the potential rise in facility utilization resulting from universal health insurance.

4. Health Financing in service provision

4.1. Expenditure by Health Care Providers

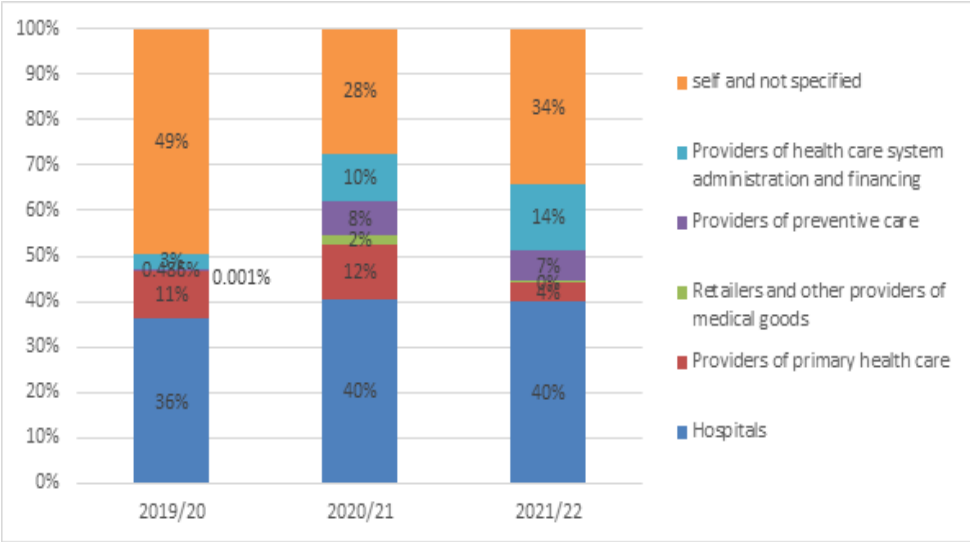
In Tanzania, healthcare providers comprise a range of facilities, including National Hospitals, Zonal Referral Hospitals, Regional Referral Hospitals, and District Hospitals. Additionally, the healthcare system incorporates primary healthcare facilities, such as Health Centers and Dispensaries.

The analysis of health expenditures by providers extends to include retailers of medical goods, providers of preventive care, institutions responsible for administering and financing healthcare systems, as well as funds managed directly by the respective agents themselves. Table 6; and Figure 5; show the absolute value of CHE by providers and the shares of CHE by providers, respectively.

Table 6: Total Health Expenditure by Providers (in million TZS)

	2019/20	2020/21	2021/22
Hospitals	1,946,884	2,827,652	2,681,113
Providers of primary health care	568,745	833,170	274,052
Retailers and other providers of medical goods	80	151,132	32,451
Providers of preventive care	26,165	534,317	457,604
Providers of health care system administration and financing	179,352	720,834	961,225
self and not specified	2,664,040	1,927,051	2,312,095
Total	**5,385,265**	**6,994,156**	**6,718,540**

Figure 5: Share of Health Expenditure by Providers



Hospitals, ranging from district to national levels, have been the main spenders of Tanzania's healthcare resources. The expenditure on hospital services increased to 40 percent in 2022, marking a rise from 36 percent in 2020. It is essential to note that while expenditure on primary health care demonstrated a decline, there was a challenge in accurately allocating salary expenses according to cost centers. This discrepancy arose due central data pulling of salary expenditure. Recognizing this, efforts are underway to enhance the reporting of expenditure by providers for improved accuracy.

A substantial portion of spending is spent by agents/managers of health resources (defined as self), signing that fund managers are directly involved in providing various services. Additionally, there has been a noteworthy increase in health systems administrators, accounting for 14 percent a rise from 3 percent in 2020. This improvement in expenditure categorization is attributed to an enhanced methodology, whereas administration departments at ministries, RHMTs, CHMTs, and NGOs, which do not directly offer services to citizens, are collectively considered as health systems administrators.

