MINISTRY OF HEALTH
Republic of Ghana

NATIONAL HEALTH ACCOUNTS 2018-2022

Ministry of Health
Accra, Ghana
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ADMINISTRATIVE MAP OF GHANA

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FOREWORD

The Ministry of Health is poised to attain Universal Health Coverage (UHC) by 2030. In furtherance of this, it has taken a number of actions including the review of the National Health Policy, development of a UHC Roadmap, Health Sector Medium Term Development Plan, revised Essential Health Services Package, developed Non-Communicable Disease Policy and Action Plan and other documents. A Health Financing Strategy has also been developed to support the implementation of the UHC Roadmap. Monitoring and reviewing the progress of financing of the UHC indicators is crucial to the attainment of the UHC goal.

In ensuring effective monitoring of UHC financing indicators in Ghana, the Ministry has initiated the process of generating much-needed information to inform resource allocation and prioritization of programs and activities by conducting Health Accounts for the outstanding years (2018-2022) as part of the NHA institutionalization process. National Health Accounts addresses the question of who provides the funds, who manages the funds, what services are being purchased and who benefits from the services provided.

The results of the 2018-2022 National Health Accounts indicate that Current Health Expenditure (CHE) as a percentage of Gross Domestic Product (GDP) increased from 2.61 per cent in 2018 to 3.95 per cent in 2022 and the government remains the major financier of healthcare services in Ghana over the period. The report brings to light, an interesting revelation around the funding of HIV/AIDs, TB, Malaria, and Reproductive Health and increasing off-budget expenditures by donors which needs to be discussed to strengthen the funding of these diseases and donor alignment.

Even though household out-of-pocket (OOP) payments declined from 33.48 per cent in 2018 to 25.03 per cent in 2022, it remains a concern and calls for concerted efforts from all stakeholders especially the National Health Insurance Authority (NHIA) to increase coverage and provide financial risk protection to the poor and vulnerable.

Acknowledging the high interest to support the NHA institutionalization to produce regular reports, I do not doubt in my mind that stakeholders will continue to support the Ministry to produce regular annual reports owing to the increasing demand for evidence to support policy decisions in the health sector.

Accordingly, I wish to express my deepest gratitude to the National Health Account Technical Working Group, the Ministry and its Agencies, other Ministries, Departments and Agencies (MDAs), Development Partners, the Private Sector, NGOs and Civil Societies for their support. I particularly want to thank the World Health Organization for the technical and financial assistance to the Ministry towards the production of the 2018-2022 National Health Accounts.

I urge all stakeholders to use the findings from the 2018-2022 National Health Accounts to inform resource allocation and prioritization of health interventions to contribute towards the country's Universal Health Coverage (UHC) targets.

HON. DR. BERNARD OKOE BOYE
MINISTER FOR HEALTH
GHANA

ACRONYMS

ABFA	Annual Budget Funding Amount
AIDs	Acquired Immunodeficiency Syndrome
CHAG	Christian Health Association of Ghana
CHE	Current Health Expenditure
CHPS	Community-Based Health Planning and Services
COVIID-19	Coronavirus
DHIMS	District Health Information Management System
DPs	Development Partners
FA	Financing Agent
FS	Category of Funding
FSRI	Funding Sources
GAQHI	Ghana Association of Quasi-Government Health Institutions
GDHS	Ghana Demographic and Health Survey
GDP	Gross Domestic Product
GGHE	General Government Health Expenditure
GGHE-D	General Government Health Expenditure - Domestic
GHED	Global Health Expenditure Database
GHS	Ghana Health Service
GLSS	Ghana Living Standard Survey
GoG	Government of Ghana
GSS	Ghana Statistical Service
HA	Health Accounts
HAPT	Health Accounts Production Tool
HC	Healthcare Function
HF	Financing Schemes
HIV	Human Immunodeficiency Virus
HK	Capital Health Expenditure
HP	Healthcare Provider
IGF	Internally Generated Funds
LMICs	Low-Middle-Income-Countries
MoH	Ministry of Health
NCDs	Non-Communicable Diseases
NGOs	Non-Governmental Organisations
NHA	National Health Accounts
NHIA	National Health Insurance Authority
NHIS	National Health Insurance Scheme
NPISH	Non-Profit Institutions Serving Households
OOP	Out-Of-Pocket
SHA	System of Health Accounts
SPH	School of Public Health
SSNIT	Social Security and National Insurance Trust
TB	Tuberculosis
TGE	Total Government Expenditure
THE	Total Health Expenditure
UHC	Universal Health Coverage

USAID	United States Agency for International Development
USD	US Dollars
WHO	World Health Organisation

ACKNOWLEDGEMENTS

The Ministry of Health (MoH) is grateful to all its Agencies, Ghana Statistical Service, Development Partners, Private Employers and Insurance Companies for their contribution towards the development of the 2018-2022 National Health Accounts.

A special thanks and recognition to the World Health Organization (WHO) and West African Health Organization (WAHO) for the technical and financial assistance provided to support the production of the National Health Accounts for the years 2018-2022.

Lastly, we deeply appreciate all members of the National Health Accounts Technical Working Group and the Consultant for their dedicated efforts in data collection, analysis, and interpretation of the results.

The 2018-2022 NHA was coordinated by Mr. Kwakye Kontor.

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EXECUTIVE SUMMARY

Ghana is committed to achieving its UHC vision (2030) by improving its health outcomes to ensure that all people have timely access to high-quality health services irrespective of ability to pay at the point of care. To achieve this, it is essential to monitor how resources are mobilized and pooled, allocated and utilized efficiently to inform policy decisions. National Health Accounts provides a platform of tracking health expenditures in this regard. The Ministry conducted the National Heath Accounts for the years 2018-2022 to cover all outstanding years to deepen the NHA institutionalization to ensure that regular information is provided to inform decision-making.

The 2018-2022 NHA used the 2011 edition of the System of Health Accounts (SHA 2011) methodology. Data was collected from public and private health sectors whereas household expenditures were projected from the 2017 Ghana Living Standard Survey (GLSS 7, 2017). Data for the study was a big challenge due to the long delay in NHA production.

The following are some of the key findings from the study:

Ghana's current health expenditure as a percentage of Gross Domestic Product (GDP) increased from 2.61 per cent in 2018 to 3.95 per cent in 2022 and per capita spending from GHC253.21 (USD52.51) in 2018 to GHC715.38 (USD83.42) in 2022. During the same period, total health expenditure increased from GHC9.9 billion to GHC23.1 billion and current health expenditure increased from GHC7.5 billion to GHC22.6 billion. Although out-of-pocket payment as a percentage of current health expenditure decreased from 33.48 per cent in 2018 to 25.03 per cent in 2022, it remains higher compared to social compulsory insurance (NHIS) and voluntary prepayments (private insurance). At the peak of the COVID-19 pandemic in 2020, household expenditure decreased from 27.97 per cent in 2019 to 24. 21 per cent in 2020 and expenditure on preventive care increased from 9.61 per cent in 2019 to 15.58 per cent in 2020. Findings from the analysis indicated that the government is the main financing source for the prevention and treatment of TB, Malaria, HIV/AIDs and Reproductive Health when indirect costs are considered. However, when indirect costs are excluded, households are the main financing source for malaria and reproductive health, while donors primarily fund HIV/AIDS. The study also shows that between 2018 and 2022, expenditures on capital investment remain low.

The study recommends the following as areas for policy consideration:
It is recommended that the Ministry work with NHIA to reduce out-of-pocket payments (OOP) to provide financial risk protection to the poor and vulnerable and prioritize expenditure on capital investment. Even though there was an increase in current health expenditure between 2018-2022, per capita health expenditure showed a downward trend from 2021 which indicates that more has to be allocated to health to support financing of UHC targets. The analysis also showed that expenditure on preventive care, ancillary services and rehabilitative care remains low and requires more funding in future.

The table below shows a summary of the results of the 2018-2022 National Health Accounts.

Key National Health Account Indicators, 2018-2022 (in GHC million)

Indicators		**2018 'Million**	**2019 'Million**	**2020 'Million**	**2021 'Million**	**2022 'Million**
General	Population	29.61	30.28	30.49	30.83	31.56

Indicators		2018 'Million	2019 'Million	2020 'Million	2021 'Million	2022 'Million
	Gross Domestic Product (GDP) at Current Price (Nominal)	286,964	333,626	368,105	431,152	571,067
	Total Government Expenditure (TGE)	67,279.96	78,771.83	98,036.69	129,032.80	145,472.32
	Current Health Expenditure (CHE)	7,498.70	11,603.74	17,375.41	17,822.85	22,574.34
	CHE per capita (GHC)	253.21	383.20	569.93	578.06	715.38
Revenues of Schemes	General Government Health Expenditure (GGHE)	4,466.80	7,186.28	10,088.27	9,835.62	12,698.68
	Private Health Expenditure	2,678.92	3,562.65	4,346.71	5,492.93	6,490.64
	Development partner	259.31	677.85	2,786.96	2,260.57	2,895.76
	GGHE as a % CHE	59.57%	61.93%	58.06%	55.19%	56.25%
	Private expenditure as a % of CHE	35.73%	30.70%	25.02%	30.82%	28.75%
	Development partner funds as a % CHE	3.46%	5.84%	16.04%	12.68%	12.83%
	CHE as a % of GDP	2.61%	3.48%	4.72%	4.13%	3.95%
	GGHE as a % of TGE	6.64%	9.12%	10.29%	7.62%	8.73%
	GGHE as a % of GDP	1.56%	2.15%	2.74%	2.28%	2.22%
	GGHE per capita (GHC)	150.83	237.32	330.90	319.01	402.42
	Private health expenditure as a % of GDP	0.93%	1.07%	1.18%	1.27%	1.14%
	Development partner funds as a % GDP	0.09%	0.20%	0.76%	0.52%	0.51%

Indicators		2018 'Million	2019 'Million	2020 'Million	2021 'Million	2022 'Million
Financing Schemes	Government financing Schemes as a % of CHE	60.82%	63.46%	58.94%	56.50%	58.42%
	Out of Pocket (OOP) Expenditure as a % of CHE	33.48%	28.98%	23.75%	26.50%	25.03%
Health Functions	Curative care as a % of CHE	59.80%	56.39%	45.50%	49.93%	56.80%
	Inpatient care as a % of Curative care	38.79%	43.07%	52.06%	47.00%	42.18%
	Outpatient care as a % of Curative care	61.21%	56.93%	40.64%	52.83%	56.90%
	Preventive care as a % of CHE	8.38%	9.61%	15.58%	11.60%	16.72%
Health Providers	Hospital spending as a % of CHE	39.69%	41.51%	36.15%	33.36%	39.15%
	Ambulatory health care as a % of CHE	20.62%	15.39%	9.71%	12.08%	18.22%
	Medical goods as a % of CHE	6.02%	4.81%	3.79%	5.70%	5.46%
	Health Care System Administration and Financing as a % of CHE	18.85%	23.63%	26.27%	27.00%	16.28%
Factors of Provision	Compensation of Employees as a % of CHE	40.12%	39.53%	31.16%	37.82%	31.73%
	Compensation of Employees as a % of GGHE	67.35%	63.82%	53.66%	68.54%	56.41%

1.0 INTRODUCTION

Tracking health expenditures is crucial for effective global health governance and policymaking, as it provides insights into how resources are allocated and utilized within healthcare systems. This monitoring is particularly essential in the pursuit of Universal Health Coverage (UHC), which seeks to ensure that everyone has access to essential health services without financial hardship. By analyzing how funds are mobilized, distributed and utilized, countries can identify coverage gaps and make informed decisions to enhance health outcomes and address disparities in healthcare access.

National Health Accounts (NHA) is a systematic and comprehensive process of measuring expenses from public, private, households, and donor sources for the utilization of healthcare goods and services within a country during a specific period. NHA offers insight into the origin of financial resources, the various financing mechanisms used in distributing funds, the type of healthcare providers, the operational aspects through which these providers deliver healthcare products and services and the beneficiaries of health resources.

The 2018-2022 National Health Accounts is based on the 2011 edition of the System of Health Accounts (SHA-2011). The SHA-2011 focuses on the key areas of healthcare expenditure and therefore, aims at answering key policy questions such as who finances health in the country? how and by whom are health resources managed? who are the key providers of healthcare services? what goods and services are provided? how much is allocated to priority health programmes? on which diseases/conditions are funds spent? how much does a country spend on healthcare? and at what level of care are resources being invested?

In computing the NHA estimates for Ghana, a total of 8 dimensions were used. Subsequently, data was organized and mapped for analysis using the Health Accounts Production Tool (HAPT) software to generate health expenditure tables. These tables, presented in a two-by-two format, constitute the outcome of the National Health Account for the year.

1.1 Demographic, epidemiological and socioeconomic trend in Ghana

Ghana is a nation classified as a lower-middle-income country with a land size of 239,567km square and has savanna and tropical rainforest ecological zones. The country had a population estimate of 28.96m in 2017[1], 29.61m in 2018[1], 30.28m in 2019[1], 30.82m in 2020[2], 30.83m in 2021[1] and 31.35m in 2022[1]. Between the years 2010 and 2021, Ghana experienced an intercensal growth rate of 2.1%[2]. The total fertility rate dropped from 4.2 in 2014 to 3.9 in 2017 and remained the same in 2022 according to the 2022 Ghana Demographic and Health Survey (GDHS).

Ghana's GDP increased from USD60.41 billion in 2017 to USD73.77 billion in 2022 showing a growth rate of 8.1% in 2017 and 3.1% in 2022. The growth rates for the years 2019 to 2021 are as follows: 6.5% in 2019, 0.5% in 2020 and 5.1% in 2021[3]. The low growth rate in 2020 can be attributed to the impact of COVID-19.

