MINISTRY OF HEALTH

2015 NATIONAL HEALTH ACCOUNTS

JULY 2017

ACKNOWLEDGEMENT

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ACRONYMS

5YPOW	Five-Year Programmes of Work
BMC	Budget Management Centre
CHAG	Christian Health Association of Ghana
CHIM	Central Health Information Management
CHN	Community Health Nurses
CHO	Community Health Officers
CHPS	Community-based Health Planning and Services
CMA	Common Management Arrangement
COI	Cost of Illness
DFID	Department for International Development
DHIMS	District Health Information Management System
DMHIS	District Mutual Health Insurance Schemes
FS	Financing Sources
FY	Financial Year
GDHS	Ghana Demographic and Health Survey
GDP	Gross Domestic Product
GF	Global Fund
GFATM	Global Fund for HIV, TB and Malaria
GHS	Ghana Health Service
GLSS	Ghana Living Standard Survey
GOG	Government of Ghana
GSGDA	Ghana Shared Growth and Development Agenda
HA	Health Accounts
HAAT	Health Accounts Analysis Tool
HAPT	Health Accounts Production Tool
HC	Health Care functions
HDI	Human Development Index
HDR	Human Development Report
HF	Financing Agents
HIFRA	Health Institutions and Facilities Regulatory Acts
HIV	Human Immunodeficiency Virus
HP	Health providers
HSMTDP	Health Sector Medium Term Development Plan
HSWG	Health Sector Working Group
IALC	Inter-Agency Leadership Committee

ICC	Inter-Agency Coordinating Committee
ICHA	International Classification for Health Accounts
IGF	Internally Generated Fund MAF
MDG	Acceleration Framework
MDG	Millennium Development Goal
MOD	Ministry of Defense
MOE	Ministry of Education
MOF	Ministry of Finance
MOH	Ministry of Health
MOI	Ministry of Interior
MTHS	Medium Term Health Strategy
NGO	Non - Governmental Organization
NHA	National Health Accounts
NHIA	National Health Insurance Authority
NHIC	National Health Insurance Council
NHIF	National Health Insurance Fund
NHIL	National Health Insurance Levy
NHIS	National Health Insurance Scheme
PPME	Policy, Planning, Monitoring and Evaluation
SHA	System of Health Accounts
SSNIT	Social Security and National Insurance Trust
SWAp	Sector Wide Approach
TFR	Total Fertility Rate
THE	Total Health Expenditure
USAID	United States Agency for International Development
VAT	Value Added Tax
WHO	World Health Organization

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CHAPTER 1

Country Profile

Ghana is located on West Africa's Gulf of Guinea only a few degrees north of the Equator. It lies between longitudes 3º · 15′ W and 1º 12′ E, and latitude 4º 44′and 11 º 15′ N. The country is bordered on the west by La Cote d'Ivoire, east by the Republic of Togo, Burkina Faso to the North and to the South by the Gulf of Guinea. The total land area of Ghana is 238,533 km square with an Exclusive Economic Zone (EEZ) of 110,000 km square of the sea, which forms the territorial area of Ghana.

The climate is tropical. The eastern coastal belt is warm and comparatively dry; the southwest corner, hot and humid; and the north, hot and dry. There are two distinct rainy seasons in the south; May-June and August-September; in the north, the rainy seasons tend to merge. A dry, north-easterly wind, the harmattan, blows in January and February. Annual rainfall in the coastal zone averages 83 centimetres (33 inches). The mean minimum temperature ranges from 21ºC - 23ºC and mean maximum temperature is between 30ºC - 35ºC.

The man-made Volta Lake extends from the Akosombo Dam in south-eastern Ghana to the town of Yapei, 520 kilometres (325 miles.) to the north. The lake generates electricity, provides inland transportation, and is a potentially valuable resource for irrigation and fish farming.

Ghana's 2015 population was estimated at 28.58m. The country's population was estimated by the 2010 population census to be 24,658,823 as against 18,912,079 in 2000, showing a 30.4 percent increment and an intercensal average annual growth rate of 2.5 percent compared to 2.7 percent in 2010. There are 95 males per 100 females making the total number of women in Ghana 12,633,978 (51.24 percent) as against 12,024,845 (48.76 percent) for men. Across regions, the sex ratio ranges between 90 in the Central region and 104 in the Brong Ahafo region. On a regional basis, the Ashanti region has the highest number of people with 4,780,380 (19.5 percent) followed by the Greater Accra region with 4,010,054 (16.1 percent) thereby constituting 35.6 percent of the total population. This was followed by the Eastern region, then the Northern region, then the Western region, Brong Ahafo region, Central region, Volta region, Upper East and lastly Upper West region with the least population of 702,110. Population density increased from 79 in 2000 to 103 in 2010 with the highest of 1205 in Greater Accra region and the least of 35 in Northern region. The dependency load in Ghana is estimated to be very high considering that the country has a typical pyramidal age structure with over 41 percent of the population being below fifteen years' population, 5 percent being over age 65 and 54 percent being between 15 and 64 year. In 2010, close to half of Ghana's population, 10,617,930 were dependent.

Ghana is divided into ten administrative/political regions, which are further divided into 170 District Assemblies (in September 2012, 45 new ones were created). The District Assemblies develop, plan and mobilize resources for programmes and strategies for the development of the district. Ghana has a stable political economy, with Presidential and Legislative elections held every four years from the inception of

the fourth Republic after the promulgation of the 1992 constitution. Transition of power between political parties has taken place smoothly in 2000 and 2008, 2012 and most recently 2016

The rebasing of the national account of Ghana in 2010 estimated the country's GDP at 44,799 million cedis or 31,548.40 million US dollars, thereby pushing the country into lower middle income group with GDP per capita of 1,872.07 cedis or 1,318 US dollars. The country developed national medium-term strategic agenda which is to lay the foundation for structural transformation of the Ghanaian economy through industrialization especially manufacturing, based on modernized agriculture and sustainable exploitation of Ghana's natural resources. The transformation will be anchored by rapid infrastructural and human development as well as application of science, technology and innovation. The strategy will entail: an improved enabling environment to empower the private sector; active collaboration between the public and private sectors, including civil society organizations; transparent and accountable governance and efficiency in public service delivery at all levels; and effective decentralization for enhanced local economic development.

The Health System in Ghana

Health service delivery in Ghana follows a three-tier arrangement: peripheral primary, secondary and tertiary levels. Correspondingly, there are three levels of management in the Ghanaian health sector: district; regional; and central or national headquarters.

In 1996, the health sector, adopted Sector Wide Approach (SWAp) in its sector reforms; with government, partners, civil societies and the private sector all playing a part. Because of this reform, the MOH retained responsibility for policy formulation, monitoring and evaluation, resource mobilization and regulation of the health services delivery through the passing of the Ghana Health Service and Teaching Hospitals Act (Act 525), 1996. Since then, other agencies have been created to deliver regulatory and financing functions.

Health Status

In Ghana, significant improvement in health status has been achieved through increased access to cost-effective interventions including expansion of access to immunizations, essential medicines, and essential obstetrics care over and above general improvements in socio-economic determinants of health.

