HEALTHCARE FINANCING IN GHANA

Results from the National Health Account Study (2019-2023)

Ernest Owusu sekyere[1], Solomon Agyei Boateng[1], Berlinda Nimako Afriyie[1], Adwoa Twum-Barimah[2], Samson Awudanjong[1], Carl Mensah[1] Kwasi Oppong-Ababio[1], Falid Kakra Adjei[1], Rwakinanga Ezrah Trevor [3]

[1] Ministry of Health, Ghana

[2] World Health Organization, Ghana

[3] World Health Organization, AFRO

Corresponding author, **nanaksekyere@gmail.com**, **kwabenaboateng853@gmail.com**

1. Introduction

1.1 Background to Health Financing

Health financing is a critical pillar for achieving Universal Health Coverage (UHC), which aims to ensure that all individuals receive the health services they need without suffering financial hardship. In Ghana, this remains a national priority, with health financing reforms aimed at improving equity, efficiency, and sustainability. According to Kutzin (2013), health financing encompasses the functions of revenue collection, pooling of resources, and purchasing of services, all directed toward strengthening population-level health outcomes.

Over the years, Ghana has made progress in establishing financing mechanisms that improve access and protect households from catastrophic health expenditures. These include the National Health Insurance Scheme (NHIS), which continues to serve as the main vehicle for financial risk protection, and various government-funded initiatives that support maternal and child health, non-communicable diseases (NCDs), and preventive services.

The 2023 National Health Accounts (NHA) provides the most recent and comprehensive overview of health financing trends in Ghana. It captures critical data on sources of health funds, the flow

of financing through the system, and spending across health providers and functions. This evidence supports policy decisions to strengthen financial protection, promote resource efficiency, and ensure equitable access to health care.

1.2 Global Health Expenditure Trends and Implications

The global health financing landscape has undergone notable shifts, particularly during and following the COVID-19 pandemic. According to the 2023 Global Spending on Health Report by the World Health Organization (WHO), global health spending rose to US$9.8 trillion in 2021, accounting for 10.3% of global GDP. This reflects continued prioritization of health in the face of evolving public health demands. However, disparities in spending remain stark. High-income countries accounted for nearly 80% of all health spending, while low-income countries represented just 0.2%, despite housing a significant share of the global population.

In lower-middle income countries, a category that includes Ghana, the increase in health spending was largely driven by overall government budget expansion rather than targeted increases in health prioritization. Nonetheless, external aid played a critical role, particularly as government revenues faced pandemic-related constraints. In 2021, external health aid reached its highest level since 2000, with 14% of total health spending in lower-middle income countries coming from donor support.

A key trend highlighted in the report is the shift toward greater government financing and reduced reliance on out-of-pocket spending (OOPS). In Ghana's context, this aligns with ongoing efforts to expand prepaid and pooled health financing mechanisms, such as the National Health Insurance Scheme (NHIS). The share of OOPS in total spending declined globally, signaling progress toward financial risk protection, a core element of Universal Health Coverage (UHC).

The Global Health expenditure report also underscores the increased investments in preventive care and capital infrastructure across income groups. This is consistent with Ghana's emphasis on strengthening its primary health care (PHC) system and the Network of Practice (NOP) model, which promotes integrated, community-based service delivery.

Despite these positive trends, the report cautions that sustaining current spending levels will be challenging amid rising debt burdens, inflationary pressures, and constrained fiscal space. For Ghana, this signals the need for enhanced domestic resource mobilization, more efficient allocation of funds, and institutionalization of health accounts for continuous monitoring.

The insights from the global report reinforce the importance of evidence-informed planning, and the need for resilient, equitable, and financially sustainable health systems. Ghana's 2023 National Health Accounts (NHA) serve as a vital tool to assess how domestic trends compare to global patterns and to inform policy decisions that support the country's UHC aspirations.