[1] Ghana Statistical Service Projections

[2] 2021 Population and Housing Census

[3] World Bank National Account Data

1.2 Health Status

Since independence, the health status of Ghana has improved significantly. The health sector has seen several reforms which have brought increased access to healthcare services such as maternal mortality reducing from 708.9 per 100,000lb in 1990 to 101.7 per 100,000lb in 2022, under 5 mortality from 23.2 per 1000lb in 2008 to 9.8 per 1000lb in 2022, immunization coverage increasing from 49% in 2008 to 99% in 2022, skilled delivery increasing from 35.4% in 2009 to 62.6% in 2022, among others[4,5]. Access to essential health services has also increased through the implementation of Community-Based Health Planning and Services (CHPS). In addition, the introduction of the National Health Insurance Scheme (NHIS) has helped to reduce the financial burden on the poor and vulnerable. For example, as of the year 2022, 54.5% of the population is covered by the National Health Insurance Scheme. As a result of the expansion and improvement of access to healthcare, life expectancy has increased from 59.2 in 2000 to 66.3 in 2019[4]. While progress has been made in improving healthcare service, disparities persist, particularly in rural and underserved communities.

The top five (5) leading causes of morbidity and mortality in Ghana include malaria, stroke, lower respiratory infection, neonatal disorder and ischemic heart disease[5]. Anecdotal evidence also suggests an emerging trend in the rising prevalence of non-communicable diseases (NCDs), including stroke, ischemic heart disease, diabetes, and chronic liver diseases. These conditions may be mostly a result of factors including inactive lifestyles, unhealthy diets, and consumption of harmful products such as tobacco, alcohol and sugar-sweetened beverages.

1.3 National Healthcare System

Ghana's Healthcare System is designed such that the Ministry of Health provides overarching direction through policy whereas health regulatory agencies oversee the regulation of healthcare facilities, health professionals, pharmaceuticals and other health products. Service delivery function is performed by the Ghana Health Service (GHS), Faith-Based, Quasi and some Private-For-Profit health facilities with a focus on primary healthcare which is the main vehicle for attaining Universal Health Coverage (UHC). Psychiatric and Teaching Hospitals and some private health facilities provide tertiary and specialized healthcare services. The National Health Insurance Authority (NHIA) also provides financial risk protection for the population.

Health service delivery in Ghana follows a three-tier arrangement which starts from peripheral primary to secondary and tertiary levels. Correspondingly, there are three levels of management in the Ghanaian health sector which are the district level, regional level and the central or national headquarter level.

1.4 Health Financing

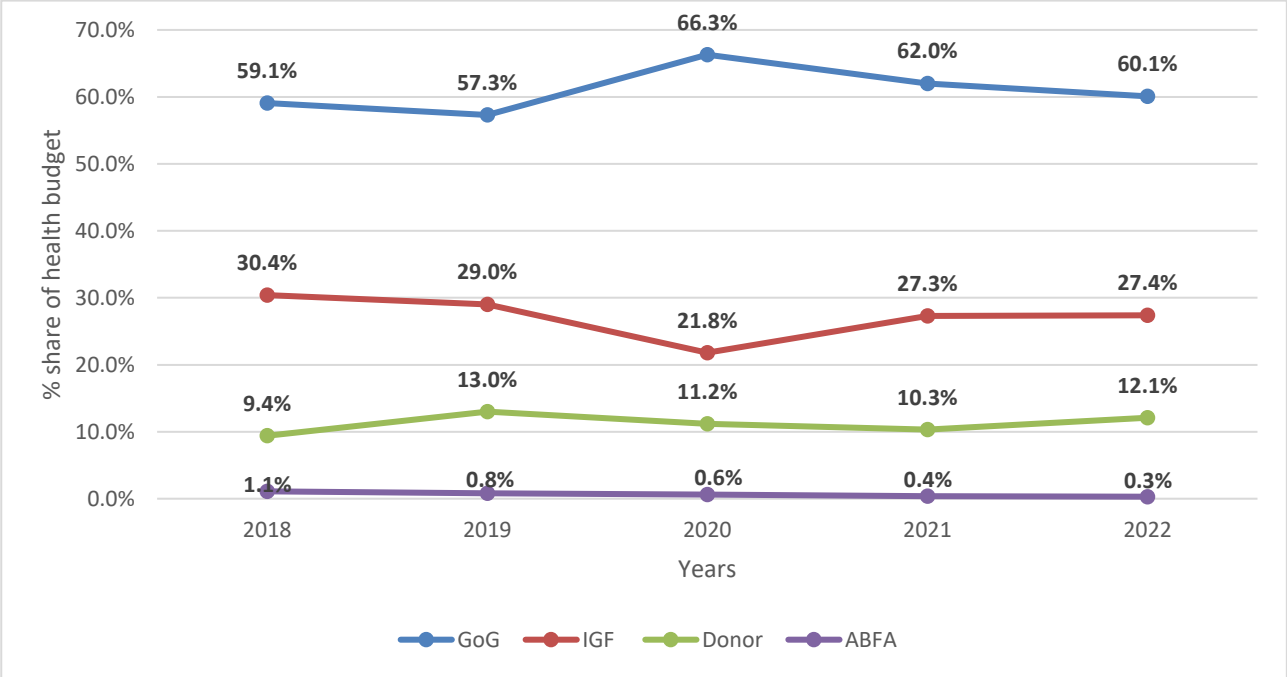
The primary sources of healthcare financing in Ghana are government (direct budget allocations), Internally Generated Funds (IGF), donor contributions and Annual Budget Funding Amount (ABFA). The Government of Ghana (GoG) over the years, has been the major financier of healthcare services contributing approximately 60.8% of resources allocated to the sector. This fund mainly comes in the form of payment of wages and salaries. In 2022, the share of salaries and wages from GoG was

[4] The Global Health Observatory

[5] District Health Information Management System (DHIMS)

95.42% compensation. IGF which is the second major contributor is about 26.5% of resources available and is mostly used to support service delivery. The IGF is made up of out-of-pocket (OOP) payments by households and claims payments made to health facilities by the National Health Insurance Authority for services rendered. Donor funding which contributes approximately 11.7% of resources available to the sector is mostly earmarked for specific programs, activities and capital investment projects. ABFA which is the least contributor (approximately 1% of health resources) is the allocation from oil revenue in Ghana and is used to support capital projects. Figure 1 below shows a trend of budgetary allocation for healthcare financing in Ghana.

Figure 1: Trend in Health Sector Budget by Source of Funds



2.0 METHODOLOGY

This section of the report outlines the data source and approach used for collating health expenditures, the boundaries of the study and data management. The section also details the assumptions and estimations used in the study as well as the limitations of the study.

2.1 Approach and Data Sources

Two forms of data were collected (primary and secondary). The collection of data was guided by the categories defined in the System of Health Accounts (SHA 2011) manual i.e., the financing, providing and consumption perspectives. For all years under consideration, the health expenditure data was obtained from both administrative and surveys, covering government, donors, employers, NGOs and insurance companies with standardized survey instruments generated from the Health Accounts Production Tool (HAPT). Household health expenditure was estimated using information from the Ghana Living Standard Survey (GLSS 7, 2017).

2.1.1 Primary Data

Data collection sources were identified to include Private Health Insurers whose main focus is to purchase healthcare on behalf of employers and households and employers who provide healthcare services to their employees. The employer list was selected from the Association of Ghana Industries and Ghana Employers Association Club 10. Data from Development Partners (DPs) including both bilateral and multilateral who support the health sector and Non-Governmental Organisations (NGOs) which may provide direct healthcare services or support the health sector in Ghana. Questionnaires were distributed to these institutions and follow-up calls and visits were conducted by data collectors to ensure completion.

2.1.2 Secondary Data

Government Ministries, Departments and Agencies

Secondary data were sourced from the Ministry of Health audited financial statements, budget reports, annual reports and other official publications. Additionally, other secondary information such as utilization data and other statistics were sourced from the District Health Management Information System (DHIMS) for the period under review. Data was also collected from the National Health Insurance Authority and Ghana Association of Quasi-Government Health Institutions (for example Christian Health Association of Ghana (CHAG), Military, SSNIT Hospitals among others) to support the study.

Household Data

The NHA team received household expenditure information from the household survey 2017 which was categorized as registration, consultation, diagnosis, drugs for treatment and other costs associated with health care. This data was forecasted from 2018 to 2022 using different, generally agreed upon, macroeconomic variables. These variables were population growth, economic growth and household consumption price index for the respective years. The resultant trends were compared with the estimated trends from the Global Health Expenditure Database and they were in sync though not the same. Figures were shared with the Ghana Statistical Service team for review and final input which was done. The same procedure was followed while dealing with the private employers' data for the years from 2018 to 2022.

2.2 Boundaries

The 2018-2022 NHA was produced in line with the SHA 2011 financing framework which uses a tri-axial recording of each transaction to enable understanding of resource flows between financing, provision, and consumption. This approach ensures that the value of all healthcare goods and services consumed equals the value of healthcare goods and services financed and provided. The period for this report is January to December for the years under consideration.

2.3 Data Management

Data collected were reviewed and validated by the National Health Accounts Technical Working Group and imported into the Health Accounts Production Tool (HAPT). This was followed by mapping of the data to the NHA dimensions in the HAPT. Seven Health Accounts (HA) tables (HF x FS, HF x FA, HP x HF, HC x HF, HC x HP, DIS x HF and HK x FA) were then generated from the HAPT. The tables were analysed by the NHA Technical Working Group followed by findings deducing and recommendations for use. Policy briefs were developed for dissemination of the report.

2.4 Assumptions

The following assumptions were made in the 2018 to 2022 National Health Account:

- Some distribution keys were used to split data, for example, where health expenditures were aggregated, budget proportions were assumed to be equal to expenditure for an activity or programme.
- Household expenditures were obtained from the Ghana Living Standard Survey (GLSS 7, 2017) and projected for the years 2018 to 2022 with support from the Ghana Statistical Service (GSS).
- The interbank annual exchange rate published by the Bank of Ghana as of 31 December of each year (US dollar to the Ghana cedi) was used in this study.

2.5 Limitations

The following were the challenges experienced during the development of the 2018 – 2022 NHA:
Data

- Difficulty in getting data from institutions due to the long laps in the production of NHA
- Difficulty in getting real-time data for household expenditures as a result of the periodic preparation of the Ghana Living Standard Survey (GLSS).
- Health expenditures data were aggregated in some cases making it difficult to disaggregate.
- Difficulty in collecting data from Traditional and Alternative Medicine practitioners

Limited capacity in the use of the NHA Tool (HAPT) due to staff attrition and the long delay in the development of NHA.

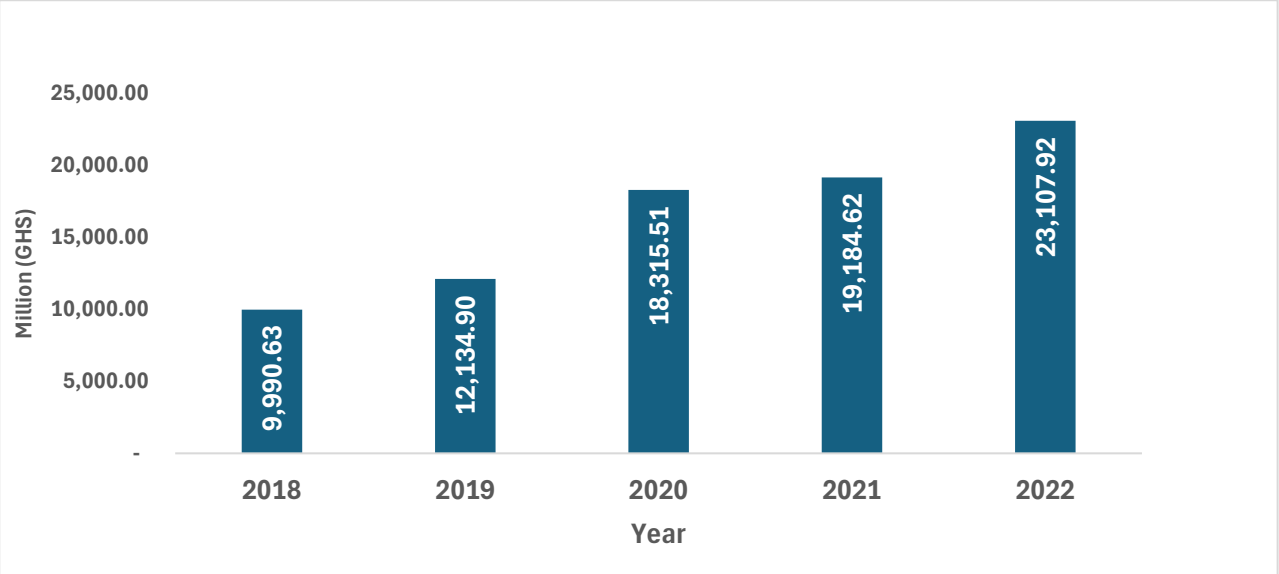
3.0 FINDINGS

This section discusses the major findings of the 2018-2022 National Health Accounts which includes financing sources and agents, health care providers and health care functions.

3.1 Total Health Expenditure (THE) GHS: 2018-2022

Total Health Expenditure measures the sum of all expenditures on health services and goods as well as capital investments in Ghana. For the years 2018-2022, Ghana's Total Health Expenditure (THE) consistently increased from GHC9.9 billion to GHC23.1 billion with the highest percentage increase of approximately (51%) occurring between 2019 and 2020. The significant rise in 2020 may be attributed to COVID-19 and its impact on healthcare spending. It is worth noting that current health expenditure accounted for 90 to 97 per cent of Total Health Expenditure whereas capital health expenditure accounted for less than 10 per cent over the years.

