



LIBERIA NATIONAL HEALTH ACCOUNTS 2007/08



October 2009
Produced by the Liberia Ministry of Health and Social Welfare



USAID
FROM THE AMERICAN PEOPLE



Mission

The Health Systems 20/20 **cooperative agreement**, funded by the U.S. Agency for International Development (USAID) for the period 2006-2011, helps USAID-supported countries address health system barriers to the use of life-saving priority health services. Health Systems 20/20 works to strengthen health systems through integrated approaches to improving financing, governance, and operations, and building sustainable capacity of local institutions.

October 2009

For additional copies of this report, please email info@healthsystems2020.org or visit our website at www.healthsystems2020.org

Cooperative Agreement No.: GHS-A-00-06-00010-00

Submitted to: Bob Emrey, CTO
Health Systems Division
Office of Health, Infectious Disease and Nutrition
Bureau for Global Health
United States Agency for International Development

Suggested Citation: Government of Liberia and Health Systems 20/20 Project. October 2009. *Liberia National Health Accounts 2007/2008*. Bethesda, MD: Health Systems 20/20 project, Abt Associates Inc.



Abt Associates Inc. | 4550 Montgomery Avenue | Suite 800 North
| Bethesda, Maryland 20814 | P: 301.347.5000 | F: 301.913.9061
| www.healthsystems2020.org | www.abtassociates.com

In collaboration with:

| Aga Khan Foundation | Bitrán y Asociados | BRAC University | Broad Branch Associates | Deloitte Consulting, LLP | Forum One Communications | RTI International | Training Resources Group | Tulane University School of Public Health and Tropical Medicine

LIBERIA NATIONAL HEALTH ACCOUNTS 2007/08

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development (USAID) or the United States Government.

CONTENTS

- Foreword..... xi**
- Acknowledgments..... xiii**
- 1. Background 1**
 - 1.1 Concept and Purpose of NHA..... 1
 - 1.2 Policy Objectives of the First Round of NHA in Liberia..... 2
 - 1.3 Organization of This Report..... 2
- 2. Methodology..... 3**
 - 2.1 Overview of Approach..... 3
 - 2.2 Sampling Frame and Methodology for Primary Data Collection.4
 - 2.2.1 Employer Surveys..... 4
 - 2.2.2 Donor Surveys..... 4
 - 2.2.3 Insurance Surveys 4
 - 2.2.4 NGO Surveys 4
- 3. General NHA Findings..... 5**
 - 3.1 Introduction 5
 - 3.2 Summary of General NHA Findings 6
 - 3.3 Financing Sources: Who Pays for Health Care? 7
 - 3.4 Financing Agents: Who Manages Health Funds? 8
 - 3.4.1 Sources of Government Spending on Health..... 9
 - 3.5 Providers of Health Care: Who Uses Health Funds to Deliver Care? 10
 - 3.5.1 Which Providers Consume Household OOP Funds?.... 11
 - 3.5.2 Which Providers Consume MOHSW Funds?..... 12
 - 3.5.3 Which Providers Consume NGO Funds? 13
 - 3.6 Health Care Functions: What Services and/or Products are Purchased with Health Funds? 14
- 4. Malaria Subaccount 14**
 - 4.1 Introduction 15
 - 4.2 Summary of Malaria Subaccount Findings 15
 - 4.3 Financing Sources of Malaria Health Care: Who Pays for Malaria Services? 16
 - 4.3.1 What are the Sources of MOHSW Malaria Funds?..... 17
 - 4.4 Financing Agents of Malaria Health Care: Who Manages Malaria Funds?..... 18
 - 4.4.1 Who Manages Donor Malaria Funds?..... 19

4.5	Providers of Malaria Health Services: Who Uses Health Funds to Deliver Malaria Care?.....	20
4.5.1	Which Providers Consume OOP Malaria Funds?.....	21
4.5.2	Which Providers Consume MOHSW Funds?.....	22
4.5.3	Which Providers Consume NGO Malaria Funds?.....	23
4.6	Health Care Functions: What Services and/or Products are Purchased with Health Funds?.....	24
4.6.1	Which Services are Bought with MOHSW Malaria Funds?	25
4.6.2	Which Services are Bought with NGO Malaria Funds?..	26
5.	Reproductive Health Subaccount	27
5.1	Introduction	27
5.2	Summary of RH Subaccount Findings, 2007/08	27
5.3	Financing Sources of RH: Who Pays for RH Services?	29
5.3.1	What are the Sources of MOHSW RH Funds?.....	30
5.4	Financing Agents of RH: Who Manages RH Funds?	31
5.4.1	Who Manages Donor RH Funds?	32
5.5	Providers of RH Services: Who Uses Health Funds to Deliver RH Care?	33
5.5.1	Which Providers Consume Household OOP RH Funds?	34
5.5.2	Which Providers Consume MOHSW RH Funds?	35
5.5.3	Which Providers Consume NGO RH Funds?.....	36
5.6	Health Care Functions: What Services and/or Products are Purchased with RH Funds?	37
5.6.1	Which Services are Bought with MOHSW RH Funds? ..	38
5.6.2	Which Services are Bought with NGO RH Funds?.....	39
6.	Child Health	41
6.1	Introduction	41
6.2	Summary of CH Subaccount Findings.....	41
6.3	Financing Sources of CH: Who Pays for CH Services?	43
6.3.1	What are the Sources of MOHSW CH Funds?	44
6.4	Financing Agents of CH: Who Manages CH Funds?	45
6.4.1	Who Manages Donor CH Funds?.....	46
6.5	Providers of CH Services: Who Uses Health Funds to Deliver CH Care?.....	47
6.5.1	Which Providers Consume Household OOP CH Funds?	48
6.5.2	Which Providers Consume MOHSW CH Funds?.....	49
6.5.3	Which Providers Consume NGO CH Funds?.....	50
6.6	Health Care Functions: What Services and/or Products are Purchased with CH Funds?.....	51
6.6.1	Which Services are Bought with MOHSW CH Funds? ..	52

6.6.2 Which Services are Bought with NGO CH Funds?	53
7. Conclusions and Next Steps	55
Annex A: NHA Matrices.....	57
Annex B: Bibliography	75

LIST OF TABLES

Table 3.1: Summary of General NHA Findings, 2007/08	6
Table 4.1: Summary of Malaria Subaccount Findings, 2007/08	15
Table 5.1: Summary of RH Subaccount Findings, 2007/08.....	28
Table 6.1: Summary of CH Subaccount Findings, 2007/08	42

LIST OF FIGURES

Figure 3.1: Breakdown of THE by Financing Source, 2007/08.....	7
Figure 3.2: Breakdown of THE by Financing Agent, 2007/08.....	8
Figure 3.3: Sources of MOHSW Funding, 2007/08.....	9
Figure 3.4: Breakdown of THE by Provider, 2007/08.....	10
Figure 3.5: Which Providers Consumed Household OOP Funds, 2007/08?	11
Figure 3.6: Which Providers Consumed MOHSW Funds, 2007/08?	12
Figure 3.7: Which Providers Consumed NGO Funds, 2007/08?	13
Figure 3.8: Breakdown of THE by Function, 2007/08.....	14
Figure 4.1: Who Paid for Malaria Services, 2007/08?	16
Figure 4.2: Sources of MOHSW Malaria Funds, 2007/08	17
Figure 4.3: Who Managed Malaria Funds, 2007/08?	18
Figure 4.4: Managers of Donor Malaria Funds, 2007/08.....	19
Figure 4.5: Providers of Malaria Health Services, 2007/08	20
Figure 4.6: Which Providers Consumed Household OOP Malaria Expenditures, 2007/08?.....	21
Figure 4.7: Which Providers Consumed MOHSW Malaria Funds, 2007/08?	22
Figure 4.8: Which Providers Consumed NGO Malaria Funds, 2007/08?	23
Figure 4.9: Breakdown of THE _{ma} by Function, 2007/08	24
Figure 4.10: Which Services were Purchased with MOHSW Funds, 2007/08?	25
Figure 4.11: Which Services were Purchased with NGO Funds, 2007/08?	26
Figure 5.1: Who Paid for RH Services in 2007/08?.....	29
Figure 5.2: Sources of MOHSW RH Funds, 2007/08.....	30
Figure 5.3: Who Managed RH Funds, 2007/08?.....	31
Figure 5.4: Managers of Donor RH Funds, 2007/08.....	32
Figure 5.5: Providers of RH Services, 2007/08	33

Figure 5.6: Which Providers Consumed Household OOP RH Funds, 2007/08?	34
Figure 5.7: Which Providers Consumed MOHSW RH Funds, 2007/08?	35
Figure 5.8: Which Providers Consumed NGO RH Funds, 2007/08?	36
Figure 5.9: Breakdown of THE on RH by Function, 2007/08	37
Figure 5.10: Which Services were Purchased with MOHSW RH Funds, 2007/08?	38
Figure 5.11: Which Services were Purchased with NGO RH Funds, 2007/08?	39
Figure 6.1: Who Paid for CH Services, 2007/08?	43
Figure 6.2: Sources of MOHSW CH Funds, 2007/08	44
Figure 6.3: Who Managed CH Funds, 2007/08?	45
Figure 6.4: Managers of Donor CH Funds, 2007/08	46
Figure 6.5: Providers of CH Services, 2007/08	47
Figure 6.6: Which Providers Consumed Household OOP Funds, 2007/08?	48
Figure 6.7: Which Providers Consumed MOHSW CH Funds, 2007/08?	49
Figure 6.8: Which Providers Consumed NGO CH Funds, 2007/08?	50
Figure 6.9: Breakdown of THE on CH by Function, 2007/08	51
Figure 6.10: Which Services were Bought with MOHSW CH Funds, 2007/08?	52
Figure 6.11: Which Services were Bought with NGO CH Funds, 2007/08?	53

ABBREVIATIONS AND ACRONYMS

CH	Child Health
CWIQ	Core Welfare Indicator Questionnaire Survey
FBO	Faith-based Organization
FP	Family Planning
FS	Financing Source
GDP	Gross Domestic Product
HC	Health Function
HF	Financing Agent
HH	Household
HMIS	Health Management Information System
HP	Health Provider
IEC	Information, Education and Communication
IPT	Intermittent Preventive Treatment
IRS	Indoor Residual Spraying
IUD	Intra-uterine Device
LDHS	Liberia Demographic and Health Survey
LISGIS	Liberia Institute for Geo-Information Services
MCH	Maternal and Child Health
MOF	Ministry of Finance
MOHSW	Ministry of Health and Social Welfare
MSG	Monitoring and Steering Group
NASSCORP	National Social Security and Welfare Corporation
NGO	Nongovernmental Organization
NHA	National Health Accounts
NHE	National Health Expenditure
NMCP	National Malaria Control Program
NSK	Not Specified by Any Kind
OOP	Out of Pocket
PER	Public Expenditure Review
RH	Reproductive Health

THE	Total Health Expenditure
THE_{MA}	Total Health Expenditure for Malaria
THE_{RH}	Total Health Expenditure for Reproductive Health
THE_{CH}	Total Health Expenditure for Child Health
UNICEF	United Nations Children's Fund
US\$	US Dollar
USAID	United States Agency for International Development
WAHO	West African Health Organization
WHO	World Health Organization

FOREWORD

Most of the complex policy issues facing developing and fragile post-conflict countries relate to health care financing, including: How much is invested in the overall health sector? Is this adequate to meet equity and efficiency goals? Are there other possible additional sources of financing that could be mobilized? What health services should be prioritized for a basic package and what is the appropriate mix of mechanisms to finance this package? National Health Accounts (NHA) is a useful tool for understanding and informing responses to these policy issues.

NHA tracks all expenditure flows across a health system, and describes the sources, flow, and uses of financial resources within the health system, a basic requirement for optimal resource mobilization and allocation. NHA is therefore an essential component of successful implementation of health reforms aimed at improving the provision of an optimal package of health care. This is the first NHA undertaken for the Government of Liberia and has used the NHA framework to produce estimation for financial year 2007/08. The NHA findings will be relevant in the development of the National Health Care Financing Policy and Strategic Plan.

Sources of health care funding in Liberia include: the Government of Liberia, donors, private firms, and households. Resources mobilized from these sources are channeled through intermediaries (called financing agents) to the providers of health care services and ultimately to the goods and services produced or paid for with those funds. For the 2007/08 estimation, a wide range of data and information were collected from various government documents. In addition, several surveys targeted to donors, nongovernmental organizations, insurance and other private companies, and households were conducted to complete the NHA process.

The NHA estimates provided in this report are intended for all stakeholders involved in Liberia's health care system – public, private, and donors. It is hoped that the estimates will directly inform policy and go a long way to inform the development of the country's health care financing strategy. The findings should also encourage further research into Liberia's health care financing, leading to a better understanding of the problems facing the health sector while identifying areas in need of reform.

This NHA exercise was a collaborative effort between the Ministry of Health and Social Welfare, the Liberia Institute for Geo-Information Services (LISGIS), and our development partners. USAID's Health Systems 20/20 project provided technical support.

It is my hope that stakeholders in health sector would use the NHA findings to refocus their resources to cost-effective interventions that will accelerate our pace to achieving the Millennium Development Goals.

Walter T. Gwenigale, MD
Minister of Health and Social Welfare
Republic of Liberia

ACKNOWLEDGMENTS

The production of Liberia's National Health Accounts (NHA) report for financial year 2007/08, together with the subaccounts for malaria, reproductive health (RH), and child health (CH), is a result of efforts from many people and institutions. The NHA estimates are based on data collected by the Ministry of Health and Social Welfare's (MOHSW) Department of Planning, Research and Development and the Liberia Institute for Geo-Information Services (LISGIS) from the private sector, donors, nongovernmental organizations (NGOs) and faith-based organizations, and, to some extent, other government ministries and agencies.

The MOHSW would like to acknowledge the financial support provided by the United States Agency for International Development (USAID), the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), and the World Bank. USAID's Health System 20/20 project provided technical assistance through the efforts of Susna De, Cheikh Mbengue, Darwin Young, Stephen Muchiri, Ken Carlson, Jenna Wright, Douglas Glandon, Michael DeLuca, and Jessica Erbacher. The constant support provided by Chris McDermott and Tarnu Duwarko, both of USAID/Liberia, is greatly appreciated.

The MOHSW wishes to thank LISGIS Director General Edward Liberty for his valuable support to the study process, and his deputies Francis Wreh and Daniel Kingsley for assisting in the household survey design, sampling, and analysis as well as the enumerators who assisted in data collection for the household component.

The MOHSW also appreciates the support, cooperation, and information supplied by government departments, private organizations, NGOs, insurance companies, development partners, and private firms, without which the NHA study would not have been completed. Special thanks go to all the MOHSW departments and sections that participated and provided data. Special acknowledgements are extended to the data collectors for the institutional surveys and the Health Management Information System (HMIS) staff for their magnificent contribution.