The major causes of child morbidity and mortality include malaria, HIV/AIDS, diarrhoea, respiratory infection, and neonatal conditions (not in the order of highest burden). Malaria remains the top cause for outpatient morbidity and hospitalization, as well as mortality. About 60 percent of all outpatient cases are made up of Malaria, Upper Respiratory Tract Infection, Diarrhoea and Diseases of the Skin. Low level of

literacy, poor sanitation, under-nutrition, alcohol abuse, sedentary life styles and unhealthy diets constitute the broad determinants of ill-health contributing to high morbidity and mortality rates.

Health care services provided to the people both as curative and as preventive services showed improvements. The per capita outpatient visits declined from 1.14 in 2014 to 1.08 in 2015[1]. Coverage of immunization has been increasing over the years with a performance of 90% in 2015

Health Care Financing in Ghana

Financing of health care in Ghana has gone from free health care, with total costs borne by government through cost recovery system to a combination of health insurance and direct out-of-pocket payments.

Financing mechanisms of the NHIS

The National Health Insurance Fund (NHIF) has five main sources which accumulate funds to operate the NHIS. The sources include the National Health Insurance Levy (NHIL) - a 2.5 percent value added tax (VAT) levied on selected goods and services, 2.5 percent social security deductions from formal sector workers managed by the Social Security and National Insurance Trust (SSNIT), GoG annual budgetary allocations proposed and approved by parliament to the NHIF, accruals from investments of surplus funds held in the NHIF by the National Health Insurance Council (NHIC) and grants, gifts and donations made to the NHIF (Figure 2.2). In addition to these is the voluntary contributions paid by subscribers to the NHIA.

CHAPTER TWO
Methodology

NHA has a standard methodology that makes it internationally comparable. It uses the System of Health Accounts (SHA) methodology which is constructed to disaggregate complex information into a sequence of discrete matrices (or discrete tables in the case of time series) in which all agents and transactions of the health care system are uniquely classified. The construction of NHA obeys exacting rules. As a statistical system, the NHA process entails respect of ten major attributes ranging from policy sensitivity to comprehensiveness to timeliness.

In short, NHA shows the flow of financing from a source of funding to a use or to beneficiaries following a standard classification of health expenditure. Four main dimensions are considered:

[1] 2015 Holistic Assessment report

Financing Institutional Units Providing Revenues (FS.RI)
These are the organizations who provide the revenues for financing healthcare. They are classified as Health Financing Schemes

Financing Sources (FS)
These are entities that provide health funds, examples include Ministry of Finance, households and donors. Sources of Finance in Ghana include;

Financing Agents (FA)
Financing agents receive funds from financing sources and use them to pay for health services, products and activities.

Providers (HP)
Providers are the end users or final recipients of health care funds.

Approach and Data Sources

National Health Accounts data are obtained from multiple sources in as far as the data is within the health expenditure boundary as defined in the System of Health Accounts (SHA 2011) manual. The 2016 National Health Accounts data was obtained from government, donors, employers, NGOs and insurance companies using standardized survey instruments. Household health expenditure was estimated from the Ghana Living Standard Survey (GLSS6).

Primary Data Collection

Private Health Insurance
Standard questionnaires were sent to all private health insurance organizations

Employer Survey
The objective of collecting data from employers was to be able to capture as much as possible the total expenditure on health. The total list of firms/employers for the employer survey was taken from the Association of Ghana Industries, Ghana Club 100 and Ghana Employers Association. The list was stratified by sector, number of employees and size. Data collectors administered the questionnaire to the selected organizations.

Non-Governmental Organizations Survey
Both local and international health NGOs[2] operating in Ghana were included in the survey. Questionnaires were sent to the NGOs to complete and submit to the MoH NHA team.

[2] From Coalition of NGOs and other umbrella groupings

Secondary Data Collection

Government Ministries, Departments and Agencies

Secondary data was gathered from official publications, government records, audited financial statements, publications and publicly available studies from the MOH and its agencies. It also included budget data and financial statements of MoH. Health service utilization from the District Health Management Information System (DHIMS) was obtained for the period January to December 2015. The utilization data included inpatient and outpatient, diagnoses and bed capacity by facility type.

Donor

All Development Partners (donors) in health were included in the primary data collection.

Household Data

With respect to household estimates, a household survey with a revised health module to help estimate household health expenditure was included as part of the GLSS 6 which started in September 2012. For this study, the Ghana Living Standards Survey (GLSS 6) was used to estimate total household expenditure.

National Health Insurance

Data on a sample of claims were obtained. This included number of clients, services received (e.g. inpatient, outpatient, and pharmaceuticals), diagnosis (DRGs and ICD 10) and cost of services and medicines. Data was sampled by geographical location, type of facilities and level of services.

Quasi-government facility survey

Quasi-government health facilities included the Christian Health Association of Ghana, Police and Military hospitals. The survey covered all the quasi-government health facilities under their umbrella Association.

Data Entry and Analysis

All completed questionnaires were collected from the enumerators and given to the supervisors (members of the technical team) for data quality checks and verification for accuracy and completeness. Questionnaires were then submitted for data entry. Data was captured using the Health Accounts Production Tool (HAPT). This is a special software developed specifically for national Health Accounts.

The NHA software (HAPT) was used for data verification, validation and checks. Using the HAPT, the data was mapped according to the main dimensions of health as setup by the user. The dimensions of health used in 2015 were FS.RI, FS, HF, FA, HP, HC, FP and DIS (Diseases).

Assumptions and Estimations

Where funds are pooled, the expenditure contribution to the activities was assumed to be equal in equal proportions as the contribution to the total fund. The same rationale was also applied to any under spending. Also, where detailed expenditure records of providers were not available, we assumed equal split of funds between the key activities, unless instructed otherwise.

The estimation of the household out-of-pocket expenditure on health was assessed within the framework of the Cost of seeking care approach using the Ghana Living Standard Survey (GLSS 6). Health service statistics from the GHS was used to compute the Outpatient-Inpatient
Ratio to split expenditure items that had both components.

The average interbank annual exchange rate published by the Bank of Ghana as at 31 December 2015 for the US dollar to the cedi was used in this study. For 2015, the rate was GH¢3.7 to US$1

Study Limitations

Overall, the financial information from primary and secondary data sources were aggregated, which made it very difficult to disaggregate the financial information necessary to determine certain sub-classifications, such as the distinction of inpatient expenditure from outpatient expenditure, IGF from NHIS Claims and Out-of-Pocket payment among others. The study utilized ratios to determine the various contributions. An effort was made to confirm the ratios with existing literature and individual consultations in the health sector.