1.3 Health Service Delivery in Ghana

Ghana's health service delivery system operates within a well-defined three-tier structure designed to ensure that healthcare services are accessible at all levels of the population. At the primary level, services are provided through Community-Based Health Planning and Services (CHPS) compounds, health centers, and polyclinics, which serve as the first point of contact for most Ghanaians. The secondary level consists of district and regional hospitals that provide more specialized care and act as referral centers for primary-level facilities. At the tertiary level, highly specialized services are offered through teaching hospitals and specialized institutions, which manage complex conditions and provide training and research support.

This service delivery system is supported by a corresponding administrative structure comprising district, regional, and national management levels. These levels coordinate planning, supervision, resource allocation, and monitoring and evaluation, thereby forming a coherent framework for the implementation of health policies and programs across the country.

In 1996, the Ministry of Health introduced the Sector-Wide Approach (SWAp) as a strategic reform to improve aid coordination, enhance resource efficiency, and promote alignment among government and development partners. One of the key outcomes of this reform was the establishment of the Ghana Health Service (GHS), which was carved out of the Ministry to focus exclusively on service delivery. This separation allowed the Ministry of Health to concentrate on its core functions policy formulation, regulation, monitoring and evaluation, and resource mobilization while empowering GHS and other implementing agencies to manage service provision more effectively (NHA, 2015). Over the years, the government has implemented a range of initiatives aimed at expanding access and improving the quality of health care. The National Health Insurance Scheme (NHIS), introduced in 2003, marked a major shift in health financing by offering financial risk protection to millions of Ghanaians. Complementary programs such as the Free Maternal Health Care Policy have significantly boosted antenatal care coverage and skilled delivery rates. More recently, emphasis has been placed on integrating preventive and promotive services into routine care, particularly at the primary level, to address emerging health challenges and improve long-term outcomes.

A transformative development within the service delivery framework is the introduction of the Network of Practice (NOP) model. Anchored in Ghana's Universal Health Coverage (UHC) Roadmap, the NOP seeks to foster collaborative and people-centered care by linking health facilities at all levels within a defined geographic area. This model emphasizes continuity of care, efficiency in resource use, and responsiveness to community health needs.

The 2023 National Health Accounts (NHA) provides updated evidence on how financial resources are mobilized and allocated across this service delivery structure. It sheds light on the distribution of funding among providers, the share of resources devoted to different types of services, and the

extent to which investments align with national health priorities. Notably, the data help to evaluate whether resources are equitably reaching underserved areas, supporting critical health functions such as maternal and child health, and addressing the rising burden of Non-Communicable Diseases (NCDs). These insights are essential for informing future reforms, strengthening health system resilience, and achieving sustainable progress toward UHC.