Benedict C. Harris, Coordinator of the Health Financing Secretariat in the Department of Planning, Research and Development, oversaw the whole process, including the coordination of the data collection, entry, analyses, and the compilation of the NHA report. Other central NHA team members include C. Sanford Wesseh, Roland Y. Kesselly, Bennetha J. Sampson, Marcus J. Gonny, Momolu Trowen Massaquoi, and Ohyndis Sleweon, who are all thanked for their contributions. We would also like to extend our thanks to the different program heads at the ministry, specifically the National Malaria Control Program (NMCP), RH and CH Divisions.

Finally, implementing an NHA estimation is a process that must constantly be improved. Users of the data and the analyses in this report are, therefore, invited to freely comment on its contents, presentation, and format, as this will reveal areas where improvements could be made.

S. Tornorlah Varpilah
Deputy Minister for Planning, Research and Development
Ministry of Health and Social Welfare

I. BACKGROUND

In 2007, the Government of Liberia developed a National Health Policy and Strategic Plan that recognized the need to prepare a health care financing policy to mobilize funds and guide investments in the health sector. In order to provide base information for the plan, it was found necessary to conduct Liberia's first National Health Accounts (NHA) estimation. The Health Financing Secretariat was constituted and trained to coordinate the NHA study. NHA work started in March 2007 with the development of the data collection tools, mobilization of resources, and work plan. To make the NHA policy relevant, it was decided to include three NHA subaccounts that reflect much of the disease burden of the country: malaria, reproductive health (RH), and child health (CH).

NHA is an internationally recognized methodology used to track expenditures in a health system for a specified period of time. Specifically, NHA details the flow of funding from financial sources (e.g., donors, Ministry of Finance [MOF]), to financing agents (i.e., those who manage the funds, such as the Ministry of Health or nongovernmental organizations [NGOs]), to providers (e.g., public and private facilities) and finally to end uses (e.g., inpatient and outpatient care, pharmaceuticals). Actual expenditures, rather than budget inputs, are used to fill a series of tables that show the flow of funding through the health sector. NHA also provides detailed breakdowns of disease-specific expenditures such as those for malaria, RH, and CH. NHA is designed to be used as a policy tool to facilitate the assessment of how well resources are targeted to health system goals and priority areas.

This report describes findings from the first round of NHA in Liberia, which was undertaken in 2008 for financial year 2007/08, and implemented by the Ministry of Health and Social Welfare (MOHSW) with technical support from USAID's Health Systems 20/20 project, led by Abt Associates Inc. The findings will be used as a platform for informing policy decisions concerning health sector resource allocation; they will also be used by stakeholders in the sector.

I.1 CONCEPT AND PURPOSE OF NHA

NHA is a systematic, comprehensive, and consistent method for monitoring financial resource flows in a country's health system. It is a tool for health sector management and policy development that measures total public and private (including households) health expenditures. It tracks all expenditure flows within a health system, and links the sources of funds to service providers and to ultimate uses of the funds. Thus, NHA answers questions like: Who pays for health care? How much? For what services? NHA is designed to facilitate the successful implementation of health system goals by policymakers who are entrusted to provide an optimal package of goods and services to maintain and enhance the health of individuals and populations, to be responsive to their legitimate expectations, and to protect them from an unfair financial burden. For any given year, NHA track all the resources that flow through the health system. Due to its internationally standardized framework, it also facilitates comparison across countries. NHA therefore provides important prerequisite data for optimizing health resource allocation and mobilization, identifying and tracking shifts in resource allocations (e.g., from curative to preventive, or from public to private sector), comparing findings with other countries, and finally, assessing equity and efficiency in a dynamic health sector environment. Given the flexibility of the NHA, it is also possible to assess whether targeted efforts are having the desired impact.

I.2 POLICY OBJECTIVES OF THE FIRST ROUND OF NHA IN LIBERIA

The overall objective of the NHA study was to estimate total health expenditure (THE) in 2007/08 with a view to obtain data that will inform health policy formulation and development. The specific objectives included:

- Determine the distribution of THE by financing sources and the institutions that manage the funds (i.e. financing agents);
- Determine the distribution of THE by provider of health services and functions (i.e. the services that are purchased);
- Estimate health expenditures in three subaccount categories: malaria, RH, and CH;
- Provide estimates that will inform the development of the health care financing strategy.

I.3 ORGANIZATION OF THIS REPORT

This report is organized into six chapters. Chapter 1 has provided background information on NHA in general and NHA development in Liberia. Chapter 2 describes the methodology used for this NHA. Chapter 3 presents findings on the general NHA; Chapters 4, 5, and 6 are on the malaria, RH, and CH subaccounts, respectively. Chapter 7 gives concluding remarks and recommendations for next steps.

2. METHODOLOGY

2.1 OVERVIEW OF APPROACH

The 2007/08 Liberia NHA was conducted in accordance with the Guide to producing national health accounts, with special application for low-income and middle-income countries (World Health Organization [WHO], World Bank, and USAID 2003) and used both primary and secondary data. The three subaccounts were produced using the methodology outlined in the following documents:

- Guidelines for Producing Malaria Subaccounts Within the National Health Accounts Framework (Prepublication Version)
- Guidelines for Producing Reproductive Health Subaccounts Within the National Health Accounts Framework
- Guidelines for Producing Child Health Subaccounts Within the National Health Accounts Framework (Prepublication Version)

A wide range of data and information were collected from various government documents and key informants. The following primary surveys were conducted to complete the NHA process:

- Employer surveys
- Donor surveys (both bilateral and multilateral donors)
- Insurance (public and private)
- NGOs involved in health

The following secondary data sources were used:

- Republic of Liberia MOHSW Unaudited Financial Statements for the year ended June 30, 2008
- Liberian National Budget 2007/2008
- Financial statements from the National Malaria Control Program (NMCP)
- Financial statements from the National AIDS Control Program
- National Drug Service Consumption Dataset for Malaria and HIV/AIDS Commodities
- Family Planning Association of Liberia Annual Budget and Commodities Dataset
- Health Management Information System (HMIS)

Additionally, expenditure questions were added to the Community Health Financing and Health Seeking Behavior Survey; Core Welfare Indicator Questionnaire survey (CWIQ); and the Malaria Indicator Survey. These surveys provided out-of-pocket (OOP) expenditures by households. Please refer to these studies for any methodology questions.

Furthermore, it is important to note the following. Some of the expenditures at the provider and functional level could not be disaggregated. This was due to a lack of 1) disaggregated detail in the household survey that was used, 2) robust costing data at both the hospital and health clinic levels, and 3) provider-level expenditure data.

2.2 SAMPLING FRAME AND METHODOLOGY FOR PRIMARY DATA COLLECTION

2.2.1 EMPLOYER SURVEYS

Using key informants, a list of firms was developed to represent all formal sector employers that were large enough to spend money providing health benefits to their employees. A total of 27 were identified, 23 were sampled, and 23 responded to the questionnaire.

To extrapolate the expenditures of the 23 respondents, the firms were divided into terciles based on their respective number of employees who would be eligible to receive health benefits within the study timeframe. A weighting factor was generated by determining the number of employees in surveyed firms compared with the number of employees in non-surveyed firms. The health expenditures for the surveyed employers were multiplied by their respective weights in order to estimate the THE. The same methodology was applied to the other institutional surveys, to adjust for nonresponsive or non-sampled institutions.

2.2.2 DONOR SURVEYS

Foreign assistance is a very significant source of financing for Liberia's health sector. A listing of all donors involved in the health sector was compiled from the External Aid Coordination Unit of the MOHSW Department of Planning, Research and Development. Fourteen donors were identified and surveyed; all returned a completed survey questionnaire. The donor surveys were designed to overlap with the NGO surveys and government fiscal reports. Where possible, the funds were tracked from the donor to the NGO implementing partner or the MOHSW and the expenditure numbers from these latter sources were used.

2.2.3 INSURANCE SURVEYS

A list of insurance companies providing medical and general cover was obtained from the Commission of Insurance Companies in Liberia. A total of 15 insurance companies were surveyed; five returned the questionnaire.

2.2.4 NGO SURVEYS

A list of NGOs involved in the health sector was compiled from the External Aid Coordination Unit of the MOHSW Department of Planning, Research and Development. Additional NGOs were identified by the Monitoring and Steering Group for NGOs in Liberia. Forty-seven were identified and all were included in the sample; 31 responded to the questionnaire.

3. GENERAL NHA FINDINGS

3.1 INTRODUCTION

Overall expenditure on health, including that of the government, has increased significantly in recent years. The lack of access to services and low expenditures on health that were characteristic of the earlier part of this decade are now being targeted. There is still much room for improvement, however, in the general health status of the population. The WHO estimated life expectancy in Liberia in 2006 to be 46 years. Although the total fertility rate has fallen in recent years, it remains high, at 5.2, with significant regional differences. Furthermore, it is estimated that 11.4 percent of women use some modern family planning method. The infant mortality rate has dropped in the last few years and now stands at 72/1,000 live births. Both the infant mortality rate and the under-five/child mortality rate, at 111/1,000 live births, are below the average for sub-Saharan Africa. At the same time, nearly a fifth of children are undernourished and over a third suffer from stunted growth (LISGIS et al., 2008, henceforth referred to as the Liberia Demographic and Health Survey [LDHS] 2007; World Bank, December 2007, henceforth referred to as the Liberia Public Expenditure Review [PER] [draft]).

The most significant disease threats in Liberia include malaria, acute respiratory infections, diarrhea illnesses, tuberculosis, sexually transmitted illnesses, worms, and malnutrition. Of these, malaria accounts for the most outpatient hospital visits. Sanitation and access to clean water is still severely lacking in many areas, as are qualified health care workers, particularly in rural regions (LDHS 2007; draft PER 2007)

Additionally, data on health status and resource allocation are lacking. The NHA estimations therefore attempted to fill the gap in financial resource allocation information by measuring the expenditures on health from various perspectives. This is a novel exercise in Liberia. The findings presented in this chapter reflect overall health expenditure data in Liberia. Because it is the first account of this type, no comparison data exist. Amounts are given in US 2007/08 dollars. The data will help to inform resource allocation decisions as the health system continues to be rebuilt.

3.2 SUMMARY OF GENERAL NHA FINDINGS

In 2007/08, THE in Liberia was US\$100,517,382, 15 percent of the country's gross domestic product (GDP). This represented a per capita expenditure of US\$29. Of total government expenditure, 7.73 percent was directed toward health. The majority of health expenditure came from donor sources (47 percent) and household OOP spending (35 percent). OOP spending on health was US\$10 per person. The public, private, and NGO sectors accounted for fairly equal proportions of the management, or programming, of THE, at 33.7 percent, 37.6 percent, and 28.8 percent, respectively. Public facilities were the principal providers of health care, representing 63.8 percent of THE. Curative care was the health function or service that accounted for the largest proportion of THE at 54.3 percent.

TABLE 3.1: SUMMARY OF GENERAL NHA FINDINGS, 2007/08

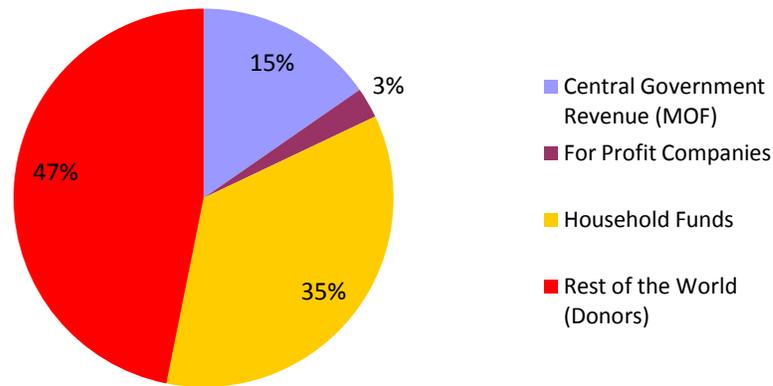
Indicators	2007/08
Total population	3,489,072
Exchange rate	61.1
Total real GDP	US\$670,000,000
Total government health expenditure	US\$15,417,802
Total health expenditure (THE)	US\$100,517,382
THE per capita	US\$29
THE as % of nominal GDP	15%
Government health expenditure as % of total government expenditure	7.73%
Financing Source as a % of THE	
Public	15%
Private	3%
Donor	47%
Household OOP spending	35%
Household (HH) Spending	
Total HH (OOP) spending as % of THE	35%
OOP spending as % of THE	35%
HH (OOP) spending per capita	US\$10
OOP spending per capita	US\$10
Financing Agent Distribution as a % of THE	
Public	33.7%
Private	37.6%
NGOs	28.8%
Provider Distribution as a % of THE	
Public facilities	63.8%
Private facilities	36.2%
Other	0.1%
Function Distribution as a % of THE	
Curative care	54.3%
Pharmaceuticals	10.0%
Prevention and public health programs	21.7%
Health administration	14.0%

3.3 FINANCING SOURCES: WHO PAYS FOR HEALTH CARE?

In the NHA framework, financing sources are those persons or institutions that contribute funds used in the health care system. The health sector in Liberia obtains varying levels of funding from the traditional sources: public (government), private firms, households, and donors. Figure 3.1 provides a breakdown of THE by financing source.

As stated above, THE in Liberia in 2007/08 was US\$100.5 million, which translates to US\$28.8 per capita. This expenditure level is close to the US\$34 that the WHO recommends for the cost of an essential basic package of health. The “rest of the world” (donors) contributes 47 percent to THE followed by household OOP expenditures, at 35 percent; the central government contributes 15 percent. The lowest contribution comes from private for-profit companies, which provide only 3 percent of THE.

FIGURE 3.1: BREAKDOWN OF THE BY FINANCING SOURCE, 2007/08

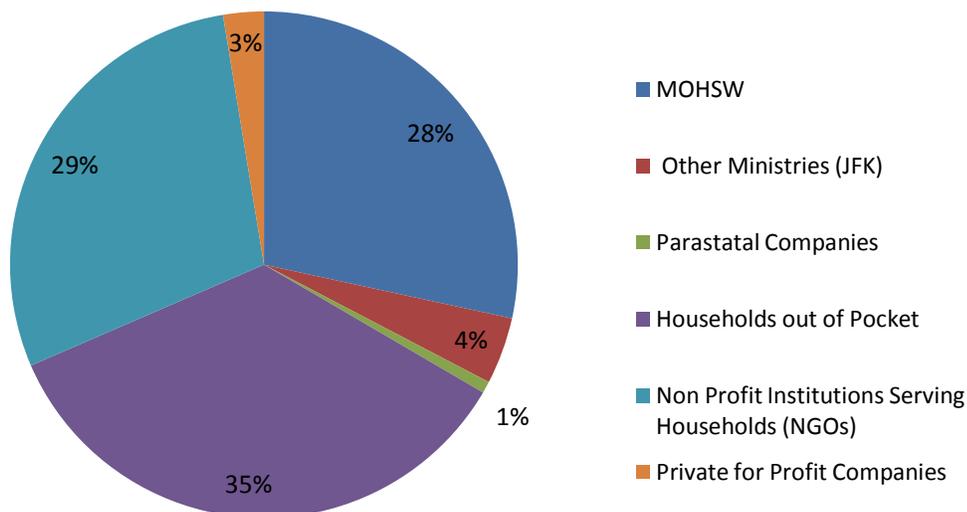


3.4 FINANCING AGENTS: WHO MANAGES HEALTH FUNDS?

Financing agents are institutions that receive and manage funds from financing sources to pay for or purchase health goods and services. They maintain programmatic control over how resources are allocated across providers and determine which functions, in which proportions, will consume the resources mobilized. Financing agents are entities such as the MOHSW, parastatals, public and private insurance entities, households, NGOs, private firms, and sometimes donors.