Private health providers (excluding those owned by employers) and private pharmacies were excluded in the survey

CHAPTER THREE

FINDINGS

Overview of Healthcare Financing in 2015

In 2015, about 75% of total health expenditure was funded from domestic sources (figure1). The remaining 25% was provided by external funding sources. The question of who pays for healthcare is of concern to every country. As countries work towards Universal Health Coverage (UHC) with financial protection for the poor, it is expected that every country will work towards reducing catastrophic payments on households. In 2015, 36% of total health expenditure were paid by households. This far exceeds the benchmark of 20% as suggested by the World Health organization. Though government paid for 53% of total health expenditure, it is expected that this will increase in the future. The type of health financing scheme adopted by a country drives how healthcare services are paid for. In Ghana, the National Health Insurance Scheme (NHIS) is expected to move the country towards Universal Health coverage. The NHA studies in 2015 shows that about 52% of total health expenditure are paid by government schemes (GoG, NHIS). Nine percent of total health expenditure in 2015 was paid through voluntary payments whilst 2% went through Development Partners. Households as a financing scheme was 36% of total health expenditure.

Figure 1: Summary indicators of health financing System

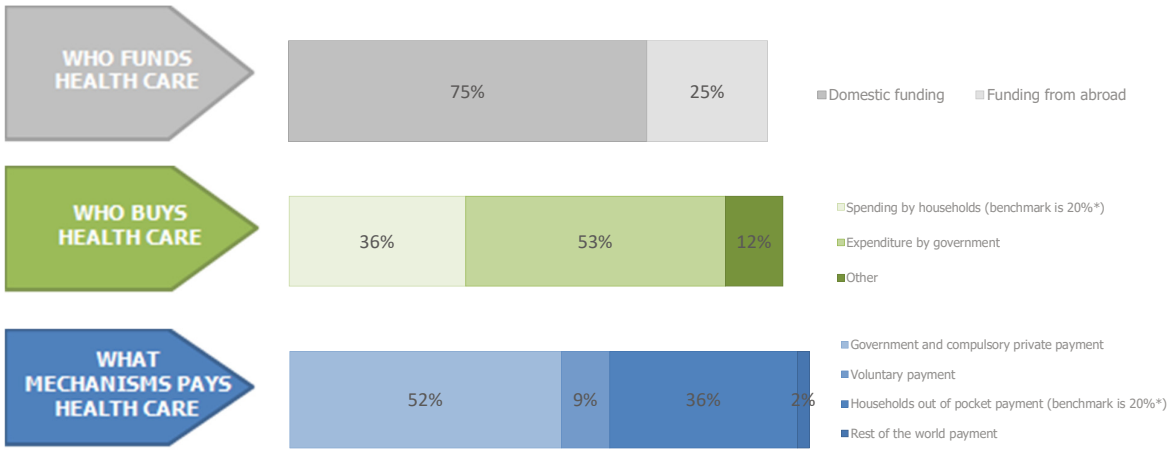
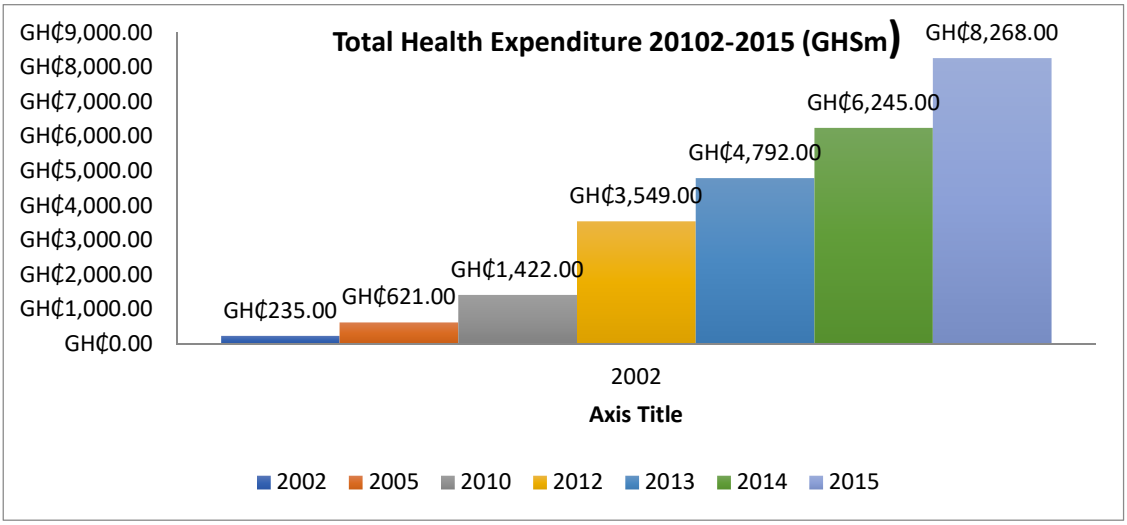


Figure 1 above shows the total health expenditure by source, by financing agent and by financing scheme. Though external sources (Development Partners) provide about 25% of total health expenditure, they only manage 2% of it. In contrast, government provides about 35% of total health expenditure and manages about 52% of total health expenditure.

Total Resource Envelope Available for Health in 2015

The 2015 National Health Accounts studies estimate Total Health Expenditure (THE) in 2015 as GHS 8.2bn ($2.3bn). There has been an annual increase of about GHS2bn in the last five NHA studies.

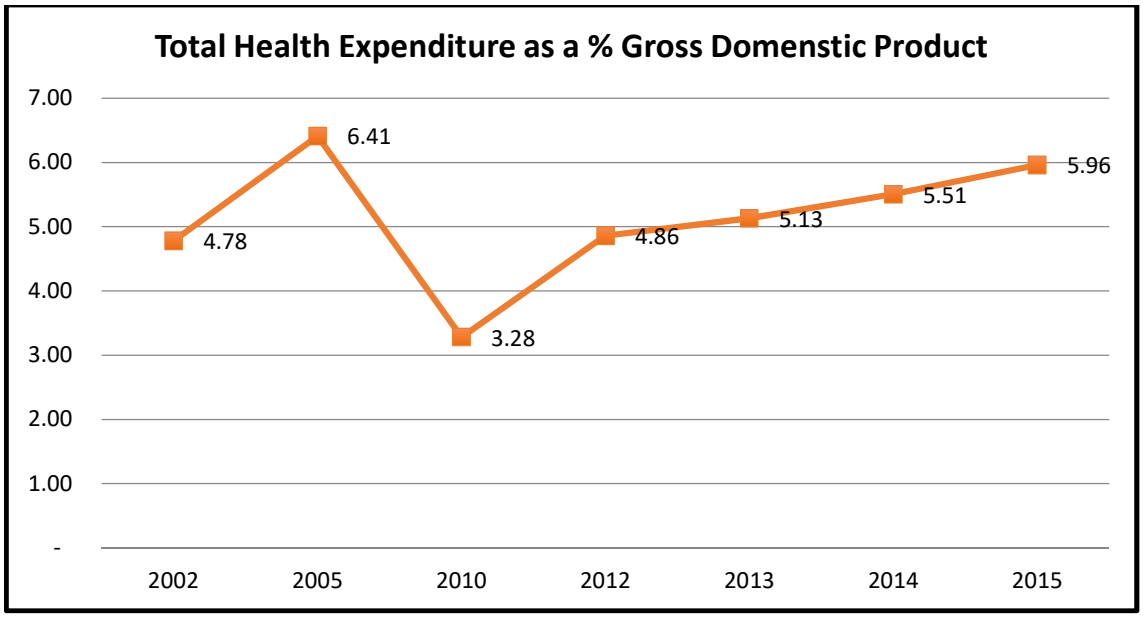
Figure 2: Trends in Total Health Expenditure (2002-2015)



Total Expenditure on Health as a Percentage of GDP

In 2015, the Total Health Expenditure as a percentage of GDP was about 6%. This is the highest in the las five years. In the period in which National Health Accounts studies has been conducted (2002-2015), 2005 recorded the highest percentage of Total Health Expenditure as a percentage of GDP of 6.4. The percentage fell by half to 3.4% in 2010 and since then has recorded a steady rise of about 0.5 percentage points between 2012 and 2015. Both THE and nominal GDP has been increasing with the GDP increasing at a higher rate of increase than THE in the five NHA studies.