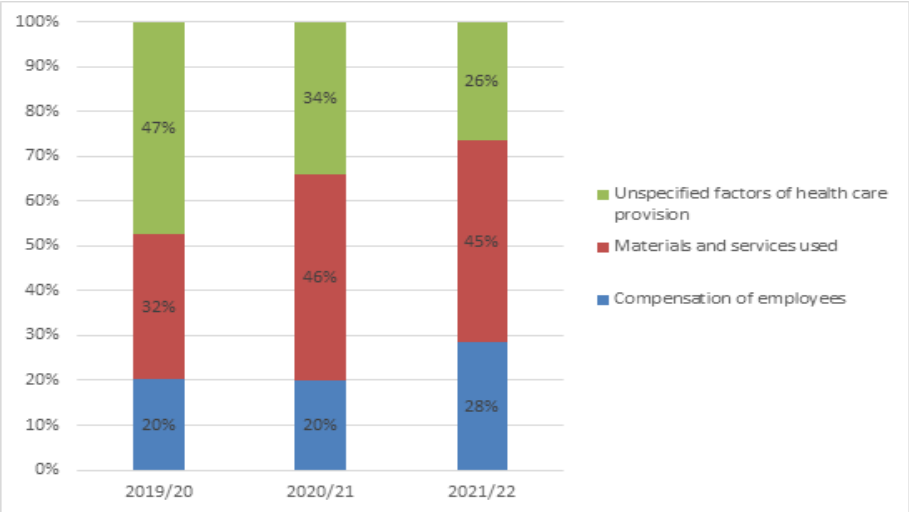
4.2. Expenditure by Factors of Health Care Provision

Factors of health care provision are essential inputs utilized in the process of delivering health care services. These inputs play a crucial role in producing the desired outputs. Examining the expenditure related to these factors provides valuable insights into how various inputs are combined to attain different goals in the provision of services. Table 7 and Figure 6. show the absolute value of CHE by factors of health care provision and the distribution of CHE by factors of health care provision, respectively.

Table 7: CHE by Factors of Provision (in million TZS)

	2019/20	2020/21	2021/22
Compensation of employees	1,094,207	1,409,308	1,913,057
Materials and services used	1,736,140	3,203,244	3,030,136
Unspecified factors of health care provision	2,554,918	2,381,604	1,775,347
	5,385,262	6,994,156	6,718,540

Figure 6: Share of Factors of Provision



The share of compensation for employees in Current Health Expenditure (CHE) has witnessed a substantial 74 percent increase between 2020 and 2022. This increase is attributed to a notable expansion in health facilities and increased employment within the health sector during this period. Materials and services utilized represent the largest shares in health spending, reaching 45 percent in 2022 an increase from 32 percent in 2020, also reflecting a significant rise of 74 percent. Further analysis is described below to show the components covered in materials and services.

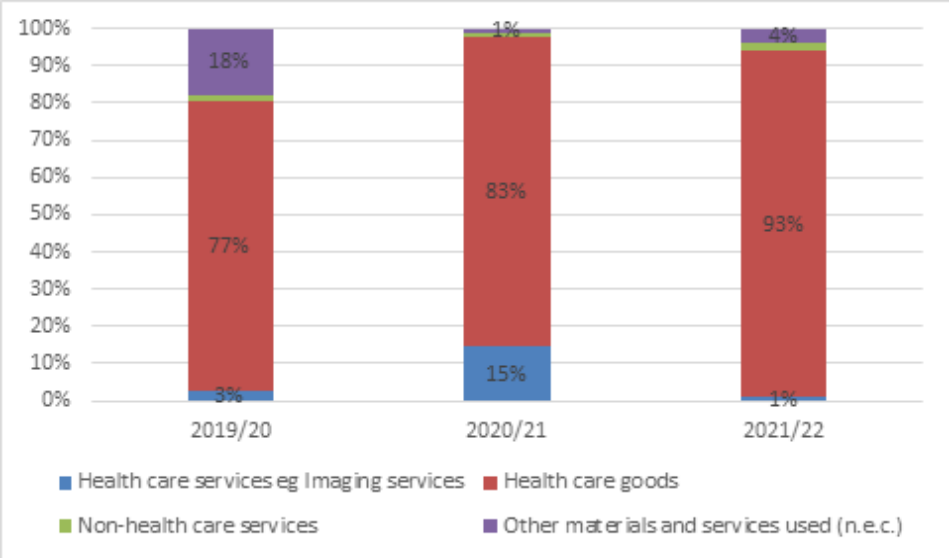
Despite improvements in capturing detailed factors of provision, there remains a notable share reported under unspecified factors, accounting for 26 percent in 2022 a decline from 47 percent that was reported in 2020.