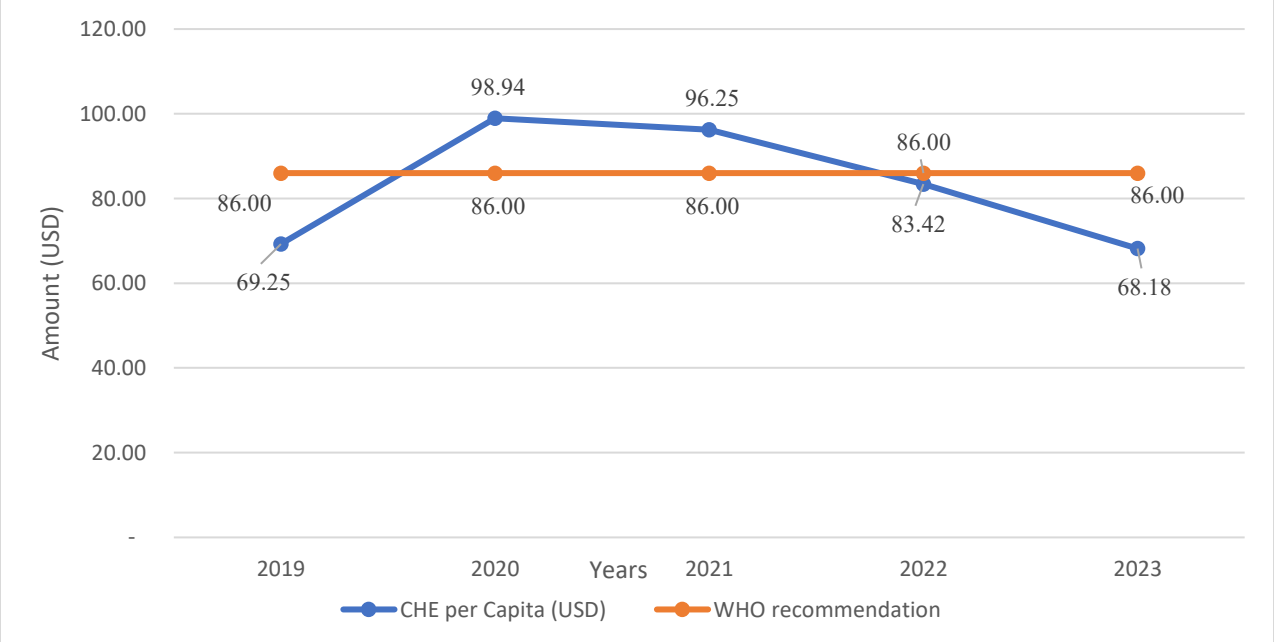
2. Health expenditure in Ghana (2019-2023)

2.1 General Overview (2023 NHA)

Ghana's Total Health Expenditure (THE) increased from GHS 23.11 billion in 2022 to GHS 26.95 billion in 2023, reflecting a nominal growth of approximately 16.6%. This increase indicates a continued commitment to funding the health sector, albeit with variations in expenditure patterns. The Current Health Expenditure (CHE) also rose from GHS 22.57 billion in 2022 to GHS 26.16 billion in 2023, with CHE consistently accounting for a dominant share (97.08%) of THE, compared to just 2.92% for capital investments. This trend suggests that the majority of health spending remains focused on recurrent costs, potentially limiting investments in infrastructure, equipment, and long-term health system strengthening.

In per capita terms, CHE increased from GHS 715 in 2022 to GHS 810 in 2023. However, when expressed in US dollars, CHE per capita saw a decline from US$83.42 in 2022 to US$68.18 in 2023 due to exchange rate effects. This figure remains below the WHO's recommended minimum of US$86 for delivering primary health care and the average for lower-middle-income countries (LMICs), which stands at US$119. This shortfall underscores the need for strategic resource mobilization and efficiency gains to achieve Universal Health Coverage (UHC) goals.

Figure 1 Current Health Expenditure per capita [2019-2023]



2.2 Global and Domestic Context of Health Expenditure (2023 NHA)

According to the 2023 Global Health Expenditure Report by WHO, global health spending continued to grow, reaching a new high of US$ 9.8 trillion in 2021 equivalent to 10.3% of global GDP. However, spending remains unevenly distributed across countries. Notably, public spending increased globally except in low-income countries, where government health spending declined and external assistance remained crucial.

In Ghana, Current Health Expenditure (CHE) as a percentage of GDP increased steadily from 2.61% in 2018 to 3.06% in 2023. Although this marks progress, it still lags behind the global average of 10.3% and the 2021 LMICs average of 5.4%. When compared to regional peers, Ghana's CHE as a percentage of GDP in 2023 (3.06%) remains below that of Senegal (4.35% in 2021), indicating room for further investment to match regional standards.

Domestic General Government Health Expenditure (GGHE-D) as a percentage of GDP in Ghana on the other hand, showed a downward trend, decreasing from 2.11% in 2019 to 1.93% in 2023. This 2023 figure surpasses the GGHE-D levels of many peer countries in 2021, including Senegal (1.12%), Côte d'Ivoire (1.03%), and Nigeria (0.54%). Ghana's performance in this regard is also above the 2021 LMIC average of 1.36%, reflecting a relative prioritization of health in domestic public spending.