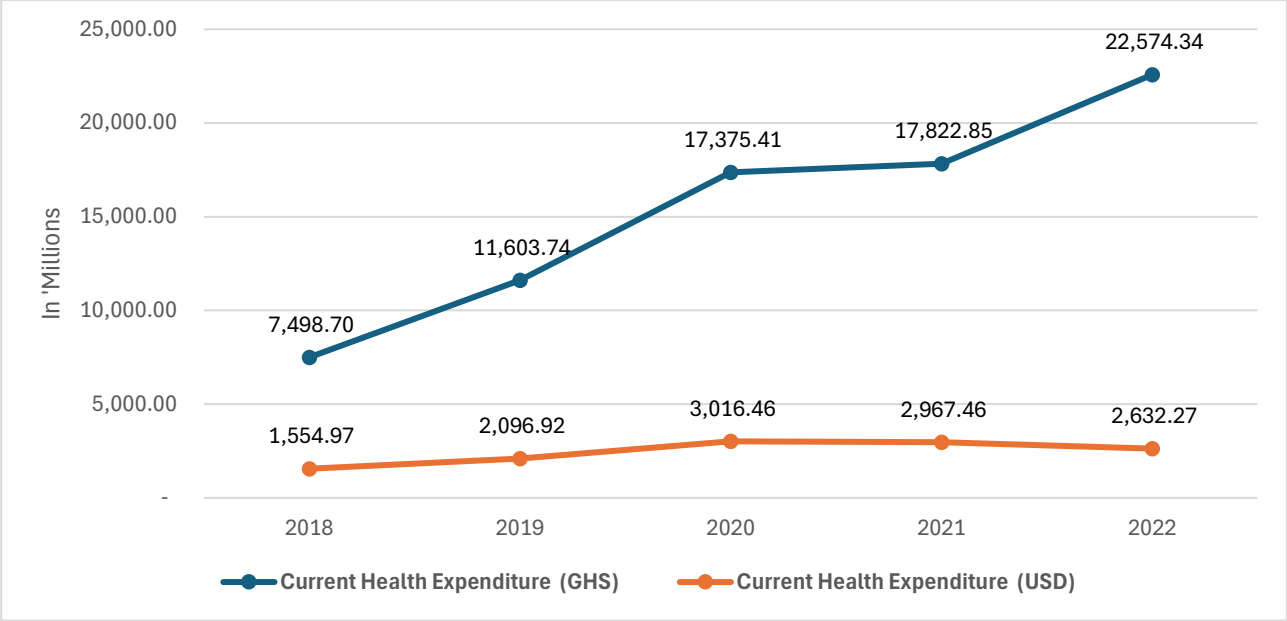
Figure 2: Total Health Expenditure (THE) GHS (2018-2022)



3.2 Current Health Expenditure (CHE) (GHS vs USD): 2018-2022

Ghana's Current Health Expenditure (CHE), representing spending on health goods and services excluding capital investments, steadily increased from GHS 7.5 billion in 2018 to GHS 22.5 billion in 2022. However, when converted to USD using the interbank exchange rate at the end of each year, the trend differed. While CHE in GHS consistently rose, expenditure in USD increased from USD 1.5 billion in 2018 to USD 3 billion in 2020, then decreased to USD 2.6 billion in 2022.

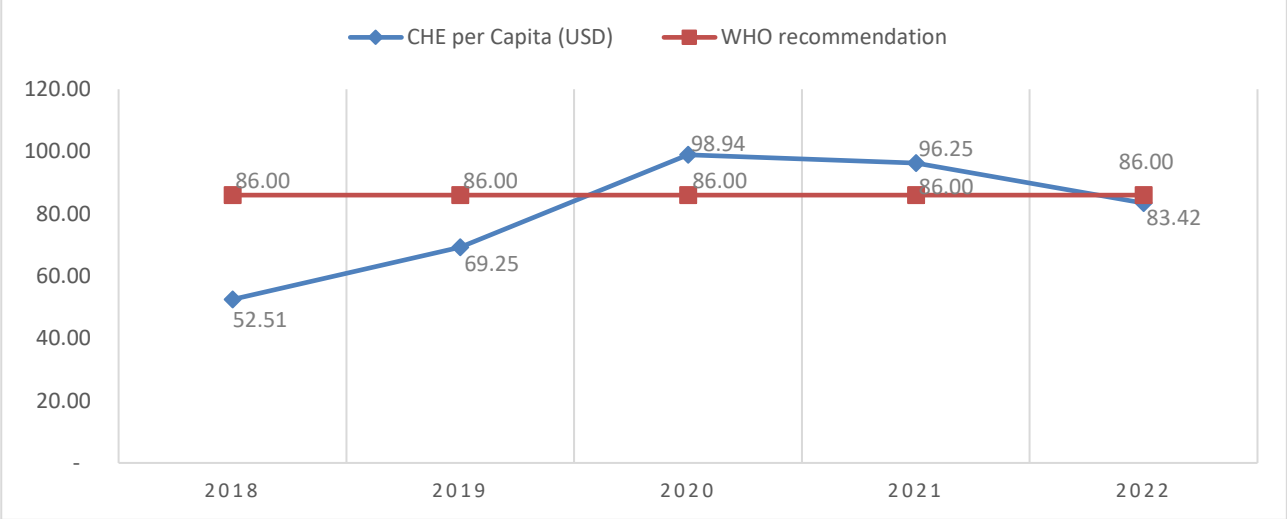
Figure 3: Current Health Expenditure (GHS vs USD)



3.3 Current Health Expenditure (CHE) Per Capita

Per capita Current Health Expenditure (CHE) measures the amount spent on healthcare for each person in the country for a specific period. Ghana's CHE per capita (USD) varied from a low of USD 52.51 in 2018 to a high of USD 98.94 in 2020. Between 2021 and 2022, Ghana's per capita CHE was higher than the WHO's recommended minimum average spending of USD 86[6] per capita to achieve UHC but lower than the average per capita health spending of USD 119 for Low-Middle-Income-Countries (LMICs)[7]. The CHE per capita decreased to USD 83.42 in 2022. This decline suggests a need to increase healthcare spending to meet the demands of the growing population and achieve the Universal Health Coverage (UHC) target by 2030.

Figure 4: Current Health Expenditure (CHE) Per Capita 2018-2022



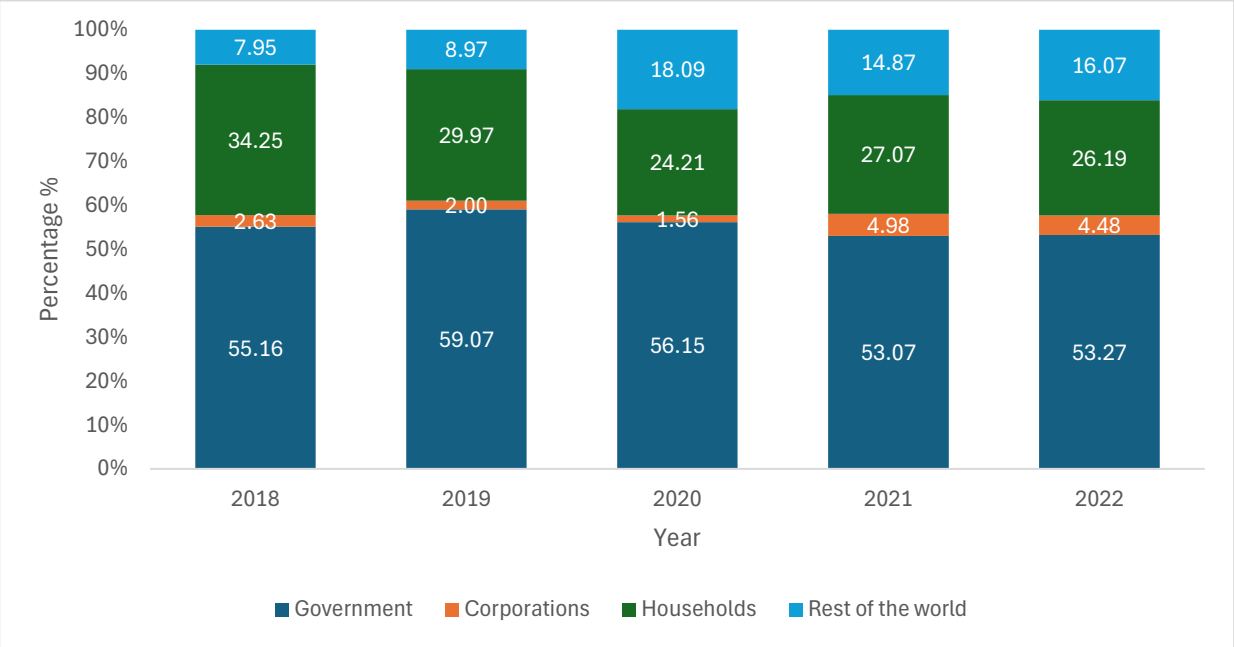
[6] https://www.chathamhouse.org/sites/default/files/field/field_document/20140521HealthFinancing.pdf

[7] https://files.aho.afro.who.int/afahobckpcontainer/production/files/2_Global_expenditure_on_health_Public_spending_on_the_rise.pdf

3.4 Current Health Expenditure (CHE) by Financing Sources (FSRI)

Financing Sources (FSRI) refers to the institutional units that provide revenues for the various schemes. The traditional financing sources in Ghana are government, households, corporations and the rest of the world. Government remains the primary financier of the health sector contributing 53 to 60 per cent of funds from 2018-2022. The second-largest financier is households, however, its share shows a decline from 34.25 in 2018 to 26.19 in 2022. Contributions from the Rest of the World (donors) remain the third largest. However, its share increased from 7.95 per cent in 2018 to 16.07 per cent. This may be attributed to the heavy inflow of funds due to the COVID-19 pandemic.

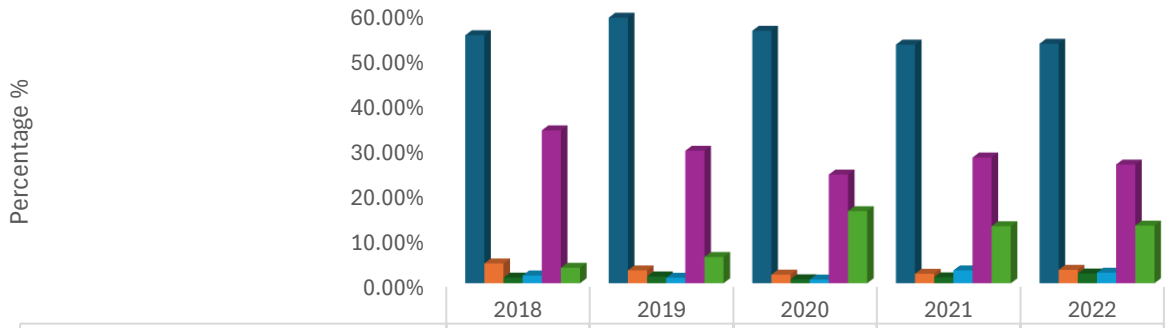
Figure 5: Current Health Expenditure by Funding Sources (FSRI) (2018-2022)



3.5 Current Health Expenditure (CHE) by Categories of Funds (FS)

Categories of Funds (FS) describe the type of revenue received by financing schemes. In Ghana, transfers from government domestic revenue (budget) are the largest form of inflow to the health sector accounting for 53 to 60 per cent of resources. This is followed by other domestic revenues (out-of-pocket) showing a decline from 34 per cent in 2018 to 26.4 per cent in 2022. The rest of the world is the third source of transfer of funds to the health sector. This is made up of transfers distributed by the government from foreign origin (on-budget) and direct foreign transfers (off-budget). It was observed that while on-budget transfers reduced from 4.4 per cent in 2018 to 2.98 per cent in 2022, off-budget increased from 3.46 per cent in 2018 to 12.83 per cent in 2022.