Households manage the largest proportion of THE, 35 percent, followed closely by NGOs and MOHSW, which manage nearly the same amount of funds at 29 percent and 28 percent, respectively.

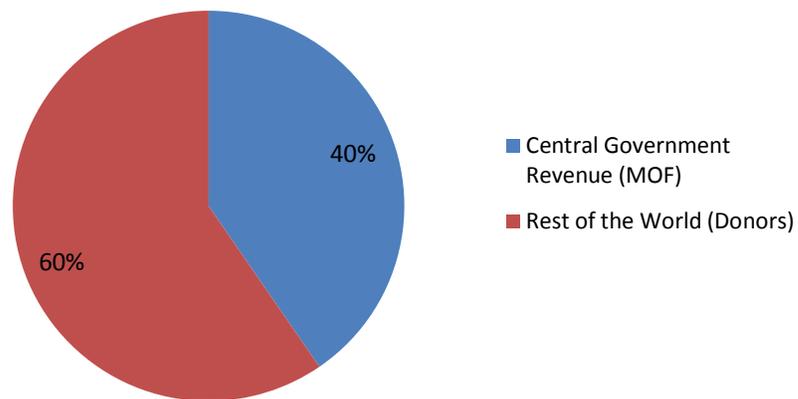
FIGURE 3.2: BREAKDOWN OF THE BY FINANCING AGENT, 2007/08



3.4.1 SOURCES OF GOVERNMENT SPENDING ON HEALTH

There are two principal sources for the funds that the MOHSW manages. Central government revenue accounts for 40 percent, while donors contribute the remaining 60 percent.

FIGURE 3.3: SOURCES OF MOHSW FUNDING, 2007/08

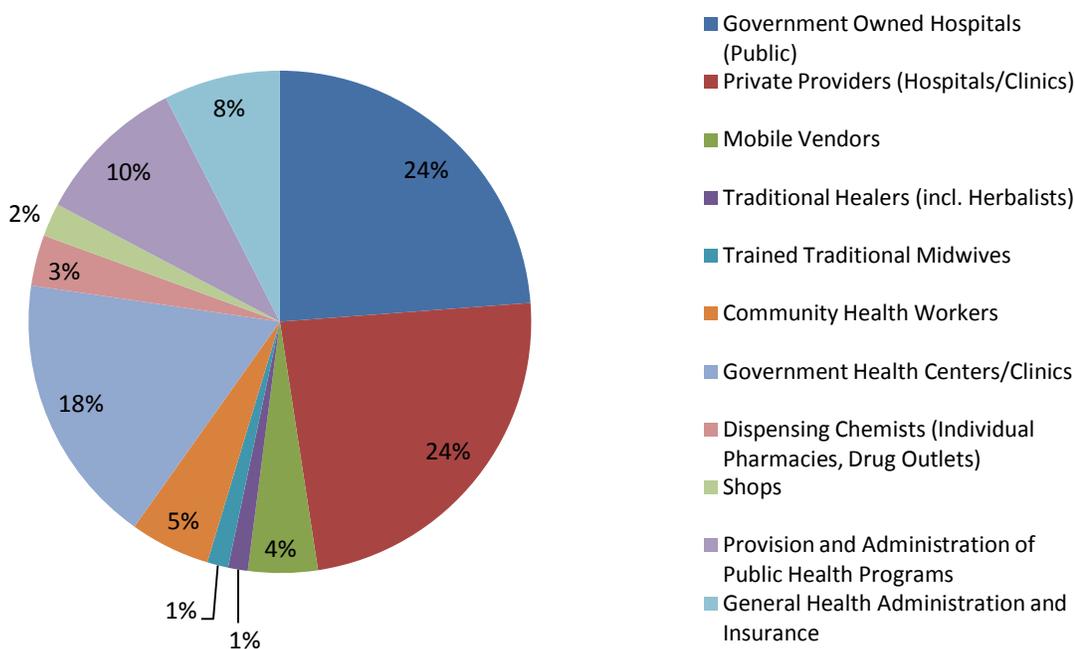


3.5 PROVIDERS OF HEALTH CARE: WHO USES HEALTH FUNDS TO DELIVER CARE?

Health care providers are entities that receive money to produce goods and services within the health accounts boundary: these include public and private facilities, pharmacies and shops, traditional healers, and community health workers as well as public health programs and general health administration. Public health programs refer to the provision and implementation of programs such as health promotion and protection. General health administration expenditures are the costs of overall regulation of activities of agencies that provide health care.

In 2007/08, the largest share of THE, 42 percent, occurred in public facilities, in government-owned hospitals (24 percent) and health centers (18 percent), while private providers consumed the second largest share of THE, at 24 percent.

FIGURE 3.4: BREAKDOWN OF THE BY PROVIDER, 2007/08

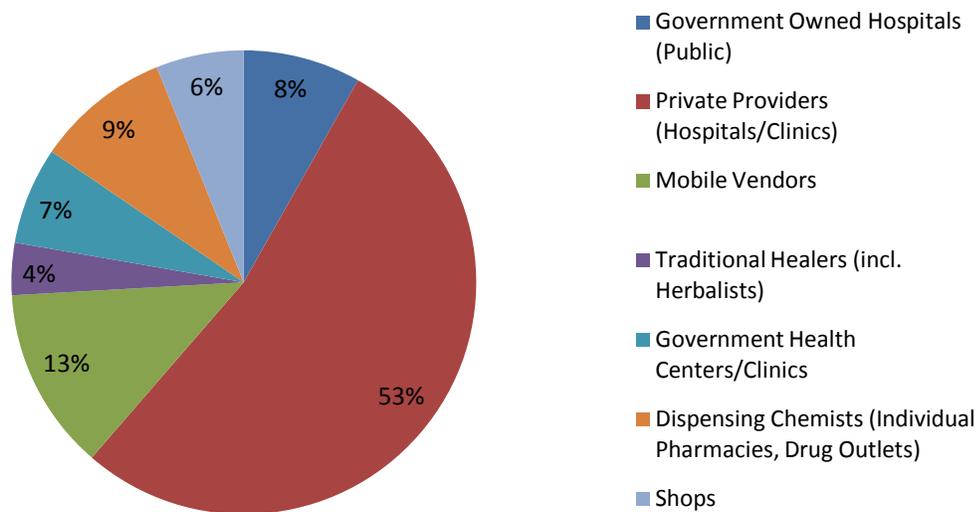


3.5.1 WHICH PROVIDERS CONSUME HOUSEHOLD OOP FUNDS?

In 2007/08, 85 percent of households' health spending was at private health care providers including hospitals and clinics, mobile vendors, dispensing chemists, and traditional healers. Government-owned hospitals and health centers consumed only 15 percent.

It is important to note that, throughout this report, household OOP expenditure includes all health costs paid for by a household. It does not include associated non-health costs such as transportation, lodging, and dining incurred while accessing health care.

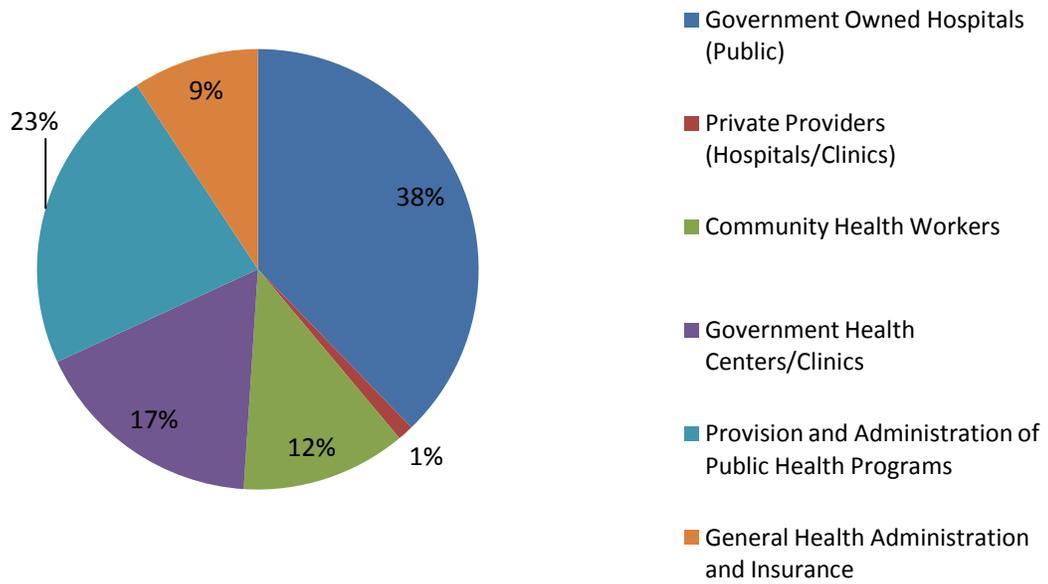
FIGURE 3.5: WHICH PROVIDERS CONSUMED HOUSEHOLD OOP FUNDS, 2007/08?



3.5.2 WHICH PROVIDERS CONSUME MOHSW FUNDS?

Of the funds managed by the MOHSW, government-owned hospitals consumed the largest proportion, at 38 percent. This was followed by the provision and administration of public health programs, at 23 percent.

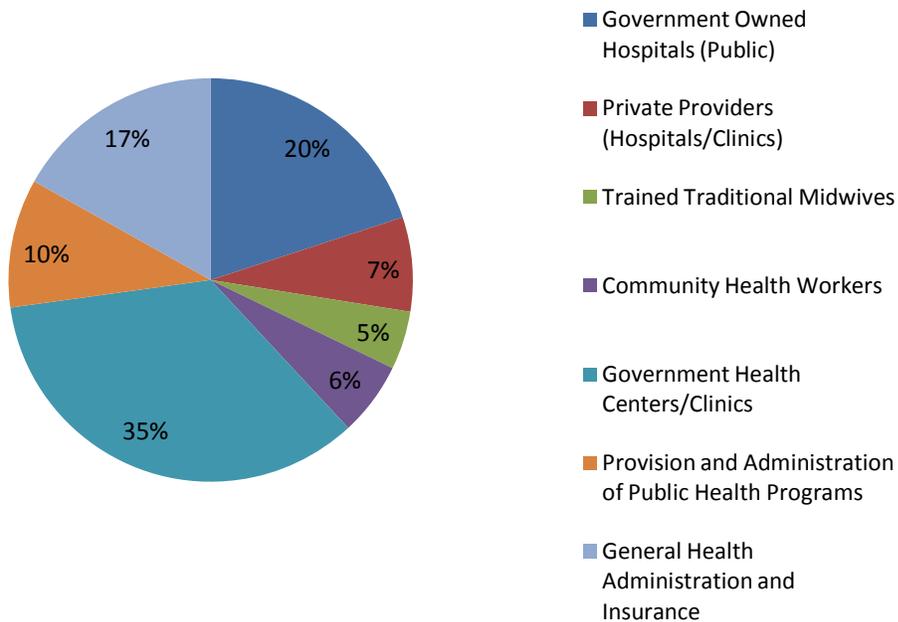
FIGURE 3.6: WHICH PROVIDERS CONSUMED MOHSW FUNDS, 2007/08?



3.5.3 WHICH PROVIDERS CONSUME NGO FUNDS?

Government health centers and clinics consumed the majority of NGO-managed funds (35 percent) in 2007/08. This was followed by government-owned hospitals and general health administration and insurance at 20 percent and 17 percent, respectively.

FIGURE 3.7: WHICH PROVIDERS CONSUMED NGO FUNDS, 2007/08?



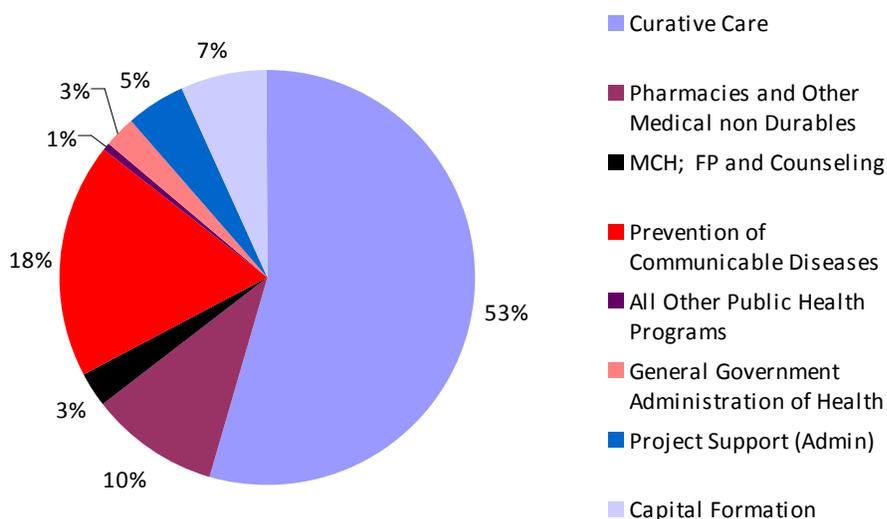
3.6 HEALTH CARE FUNCTIONS: WHAT SERVICES AND/OR PRODUCTS ARE PURCHASED WITH HEALTH FUNDS?

Health care functions refer to the goods and services provided and activities performed within the health accounts boundary. General health functions include curative care (inpatient and outpatient), provision of pharmaceuticals from independent pharmacies (i.e., pharmaceuticals not procured from a health facility as part of inpatient or outpatient treatment), prevention and public health programs, health care administration, and capital formation. Inpatient care refers care delivered to a patient who is formally admitted to an institution for treatment for a minimum of one night (and includes all associated costs for labs, medicines, operations, etc.), while outpatient care is medical services administered to patients who are not admitted to the facility (do not stay overnight).

Curative care refers to services provided in public and private hospitals, health care centers and clinics, and by community health workers and traditional healers. The services include all costs associated with treatment at these facilities, including drugs, labor, and overhead. Pharmacies and other medical nondurables refers to goods purchased from mobile vendors, community health workers, dispensing chemists, and/or shops.