4.2.1. Materials and services used.

The rise in expenditure on materials and provided services was primarily driven by an increase in pharmaceuticals expenditure. Health goods accounted for 93 percent of the total materials and services used in 2022, up from 77 percent in 2020. This increase in healthcare goods is

mainly attributed to government investment in ensuring the availability of health commodities and the investments made in prevention during the COVID-19 pandemic.

Figure 7: Materials and services used % share.



5. Health Financing in Consumption of services

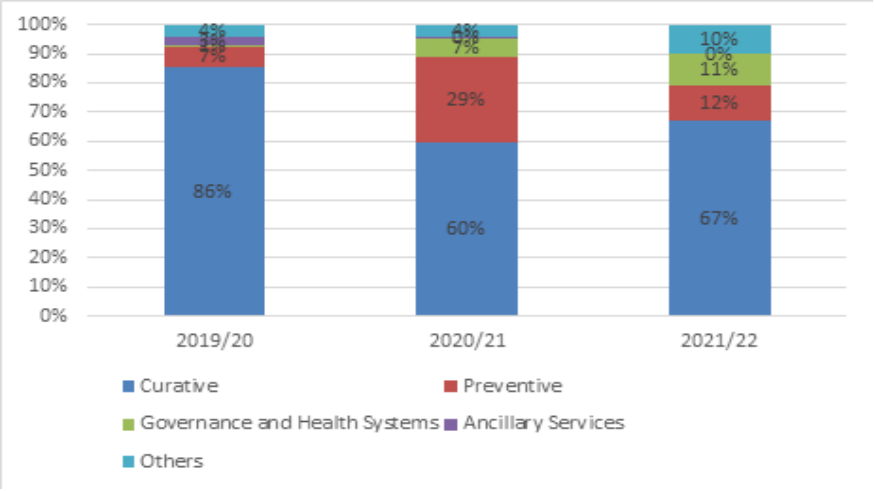
5.1. Expenditure by Health Care Functions

It is crucial to analyze which services heavily consume healthcare resources. Healthcare functions encompass health care goods and services utilized by end-users for specific health purposes. These functions include curative services, prevention services, governance, and administration, as well as other unclassified services. Table 9 presents the absolute value of total healthcare expenditure (THE) categorized by health care functions, while Figure 8 illustrates the distribution of THE across health care functions.

Table 8*:* CHE by Function (in million TZS*)*

	2019/20	2020/21	2021/22
Curative	4,614,427	4,166,476	4,522,816
Preventive	364,229	2,043,342	801,786
Governance and Health Systems	28,433	465,092	740,533
Ancillary Services	163,873	9,849	16,030
Others	214,303	309,397	660,553
Total	**5,385,262**	**6,994,156**	**6,741,718**

Figure 8: Function by Share



As is common in many developing countries, healthcare expenditure in Tanzania is primarily focused on curative services. However, spending on curative care decreased from 86 percent in 2020 to 67 percent in 2022. This reduction was accompanied by a significant increase in spending on preventive care during the same period, more than doubling in allocation of resources to preventive care between 2020 and 2022. Notably, there was a substantial rise in preventive care in 2021, reaching 17 percent, before declining again in 2022. This increase in 2021 may be attributed to preventive measures implemented during the COVID-19 pandemic, which necessitated additional investment. However, it is necessary to further analyze and develop measures for investing in preventive care to reduce the costs incurred during curative care.

Expenditure on health administration function has increased from 1 percent to 11 percent. It's worth noting that the methodology for capturing systems administration function has been improved to better reflect reality, hence the observed increasing trend.