Figure 6: CHE by Categories of Funds (FS) (2018-2022)

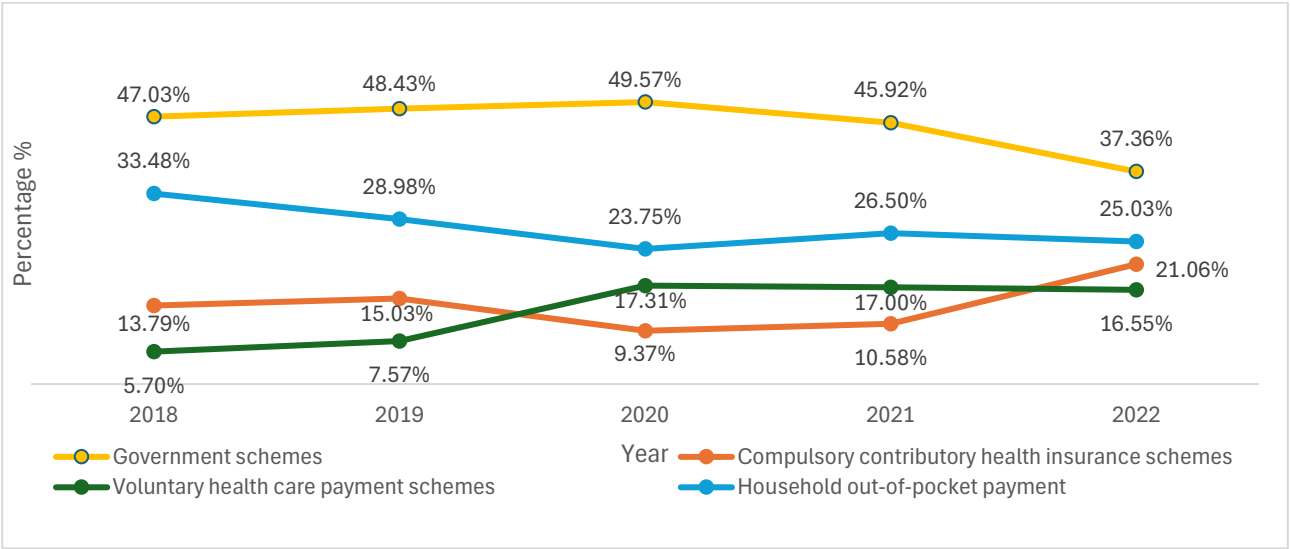


	2018	2019	2020	2021	2022
Transfers from government domestic revenue (allocated to health purposes)	55.16%	59.07%	56.15%	53.07%	53.27%
Transfers distributed by government from foreign origin	4.40%	2.86%	1.91%	2.11%	2.98%
Social insurance contributions	1.25%	1.53%	0.88%	1.31%	2.17%
Voluntary prepayment	1.73%	1.23%	0.84%	2.86%	2.35%
Other domestic revenues n.e.c.	34.00%	29.47%	24.17%	27.96%	26.40%
Direct foreign transfers	3.46%	5.84%	16.04%	12.68%	12.83%

3.6 Current Health Expenditure (CHE) by Financing Schemes (HF)

Financing scheme (HF) refers to the mechanisms through which health resources are collected and pooled to pay for health services. Funds pooled through government schemes remained the highest with a share of 47.03 per cent in 2018 and 49.57 per cent in 2020 but showed a decline in 2021 and 2022 (45.92 and 37.36 per cent respectively). Household out-of-pocket (OOP) decreased from 33.48 per cent in 2018 to 25.03 per cent in 2022 but still remains the second highest over the same period. It was observed that voluntary healthcare prepayment scheme (i.e., private insurance) increased from 5.7 per cent in 2018 to 16.55 per cent in 2022. Compulsory contribution health insurance scheme also decreased from 15.03 per cent in 2019 to 9.37 per cent in 2020 but increased to 21.06 per cent in 2022.

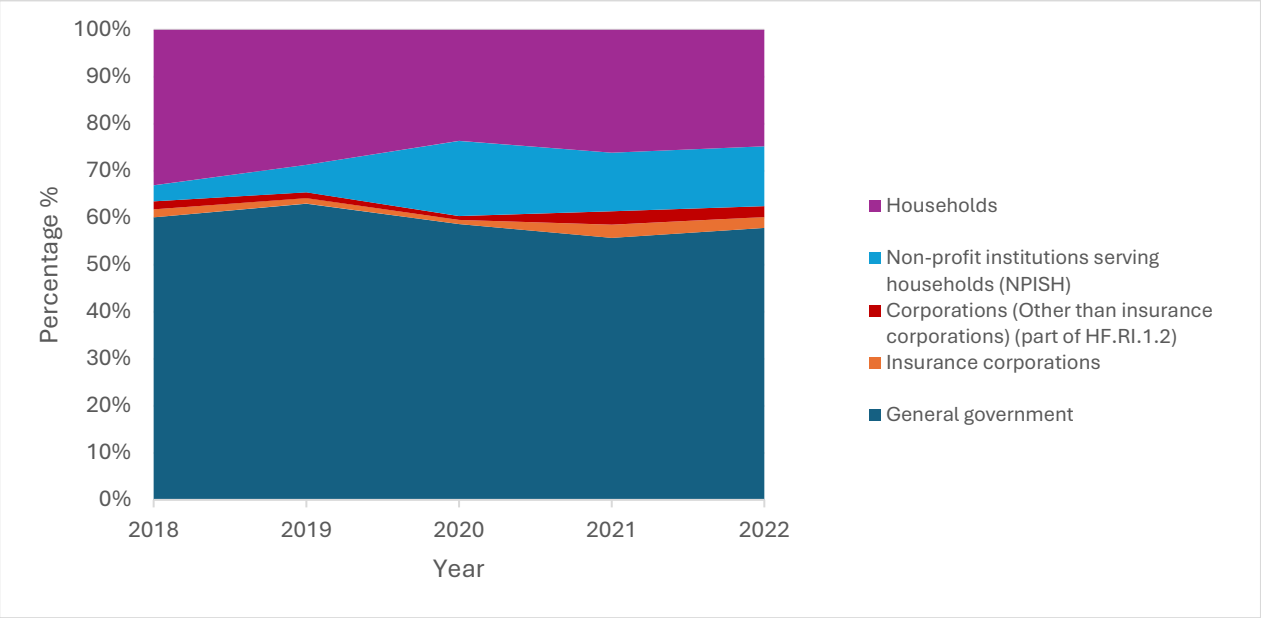
Figure 7: Current Health Expenditure by Financing Schemes (HF)



3.7 Current Health Expenditure (CHE) by Financing Agents (FA)

Financing agents are entities that manage health funds and make decisions on how to allocate resources to healthcare services. During the period under review, the government managed an average of 59.63 per cent, Households (Out-of-pocket) 27.55 per cent and Non-profit institutions serving households (NPISH) 10.17 per cent of health expenditures within the same period. Corporation (other than insurance corporations) remains the lowest manager of health funds managing 0.85 per cent. This reveals that government and households together managed over 80 per cent of health funds from 2018 to 2022.

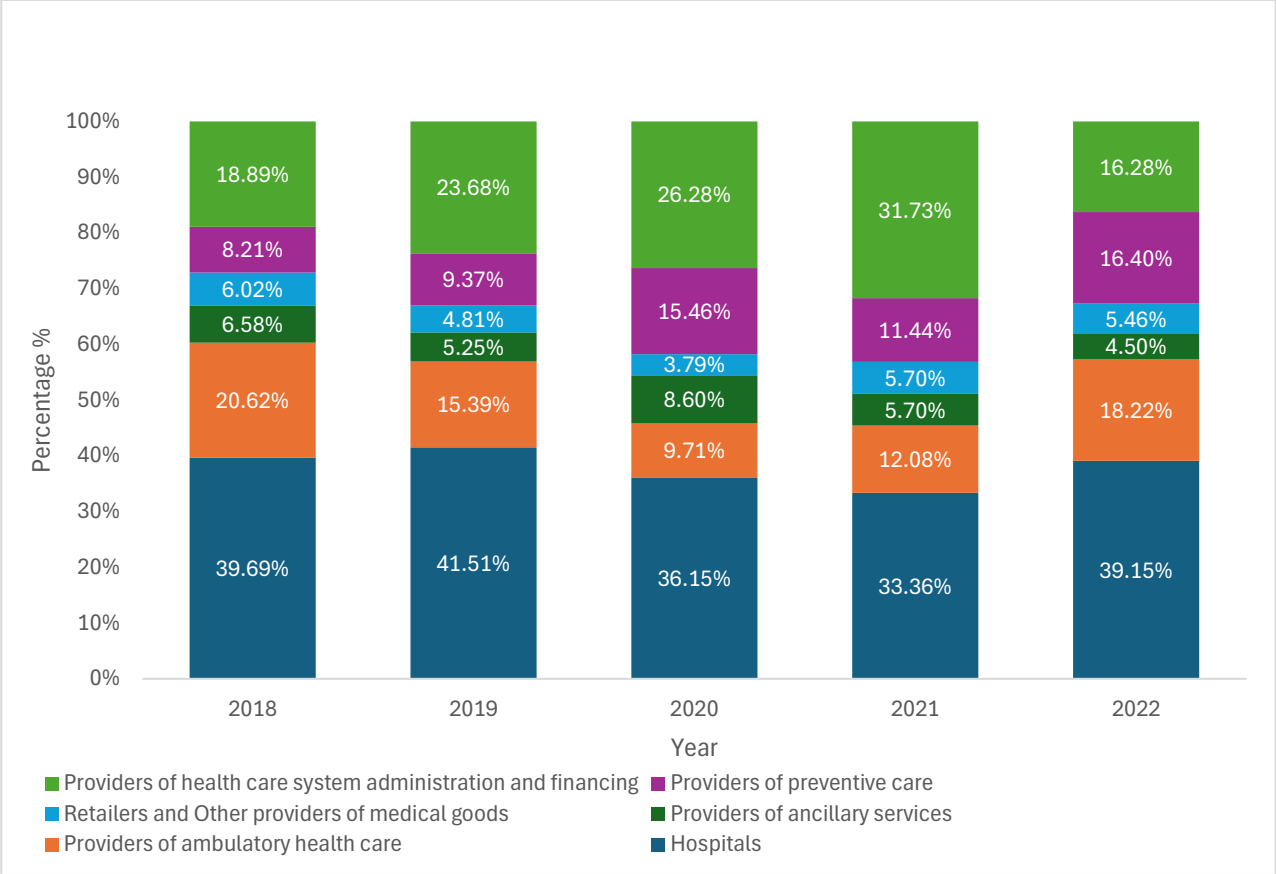
Figure 8: Current Health Expenditure by Financing Agents



3.8 Current Health Expenditure (CHE) by Healthcare Providers (HP)

Healthcare Providers (HP) are organisations and actors that, either primarily or as part of the multiple activities in which they are engaged, deliver health care. Hospitals are the major healthcare providers in Ghana accounting for 39.69 per cent in 2018 and 39.1 per cent in 2022, followed by providers of healthcare system administration and financing with a sharp increase of 31.73 per cent in 2021 and decreased to 16.28 per cent in 2022. Expenditures by providers of ambulatory service decreased from 15.39 per cent in 2019 to 9.71 per cent during the COVID-19 era (i.e. 2020 and 2021) and increased to 18.22 per cent in 2022. Generally, expenditures on preventive care did not see much significant increase except in 2022.

Figure 9: Current Health Expenditure by Healthcare Providers (HP)



3.9 Current Health Expenditure (CHE) by Healthcare Function (HC)

Healthcare Function expenditure measures spending on various types of health goods and services consumed and health activities performed within the country. Curative care remains the major cost driver in the provision of healthcare from 2018 to 2022. The main cost drivers of curative care over the years have been compensation of employees and materials and services used. From 2018 to 2022, expenditure on medical goods, ancillary services and rehabilitative care were less than 13 per cent for the years under review.

For instance, in 2022, materials and services used which include healthcare goods and services, non-healthcare goods and services and other materials used constituted 66.83 per cent of expenditures while compensation of employees accounted for 32.83 per cent.

Figure 10: Current Health Expenditure by Healthcare Function (HC)

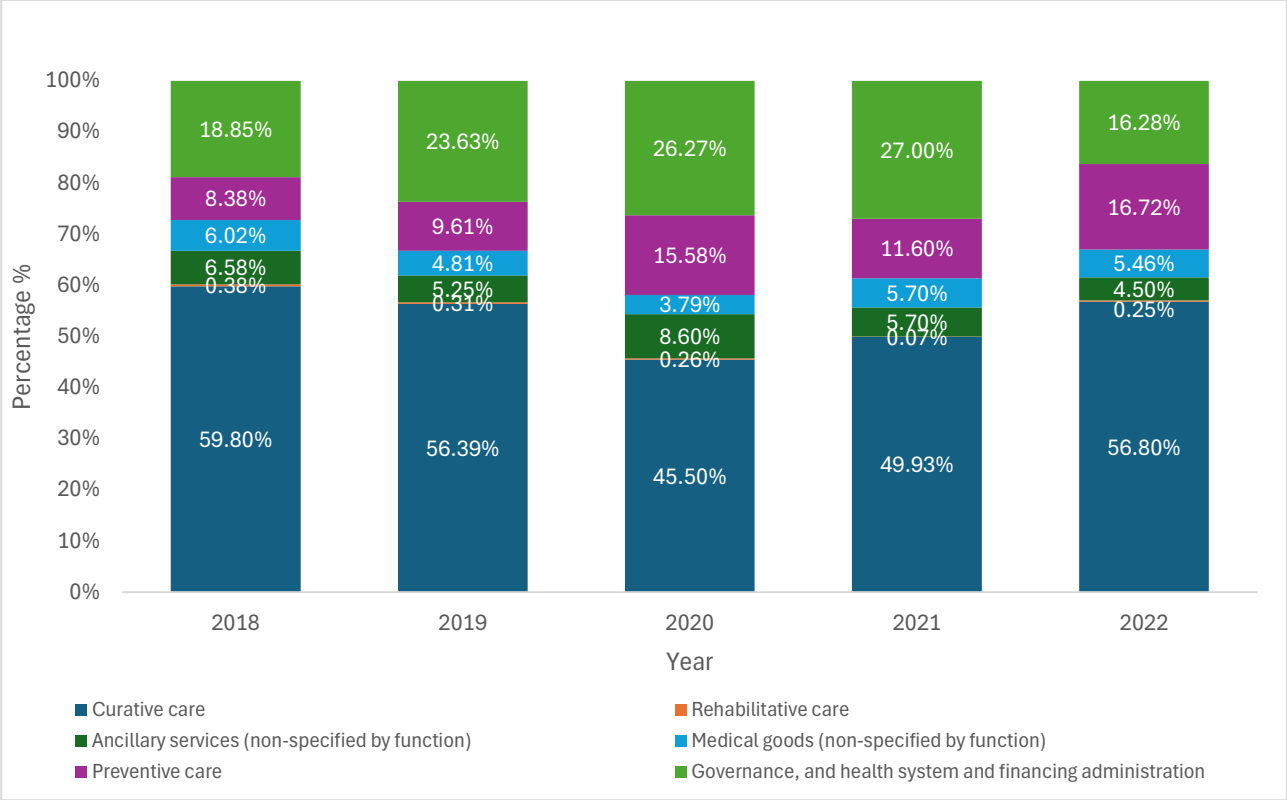


Figure 11: Cost Drivers of Curative Care (2022)