In Liberia in 2007/08, curative care, both outpatient and inpatient, consumed the largest portion of THE, at 53 percent, followed by prevention of communicable diseases, at 18 percent. Other significant areas of spending included pharmacies and other medical nondurables (10 percent) and capital formation (7 percent).

FIGURE 3.8: BREAKDOWN OF THE BY FUNCTION, 2007/08



4. MALARIA SUBACCOUNT

4.1 INTRODUCTION

Malaria continues to be a significant challenge for health and development in Liberia – it is the leading cause of morbidity in the country. In the 2008-09 Malaria Indicator Survey (NMCP et al., 2009), respondents indicated that 44 percent of children under five had experienced a fever in the two weeks before the survey was administered. The study also found that 32 percent of children under five (age 6-59 months) had positive laboratory tests for malaria. Malaria is the most common cause for visits to outpatient centers and inpatient mortality. It remains a serious, preventable public health threat in Liberia, accounting for almost half of THE (Liberia Malaria Indicator Survey, 2008-09).

4.2 SUMMARY OF MALARIA SUBACCOUNT FINDINGS

Table 4.1 summarizes the breakout of THE on malaria (THE_{MA}) in Liberia in 2007/08. A total of US\$44,311,477.87 was spent on health services related to malaria. This represented nearly half of general THE (44.1 percent) and 6.61 percent of GDP. The majority of THE_{MA} was funded through private (51.3 percent) and donor sources (42.4 percent), with approximately half of all malaria health expenditures occurring as household OOP spending (48.9 percent). This translates into OOP spending of \$6.21 per person on malaria. The non-public sector represented 75 percent of financing agents. Public and private providers in 2007/08 accounted for almost all of THE_{MA} (44.3 percent and 48.2 percent, respectively), while the provision of public health programs accounted for 7.5 percent of THE_{MA} . Among health care functions, curative care accounted for the largest portion of THE_{MA} (68.5 percent).

TABLE 4.1: SUMMARY OF MALARIA SUBACCOUNT FINDINGS, 2007/08

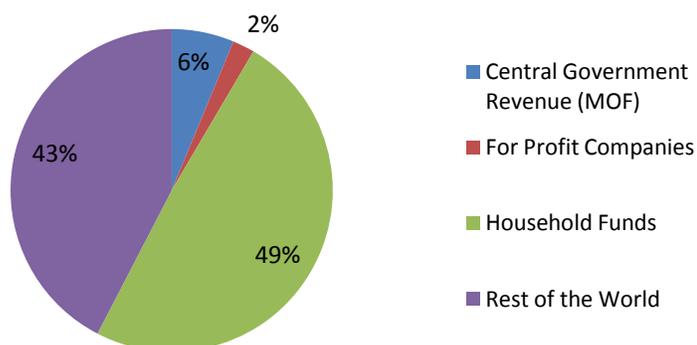
Indicators	2007/08
Total malaria health expenditure (THE_{MA})	\$44,311,477.87
Malaria expenditure per person	\$12.70
Malaria expenditure as a % of GDP	6.61%
Malaria expenditure as a % of general THE	44.1%
Financing Sources as % of THE_{MA}	
Public	6.3%
Private	51.3%
Donor	42.4%
Household (HH) Spending	
OOP spending as % of THE_{MA}	48.9%
OOP spending per person	\$6.21
Financing Agent Distribution as a % of THE_{MA}	
Public	24.8%
Private	75.0%
Other	0.3%
Provider Distribution as a % of THE_{MA}	
Public providers	44.3%

Indicators	2007/08
Private providers	48.2%
Provision of public health programs	7.5%
Function Distribution as a % of THE _{MA}	
Curative care	68.5%
Pharmaceuticals and other nondurables	14.3%
Malaria prevention programs (not disaggregated)	4.4%
Distribution of nets	9.5%
Other	3.4%

4.3 FINANCING SOURCES OF MALARIA HEALTH CARE: WHO PAYS FOR MALARIA SERVICES?

As noted above, THE_{MA} was US\$44.3 million in 2007/08, representing 44 percent of THE and 6.61 percent of GDP. Households contributed the highest proportion, 49 percent, followed by donors and the central government (MOF) at 43 percent and 6 percent, respectively.

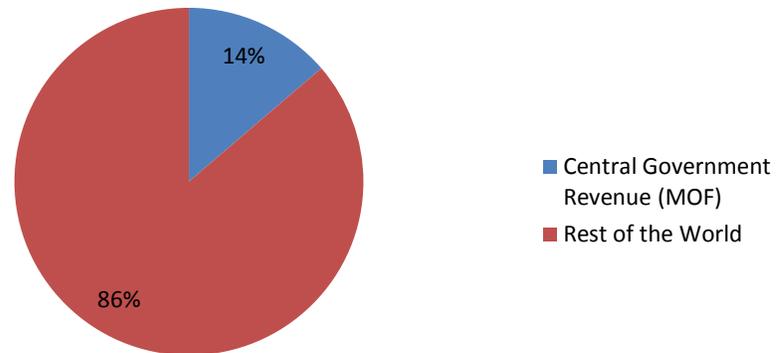
FIGURE 4.1: WHO PAID FOR MALARIA SERVICES, 2007/08?



4.3.1 WHAT ARE THE SOURCES OF MOHSW MALARIA FUNDS?

Donors were the main source (86 percent) of malaria funds spent by the MOHSW. Central government revenue (from the MOF) provided 14 percent of malaria funding.

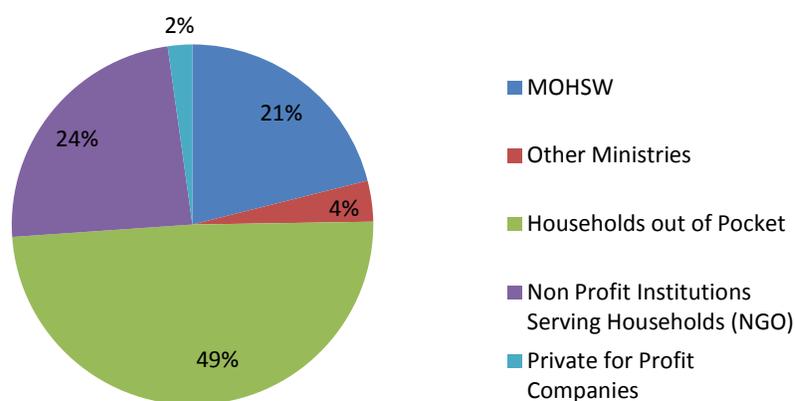
FIGURE 4.2: SOURCES OF MOHSW MALARIA FUNDS, 2007/08



4.4 FINANCING AGENTS OF MALARIA HEALTH CARE: WHO MANAGES MALARIA FUNDS?

Households “manage” funds spent on malaria, i.e., they are in control of this proportion of all spending as they use their money to purchase whatever malaria-related goods and services they desire. In 2007/08, households managed 49 percent of malaria funds. NGOs and the MOHSW managed similar proportions, at 24 percent and 21 percent, respectively.

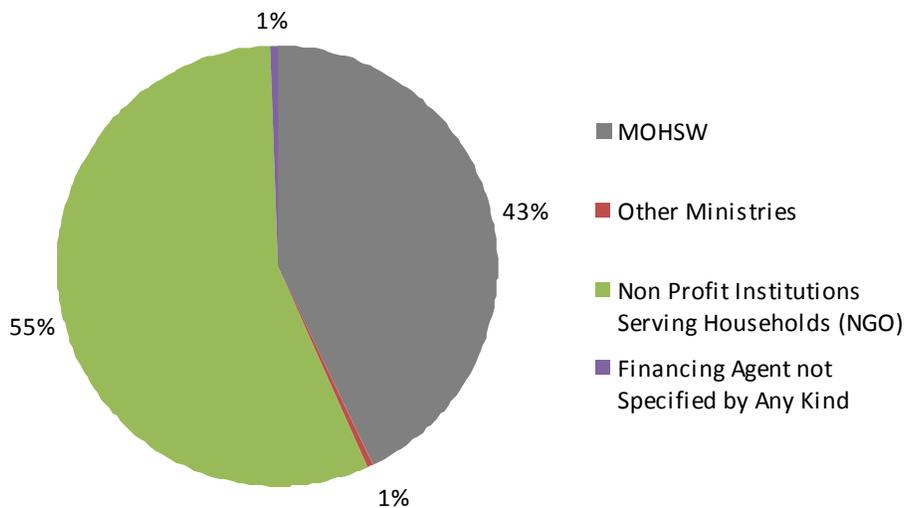
FIGURE 4.3: WHO MANAGED MALARIA FUNDS, 2007/08?



4.4.1 WHO MANAGES DONOR MALARIA FUNDS?

Nonprofit institutions serving households (i.e., NGOs) and the MOHSW managed the majority of donor malaria funds, at 55 percent and 43 percent, respectively. Financing agents not specified by any kind and other ministries each managed 1 percent of donor funds.

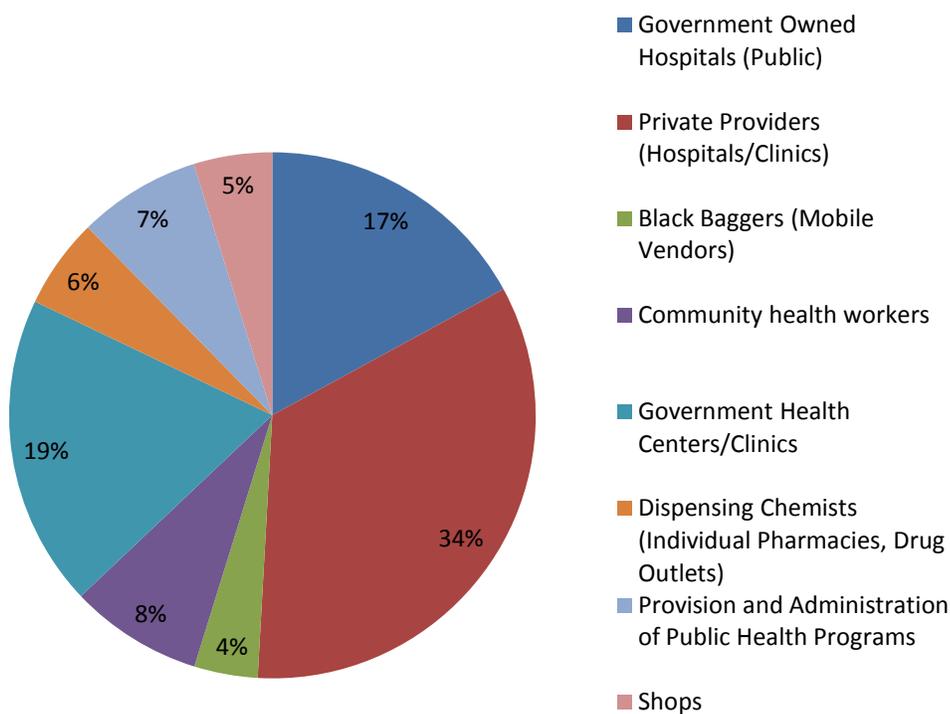
FIGURE 4.4: MANAGERS OF DONOR MALARIA FUNDS, 2007/08



4.5 PROVIDERS OF MALARIA HEALTH SERVICES: WHO USES HEALTH FUNDS TO DELIVER MALARIA CARE?

Private hospitals and clinics provided 34 percent of malaria funds, with government-owned hospitals and health centers/clinics providing almost equal amounts of malaria health services at 17 percent and 19 percent, respectively.

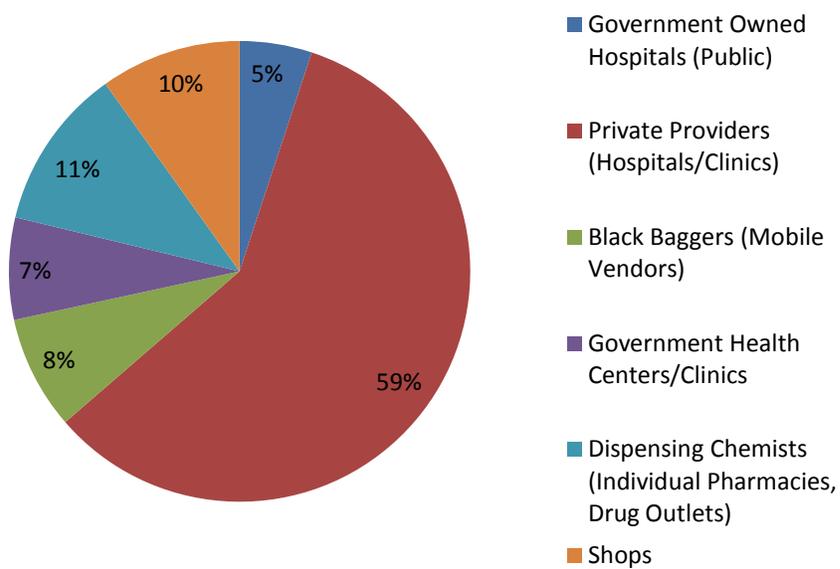
FIGURE 4.5: PROVIDERS OF MALARIA HEALTH SERVICES, 2007/08



4.5.1 WHICH PROVIDERS CONSUME OOP MALARIA FUNDS?

Private providers consumed the majority (59 percent) of household OOP spending on malaria. Dispensing chemists and shops also consumed significant proportions of OOP malaria funds, at 11 percent and 10 percent, respectively.

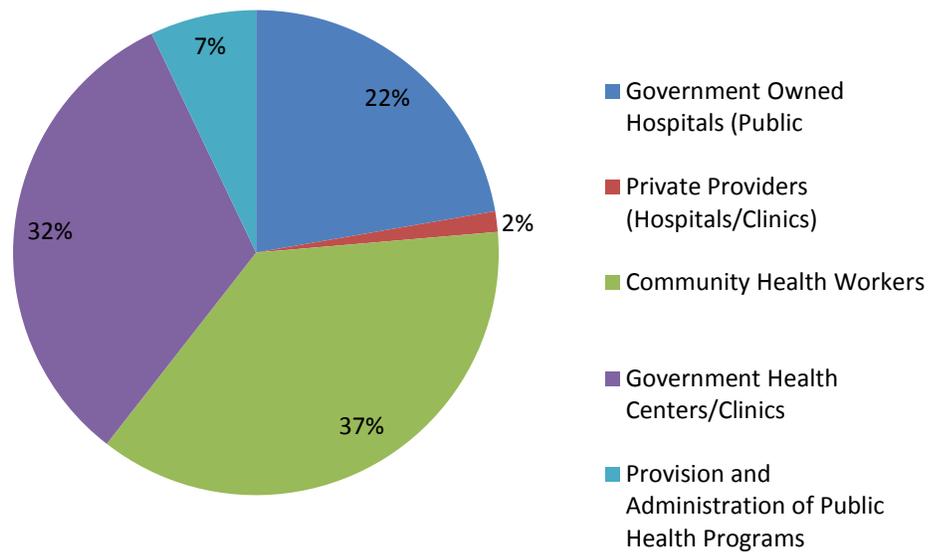
FIGURE 4.6: WHICH PROVIDERS CONSUMED HOUSEHOLD OOP MALARIA EXPENDITURES, 2007/08?