Table 2: CHE Global Comparisons (2022)

Key indicator	Share of CHE in total health expenditure (%)	Share of HK in total health expenditure (%)	CHE per capita (USD)	CHE as a share of GDP (%)
Ghana	97.69	2.31	83.42	3.95
Burkina Faso	93.44	6.56	57	7
Chad	98.40	1.60	40	5
Democratic Republic of the congo	99.08	0.92	24	4

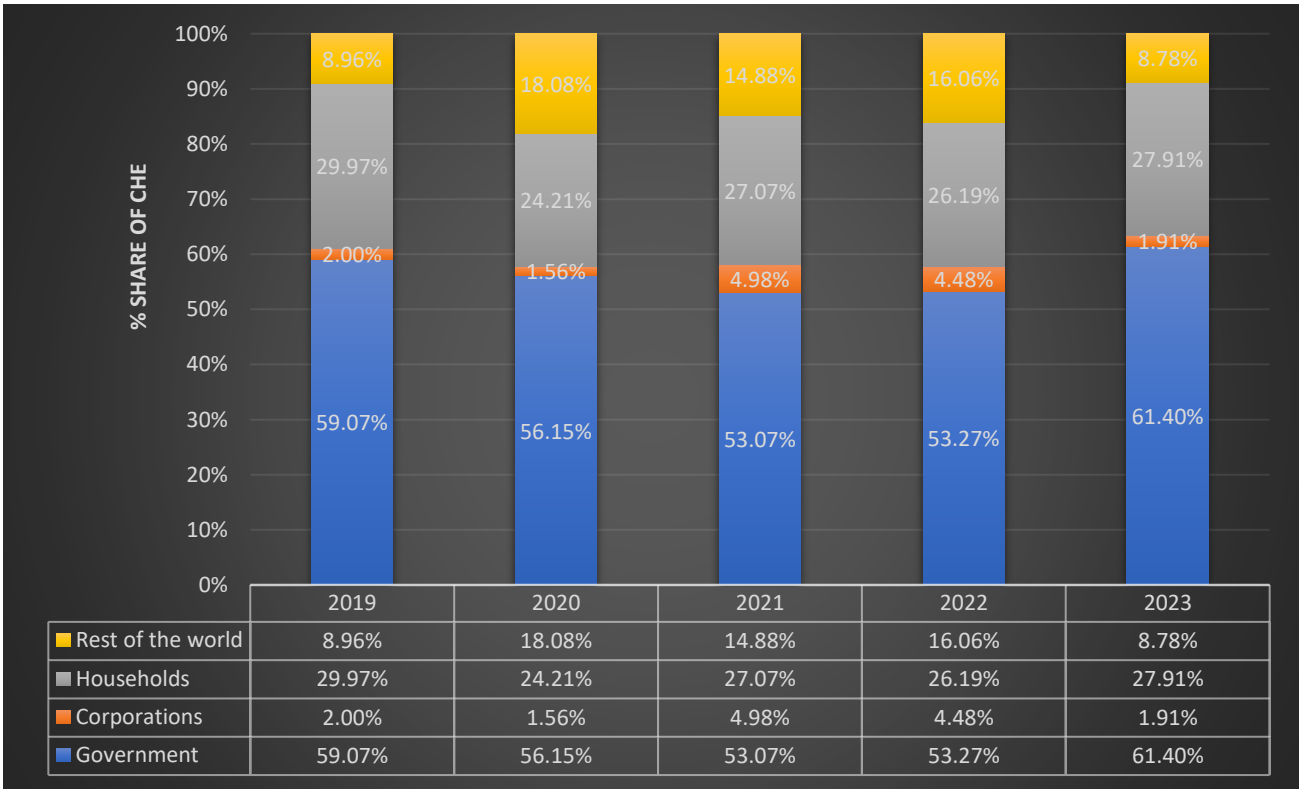
Data source: Global Health Expenditure Database & World Bank Open Data