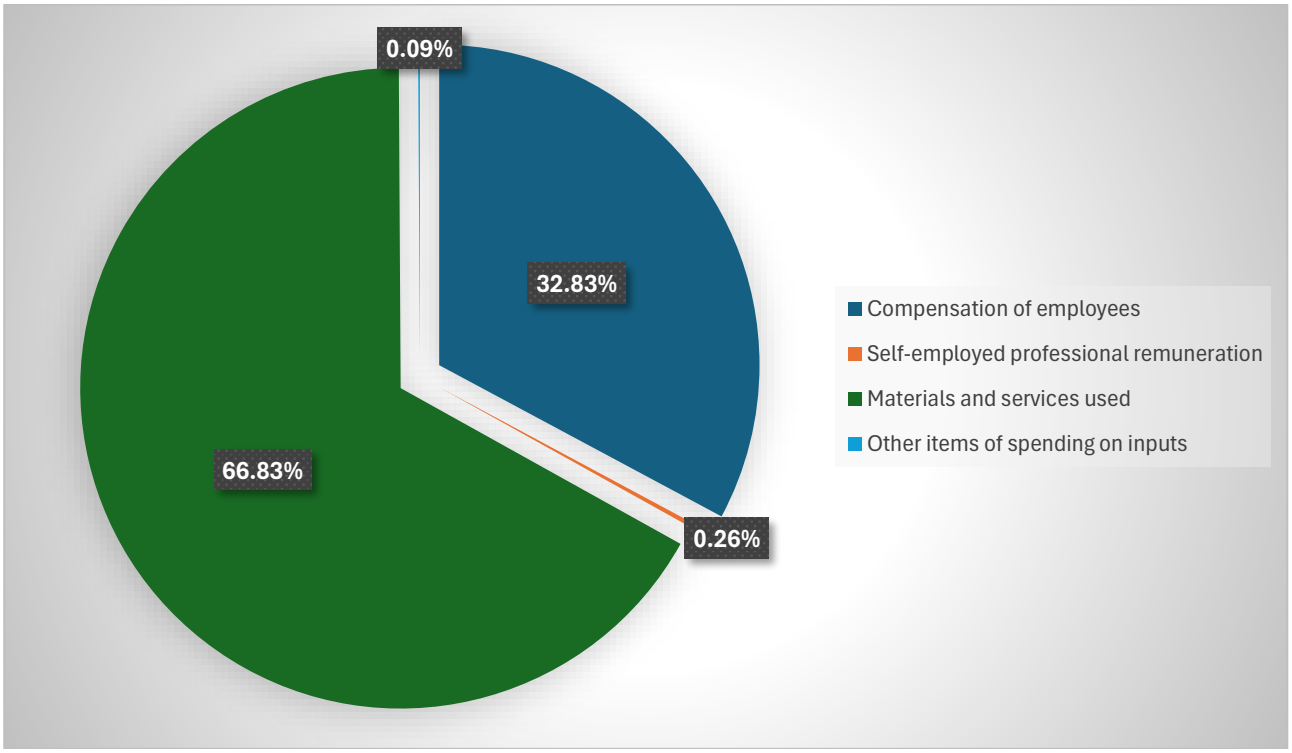
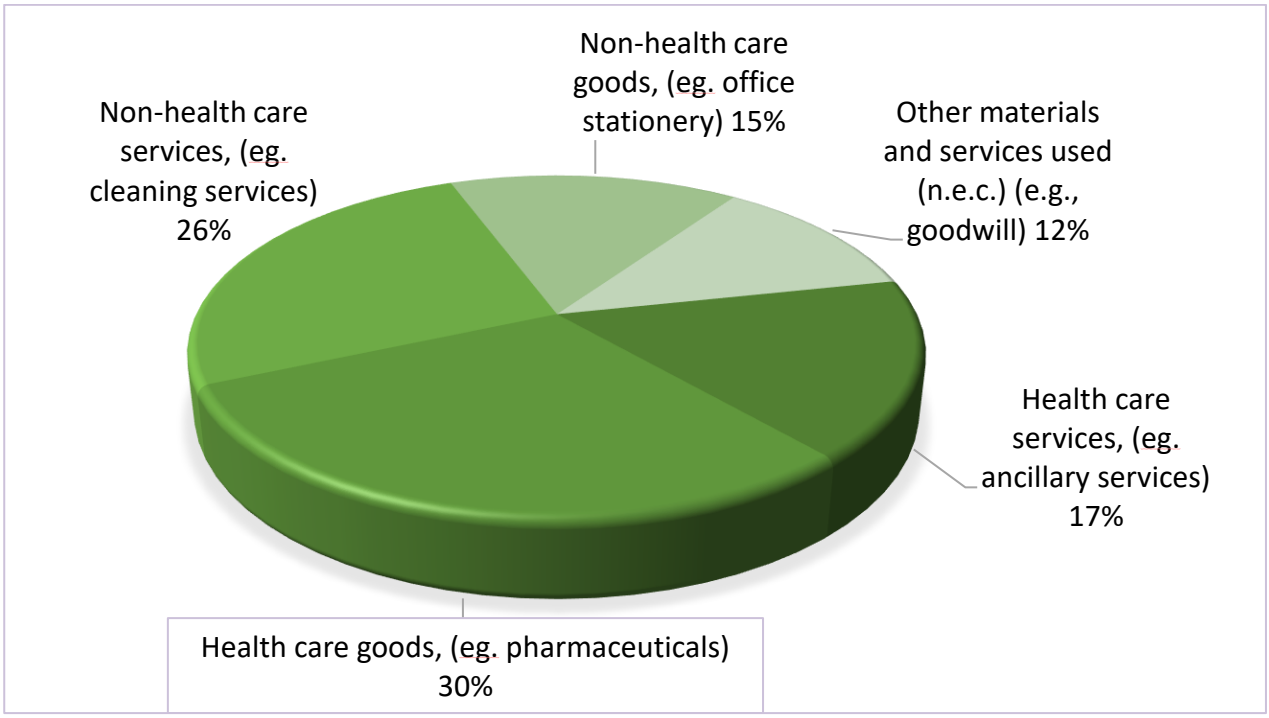


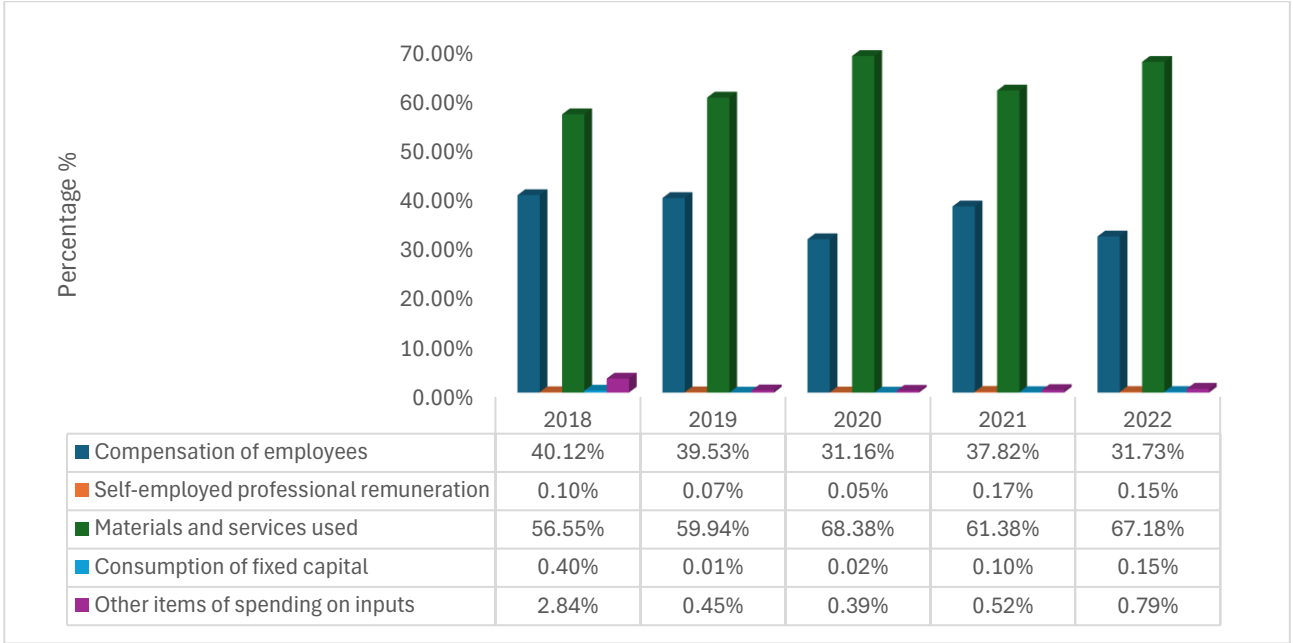
Figure 12: Components under Materials and Services Used (2022)



3.10 Current Health Expenditure (CHE) by Factors of Healthcare Provision (FP)

Factors of health care provision refer to the types of inputs used in producing the goods and services or activities. Between 2018-2022, materials and services used for healthcare provision accounted for 56 to 69 per cent. Consumption of fixed capital over the years has been negligible accounting for less than 1 per cent over the period 2018-2022.

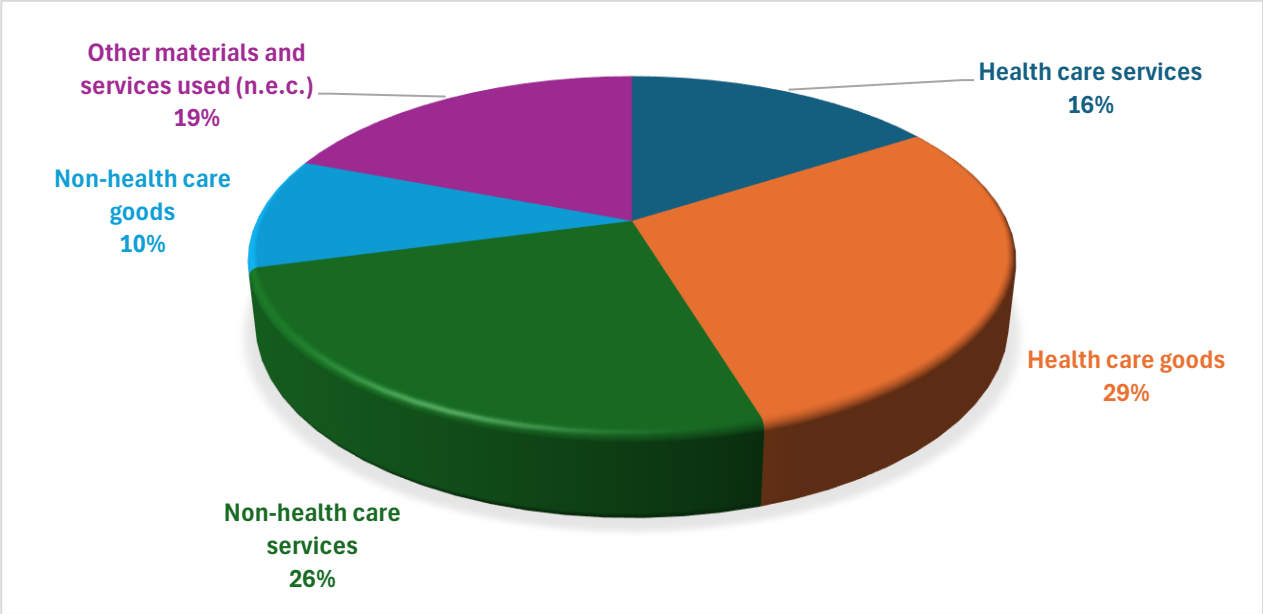
Figure 13: Current Health Expenditure by Factors of Production (FP)



	2018	2019	2020	2021	2022
Compensation of employees	40.12%	39.53%	31.16%	37.82%	31.73%
Self-employed professional remuneration	0.10%	0.07%	0.05%	0.17%	0.15%
Materials and services used	56.55%	59.94%	68.38%	61.38%	67.18%
Consumption of fixed capital	0.40%	0.01%	0.02%	0.10%	0.15%
Other items of spending on inputs	2.84%	0.45%	0.39%	0.52%	0.79%

From the graph below, adding the share of expenditure on non-healthcare goods, services and other materials and services used, takes the major share compared to healthcare goods and services.