4.5.2 WHICH PROVIDERS CONSUME MOHSW FUNDS?

Three types of providers consumed the majority of MOHSW funds; community health workers, government health centers/clinics, and government-owned hospitals consumed 37 percent, 32 percent, and 22 percent, respectively.

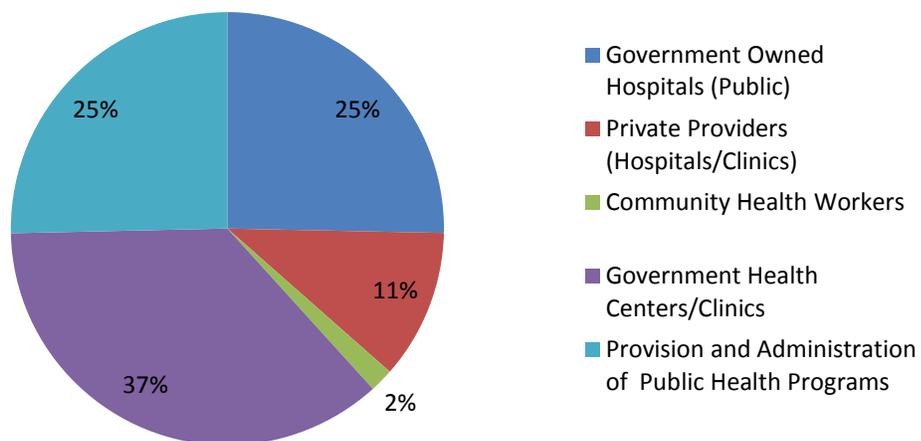
FIGURE 4.7: WHICH PROVIDERS CONSUMED MOHSW MALARIA FUNDS, 2007/08?



4.5.3 WHICH PROVIDERS CONSUME NGO MALARIA FUNDS?

Three types of providers consumed a significant amount of NGO funds: government health centers/clinics at 37 percent, government-owned hospitals at 25 percent, and provision and administration of public health programs, also at 25 percent. Private providers and community health workers consumed 11 percent and 2 percent, respectively.

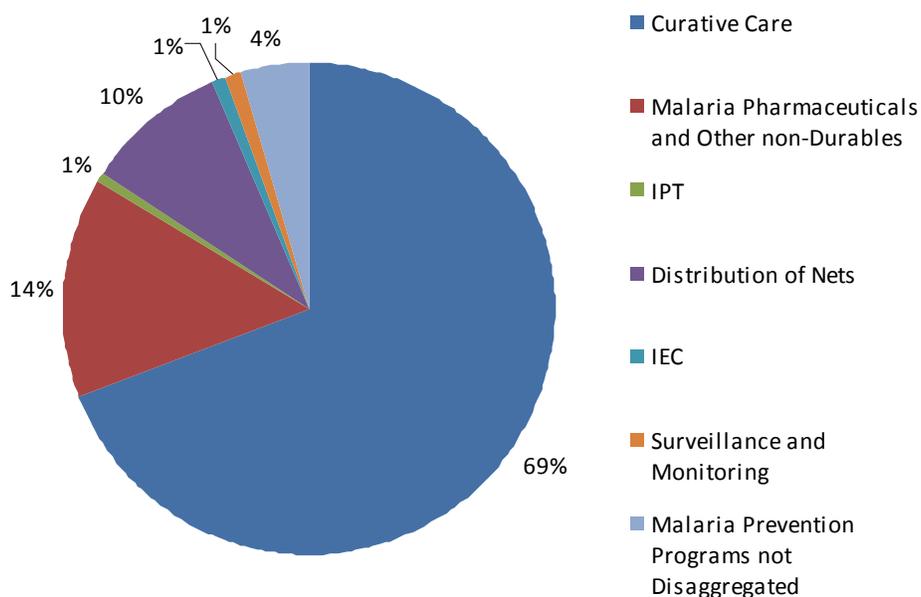
FIGURE 4.8: WHICH PROVIDERS CONSUMED NGO MALARIA FUNDS, 2007/08?



4.6 HEALTH CARE FUNCTIONS: WHAT SERVICES AND/OR PRODUCTS ARE PURCHASED WITH HEALTH FUNDS?

Sixty-nine percent of THE_{MA} is spent on curative care, whereas 14 percent is spent on malaria pharmaceuticals (through private chemists, shops, and mobile vendors) and other nondurables. Ten percent of THE_{MA} is spent on nets. Curative care refers to services provided by public and private hospitals, health care centers, clinics, and traditional healers.

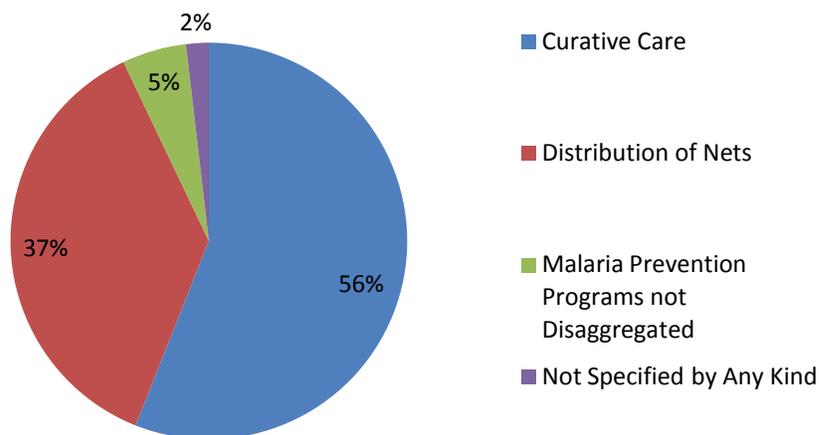
FIGURE 4.9: BREAKDOWN OF THE_{MA} BY FUNCTION, 2007/08



4.6.1 WHICH SERVICES ARE PURCHASED WITH MOHSW MALARIA FUNDS?

Curative care services were the most-purchased function with MOHSW funds, at 56 percent, followed by distribution of nets, at 37 percent. A less significant amount, 5 percent and 2 percent, was spent on malaria prevention programs not disaggregated and not specified by any kind, respectively.

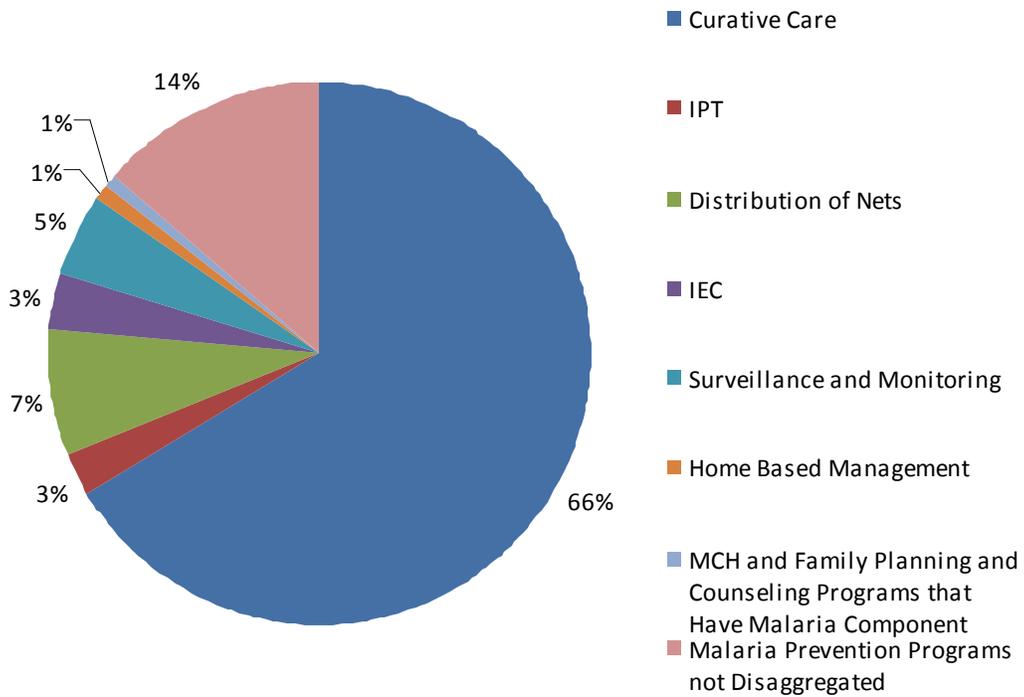
FIGURE 4.10: WHICH SERVICES WERE PURCHASED WITH MOHSW FUNDS, 2007/08?



4.6.2 WHICH SERVICES ARE PURCHASED WITH NGO MALARIA FUNDS?

Curative care was the function bought with NGO malaria funds in the highest proportion, at 66 percent. The second most-purchased service was malaria prevention programs not disaggregated at 14 percent.

FIGURE 4.11: WHICH SERVICES WERE PURCHASED WITH NGO FUNDS, 2007/08?



5. REPRODUCTIVE HEALTH SUBACCOUNT

5.1 INTRODUCTION

The status of RH in Liberia is complex, with many improvements occurring over the last 10 to 20 years and other areas of continued weakness. The fertility rate has fallen in recent years, from 6.6 children in the early to mid 1980s to 5.2 based on 2004-2006 data. There are, of course, significant variations by region and socioeconomic status. Though childbearing begins relatively early in Liberia, children tend to be spaced adequately far apart. A strong interest in family planning exists: nearly a third of women who are married would like to not have another child or are already sterilized. An additional third would like to space their pregnancies by two years at a minimum. Awareness of family planning techniques has increased in the past few decades. It is important to note that half of all women using modern contraceptives acquire them from the public sector. Maternal mortality has been estimated at 994 deaths per 100,000 births. Nearly 80 percent of women receive prenatal care from a health care professional, while a much smaller percentage receives postnatal care. Finally, the majority of children are delivered at home (LDHS, 2007).

5.2 SUMMARY OF RH SUBACCOUNT FINDINGS, 2007/08

Table 5.1 summarizes RH subaccount findings in Liberia. In 2007/08, total expenditures on RH (THE_{RH}) accounted for 6.74 percent of THE and represented 1.01 percent of GDP. The majority of THE_{RH} (84.8 percent) was funded through donor sources. Approximately 12.4 percent of THE_{RH} was household OOP spending. This translates to OOP spending of \$0.24 per person on RH services. The non-public sector represented 92.8 percent of financing agents. Public providers in 2007/08 consumed over half of THE_{RH} (53.5 percent), while private and other providers consumed 14.3 percent and 21.9 percent, respectively. The provision of public health programs accounted for 10.4 percent of THE_{RH} . Family planning and condom distribution were the individual RH functions accounting for the largest portion of THE_{RH} at 20.5 percent and 21.3 percent, respectively.

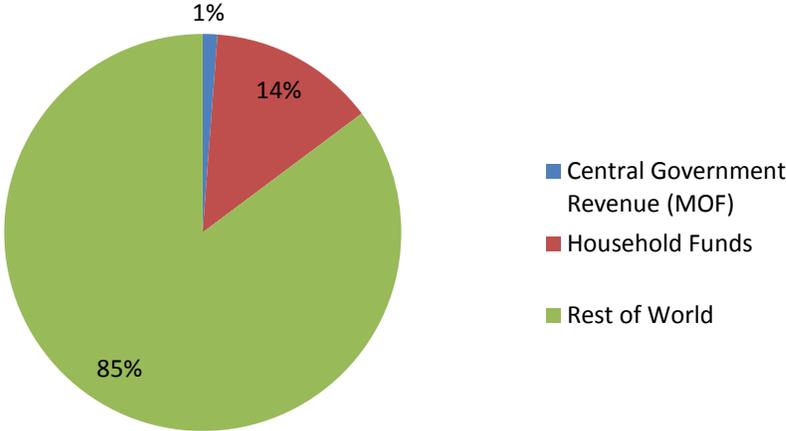
TABLE 5.1: SUMMARY OF RH SUBACCOUNT FINDINGS, 2007/08

Indicators	2007/08
Total RH health expenditure (THE _{RH})	US\$6,771,184.91
RH expenditure per person	US\$1.94
RH expenditure as a % of GDP	1.01%
RH expenditure as a % of general THE	6.74%
Financing Sources as % of THE_{RH}	
Public	1.5%
Private	13.7%
Donor	84.8%
Household Spending	
OOP spending as % of THE _{RH}	12.4%
OOP spending per person	\$0.24
Financing Agent Distribution as a % of THE_{RH}	
Public	7.2%
Private	92.8%
Provider Distribution as a % of THE_{RH}	
Public providers	53.5%
Private providers	14.3%
Provision of public health programs	10.4%
Other	21.9%
Function Distribution as a % of THE_{RH}	
Curative care	3.6%
Deliveries	6.4%
Family planning (not disaggregated)	20.5%
Condoms	21.3%
Pharmacies and other medical nondurables	3.4%
Family planning and counseling programs	8.6%
Maternal and antenatal care programs	12.7%
Other	23.5%

5.3 FINANCING SOURCES OF RH: WHO PAYS FOR RH SERVICES?

The rest of the world (donors) funded 85 percent of THE_{RH} , and households contributed 14 percent.

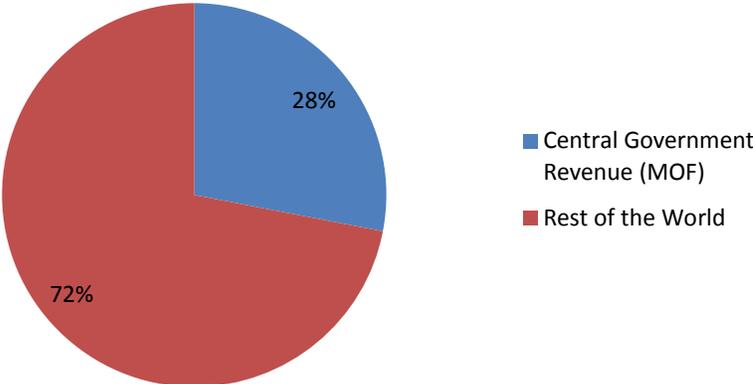
FIGURE 5.1: WHO PAID FOR RH SERVICES IN 2007/08?



5.3.1 WHAT ARE THE SOURCES OF MOHSW RH FUNDS?

Donors provided 72 percent of MOHSW funds that paid for RH services in 2007/08, whereas the central government revenue (MOF) provided only 28 percent of MOHSW RH funds.