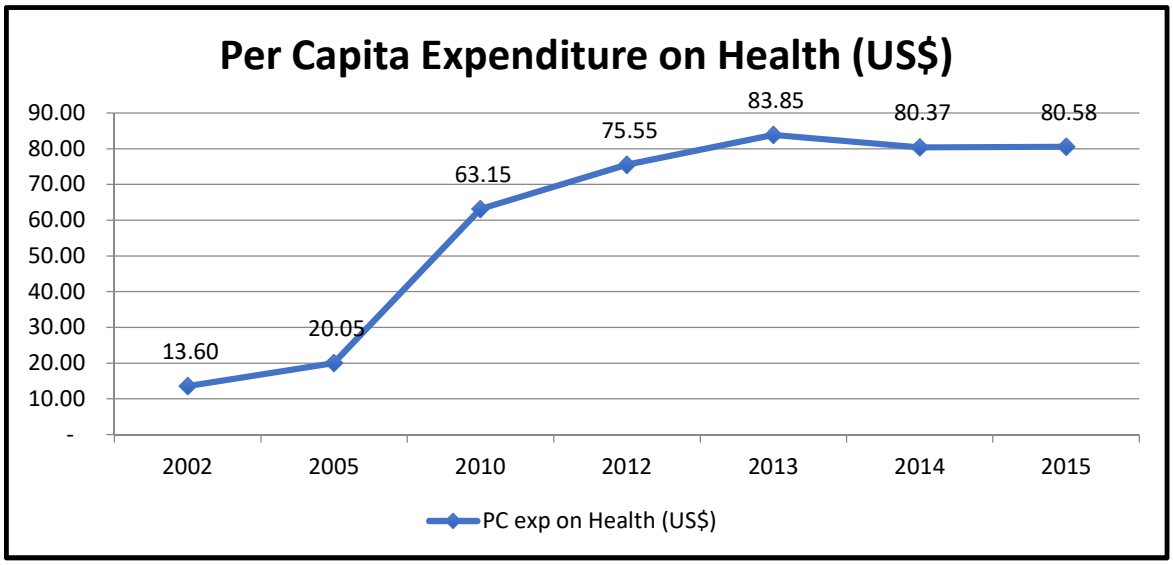
Figure 3: Total Health Expenditure as a Percentage of GDP



Per Capita Spending on Health

Per capita expenditure on health in 2015 was about US$81. There has been a nominal increase in per capita expenditure on health since 2002. There was an observed sharp increase between 2005 and 2010. However, the per capita health expenditure fell in 2014 from about US84 in 2013 to US80 in 2014. The fall in 2013 to 2014 and the almost legible growth in 2015 may be explained by the sharp fall in the value of the Ghana Cedi against the United States Dollar.

Figure 4: Trends in Per Capita Spending on Health in US Dollars

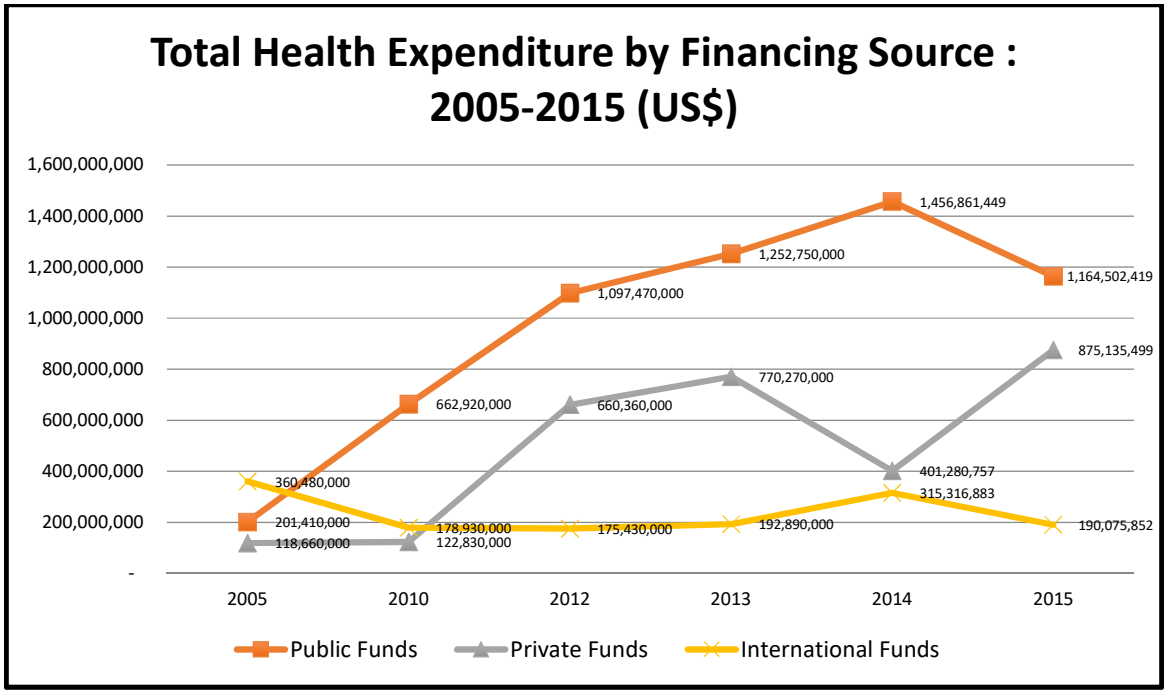


THE Breakdown by Financing Source

Observing the trends in THE by the three main categories (Public, Private and International) of funds, NHA studies between 2015 and 2015 shows abnormal trends in the financing of health services. The data from the NHA studies provides an insight into the inter-relationship between the three main funding categories. Public funds include tax based funds (discretionary and statutory) spent on health. Figure 2, shows nominal increases in total expenditure between 2005 and 2014 and a sharp drop in 2015. The sharp fall in expenditure may be partly explained by the lower spending by health facilities as well as low budget provision for government of Ghana goods and services and assets in 2015.