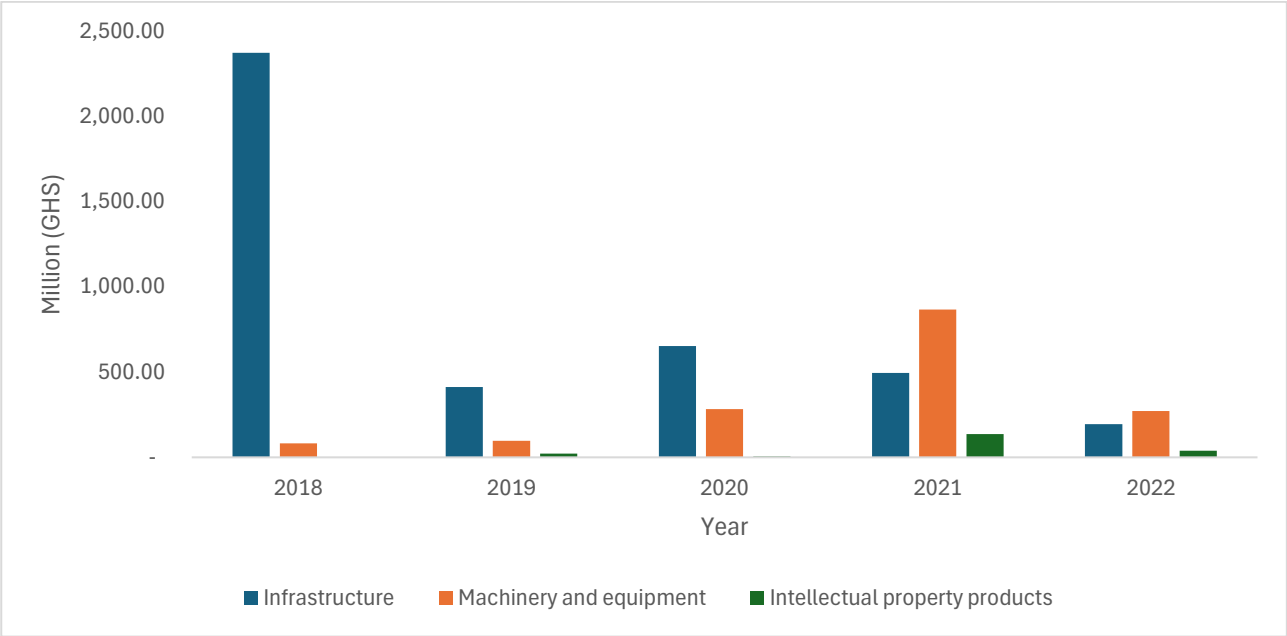
Figure 14: Materials and Services Used (Average 2018-2022)



3.11 Capital Health Expenditure (HK)

Capital expenditure between 2018 and 2020 was skewed towards infrastructure (civil works) but changed towards machinery and equipment in 2021 and 2022. The increase in expenditure for machinery and equipment may be due to COVID-19 investment. Intellectual property remains underfunded throughout the period.

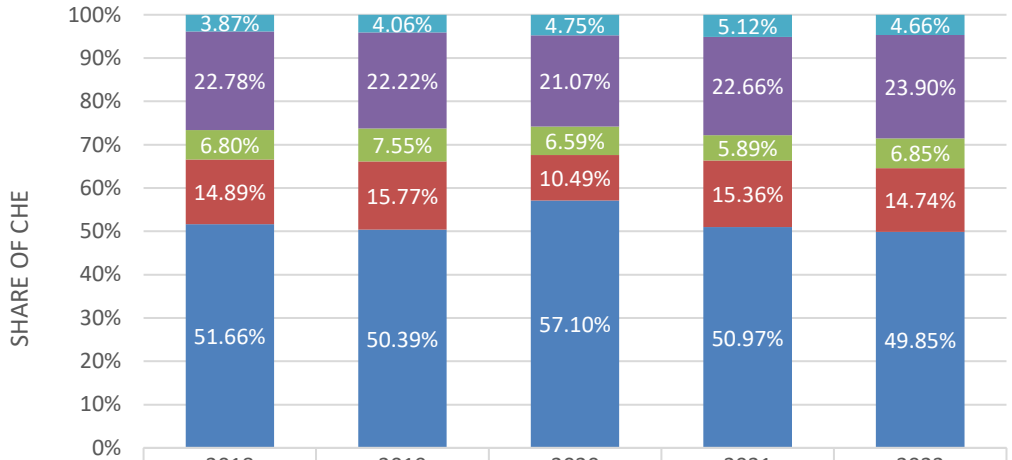
Figure 15: Capital Health Expenditure (HK)



3.12 Current Health Expenditure (CHE) by Disease and Health Conditions

The analysis of CHE on disease and health conditions indicates that from 2018 to 2022, health expenditures on infectious and parasitic diseases consumed half of the healthcare expenditures with a significant increase in 2020 during the COVID-19 period. Expenditure on reproductive health remained relatively constant throughout the period under review except for 2020 which may also be attributed to the COVID-19 pandemic. Also, expenditure on non-communicable diseases remained relatively constant throughout the period under review.

Figure 17: Current Health Expenditure (CHE) by Disease and Health Conditions (2018 - 2022)



	2018	2019	2020	2021	2022
Injuries	3.87%	4.06%	4.75%	5.12%	4.66%
Noncommunicable diseases	22.78%	22.22%	21.07%	22.66%	23.90%
Nutritional deficiencies	6.80%	7.55%	6.59%	5.89%	6.85%
Reproductive health	14.89%	15.77%	10.49%	15.36%	14.74%
Infectious and parasitic diseases	51.66%	50.39%	57.10%	50.97%	49.85%

Further analysis was done to understand spending on diseases supported by program funds (HIV/AIDs, TB, Malaria and Reproductive Health). It was observed that when all costs (direct and estimated indirect costs) are considered, the government is the major financier of these diseases. On the other hand, donors spent more on HIV/AIDs, while households spent more on malaria and reproductive health when only direct costs are considered.

Figure 18: CHE on HIV/AIDS and STDs by Funding Source (All Cost)

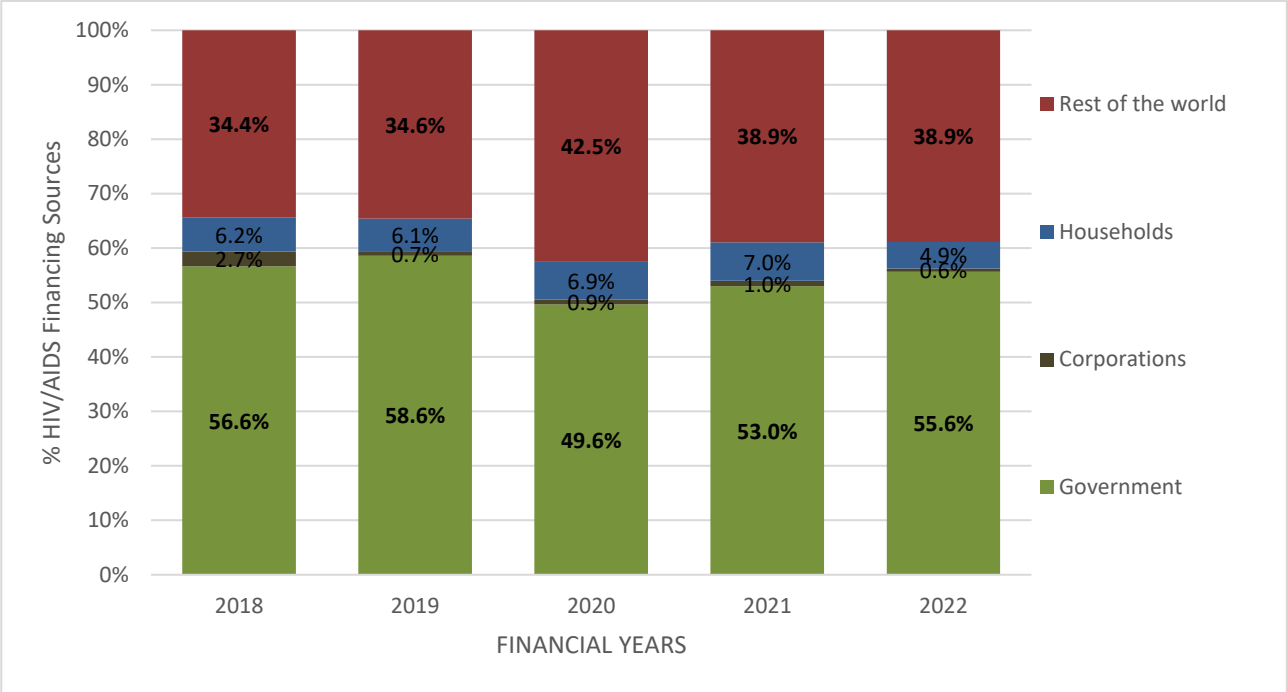


Figure 19: CHE on HIV/AIDS and STDs by Funding Source (Excl. Indirect Cost)

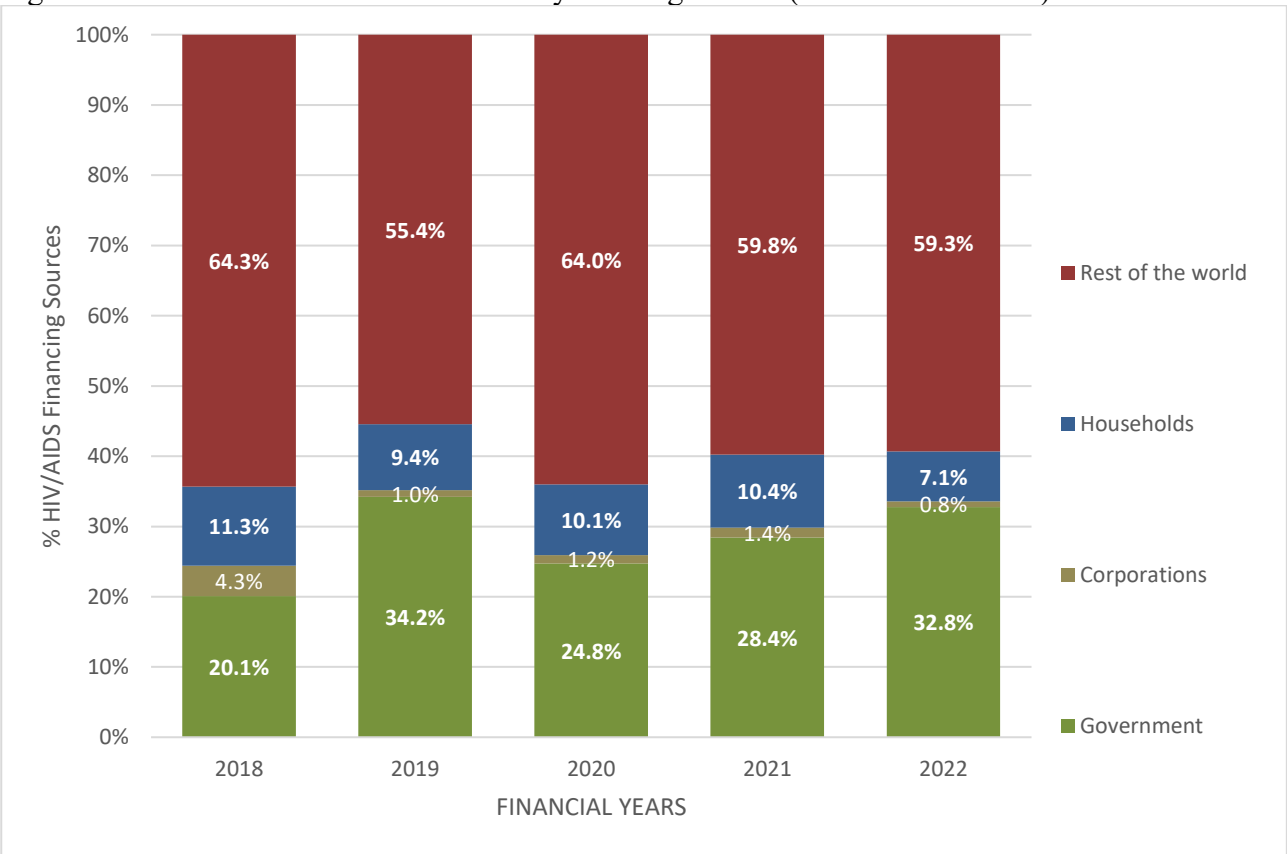


Figure 22: CHE on Malaria by Funding Source (All Cost)

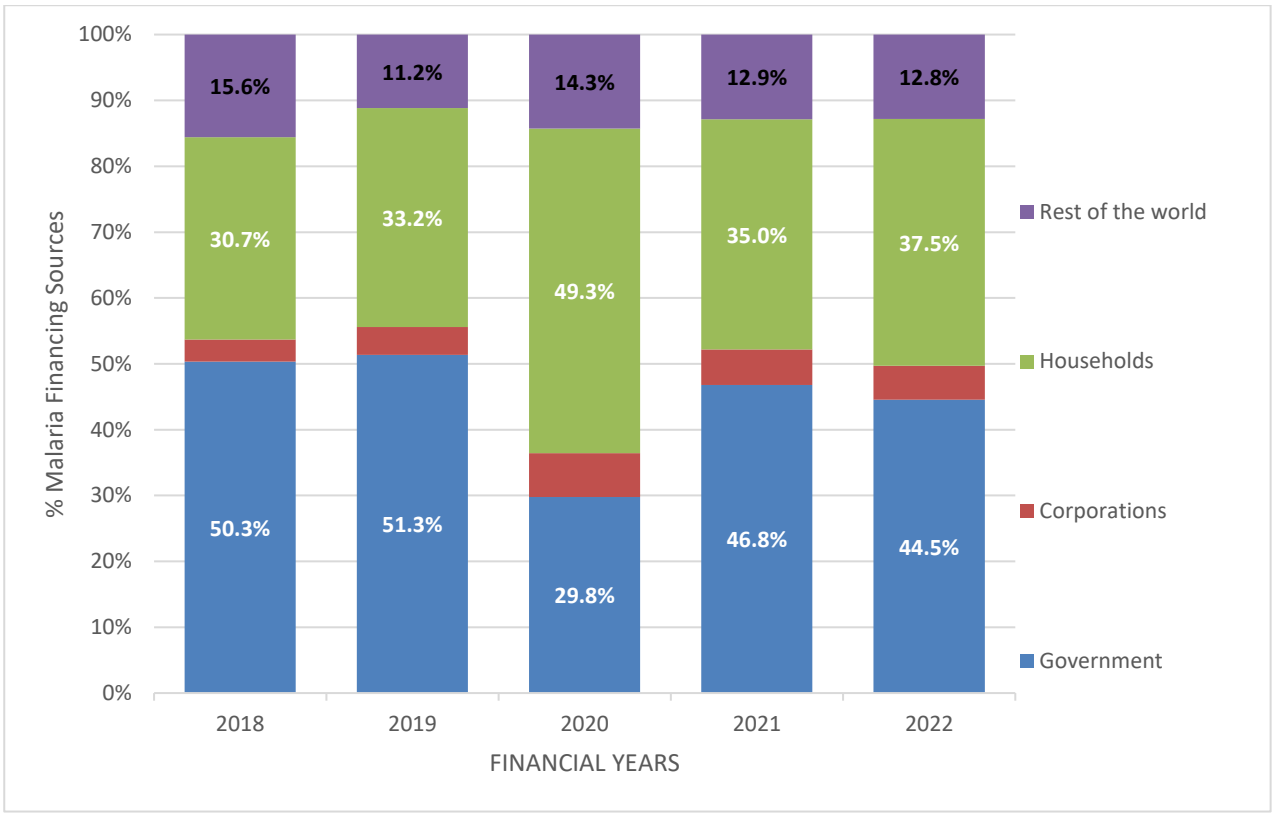


Figure 23: CHE on Malaria by Funding Source (Excl. Indirect Cost)