In 2023, Ghana allocated 97.08% of its Total Health Expenditure (THE) to recurrent health expenses, leaving only 2.92% for capital investment in healthcare. This marks a improvement in the share of capital investment compared to previous years, highlighting the country's commitment to finance infrastructure projects and long-term health system development. In contrast, Côte d'Ivoire in 2021 spent 81.3% of its THE on current health expenditure and 18.7% on capital investment, reflecting a more balanced approach. Despite Ghana's low capital investment share, it remains closer to the 2021 average for Low- and Middle-Income Countries (LMICs), where 96.0% of THE was devoted to current expenditure and only 4.0% was allocated to capital investment.

2 .2 Sources of health financing

In 2023, government resources remained the dominant source of health financing in Ghana, followed by households and then donors (both on-budget and off-budget). Specifically, the government contributed 61.40% of the Current Health Expenditure (CHE), while households accounted for 27.91%. Donors contributed 8.78%, and private corporations made up the remaining 1.91%, as illustrated in Figure 2. This distribution highlights the continued significant role of government and households in financing health services, with donor support also remaining a key contributor.

Figure 2: Financing Sources for Health in Ghana, 2019-2023



	2019	2020	2021	2022	2023
Rest of the world	8.96%	18.08%	14.88%	16.06%	8.78%
Households	29.97%	24.21%	27.07%	26.19%	27.91%
Corporations	2.00%	1.56%	4.98%	4.48%	1.91%
Government	59.07%	56.15%	53.07%	53.27%	61.40%

Household expenditure remained the second-largest source of health financing in Ghana from 2019 to 2023, as shown in Figure 2. Although there has been a gradual decline from 29.97% in

2019 to 27.91% in 2023 the level of out-of-pocket spending by households continues to be a concern. This trend poses a potential barrier to achieving Ghana's Universal Health Coverage (UHC) targets by 2030 and underscores the need for stronger financial protection mechanisms to further reduce household health spending.

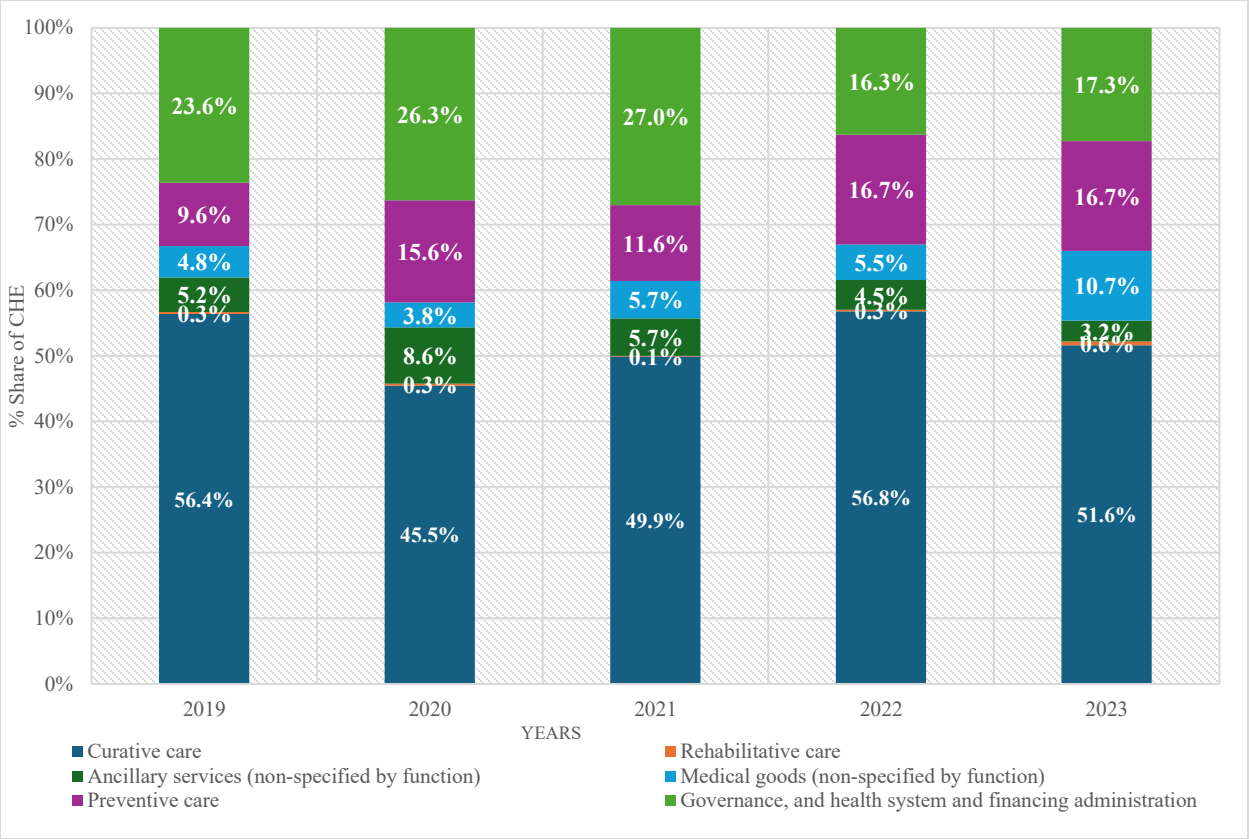
The unpredictability of donor funding continues to pose significant challenges to effective health sector planning and resource utilization. To enhance coordination and improve efficiency, the Ministry of Health should engage with development partners to align off-budget donor contributions with national budgeting processes. In 2023, donor funding accounted for 8.78% of Current Health Expenditure (CHE), reflecting a decrease from 16.06% in 2022. This may be attributed to the gradual pull out of the health sector donor partners.