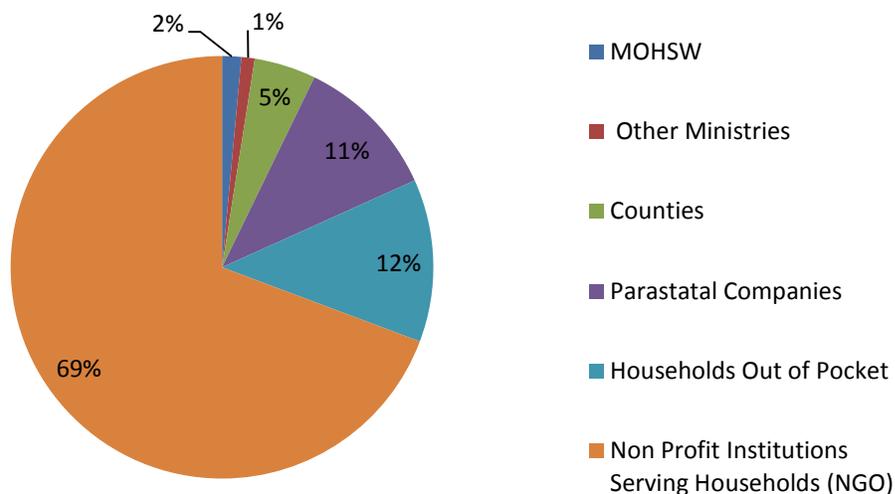
FIGURE 5.2: SOURCES OF MOHSW RH FUNDS, 2007/08



5.4 FINANCING AGENTS OF RH: WHO MANAGES RH FUNDS?

Nonprofit institutions serving households (NGOs) managed a majority of RH funds, 69 percent. This was followed by household OOP expenditures, which managed 12 percent of RH funds, and parastatal companies, which managed 11 percent.

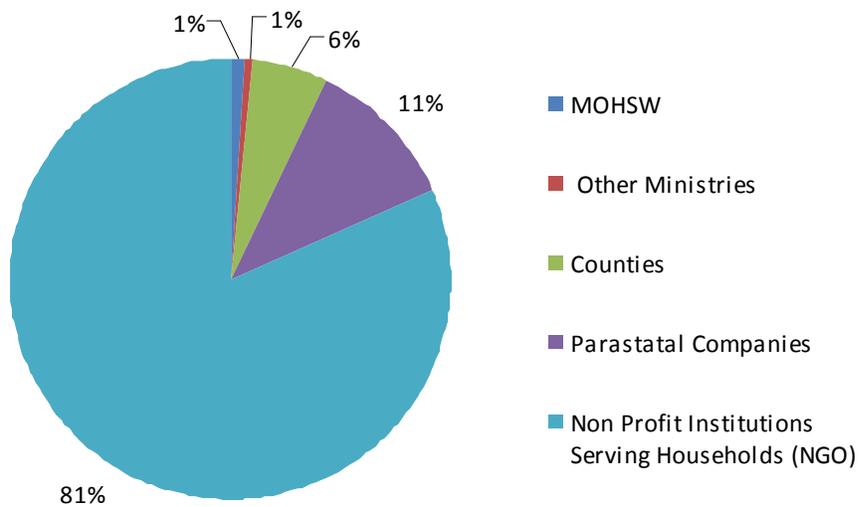
FIGURE 5.3: WHO MANAGED RH FUNDS, 2007/08?



5.4.1 WHO MANAGES DONOR RH FUNDS?

Nonprofit institutions serving households (NGO) managed 81 percent of donor RH funds. Parastatal companies and counties accounted for smaller amounts of donor RH funds: 11 percent and 6 percent, respectively. Other ministries and the MOHSW accounted for negligible amounts, at 1 percent each.

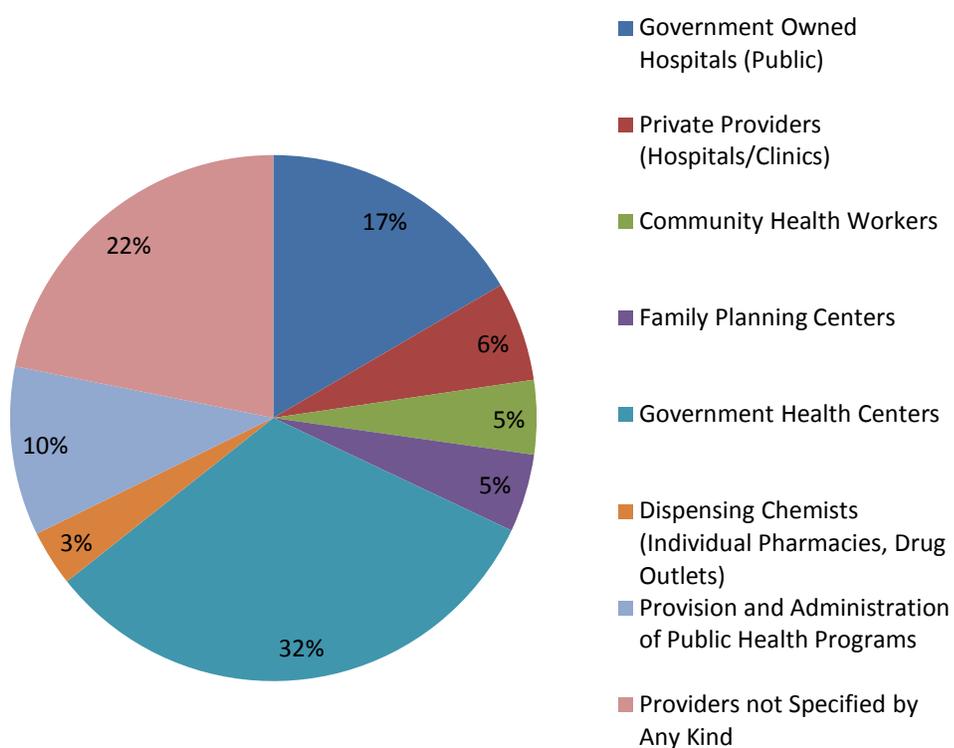
FIGURE 5.4: MANAGERS OF DONOR RH FUNDS, 2007/08



5.5 PROVIDERS OF RH SERVICES: WHO USES HEALTH FUNDS TO DELIVER RH CARE?

There are many providers of RH services in Liberia. In 2007/08, government health centers provided 32 percent of RH services, providers not specified by any kind provided 22 percent, and government-owned hospitals provided 17 percent. Other providers of RH services in Liberia included provision and administration of public health programs, private providers, community health workers, family planning centers, and dispensing chemists.

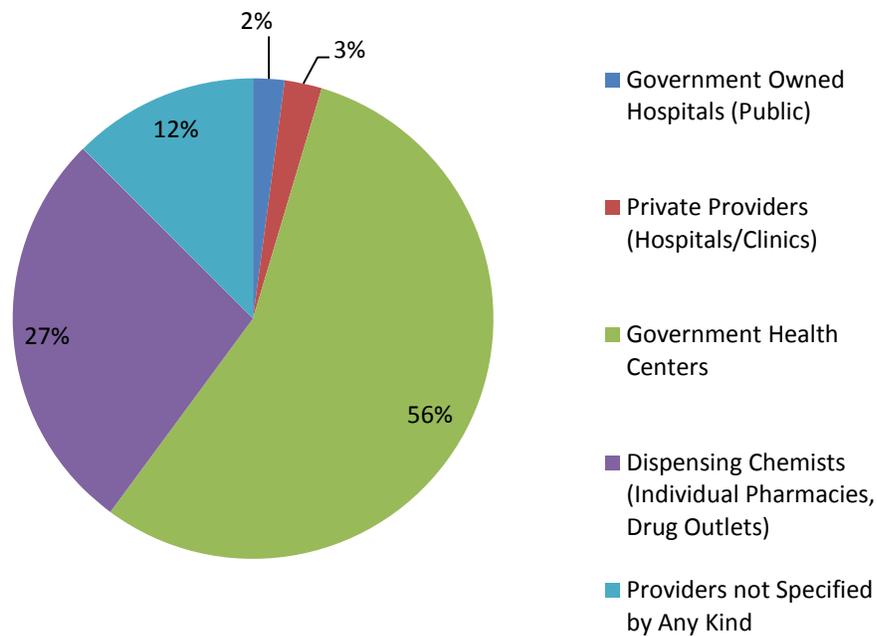
FIGURE 5.5: PROVIDERS OF RH SERVICES, 2007/08



5.5.1 WHICH PROVIDERS CONSUME HOUSEHOLD OOP RH FUNDS?

Government health centers consumed the greatest amounts of household OOP RH funds, 56 percent. Dispensing chemists and providers not specified by any kind consumed the second and third largest amounts of household OOP spending, 27 percent and 12 percent, respectively. Government-owned hospitals and private providers accounted for 2 percent and 3 percent of the household OOP RH funds, respectively.

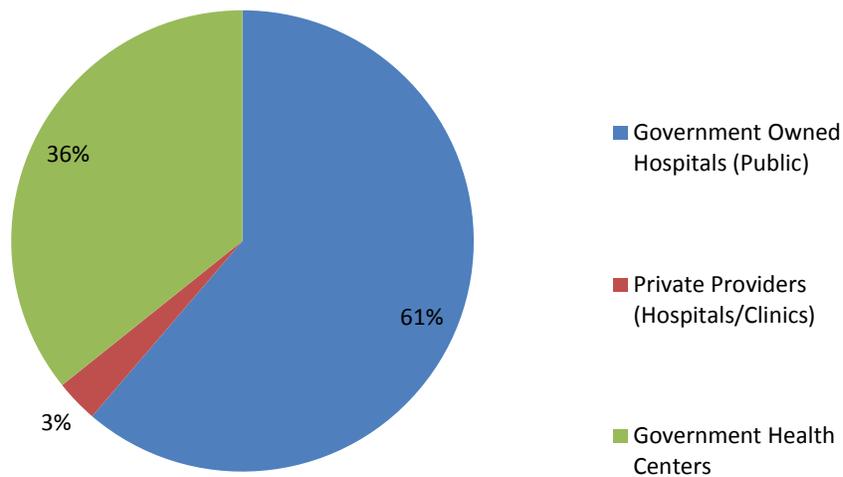
FIGURE 5.6: WHICH PROVIDERS CONSUMED HOUSEHOLD OOP RH FUNDS, 2007/08?



5.5.2 WHICH PROVIDERS CONSUME MOHSW RH FUNDS?

Three providers consumed the majority of MOHSW funds going to RH. Government-owned hospitals consumed 61 percent of MOHSW funds, while government health centers and private providers consumed 36 percent and 3 percent, respectively.

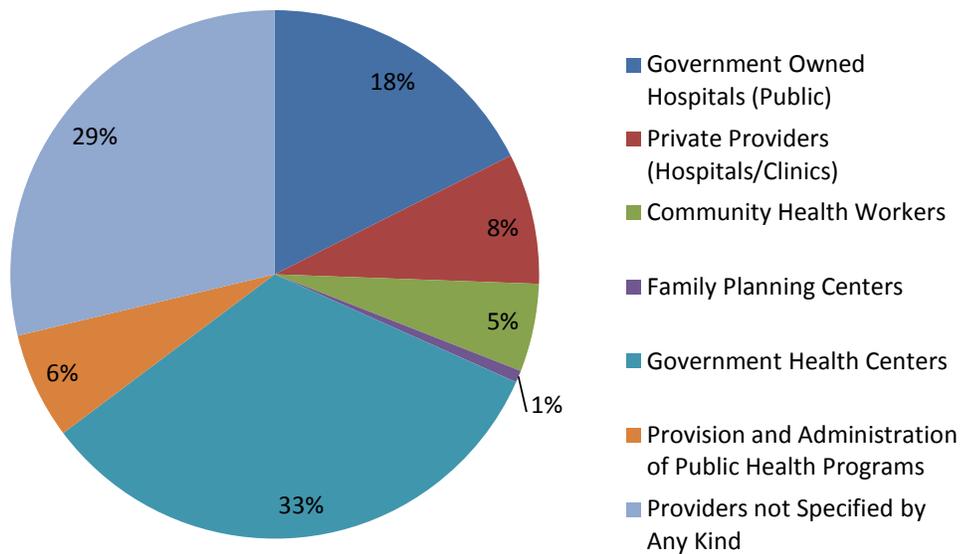
FIGURE 5.7: WHICH PROVIDERS CONSUMED MOHSW RH FUNDS, 2007/08?



5.5.3 WHICH PROVIDERS CONSUME NGO RH FUNDS?

Government health centers consumed the most NGO RH funds, 33 percent. Providers not specified by any kind and government-owned hospitals consumed 29 percent and 18 percent, respectively. Private providers and provision and administration of public health programs consumed 8 percent and 6 percent of funds, respectively.

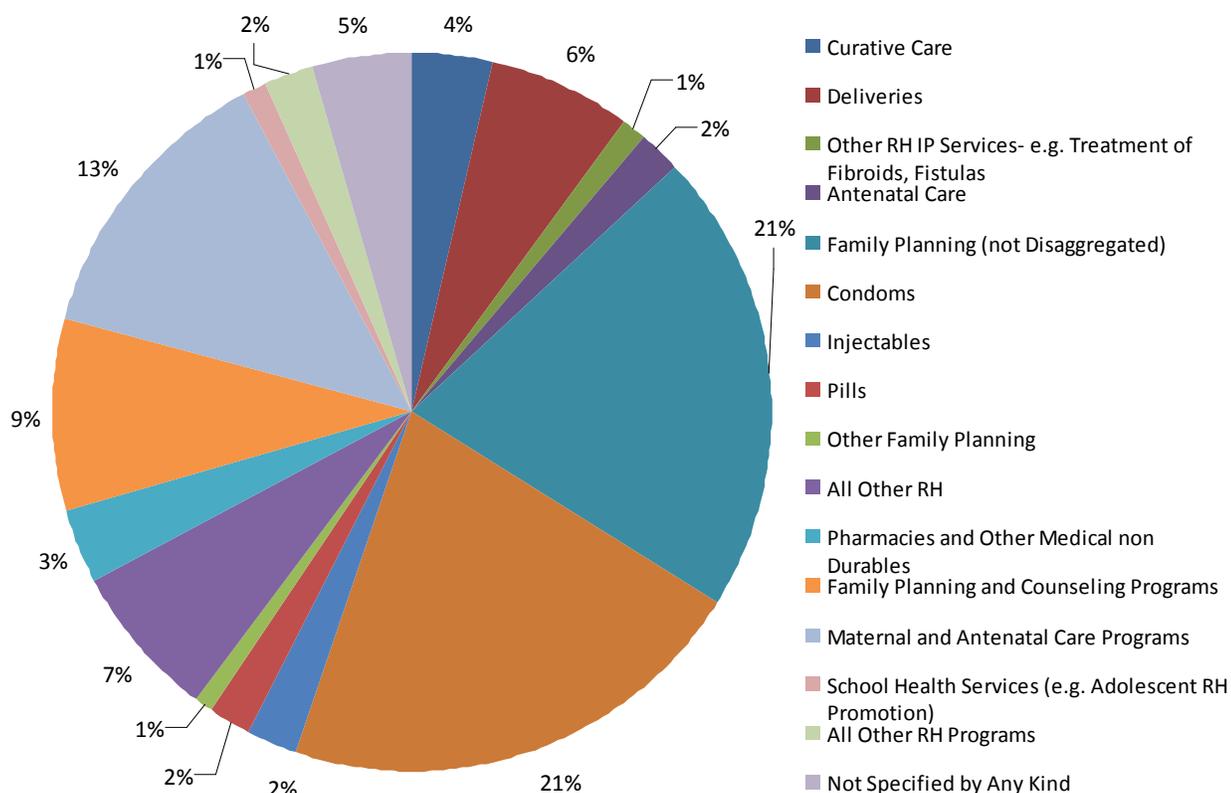
FIGURE 5.8: WHICH PROVIDERS CONSUMED NGO RH FUNDS, 2007/08?