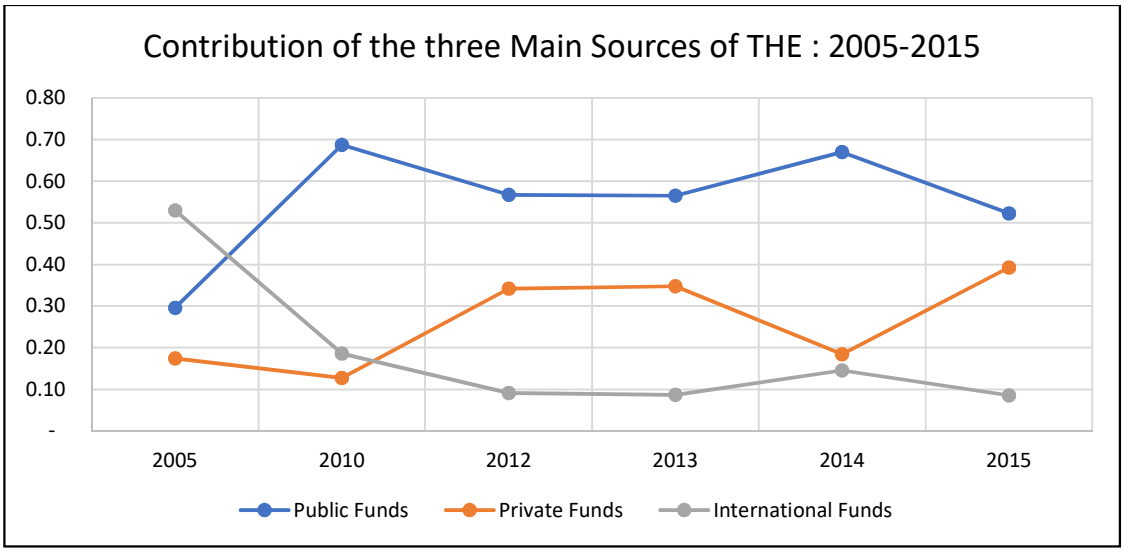
Private funds are made up of premiums and out of pocket expenditure from individuals and households, corporate expenditure of health. Unlike government, private financing is made by individual households and corporations and accounts for the funding trends over the period. International funds consist of funds from donors and organizations non-resident in Ghana.

Figure 5: Trends in Sources of Funding and Per Annum Percentage Changes



A closer review of the proportional contribution of each of the three sources, shows an interesting relationship between public and private funds. Figure 3, shows the proportional contribution of the three sources over the period 2005 to 2015.

Figure 6: Annual Percentage of the Three Main Sources of Funds to THE



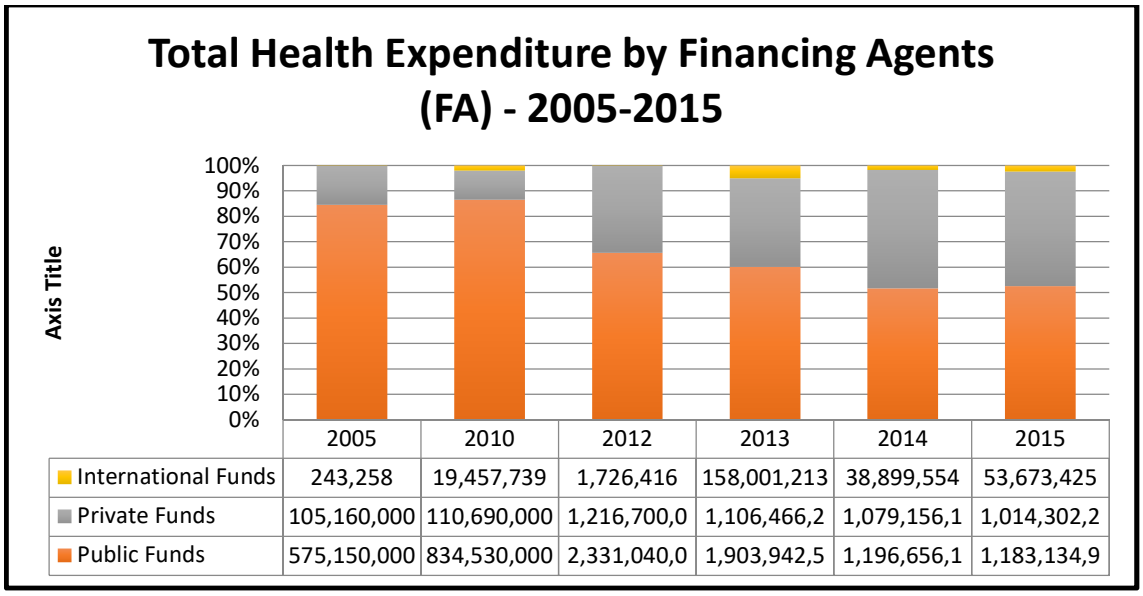
The line graph for public and private health expenditure shows that a fall or rise in public health expenditure is compensated by a rise or fall in private health expenditure. IN 2012 and 2013, the contribution of both public and private health expenditure did not change significantly. It will be necessary to understand what may have influenced such behaviour and whether it is funding or spending decision.

Total Health Expenditure by Financing Agent

Financing agents are the institutions who hold or receive funds and pays for healthcare services or healthcare expenditure incurred. Public health expenditure in 2015 was 53% of Total Health Expenditure. Government as a financing agent has been decreasing since 2005 whilst private Health Expenditure has been increasing. Health expenditure from international sources has remained stagnant at about 0.02% of Total Health Expenditure over the period 2005 to 2015.

National Health Insurance Authority as a financing agent within the publish sector has been increasing whilst central government has been reducing. Out of pocket expenditure account for a significant proportion of the private sector. The increasing proportion of private sector as a financing agent is a signal of the increase in households managing their funds (OOP). In the period between 2005 and 2015, public, as a financing agent dropped from 85% to 53% whilst private institutions as a financing agent increased from 15% to 45% in the same period.

Figure 7: Trends in THE breakdown by Financing Agent (2005-2015)



Providers of Health Care

Hospitals

In 2015, hospitals accounted for about 30% of total recurrent (exclude capital) health expenditure. Within hospitals, general hospital accounted for 81% of all hospital recurrent expenditure in 2015. In the last three years (2013-15), hospitals accounted spent an average of 31% of total recurrent health expenditure. Mental hospitals accounted for 3.2% of total recurrent health expenditure on hospitals in 2015. In the last three years, the percentage of total recurrent health expenditure on hospitals, accounted for by mental hospitals was 2.3%. Specialized hospitals in 2015 accounted for 0.8% of total recurrent expenditure on hospitals.

Table 1: Total Recurrent Expenditure on Hospitals: 2013-2015

Hospital Type	2013	2014	2015
General hospitals	2,007,746,257.57	2,001,697,901.89	2,001,697,901.89
Mental health hospitals	51,978,454.39	28,962,255.06	78,561,139.69
Specialized hospitals (Other than mental health hospitals)	81,296,917.61	195,872,504.13	20,229,297.10
Total	**2,141,023,642.57**	**2,226,534,675.08**	**2,100,490,353.68**

Health centres

Ambulatory health centres accounted for 6.7% of total recurrent expenditure. Health centres represents about 96% of the total recurrent health expenditure on ambulatory

health services. The other health Centre types are the family planning and clinics. Services at the CHPS Zones are included in the Health Centre expenditure.