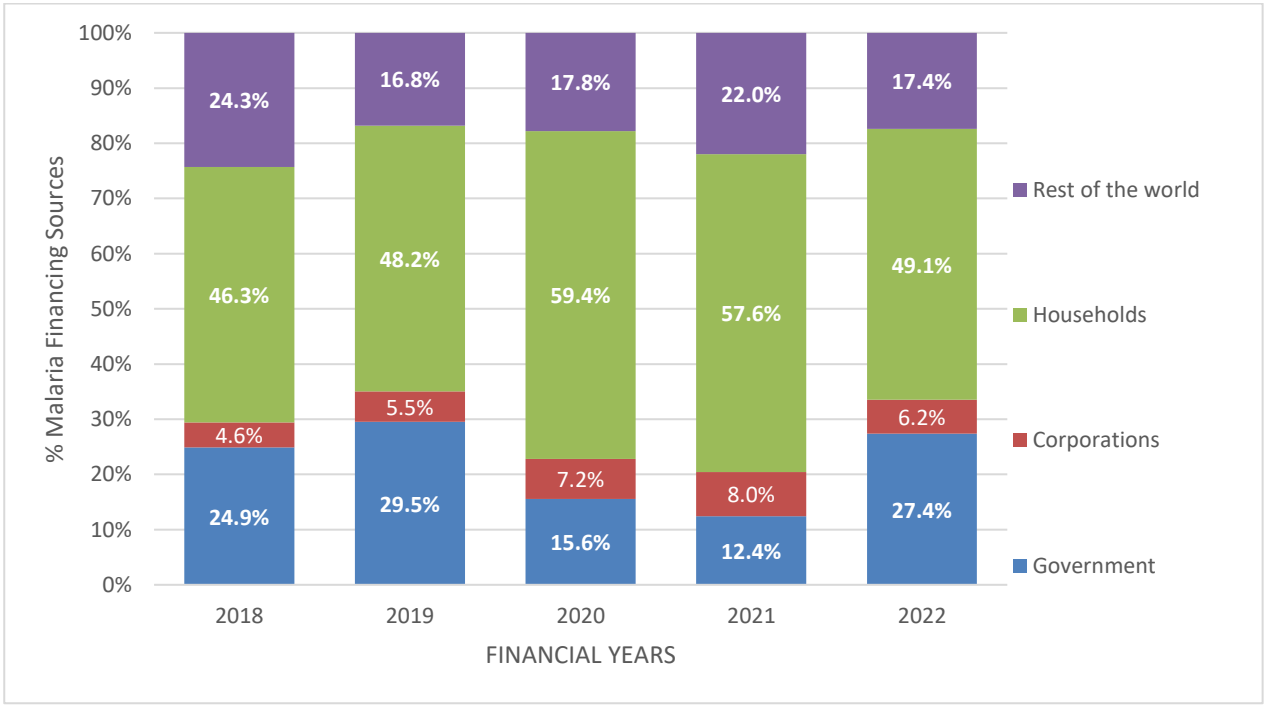


Figure 24: CHE on Reproductive Health by Funding Source (All Cost)

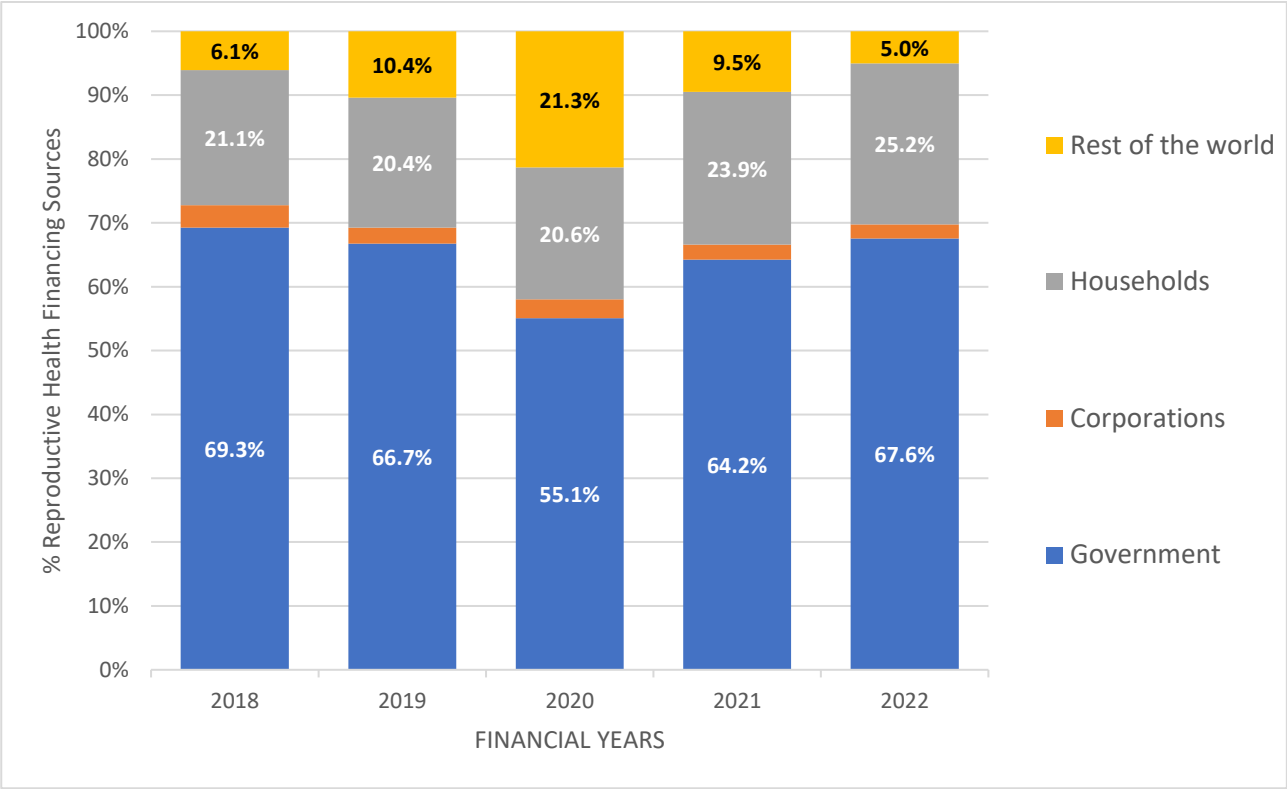
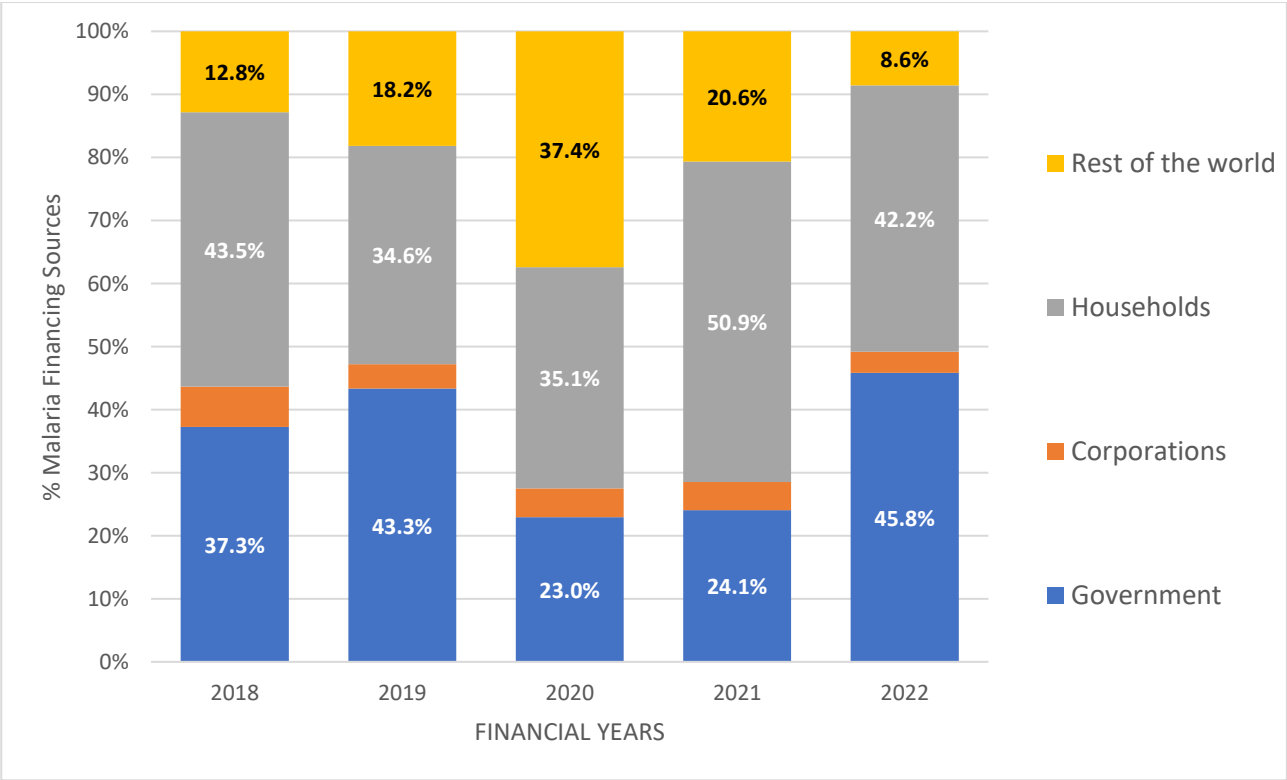


Figure 25: CHE on Reproductive Health by Funding Source (Excl. Indirect Cost)



In the case of TB, the analysis shows that the Government is the main financier. However, it will be good to do further investigations between TB and HIV/AIDs to be able to account for possible TB expenditures embedded in HIV/AIDs.

Figure 26: CHE on Tuberculosis by Funding Source (All Cost)