5.6 HEALTH CARE FUNCTIONS: WHAT SERVICES AND/OR PRODUCTS ARE PURCHASED WITH RH FUNDS?

The most significant amount of THE_{RH} was spent on condoms and family planning, both at 21 percent. Thirteen percent of THE_{RH} was spent on maternal and antenatal care programs, and 9 percent of THE_{RH} was spent on family planning and counseling programs. Smaller percentages of THE on RH were spent on a variety of functions, including antenatal care, all other RH , pharmacies and other medical nondurables, pills, and other family planning.

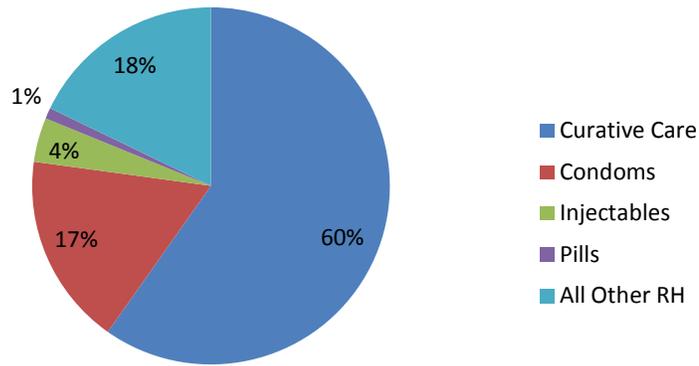
FIGURE 5.9: BREAKDOWN OF THE ON RH BY FUNCTION, 20007/08



5.6.1 WHICH SERVICES ARE PURCHASED WITH MOHSW RH FUNDS?

Sixty percent of MOHSW funds were spent on curative care, 17 percent on condoms, and 18 percent on all other RH. Injectables and pills accounted for smaller amounts of MOHSW RH funds, at 4 percent and 1 percent, respectively.

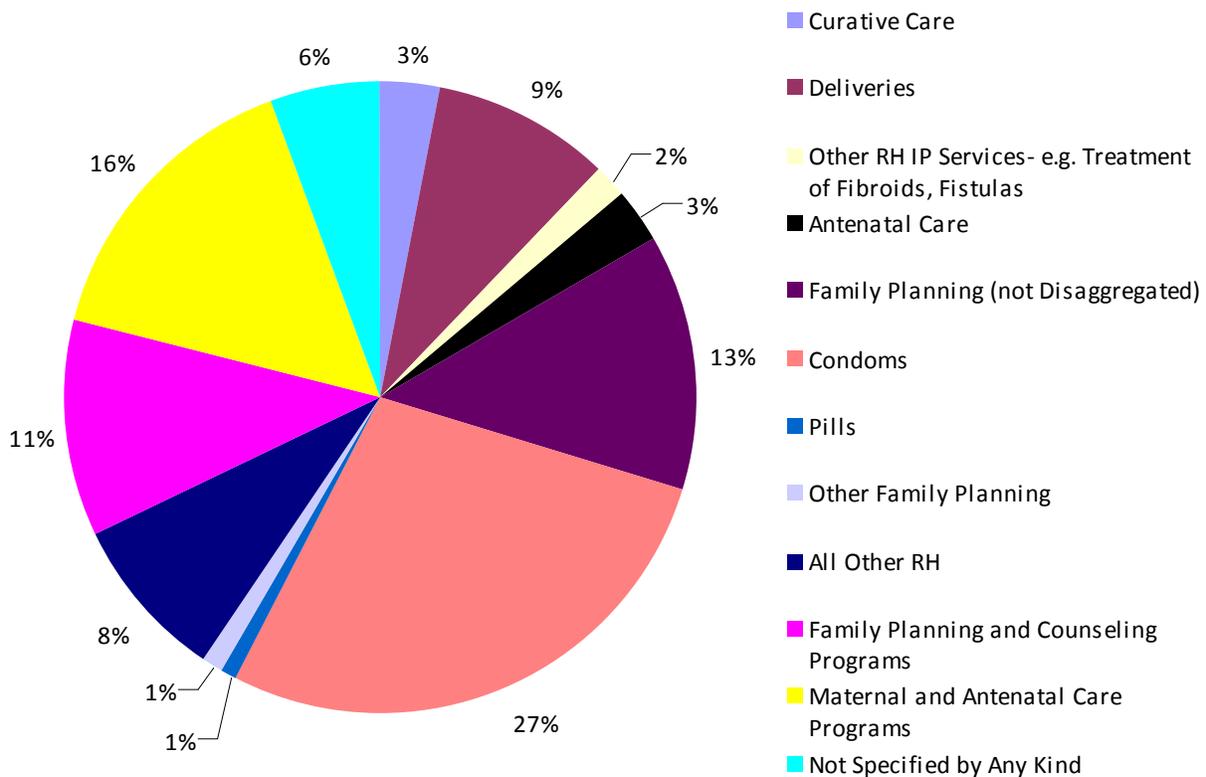
FIGURE 5.10: WHICH SERVICES WERE PURCHASED WITH MOHSW RH FUNDS, 2007/08?



5.6.2 WHICH SERVICES ARE PURCHASED WITH NGO RH FUNDS?

Condoms accounted for most of the spending of NGO RH funds at 27 percent. The second and third most-purchased services with NGO funds were maternal and antenatal care programs and family planning, accounting for 16 percent and 13 percent, respectively. Eleven percent of NGO RH funds are spent on family planning and counseling programs, and 9 percent of NGO RH funds are spent on deliveries.

FIGURE 5.11: WHICH SERVICES WERE PURCHASED WITH NGO RH FUNDS, 2007/08?



6. CHILD HEALTH

6.1 INTRODUCTION

Liberia has shown a dramatic decline in child mortality. This may be due to improvements in the health care system including increases in immunization coverage, targeted malaria campaigns, and an increase in coverage following a suspension of user fees at government and NGO facilities. Nevertheless, child mortality continues to be a problem especially in rural areas where under-five mortality is estimated to be 146 per 1,000 live births (LDHS 2007).

6.2 SUMMARY OF CH SUBACCOUNT FINDINGS

In 2007/08, CH expenditures accounted for 13.9 percent of THE and represented 2.1 percent of GDP. The majority of THE_{CH} was funded by donor sources (50.3 percent) and the private sector (mostly household OOP, 41.5 percent). Approximately 38.4 percent of all CH expenditures occurred as household OOP spending. The non-public sector represented 62.1 percent of financing agents. Public and private providers consumed an equal proportion of THE_{CH}, at 39.5 percent and 39.6 percent, respectively, while other providers consumed 16.7 percent. The provision of public health programs accounted for 4.2 percent of THE_{CH}. Curative care was the CH function that accounted for the largest portion of THE_{CH} at 64.4 percent.

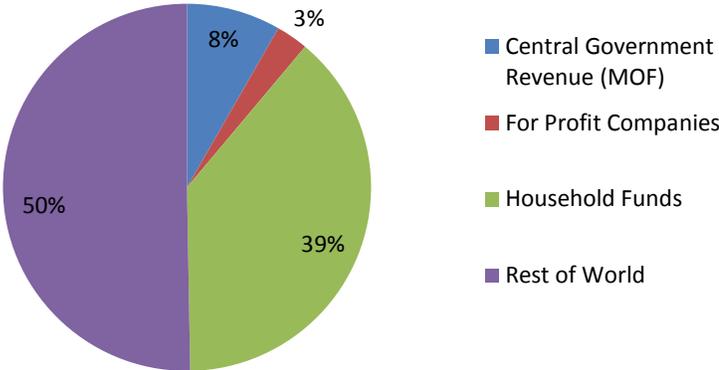
TABLE 6.1: SUMMARY OF CH SUBACCOUNT FINDINGS, 2007/08

Indicators	2007/08
Total CH expenditure	US\$14,288,636
Total CH health expenditure (THE _{CH})	US\$13,990,138
Total CH non-health expenditure	US\$298,497
THE _{CH} expenditure per child under five	US\$23.59
THE _{CH} expenditure as a % of GDP	2.1%
THE _{CH} expenditure as a % of general THE	13.9%
THE _{CH} as a % of total CH spending (health and non-health)	97.9%
Financing Sources as % of THE_{CH}	
Public	8.3%
Private	41.5%
Donor	50.3%
Household (HH) Spending	
OOP spending as % of THE _{CH}	38.4%
OOP spending per person	\$1.54
Financing Agent Distribution as a % of THE_{CH}	
Public	37.9%
Private	62.1%
Provider Distribution as a % of THE_{CH}	
Public providers	39.5%
Private providers	39.6%
Provision of public health programs	4.2%
Other	16.7%
Function Distribution as a % of THE_{CH}	
Curative care	64.4%
Pharmacies and other medical nondurables	4.2%
Immunization	21.3%
Capital formation	3.8%
Other	6.3%

6.3 FINANCING SOURCES OF CH: WHO PAYS FOR CH SERVICES?

In 2007/08, the rest of world (donors) financed half of CH services, and households funded 39 percent. Central government revenue and for-profit companies paid for a much less significant portion, at 8 percent and 3 percent, respectively.

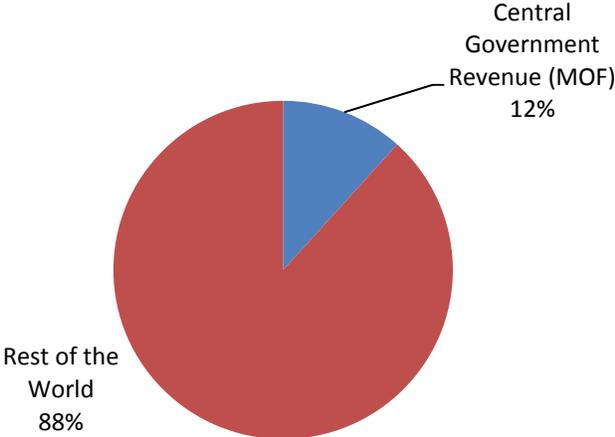
FIGURE 6.1: WHO PAID FOR CH SERVICES, 2007/08?



6.3.1 WHAT ARE THE SOURCES OF MOHSW CH FUNDS?

In 2007/08, MOHSW funds for CH came from only two sources: donors were the source of 88 percent of MOHSW funds going to CH, and the remaining 12 percent was funded by central government revenue (MOF).

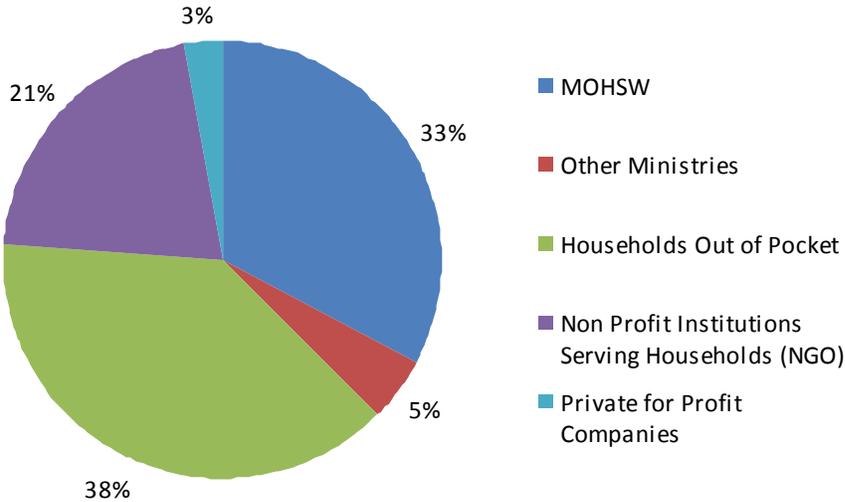
FIGURE 6.2: SOURCES OF MOHSW CH FUNDS, 2007/08



6.4 FINANCING AGENTS OF CH: WHO MANAGES CH FUNDS?

Households managed the largest proportion of CH funds, 38 percent through their OOP spending. MOHSW managed 33 percent of CH funds, and nonprofit institutions serving households (NGOs) managed 21 percent. Other ministries and private for-profit companies managed 5 percent and 3 percent of CH funds respectively.

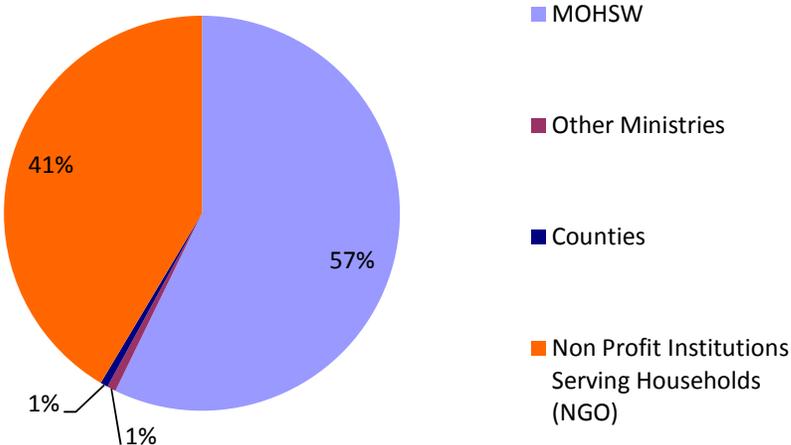
FIGURE 6.3: WHO MANAGED CH FUNDS, 2007/08?



6.4.1 WHO MANAGES DONOR CH FUNDS?

The MOHSW managed 57 percent of donor CH funds, and nonprofit institutions serving households managed 41 percent. Counties and other ministries each managed 1 percent.