5.2. Expenditures by Diseases

Categorizing health expenditure by disease provides invaluable insights for monitoring and making resource allocation decisions. This information is essential for planning health expenditure and analyzing service outputs and outcomes over time.

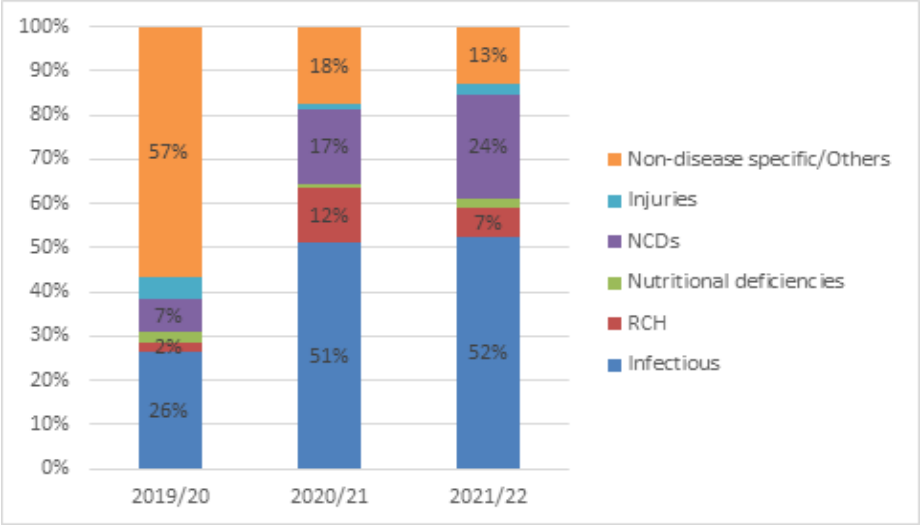
Diseases are typically classified into seven main groups, including infectious diseases, reproductive health issues, nutritional deficiencies, non-communicable diseases, injuries, non-disease-specific categories, and other and unspecified diseases/conditions.

It's important to note that expenditure on diseases primarily reflects the burden of diseases at the facility level, due to the methodology used in estimating disease-specific expenditure. Table 9 provides the absolute value of total healthcare expenditure (CHE) by disease categories, while Figure 9 illustrates the distribution of CHE across disease categories.

Table 9: Total Health Expenditure by Disease(in million TZS)

	2019/20	2020/21	2021/22
Infectious	1,424,019	3,578,820	3,523,946
RCH	114,305	867,734	450,152
Nutritional deficiencies	134,943	58,898	126,761
NCDs	388,854	1,173,378	1,584,812
Injuries	262,343	89,333	167,459
Non-disease specific	136,827	25,026	11,488
Others	2,923,974	1,200,968	853,922
Total	5,385,265	6,994,156	6,718,540

Figure 9: Share of Disease in CHE



Expenditure on non-communicable diseases (NCDs) more than doubled between 2020 and 2022, with its share in total disease expenditure rising from 7 percent to 24 percent during that period. This significant increase reflects the growing burden of NCDs in the country, as evidenced by rising mortality rates from diseases such as diabetes, hypertension, and neoplasms, which incur high disease management costs (MOH, 2020).