Retailers and Other Providers of Medical Goods

Retailers and providers of medical goods include pharmacies, chemist and chemical sellers. In 2015, 20% of total recurrent health expenditure was spent on medical goods. Out of this, about 57% was spent at pharmacy shops and chemist, whilst about 43% was spent at other providers and retailers of medical goods including chemical shops.

Table 2: Total Recurrent Health Expenditure on Medical goods (GHS)

Retailers and Other providers of medical goods	2013 (GHS)	2014 (GHS)	2015 (GHS)
Pharmacies	161,204,965.52	676,713,876.92	695,554,602.99
Retail sellers and Other suppliers of durable medical goods and medical appliances		513,078,908.79	1,025,563,673.09
Total	**161,206,978.52**	**1,189,794,799.71**	**1,721,120,291.08**

Functions of General Health Care

Functions refer to health care expenditures incurred on specific goods and services used in provision of health care. The major categories of health expenditure analyzed under healthcare functions are curative (inpatient and outpatient), rehabilitative, preventive, medical goods (pharmaceuticals and therapeutic) and government health system and financing.

Total expenditure on healthcare functions for 2015 was GHS 4,041m. This figure is about 50% of total expenditure on healthcare functions and the proportion has been decreasing since 2013. Healthcare expenditure on preventive care increased from about 7% in 2013 to 17% in 2014 and in 2015, represents about 32% of total healthcare expenditure. In monetary value the increase between 2014 and 2016 of about GHS 1.3bn is very significant. Significant increase in expenditure were on programme planning and epidemiological surveillance and disease control programmes
There has been a gradual decrease in the health expenditure on governance, health system and financing between 2013 and 2015 whilst the expenditure on medical goods increased over the same period. In 2015, about 74% of the expenditure medical goods were for pharmaceuticals whilst about 24% was for therapeutic appliances and other medical goods (not shown in table 3).

Table 3: Total Health Expenditure by Health Care Functions

	2013 (GHS)	2014 (GHS)	2015 (GHS)	2013 %	2014 %	2015 %
Curative care and Rehabilitative	4,150,495,461.30	3,377,948,046.06	4,041,909,956.43	60.6%	55.3%	48.9%

Medical goods (non-specified by function)	349,889,295.01	570,007,235.02	762,226,158.12	5.1%	9.3%	9.2%
Preventive care	469,409,851.42	990,018,266.31	2,623,403,444.74	6.9%	16.2%	31.7%
Governance, and health system and financing administration	1,862,040,754.08	1,171,098,898.17	768,599,741.79	27.2%	19.2%	9.3%
Other health care services not elsewhere classified (n.e.c.)	19,667,176.10	155,653.47	71,639,368.30	0.3%	0.0%	0.9%
Total Expenditure, Healthcare Functions	**6,851,502,537.92**	**6,109,228,099.03**	**8,267,778,669.39**	**100.0%**	**100.0%**	**100.0%**

Total health expenditure on inpatient curative care reduced between 2013 and 2015. In 2015, total inpatient curative care expenditure was GHS 384m, a reduction from GHS 1,121m in 2013. In reverse, curative outpatient expenditure increased from GHS 2,895.7m in 2013 to GHS 3,654.2m in 2015 representing 70% and 90% in 2013 and 2015 respectively.

Table 4: Total Healthcare Expenditure on Curative care

Curative Health care	**2013 (GHS)**	**2014 (GHS)**	**2015 (GHS)**
Inpatient curative care	1,121,141,898.10	347,069,913.53	384,061,338.29
Outpatient curative care	2,895,668,894.41	2,857,332,250.19	3,654,205,792.88
Unspecified curative care (n.e.c.)	133,683,718.79	139,646,871.19	342,558.49
Total Curative Care	**4,150,494,511.30**	**3,344,049,034.91**	**4,038,609,689.66**

Factors of Provision for Healthcare Services

Factors of provision represents the inputs (compensations, materials and services, non-healthcare services and capital formation) used in providing healthcare services. In 2015, about GHS 2,071.01m of the GHS 8,267.78m was spent on compensation of employees, representing 25% of total health expenditure. Total expenditure on materials and services was GHS 6,126.47m, representing 74% of total health expenditure in 2015.

Table 5: Expenditure on Factors of Provision for Health Care

Factors of healthcare	2013 (GHS)	2014 (GHS)	2015 (GHS)
Compensation of employees	1,519,761,641.75	1,030,719,899.92	2,071,375,283.76
Materials and services used	5,240,317,287.33	5,213,001,739.77	6,126,468,632.93
Consumption of fixed capital, other inputs and Unspecified factors of health care provision (n.e.c.)	91,423,748.83	25,422,916.34	69,934,752.70
Total	**6,851,502,677.91**	**6,269,144,556.03**	**8,267,778,669.39**

Health Expenditure by Diseases and Health Conditions

The health sector in 2015 spent about GHS 3,674.21m in 2015 on infectious and parasitic diseases. Trend of expenditure on infectious and parasitic disease in the last three years (2013-15) has been increasing. The average over the three years is about 34% of total health expenditure. In comparison, GHS 755.80m was spent on reproductive health services in 2015. This represents about 9% of total health expenditure. Health expenditure on reproductive health services in the last three years has been increasing but not at a lower rate compared to infectious and parasitic diseases. Table 6 below, shows that the health sector spent more on non-communicable diseases than on reproductive health in the last three years.

Table 6: Total Health Expenditure by Diseases: 2013-2015

Diseases	2013	2014	2015
Infectious and parasitic diseases	1,432,276,558.65	2,623,190,177.63	3,376,211,067.65
Reproductive health	341,584,210.86	664,465,224.16	755,799,902.51
Nutritional deficiencies	166,943,411.85	58,935,504.70	73,331,263.26
Non-communicable diseases	424,508,392.54	905,501,929.89	1,045,042,602.03
Injuries	103,224,997.71	90,225,439.22	104,471,503.93
Non-disease specific	1,740,094,370.50	935,314,704.95	1,296,568,070.00
Other and unspecified diseases/conditions (n.e.c.)	2,644,005,187.50	1,373,228,525.12	1,616,354,260.00
Total All Diseases	**6,852,637,129.62**	**6,650,861,505.67**	**8,267,778,669.39**

CHAPTER FOUR

CONCLUSIONS

Consistently and timely production of the National Health Accounts would help greatly in Ghana's efforts towards Universal Health Coverage. The National Health Account has provided trends in financing of healthcare in Ghana over the last ten years (though not continuous). The 2015 National Health accounts is the seventh to be produced by the Ministry of Health. Over the year, the methodology has improved with the use of the System of Health Accounts (SHA 2011) manual starting in 2013. Data quality has improved with the use of improved health accounts tools (software). Support from government, policy makers and Development Partners are also commendable. On the Global scene, countries, bilateral and multi-lateral partners have accepted the National Health Accounts and are gradually working towards integrating it with programmatic systems which provides them with financing of their specific programmes. As Ghana's goal is to work towards Universal Health Coverage, the National Health Accounts is a key monitoring and evaluation tool for monitoring financing and financial risk protection.