From 2021 to 2022, corporate health spending saw a decrease of 13.95%, followed by a significant decrease of 50.67% from 2022 to 2023. This reflects a sharp and consistent decline in corporate contributions to health expenditure over this period. Despite this downward trend, the share of corporate spending peaked at 5.0% in 2021. This could be partly attributed to renewed private sector investments in health infrastructure and services during the COVID-19 period.

2.3 Healthcare functions

Healthcare function expenditure measures spending on various types of health goods and services consumed and health activities performed within the country. NHA findings revealed that curative care over the years 2019-2023, has been the major consumer of health expenditure ranging between 45.5 and 56.8 per cent of spending as against preventive care (9.6 to 16.72 per cent) and rehabilitative care (0.07 to 0.57 per cent).

Figure 3: Healthcare functions in Ghana, 2019-2023



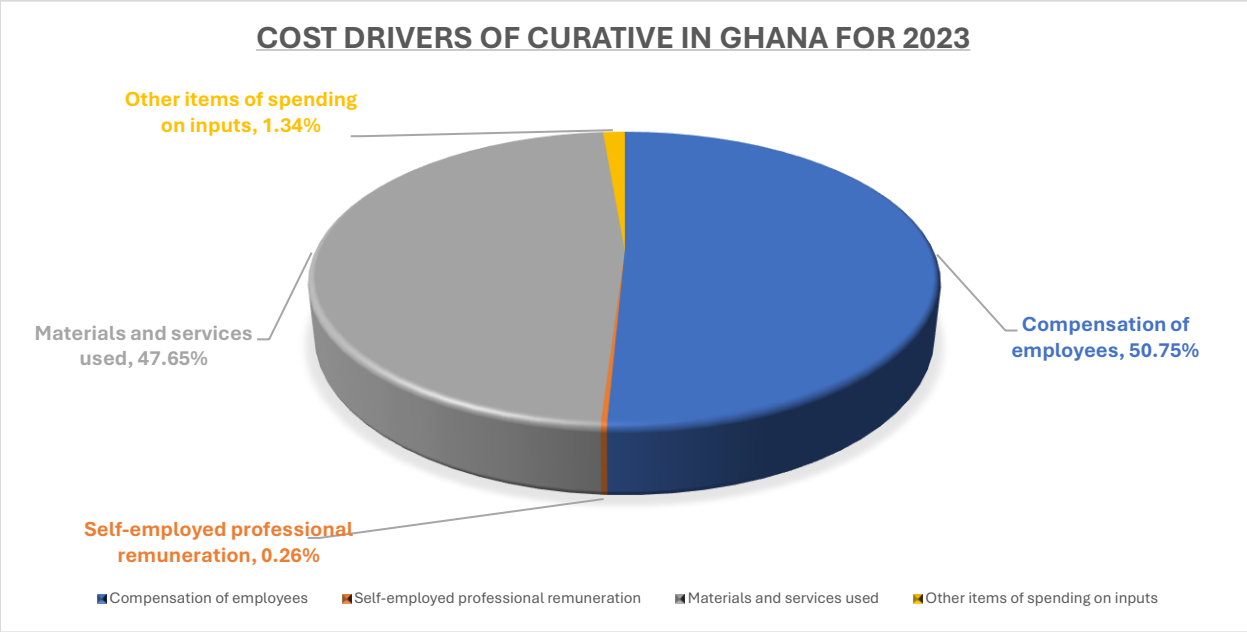
The high share of CHE spent on curative care is concerning, especially considering that Ghana's UHC roadmap prioritizes the expansion of preventive and rehabilitative care services as the main driver to attain UHC. Ghana's UHC Roadmap prescribes that at least a minimum of 50 per cent of healthcare spending should be allocated to preventive health at the lower level. It is, therefore, crucial to prioritize and reallocate more resources to the lower level if the 50 per cent spending target is to be achieved.

2.4 Factors of Provision

Further analysis of the health care functions revealed that the main cost drivers of curative care over the years are compensation of employees and materials and services used.

In 2023, the total cost of curative care in Ghana was primarily driven by compensation of employees (50.75%) and materials and services used (47.65%). Self-employed professional remuneration accounted for 0.26%, while consumption of fixed capital contributed 1.34%. Other items of spending on inputs were negligible, with labor and material inputs making up over 98% of total curative care costs.