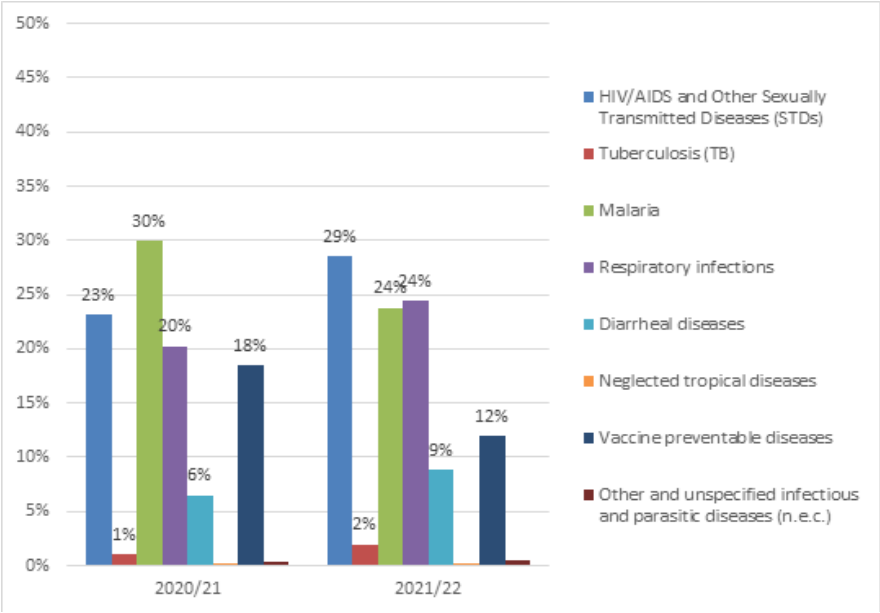
Infectious diseases continue to account for the largest share of Current

Health Expenditure (CHE). The share of infectious diseases in Current healthcare expenditure (CHE) allocated to diseases saw a notable increase from 26 percent to 52 percent between 2020 and 2022. This rise in spending on infectious diseases can also be attributed to government investments in preventing infectious diseases through vaccination programs and health promotion efforts. Table 10 provides the distribution of total healthcare expenditure by infectious diseases, while Figure 10 illustrates their respective shares for the period of 2020/21 and 2021/22. 2019/20 has not been included in this analysis due to data limitation that hindered more analysis in disease specific.

Table 10: Distribution of Infectious Diseases Expenditure (in million TZS)

	2020/21	2021/22
HIV/AIDS and Other Sexually Transmitted Diseases (STDs)	827,797	1,004,517
Tuberculosis (TB)	37,000	68,203
Malaria	1,072,101	836,864
Respiratory infections	723,942	859,264
Diarrheal diseases	232,335	311,223
Neglected tropical diseases	10,091	5,558
Vaccine preventable diseases	661,122	420,483
Other and unspecified infectious and parasitic diseases (n.e.c.)	14,432	17,833
	3,578,820	**3,523,946**

Figure 10: Share of Infectious Diseases



Malaria continues to hold the largest share of total spending on infectious diseases, accounting for 29 percent in 2021/22. Respiratory infections also maintain a significant share, comprising 20 percent in 2021 and 24 percent in 2022, primarily due to the impact of COVID-19. HIV accounts for 24 percent of spending in 2022, while diarrhea represents 9 percent during the same period. Vaccine-preventable diseases account for 12 percent in 2022, showing a decline from the 18 percent reported in 2020.Spending on tuberculosis (TB) has increased between 2020 and 2022, reflecting efforts to enhance interventions aimed at achieving a TB treatment coverage of 90% by 2025.

5.3. Capital Formation

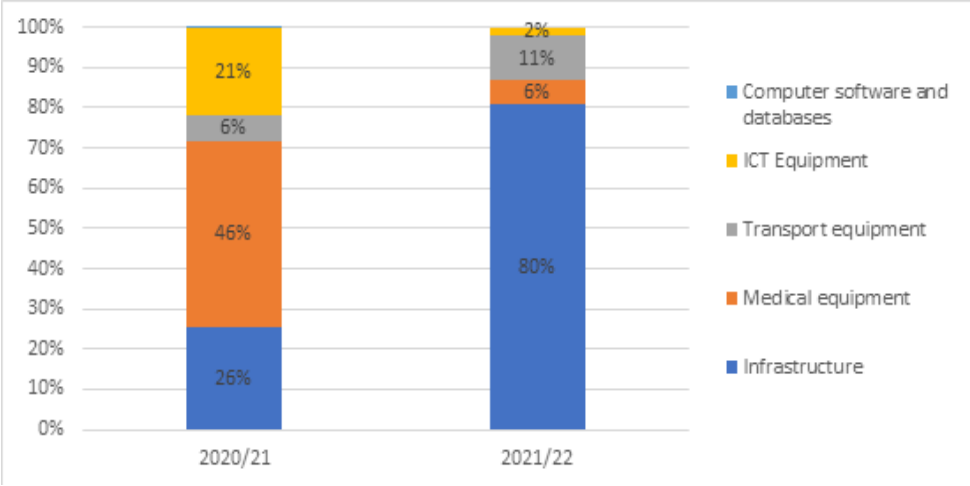
Capital formation plays a pivotal role in the development and sustainability of a country's healthcare system by enabling the acquisition of critical resources, infrastructure, and human capital necessary for the delivery of effective healthcare services. Examples of capital expenditure include infrastructure development, procurement of medical equipment and technology, health information systems, and research and development initiatives.