Total health expenditure financed by households is high (36%) and over the recommended level of 20%. This should be of concern to policy makers. With the National Health Insurance Scheme in place, it is expected that increasingly, more households would be covered to reduce catastrophic payments.

Government expenditure on health has been increasing nominally but not sufficient to meet targets such as the Abuja target agreed by all governments. Total Health Expenditure as a percentage of GDP has been increasing in the last three years but at a slow pace. Per capita health expenditure was about $80 in 2015 compared to about $84 in 2013. Currently, per capita expenditure is not used as a criterion for allocating resources to the health sector. The National Health Insurance Scheme, being a social health insurance and financed mostly from tax could form a strong basis for increasing the per capita expenditure on health.

Resources to fund preventive healthcare services has improved in the last 3-4 years based on the National Health Accounts data. In 2015, the percentage of total health expenditure on preventive services was about 32%. There has been a corresponding decrease in the expenditure on government health system administration and financing. The nominal increases in government expenditure are accounted for mostly in compensation of employees. This trend of increases in the government compensation budget in the health sector leaves little room for goods and services and capital investment.

Total health expenditure on non-communicable diseases in the last three years calls for much attention. In 2015, Non-communicable disease expenditure as a percentage of total health expenditure was about 12%. About 70% of expenditure on non-communicable diseases were paid by households. This calls for a closer look at the healthcare financing system.

In conclusion, the NHA study generates very interesting data of which less than 10% is reflected in the NHA reports. It is worth investing more in further and deeper analysis of the NHA data, developing policy briefs to inform policy makers.

ANNEX

Annex A: Infectious and Parasitic Diseases

Table 7: Health expenditure on Infectious Diseases

Infectious and parasitic Diseases	**2015 (GHS)**	**2015 (%)**
HIV/AIDS and Other Sexually Transmitted Diseases (STDs)	778,679,795.51	23.06%
Tuberculosis (TB)	216,258,521.48	6.41%
Malaria	1,884,084,103.96	55.80%
Respiratory infections	204,366,294.27	6.05%
Diarrheal diseases	56,254,536.58	1.67%
Neglected tropical diseases	7,277,846.43	0.22%
Vaccine preventable diseases	26,565,540.38	0.79%
Other and unspecified infectious and parasitic diseases (n.e.c.)	202,724,429.05	
Total	**3,376,211,067.65**	**100%**

Table 8: Health Expenditure on Reproductive Health

Reproductive Health	**2015 (GHS)**	**2015 (%)**
Maternal conditions	282,567,290.65	37.39%
Perinatal conditions	181,314,064.60	23.99%
Contraceptive management (family planning)	20,323,617.26	2.69%
Unspecified reproductive health conditions (n.e.c.)	271,594,930.00	35.93%
Total	755,799,902.51	100%

Table 9: Total health Expenditure for Revenues of Health Financing Schemes by Diseases

Institutional units providing revenues to financing schemes	**FS.RI.1.1**	**FS.RI.1.2**	**FS.RI.1.3**	**FS.RI.1.5**	**FS.RI.1.nec**	**All FS.RI**

Classification of diseases / conditions				*Ghana Cedi (GHC), Million*	Government	Corporations	Households	Rest of the world	Unspecified institutional units providing revenues to financing schemes	
DIS.1				**Infectious and parasitic diseases**	**585.75**	**68.71**	**871.68**	**1,849.88**	**0.18**	3,376.21
	DIS.1.1			HIV/AIDS and Other Sexually Transmitted Diseases (STDs)	**5.95**	**0.64**	**7.36**	**764.55**	**0.18**	778.68
		DIS.1.1.1		HIV/AIDS and Opportunistic Infections (OIs)	**5.95**	**0.64**	**7.36**	**764.55**	**0.18**	778.68
			DIS.1.1.1.1	HIV/AIDS	**5.95**	**0.64**	**7.36**	**764.55**	**0.18**	778.68
	DIS.1.2			Tuberculosis (TB)	**1.59**	**0.11**	**1.39**	**213.16**		216.26
		DIS.1.2.1		Pulmunoray TB	**0.63**	**0.01**				0.64
			DIS.1.2.1.nec	Unspecified Pulmunoray Tuberculosis (n.e.c.)	**0.63**	**0.01**				0.64
		DIS.1.2.nec		Unspecified tuberculosis (n.e.c.)	**0.96**	**0.10**	**1.39**	**213.16**		215.62
	DIS.1.3			Malaria	**392.03**	**46.49**	**578.06**	**867.50**		1,884.08
	DIS.1.4			Respiratory infections	**85.26**	**8.58**	**110.52**			204.37
	DIS.1.5			Diarrheal diseases	**23.87**	**2.35**	**28.56**	**1.47**		56.25
	DIS.1.6			Neglected tropical diseases	**5.42**	**0.12**	**1.74**			7.28
	DIS.1.7			Vaccine preventable diseases	**14.06**	**0.65**	**8.93**	**2.92**		26.57
	DIS.1.nec			Other and unspecified infectious and parasitic diseases (n.e.c.)	**57.56**	**9.77**	**135.13**	**0.27**		202.72
DIS.2				**Reproductive health**	**148.74**	**35.27**	**496.85**	**74.20**	**0.73**	755.80
	DIS.2.1			Maternal conditions	**71.88**	**14.10**	**196.59**			282.57
	DIS.2.2			Perinatal conditions	**29.96**	**9.94**	**141.42**			181.31
	DIS.2.3			Contraceptive management (family planning)				**19.59**	**0.73**	20.32
	DIS.2.nec			Unspecified reproductive health conditions (n.e.c.)	**46.90**	**11.23**	**158.85**	**54.61**		271.59

DIS.3				**Nutritional deficiencies**	**32.38**	**2.80**	**38.01**	**0.14**		73.33
DIS.4				**Noncommunicable diseases**	**276.54**	**51.44**	**717.06**			1,045.04
	DIS.4.1			Neoplasms	**30.60**	**5.31**	**75.36**			111.27
	DIS.4.2			Endocrine and metabolic disorders	**11.29**	**0.76**	**10.55**			22.60
		DIS.4.2.1		Diabetes	**0.60**	**0.00**				0.60
		DIS.4.2.nec		Other and unspecified endocrine and metabolic disorders (n.e.c.)	**10.69**	**0.76**	**10.55**			22.00
	DIS.4.3			Cardiovascular diseases	**47.30**	**9.85**	**138.53**			195.68
		DIS.4.3.1		Hypertensive diseases	**4.95**	**0.00**				4.95
		DIS.4.3.nec		Other and unspecified cardiovascular diseases (n.e.c.)	**42.35**	**9.85**	**138.53**			190.73
	DIS.4.4			Mental & behavioural disorders, and Neurological conditions	**6.81**	**0.33**	**4.64**			11.78
		DIS.4.4.nec		Unspecified mental & behavioural disorders and neurological conditions (n.e.c.)	**6.81**	**0.33**	**4.64**			11.78
	DIS.4.8			Sense organ disorders		**0.02**	**0.00**			0.02
	DIS.4.9			Oral diseases	**16.42**	**0.00**	**0.00**			16.42
	DIS.4.nec			Other and unspecified noncommunicable diseases (n.e.c.)	**164.11**	**35.18**	**487.98**			687.27
DIS.5				**Injuries**	**36.99**	**4.48**	**63.00**			104.47
DIS.6				**Non-disease specific**	**1,201.73**	**5.84**	**25.81**	**62.91**	**0.28**	1,296.57
DIS.nec				**Other and unspecified diseases/conditions (n.e.c.)**	**639.98**	**65.72**	**798.54**	**112.11**		1,616.35
All DIS					2,922.11	234.26	3,010.96	2,099.24	1.20	8,267.78