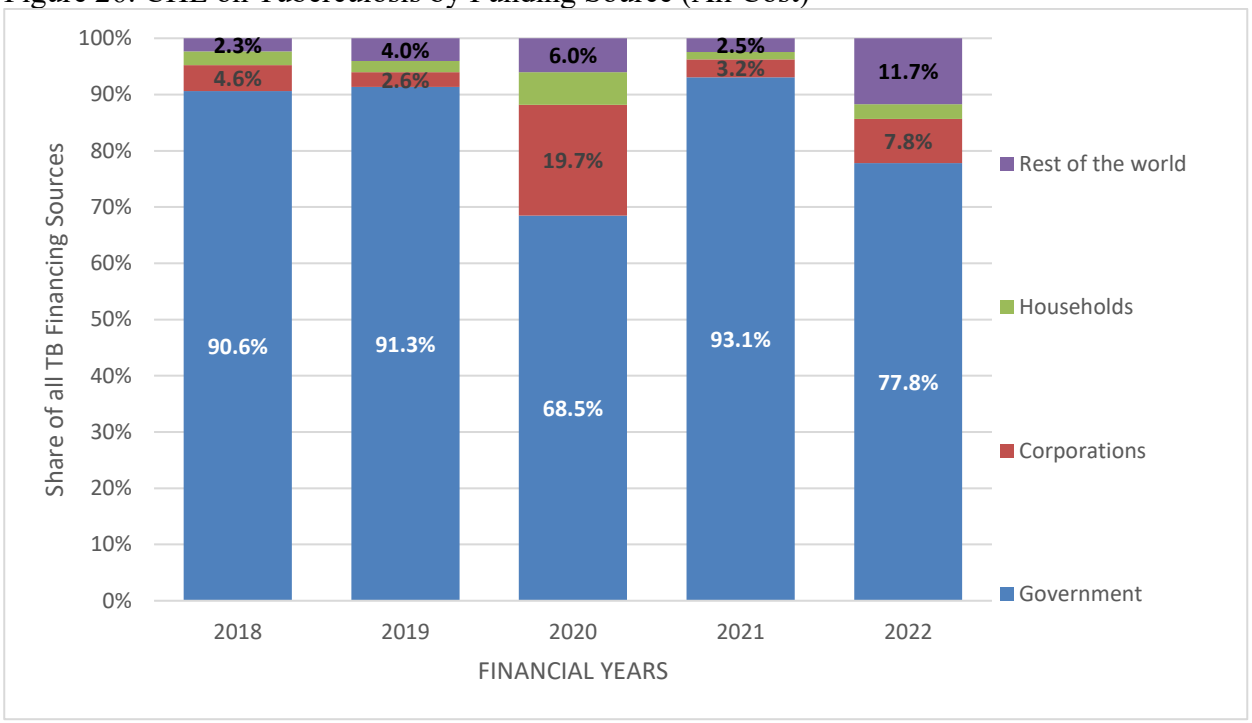
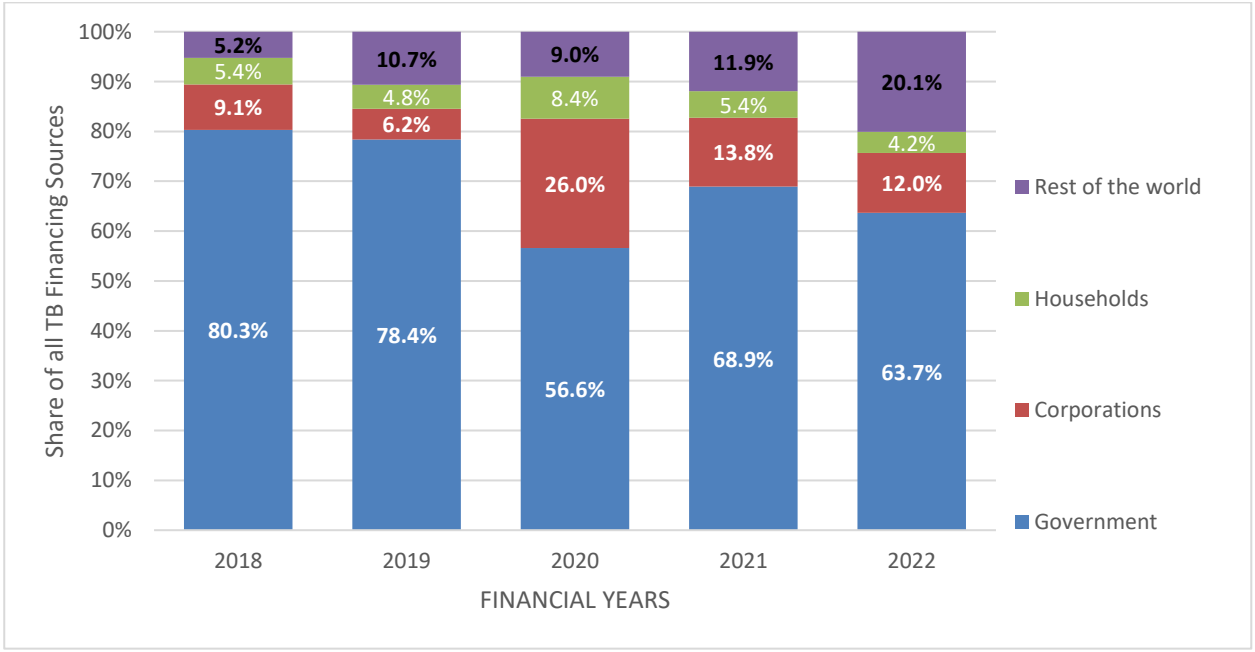


Figure 27: CHE on Tuberculosis by Funding Source (Excl. Indirect Cost)



4.0 DISCUSSION

Between 2018 and 2022, Ghana's Total Health Expenditure (THE) exhibited an upward trend increasing from GHC 9.9billion in 2018 to GHC 23.1billion in 2022. Current Health Expenditure also increased from GHC7.5billion in 2018 to GHC22.6billion in 2022 with a corresponding per capita spending of GHC 253.21 (USD52.51) in 2018 to GHC 715.38 (USD 83.42) in 2022. This overall increase highlights the government's commitment to improving health outcomes and additional inflows from development partners in response to the COVID-19 pandemic.

Per available data, Capital Health Expenditure remained low between 2.3 and 5.3 per cent in 2019 and 2022 except for 2018 which accounted for 24.94 per cent.

Government remains the main financier of health in Ghana followed by household out-of-pocket and donor expenditures. However, off-budget donor expenditure outweighs on-budget expenditure.

From the analysis, out-of-pocket (OOP) payment at point-of-service delivery remains high compared to social compulsory insurance and voluntary prepayment. However, OOP payment has observed a decrease from 33.48 per cent in 2018 to 25.03 per cent in 2022. The observed decrease in OOP expenditures may be attributed to the disruption in health service utilization due to the COVID-19 pandemic.

Ghana's roadmap for Universal Health Coverage (UHC) acknowledges the significance of all healthcare services, placing more emphasis on preventive care services to achieve UHC. Despite this prioritization, curative care has remained the primary recipient of health expenditure between 2018-2022, rather than preventive care services.

From 2018 to 2022, expenditure on medical goods, ancillary services and rehabilitative care was less than 13 per cent. Also, the average share of expenditure on non-healthcare goods, non-healthcare services and other materials and services used combined, were higher compared to the share of healthcare goods and healthcare services.

Results from the analysis indicated that government is the major financing source for the prevention and treatment of TB, Malaria, HIV/AIDs and Reproductive Health when indirect costs such as storage, compensation, transportation, etc. are considered. This observation contrasts the long-held view that donor is the major financing source. Nevertheless, when indirect cost is excluded, households are the major financing source for Malaria & Reproductive Health and donors for HIV/AIDs.

5.0 RECOMMENDATIONS

The following are recommendations aimed at offering valuable guidance to policymakers based on the findings of this study:

1. Even though nominally, health expenditure between 2018-2022 increased, per capita health expenditure shows a decline. It is therefore imperative for the government to increase health spending to at least the minimum WHO-recommended per capita health spending of (USD86) for UHC to support the growing population's health needs and the 2030 UHC target set by the country.
2. Over the years, allocation of expenditure to capital infrastructure remains low and therefore, there is a need to increase spending on health infrastructure as part of efforts to improve access across the country.
3. UHC aims to protect the population from catastrophic expenditures. To achieve this, the issue of rising out-of-pocket expenditures should be addressed to provide financial risk protection for the poor and vulnerable.
4. In addressing the issue of off-donor budget expenditure, continuous donor engagement is recommended to improve budget alignment with government priorities.
5. The analysis shows that expenditure on preventive care, ancillary services and rehabilitative care remains low. It is therefore recommended that funding to these areas should be increased to support the implementation of the Essential Health Services Package as prescribed by the Universal Health Coverage (UHC) Roadmap. Also, it is recommended that the allocation of resources should be skewed towards healthcare goods and healthcare services instead of non-healthcare activities.
6. The following recommendations are made to improve data collection and utilization:

    (i) build capacity of the Ministry of Health
    (ii) conduct analysis on efficiency and financial risk protection
    (iii) improve data collection
        a) disaggregation of data
        b) private facilities
        c) traditional & Alternative Medicine practitioners
        d) diagnostic data collection
    (iv) Conduct costing studies to assess the financial burden of health services to improve resource allocation. This also reduces the mapping onto “other and unspecified diseases (not elsewhere classified)”.

LIST OF REFERENCES

1. Ghana Statistical Service Projections
2. 2021 Population and Housing Census
3. World Bank National Account Database
4. The Global Health Observatory
5. District Health Information Management System (DHIMS)
6. WHO Global Health Expenditure Database
7. https://www.chathamhouse.org/sites/default/files/field/field_document/20140521HealthFinancing.pdf
8. https://files.aho.afro.who.int/afahobckpcontainer/production/files/2_Global_expenditure_on_health_Public_spending_on_the_rise.pdf

ANNEX

Current Health Expenditure by Financing Sources (FS.RI)

Financing Sources	2018	2019	2020	2021	2022
Government	4,136.54	6,854.30	9,755.53	9,458.94	12,025.30
Corporations	197.57	231.53	270.47	887.72	1,011.57
Households	2,568.40	3,477.91	4,207.11	4,824.51	5,911.41
NPISH	0.31	0.86	1.11	0.59	1.39
Rest of the world	595.88	1,039.14	3,141.19	2,651.10	3,624.67
TOTAL	**7,498.70**	**11,603.74**	**17,375.41**	**17,822.85**	**22,574.34**

Current Health Expenditure by Category of Funding (FS)

Category of Funding	2018	2019	2020	2021	2022
Transfers from government domestic revenue (allocated to health purposes)	4,136.54	6,854.30	9,755.53	9,458.94	12,025.30
Transfers distributed by the government from foreign origin	330.26	331.98	332.74	376.68	673.37
Social insurance contributions	93.67	176.96	153.48	233.73	489.27
Voluntary prepayment	129.59	142.91	146.56	509.65	531.06
Other domestic revenues n.e.c.	2,549.33	3,419.73	4,200.15	4,983.29	5,959.58
Direct foreign transfers	259.31	677.85	2,786.96	2,260.57	2,895.76
TOTAL	**7,498.70**	**11,603.74**	**17,375.41**	**17,822.85**	**22,574.34**

Current Health Expenditure by Fund Managers (FA)

Fund Managers	2018	2019	2020	2021	2022
General government	4,560.47	7,363.25	10,241.75	10,069.35	13,187.94
Insurance corporations	129.59	142.91	146.56	509.65	531.06
Corporations (Other than insurance corporations) (part of HF.RI.1.2)	38.64	57.33	73.43	260.50	308.74
Non-profit institutions serving households (NPISH)	259.31	677.85	2,786.96	2,260.57	2,895.76
Households	2,510.69	3,362.40	4,126.72	4,722.78	5,650.84
TOTAL	**7,498.70**	**11,603.74**	**17,375.41**	**17,822.85**	**22,574.34**

Current Health Expenditure by Health Care Providers (HP)

Healthcare Providers	2018	2019	2020	2021	2022
Hospitals	2,975.90	4,816.43	6,281.57	5,945.29	8,836.79
Providers of ambulatory healthcare	1,546.30	1,785.61	1,688.00	2,152.48	4,113.22
Providers of ancillary services	493.48	608.99	1,493.61	1,015.91	1,016.00
Retailers and Other providers of medical goods	451.22	557.75	659.27	1,016.29	1,231.44
Providers of preventive care	615.61	1,087.55	2,686.87	2,038.17	3,701.24

Providers of health care system administration and financing	1,416.19	2,747.40	4,566.10	5,654.72	3,675.65
TOTAL	**7,498.70**	**11,603.74**	**17,375.41**	**17,822.85**	**22,574.34**

Current Health Expenditure by Health Care Functions (HF)

Healthcare Functions	**2018**	**2019**	**2020**	**2021**	**2022**
Curative care	4,483.90	6,543.48	7,905.10	8,898.43	12,822.21
Rehabilitative care	28.36	36.49	45.95	13.28	57.12
Ancillary services (non-specified by function)	493.48	608.99	1,493.61	1,015.91	1,016.00
Medical goods (non-specified by function)	451.22	557.75	659.27	1,016.29	1,231.44
Preventive care	628.26	1,115.64	2,706.34	2,066.95	3,773.59
Governance, and health system and financing administration	1,413.48	2,741.39	4,565.14	4,811.99	3,673.98
TOTAL	**7,498.70**	**11,603.74**	**17,375.41**	**17,822.85**	**22,574.34**

Current Health Expenditure by Factors of Provision (FP)

Factors of Provision	**2018**	**2019**	**2020**	**2021**	**2022**
Compensation of employees	3,008.25	4,586.59	5,413.78	6,740.92	7,163.68
Self-employed professional remuneration	7.28	8.14	9.14	30.27	32.83
Materials and services used	4,240.16	6,955.54	11,881.16	10,940.07	15,166.43
Consumption of fixed capital	29.95	0.89	4.01	18.41	33.94
Other items of spending on inputs	213.06	52.57	67.32	93.19	177.46
TOTAL	**7,498.70**	**11,603.74**	**17,375.41**	**17,822.85**	**22,574.34**

Current Health Expenditure by Diseases and Health Condition (DIS)

Disease Category	**2018**	**2019**	**2020**	**2021**	**2022**
Infectious and parasitic diseases	3,873.77	5,847.40	9,792.28	9,083.81	11,900.85
Reproductive health	1,116.68	1,830.26	1,823.39	2,737.57	3,328.15
Nutritional deficiencies	509.69	876.60	1,144.91	1,050.10	1,545.99
Noncommunicable diseases	1,708.25	2,578.36	3,789.28	4,038.03	4,748.23
Injuries	290.30	471.12	825.55	913.34	1,051.13
TOTAL	**7,498.70**	**11,603.74**	**17,375.41**	**17,822.85**	**22,574.34**

Comparison of Current Health Expenditure (USD)

Country	2018	2019	2020	2021
Côte d'Ivoire	1,809.33	1,925.72	2,283.67	2,249.62
Nigeria	13,034.61	14,166.56	14,533.30	17,891.70
Senegal	1,024.49	1,052.09	1,261.97	1,201.97
Seychelles	80.91	80.34	82.47	76.50
Ghana	1,554.97	2,096.92	3,016.46	2,967.46
Kenya	3,779.43	4,385.28	4,506.06	5,018.18

Comparison of Out-Of-Pocket As % of CHE (USD)

Country	2018	2019	2020	2021
Côte d'Ivoire	39.29	37.26	31.99	32.34
Nigeria	75.95	71.50	74.68	76.24
Senegal	48.34	48.75	41.57	47.31
Seychelles	24.62	24.68	20.24	21.98
Ghana	33.48	28.98	23.75	26.50