The analysis of capital formation has been conducted for a two-year period due to improvements in data collection and mapping, which have facilitated the capturing of capital expenditure. Table 11 presents the capital formation in the healthcare sector in Tanzania for the years 2021 and 2022, while Figure 11 illustrates the breakdown of capital formation by share.

Table 11: Capital Formation in Health Sector(in million TZS)

	2020/21	2021/22
Infrastructure	56,554	116,667
Medical equipment	101,886	8,317
Transport equipment	14,208	16,269
ICT Equipment	47,041	2,652
Computer software and databases	831	0
Other	822	2,062
Total	221,340	145,966

Figure 11: Breakdown of Capital Formation by Share



Generally, Capital expenditure decreased by 34 percent between 2021 and 2022. Analysis of capital formation by type reveals medical

equipment was the largest capital expenditure item in 2021 while infrastructure was the largest capital expenditure item in 2022. There was a significant increase in investment in infrastructure (106%) between 2021 and 2022 as well as a 15 percent increase in spending on transport equipment during the same period. This increase was the result of construction of new facilities and acquisition of transport equipment to enhance service delivery by easing access to health care services in terms of quantity, quality, and geographical accessibility.

Spending on medical equipment and ICT equipment decreased significantly between 2021 and 2022. This is however normal as the benefits of capital investment have long term benefits hence once significant investments are made, there can be reduction of investment without affecting their benefits on service delivery.

6. Conclusion and Recommendations

The 2022 NHA provides a comprehensive overview of health sector expenditures in Tanzania Mainland. This report used the findings to provide expenditure trends since 2020. The following are some key conclusions and policy issues arising from this round of NHA.

6.1. Conclusions

Government financing has seen a significant increase, rising to 32 percent in 2022 from 23 percent in 2020, positioning the government as the leading source of financing in 2022. Donors still play a notable role, accounting for 23 percent in 2022, although this is a decline from 33 percent in 2020. Health insurance contribution to Current Health Expenditure (CHE) has increased, now contributing 17 percent compared to 12 percent in 2020. However, household contributions remain significant at 23 percent in 2022. Overall, domestic contributions have substantially increased, accounting for 77 percent in 2022, which is more than a quarter of total current health spending across the three years.

Government remains the primary distributor of health funds, distributing 45 percent of the total health funds in 2022. Regarding foreign funds, distribution is evenly split between the government and foreign sources, with the government distributing 50 percent in 2022 and foreign sources distributing 45 percent of the foreign fund, although the government's role has declined from 85 percent in 2020 while the role of donors has increased from 25 percent in 2020.

Government continued to oversee the largest portion of total healthcare expenditure, accounting for 46 percent, slightly down from 49 percent in 2020. The involvement of NGOs in managing health funds fluctuates during this period, increasing from 8 percent in 2020 to 17 percent in 2021, then dropping to 10 percent in 2022. Health insurance played a more significant role, with its share in managing health funds rising to

17 percent in 2022 from 12 percent in 2020, indicating progress towards implementing universal health insurance. However, although declining, households still play a significant role in managing health funds, with their share decreasing from 31 percent in 2020 to 27 percent in 2022.

Expenditure on hospitals continued to dominate CHE, increasing significantly by 37 percent between 2020 and 2022 and 5 percent between 2021 and 2022. Expenditure on primary healthcare remains minimal, with reported limitations in accurately capturing expenditure at this level.