Table 9: Total Health Expenditure for Revenues of Health Financing Schemes by Financing Sources

Financing schemes				Revenues of health care financing schemes	FS.1			FS.2	FS.3			FS.6			FS.7					All FS
						FS.1.1	FS.1.4			FS.3.1	FS.3.2		FS.6.1	FS.6.2		FS.7.1	FS.7.1.2	FS.7.1.3	FS.7.3	
				Ghana Cedi (GHC), Million	Transfers from government domestic revenue (allocated to health purposes)	Internal transfers and grants	Other transfers from government domestic revenue	Transfers distributed by government from foreign origin	Social insurance contributions	Social insurance contributions from employees	Social insurance contributions from employers	Other domestic revenues n.e.c.	Other revenues from households n.e.c.	Other revenues from corporations n.e.c.	Direct foreign transfers	Direct foreign financial transfers	Direct multilateral financial transfers	Other direct foreign financial transfers	Other direct foreign transfers (n.e.c.)	
HF.1				Government schemes and compulsory contributory health care financing schemes	2,922.11	2,166.74	755.38	1,395.64	0.22	0.06	0.16									4,317.97
	HF.1.1			Government schemes	2,166.74	2,166.74		1,395.64												3,562.38
		HF.1.1.1		Central government schemes	2,166.74	2,166.74		1,395.58												3,562.31
		HF.1.1.2		State/regional/local government schemes				0.06												0.06
	HF.1.2			Compulsory contributory health insurance schemes	755.38		755.38		0.22	0.06	0.16									755.60
		HF.1.2.1		Social health insurance schemes	755.38		755.38		0.22	0.06	0.16									755.60
HF.2				Voluntary health care payment schemes								259.91	25.87	234.04	512.10	512.10	512.08	0.03		772.01
	HF.2.2			NPISH financing schemes (including development agencies)											4.22	4.22	4.22			4.22

		HF.2.2.1		NPISH financing schemes (excluding HF.2.2.2)											4.22	4.22	4.22			4.22
	HF.2.3			Enterprise financing schemes								259.91	25.87	234.04	507.88	507.88	507.86	0.03		767.79
		HF.2.3.1		Enterprises (except health care providers) financing schemes								259.16	25.87	233.29	507.88	507.88	507.86	0.03		767.04
		HF.2.3.2		Health care providers financing schemes								0.75		0.75						0.75
HF.3				Household out-of-pocket payment								2,985.09	2,985.09							2,985.09
	HF.3.1			Out-of-pocket excluding cost-sharing								2,985.09	2,985.09							2,985.09
HF.4				Rest of the world financing schemes (non-resident)											192.70	186.78	186.78		5.92	192.70
	HF.4.2			Voluntary schemes (non-resident)											192.70	186.78	186.78		5.92	192.70
		HF.4.2.2		Other schemes (non-resident)											192.70	186.78	186.78		5.92	192.70
			HF.4.2.2.1	Philanthropy/international NGOs schemes											189.60	183.68	183.68		5.92	189.60
			HF.4.2.2.2	Foreign development agencies scheme											3.10	3.10	3.10			3.10
All HF					2,922.11	2,166.74	755.38	1,395.64	0.22	0.06	0.16	3,245.00	3,010.96	234.04	704.80	698.89	698.86	0.03	5.92	8,267.78

Table 10: Total Health Expenditure of Financing Schemes by Financing Agents

Financing schemes				Financing agents / Ghana Cedi (GHC), Million	FA.1 General government	FA.1.1 Central government	FA.1.1.1 Ministry of Health	FA.1.1.2 Other ministries and public units (belonging to central government)	FA.1.1.4 National Health Insurance Agency	FA.1.2 State/Regional/Local government	FA.2 Insurance corporations	FA.2.nec Unspecified insurance corporations (n.e.c.)	FA.3 Corporations (Other than insurance corporations) (part of HF.R1.1.2)	FA.3.1 Health management and provider corporations	FA.3.2 Corporations (Other than providers of health services)	FA.4 Non -profit institutions serving households (NPISH)	FA.5 Households	FA.6 Rest of the world	FA.6.1 International organisations	All FA
HF.1				Government schemes and compulsory contributory health care financing schemes	4,317.97	4,316.07	3,551.01	9.46	755.60	1.91										4,317.97
	HF.1.1			Government schemes	3,562.38	3,560.47	3,551.01	9.46		1.91										3,562.38
		HF.1.1.1		Central government schemes	3,562.31	3,560.44	3,551.01	9.43		1.88										3,562.31
		HF.1.1.2		State/regional/local government schemes	0.06	0.03		0.03		0.03										0.06
	HF.1.2			Compulsory contributory health insurance schemes	755.60	755.60			755.60											755.60
		HF.1.2.1		Social health insurance schemes	755.60	755.60			755.60											755.60
HF.2				Voluntary health care payment schemes							0.28	0.28	767.51	0.00	767.51	4.22				772.01
	HF.2.2			NPISH financing schemes (including development agencies)												4.22				4.22

		HF.2.2.1		NPISH financing schemes (excluding HF.2.2.2)												4.22				4.22
	HF.2.3			Enterprise financing schemes							0.28	0.28	767.51	0.00	767.51					767.79
		HF.2.3.1		Enterprises (except health care providers) financing schemes							0.28	0.28	766.76		766.76					767.04
		HF.2.3.2		Health care providers financing schemes									0.75	0.00	0.75					0.75
HF.3				Household out-of-pocket payment									1.91		1.91		2,983.18			2,985.09
	HF.3.1			Out-of-pocket excluding cost-sharing									1.91		1.91		2,983.18			2,985.09
HF.4				Rest of the world financing schemes (non-resident)												5.18		187.52	187.52	192.70
	HF.4.2			Voluntary schemes (non-resident)												5.18		187.52	187.52	192.70
		HF.4.2.2		Other schemes (non-resident)												5.18		187.52	187.52	192.70
			HF.4.2.2.1	Philanthropy/international NGOs schemes												5.18		184.42	184.42	189.60
			HF.4.2.2.2	Foreign development agencies schemes														3.10	3.10	3.10
All HF					4,317.97	4,316.07	3,551.01	9.46	755.60	1.91	0.28	0.28	769.42	0.00	769.42	9.40	2,983.18	187.52	187.52	8,267.78