Figure 5: Cost Drivers of Curative Care in Ghana for 2023 (segregated)



Conclusions

The 2023 National Health Accounts (NHA) analysis confirms that government remains the primary source of health financing in Ghana, followed by household out-of-pocket (OOP) payments and donor contributions. Total Health Expenditure (THE) increased over the 2019–2023 period; however, the inconsistent rate of growth highlights the unpredictability and instability in healthcare resource flows.

Current Health Expenditure (CHE) per capita peaked in 2020 at USD 98.94 due to increased investment in health to curb the spread of the COVID-19 virus. This has since declined, reaching USD 68.18 in 2023 well below the WHO-recommended threshold of USD 86 needed to support progress toward Universal Health Coverage (UHC). This declining trend results in persistent underfunding of the health sector relative to growing population needs.

General Government Health Expenditure (GGHE) per capita and GGHE from domestic sources (GGHE-D) both showed an upward trend, with GGHE-D growing at a faster pace. This suggests an improvement in domestic resource mobilization efforts by the government to offset declining external assistance. Despite these efforts, the share of household OOP payments in total health expenditure, though reduced from 28.98% in 2019 to 26.68% in 2023, remains significant. Alarmingly, the actual OOP amount increased by 23.5% from GHS 5.65 billion in 2022 to GHS 6.98 billion in 2023, raising the risk of catastrophic health expenditures and financial hardship among households.

Donor financing patterns also changed notably. Transfers from government-distributed foreign sources (on-budget donor funding) declined over the period, while direct foreign transfers (off-budget donor funding) increased from 5.84% in 2019 to 7.74% in 2023. The predominance of off-budget donor support suggests that a significant share of external resources may not align fully with national health priorities, which has implications for planning and sustainability.