Curative care still significantly dominates health expenditure, accounting for 67 percent in 2022, although it has declined from 86 percent in 2020. This reduction was accompanied by more than doubling spending on preventive care during the same period, implying increased resource allocation from curative care to preventive care.

Expenditure on non-communicable diseases (NCDs) has doubled between 2020 and 2022, with its share in total disease expenditure rising from 14 percent to 24 percent, indicating a growing burden of NCDs in the country. Infectious diseases still account for a substantial share, representing 52 percent in 2022.

Capital expenditure items varied, with the purchase of medical equipment being the largest in 2021, while infrastructure took the lead in 2022. There was a significant increase in investment in infrastructure (106%) between 2021 and 2022, as well as a 15 percent increase in spending on transport equipment during the same period, attributed to the construction of new facilities and acquisition of transport equipment.

6.2. Recommendations

Recommendations for improving healthcare financing and service delivery:

- Enforcement of Universal Health Insurance Act: Implement

strategies to enforce the newly established act mandating every citizen to join Universal Health Insurance. This will reduce out-of-pocket expenditure and ensure sustainable domestic financing for accessing healthcare services.

- Increase Government Allocation to support Implementation of UHI: Allocate more government funds through earmarked taxes to ensure equity in access to healthcare. This will facilitate the enrollment of indigent populations into health insurance schemes, thereby ensuring social protection for vulnerable groups.
- Improve Donor Coordination: Enhance donor coordination to align partners with sector priorities and promote transparency between the government and donors, ensuring that donor funding complements national healthcare goals effectively.
- Continue Investing in Preventive care: Maintain increased financing for preventive health interventions to reduce the demand for curative care, which currently consumes a significant portion of Current Health Expenditure (CHE). This will contribute to a healthier population and alleviate the burden on healthcare providers, ultimately improving the quality of care.
- Strengthen Public Financial Management: Enhance public financial management at all levels to ensure accurate expenditure tracking and informed decision-making based on reliable data.
- Invest in Primary Healthcare: Allocate more investment towards primary healthcare services to reduce the disproportionate expenditure on hospitals, which typically incur higher costs. Strengthening primary health care will improve accessibility and affordability of basic healthcare services for communities.
- Enhance Community Health Worker Productivity: Focus on

enhancing the productivity of community health workers by emphasizing health promotion activities and increasing expenditures on community health programs. This will enable them to effectively support healthcare delivery at the grassroots level and adapt to the growing number of health facilities.

- National Capacity for NCD Prevention: Prioritize building national capacity for non-communicable disease (NCD) prevention and health promotion approaches. This includes targeting modifiable risk factors, providing training for healthcare workers on NCD prevention and control measures, and expanding the number of facilities offering NCD services nationwide.
- Integrate patient information systems: To enhance the accuracy of estimating disease utilization at the facility level, it is recommended to integrate patient information systems from Vertical Disease programs , Electrical medical records systems with DHIS2.

Annex: Link NHA matrix

www.moh.go.tz/doc;

Bibliography

Ministry of Health (2022). Annual Health Sector Performance Profile 2021.

Ministry of Health Community Development, Gender, Elderly and Children (2021). Annual Health Sector Performance Profile 2020.

Ministry of Health Community Development, Gender, Elderly and Children (2018). Report of the 19th Joint Annual Health Sector Technical Review Meeting.

Ministry of Health Community Development, Gender, Elderly and Children (2021). Health Sector Strategic Plan V.

Ministry of Health Community Development, Gender, Elderly and Children (2019). Mid-Term Review of the Health Sector Strategic Plan IV 2015-2020

Ministry of Health Community Development, Gender, Elderly and Children (2021). Health Sector Strategic Plan V 2021-2026

Ministry of Finance and Economic Affairs (2021). Economic Survey 2020

Ministry of Finance and Economic Affairs (2020). Economic Survey 2019

Ministry of Health, Community Development, Gender, Elderly and Children (2020). Annual Health Sector Performance Profile Report 2019.


World Health
Organization