Spending on preventive, ancillary, and rehabilitative services remained consistently low, contributing less than 17% of annual expenditure throughout the reporting period. Notably, spending on ancillary services dropped from 5.7% in 2021 to 3.19% in 2023, partly due to increased partnerships with the private sector for diagnostic services. Additionally, expenditure on compensation of employees in 2023 nearly matched spending on materials and services used in service delivery, marking a significant shift from previous years and highlighting the need to rebalance resource allocation in favor of direct service provision inputs.

Disease-specific expenditure data revealed that the government is the leading financier for the prevention and treatment of tuberculosis, malaria, HIV/AIDS, and reproductive health when indirect costs (e.g., logistics, storage, and personnel) are included. However, excluding these indirect costs, households emerge as the main contributors to malaria and reproductive health care, while donors lead in HIV/AIDS financing. Furthermore, the sharp increase in CHE on non-communicable diseases (NCDs) rising from GHS 4.75 billion in 2022 to GHS 7.12 billion in 2023 signals a growing NCD burden that demands urgent policy attention.

3. Policy recommendations

1. **Align Donor Support with National Priorities**
   Strengthen continuous engagement with development partners to ensure that off-budget donor expenditures are aligned with Ghana's health sector priorities and national strategic plans.

2. **Increase Government Health Spending to Meet UHC Targets**
   The current CHE per capita of USD 68.18 (2023) is below both the 2019 level of USD 69.25 and the WHO-recommended minimum of USD 86 for achieving Universal Health Coverage. There is an urgent need to increase overall health spending, particularly government allocations, to adequately support population growth and health system needs.

3. **Rebalance Expenditure Toward Service Delivery Inputs**
   Given that CHE on compensation of employees nearly equals spending on materials and services, it is recommended that greater resources be directed toward inputs that directly support healthcare delivery such as medicines, diagnostics, and medical supplies.

4. **Enhance Financial Protection Through NHIS Expansion**
   In line with UHC objectives, the National Health Insurance Authority (NHIA) should intensify efforts to expand coverage, particularly for vulnerable populations. This will help

reduce household out-of-pocket (OOP) spending and minimize the risk of catastrophic health expenditures.

5. **Conduct Costing Studies to Inform Policy and Improve Targeting**
   Comprehensive costing studies are needed to assess the financial burden of healthcare services, enable better disaggregation of expenditures by disease condition, and identify the types of conditions for which households spend at facilities providing traditional, complementary, and alternative medicine (TCAM) services.

6. **Prioritize the Response to Non-Communicable Diseases (NCDs)**
   The rising cost of managing NCDs signals a growing public health challenge. A national strategy to reduce the prevalence and financial burden of NCDs should be prioritized, including investment in prevention, early diagnosis, and management.

7. **Strengthen Analytical Capacity for Sub-National Health Expenditure Monitoring**
   Invest in technological infrastructure particularly high-speed computers and dedicated servers to equip the NHA Team to conduct more granular analyses of current health expenditures at regional, district, and sub-district levels. This will support evidence-based planning and equitable resource distribution across the country.

4. References

Kutzin, J. (2013). *Health financing for universal coverage and health system performance: concepts and implications for policy*. Bulletin of the World Health Organization, 91(8), 602–611. https://doi.org/10.2471/BLT.12.113985

World Health Organization. (2023). *Global Spending on Health: Rising to the Pandemic's Challenges*. Geneva: WHO. Retrieved from https://www.who.int/publications/i/item/9789240064911

World Health Organization. (2023). *Global Health Expenditure Database*. Geneva: WHO. Retrieved from https://apps.who.int/nha/database

World Bank. (2023). *World Development Indicators*. Washington, D.C.: The World Bank. Retrieved from https://data.worldbank.org/

Ministry of Health, Ghana. (2023). *National Health Accounts Report 2019–2023*. Accra: Ministry of Health.

Ministry of Health, Ghana. (2015). *National Health Accounts Report*. Accra: Ministry of Health.