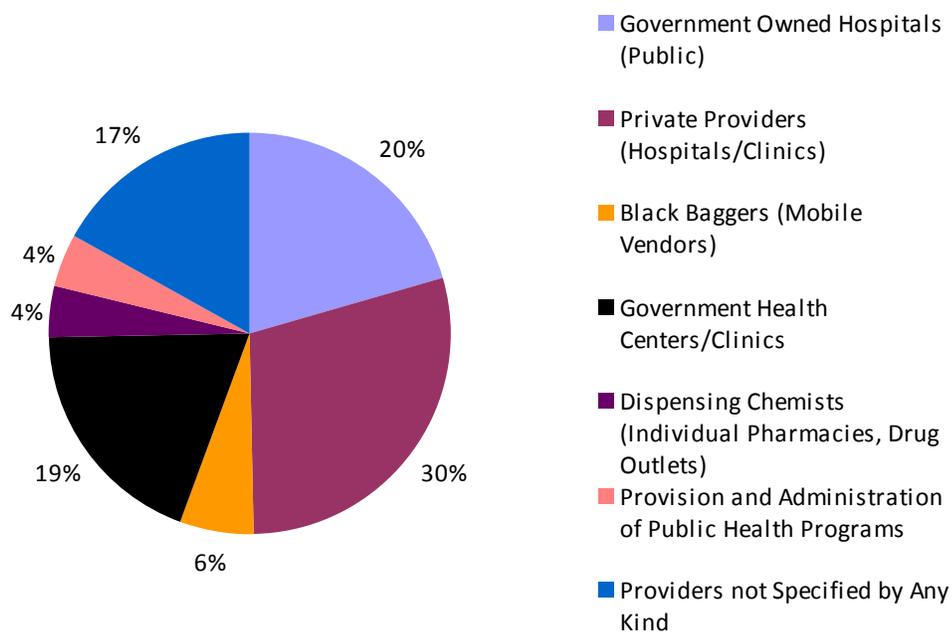
FIGURE 6.4: MANAGERS OF DONOR CH FUNDS, 2007/08



6.5 PROVIDERS OF CH SERVICES: WHO USES HEALTH FUNDS TO DELIVER CH CARE?

The most significant CH service providers were private hospitals/clinics, government-owned hospitals, government health centers/clinics, and providers not specified by any kind at 30 percent, 20 percent, 19 percent, and 17 percent respectively. Black baggers (mobile vendors) provided 6 percent of CH services, and provision and administration of public health programs and dispensing chemists each accounted for 4 percent of CH services.

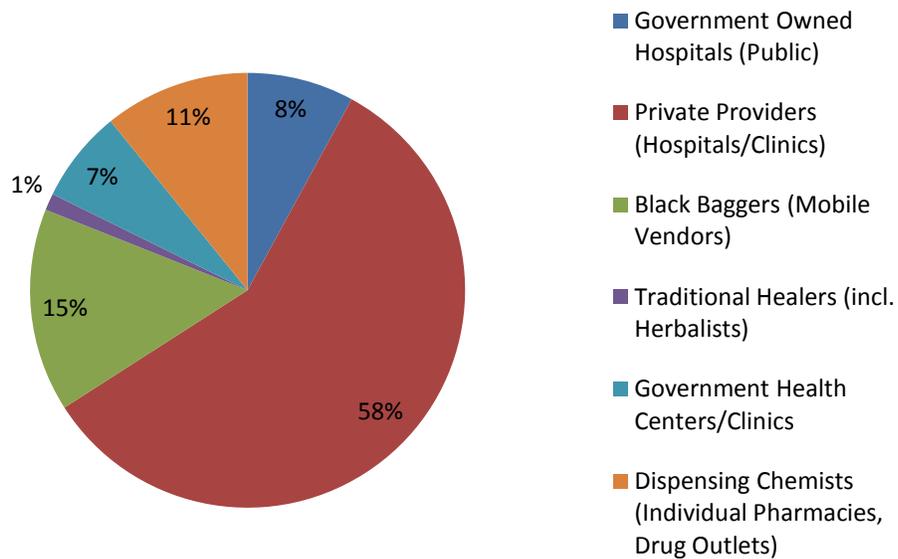
FIGURE 6.5: PROVIDERS OF CH SERVICES, 2007/08



6.5.1 WHICH PROVIDERS CONSUME HOUSEHOLD OOP CH FUNDS?

Private providers consumed 58 percent, black baggers 15 percent, and private chemists 11 percent of household OOP CH funds. Public sector providers consumed 15 percent of OOP spending.

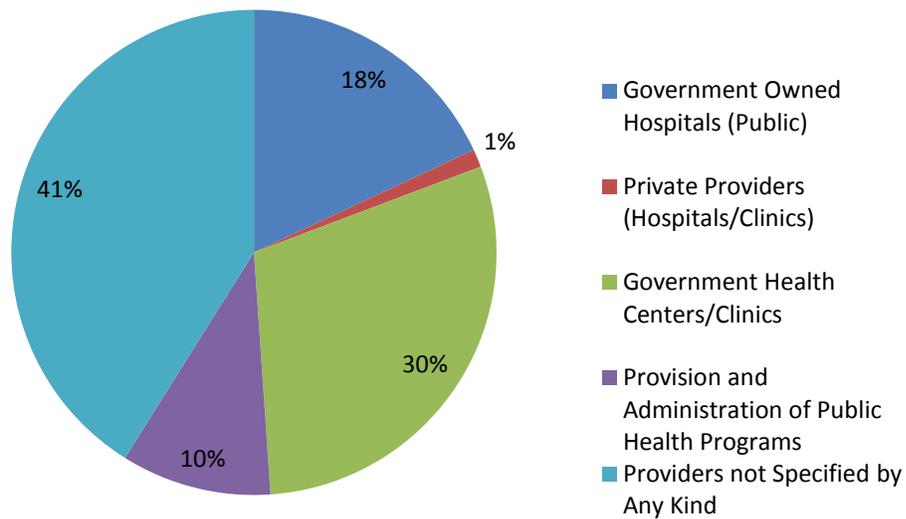
FIGURE 6.6: WHICH PROVIDERS CONSUMED HOUSEHOLD OOP FUNDS, 2007/08?



6.5.2 WHICH PROVIDERS CONSUME MOHSW CH FUNDS?

Providers not specified by any kind consumed the most MOHSW CH funds, 41 percent, government health centers/clinics consumed 30 percent, and government-owned hospitals consumed 18 percent. Less significant amounts of MOHSW CH funds were consumed by provision and administration of public health programs and private providers, at 10 percent and 1 percent, respectively.

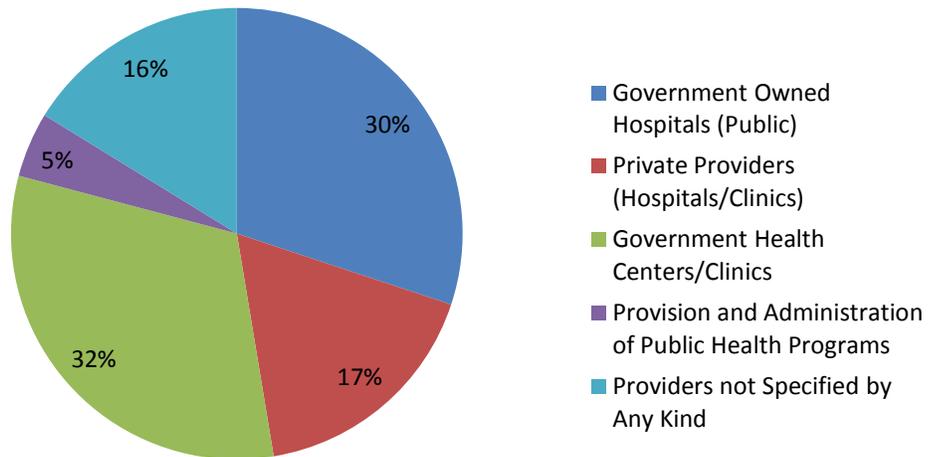
FIGURE 6.7: WHICH PROVIDERS CONSUMED MOHSW CH FUNDS, 2007/08?



6.5.3 WHICH PROVIDERS CONSUME NGO CH FUNDS?

Government health centers/clinics consumed 32 percent of NGO CH funds, and government-owned hospitals consumed 30 percent. The remaining NGO CH funds were consumed by private providers, providers not specified by any kind, and provision and administration of public health programs, at 17 percent, 16 percent, and 5 percent, respectively.

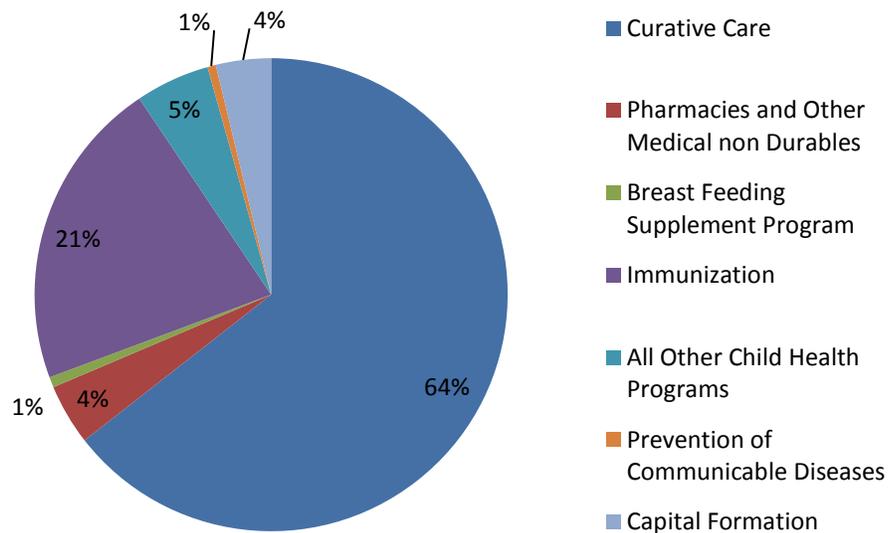
FIGURE 6.8: WHICH PROVIDERS CONSUMED NGO CH FUNDS, 2007/08?



6.6 HEALTH CARE FUNCTIONS: WHAT SERVICES AND/OR PRODUCTS ARE PURCHASED WITH CH FUNDS?

Curative care was the most significant service on which CH spending occurred, at 64 percent of THE_{CH} ; the second most significant was immunization, at 21 percent. Smaller amounts were spent on pharmacies and other medical nondurables, capital formation, all other CH programs, breast feeding supplement program, and prevention of communicable diseases.

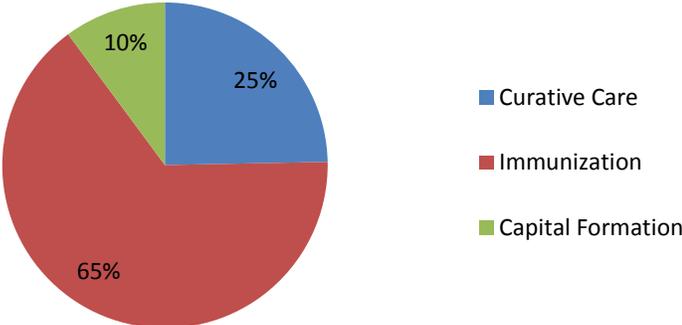
FIGURE 6.9: BREAKDOWN OF THE ON CH BY FUNCTION, 2007/08



6.6.1 WHICH SERVICES ARE BOUGHT WITH MOHSW CH FUNDS?

Sixty-five percent of MOHSW CH funds were used to buy immunization services. Twenty-five percent went to curative care, and 10 percent to capital formation.

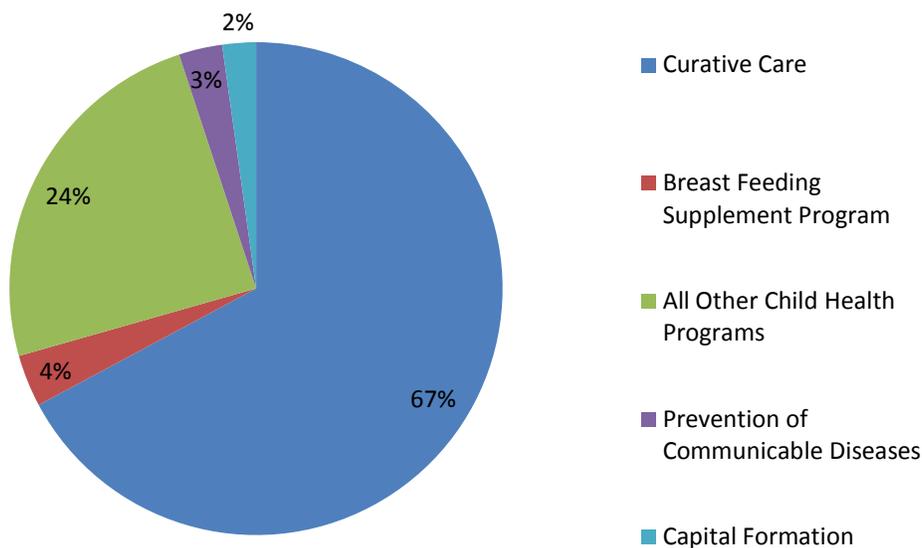
FIGURE 6.10: WHICH SERVICES WERE BOUGHT WITH MOHSW CH FUNDS, 2007/08?



6.6.2 WHICH SERVICES ARE BOUGHT WITH NGO CH FUNDS?

Sixty-seven percent of NGO CH funds were spent on curative care. The remaining 24 percent of NGO CH funds went to all other CH programs. Less significant amounts of NGO CH funds were spent on prevention of communicable diseases, breast feeding supplement program, and capital formation, at 3 percent, 4 percent, and 2 percent, respectively.

FIGURE 6.11: WHICH SERVICES WERE BOUGHT WITH NGO CH FUNDS, 2007/08?



7. CONCLUSIONS AND NEXT STEPS

The health sector in Liberia receives substantial funding, estimated at US\$ 29 per capita. This level of expenditure on health is relatively high when compared with other countries with similar incomes. Donors and household OOP spending finance a significant amount of THE in Liberia, 47 percent and 35 percent, respectively. This level of OOP expenditure may be a hindrance to accessing health, especially for poor households.

The private sector and NGOs continue to manage the bulk of THE, 66 percent, with the public sector managing the remaining funds (34 percent). Although the large expenditures by the non-public sector are not necessarily a negative indicator, it is important to ensure that private and public sector expenditures are in line with the country's priorities. Hence, there is increased need for an assessment to be done and results to be discussed in joint health sector coordinating forums.

Public facilities continue to be the predominant provider of health care services; this maybe due to the suspension of user fees or the lack of private options. To sustain the free care policy, additional funding may be needed to close any financing gap and ensure that there are no commodity stock-outs in public facilities. Disruptions to the stocks of public facility commodities may currently be occurring as a substantial amount of expenditures flow to private pharmacies, which are likely to purchase drugs that are covered in the Basic Package of Health Services. The formulation of a medium-term procurement plan would be crucial in order to ensure that enough medical supplies are available to support the health sector.

Over half (54 percent) of health funds are spent on curative (inpatient and outpatient) health care, while 22 percent are spent on prevention and public health programs. As Liberia is facing a high level of communicable disease burden, which requires the implementation of cost-effective prevention interventions, there may be the need for deliberate reallocation of additional funds to prevention activities.

Some priority areas continue to receive relatively high levels of funding and in 2007/08 malaria, RH, and CH accounted for 44 percent, 7 percent, and 14 percent of THE, respectively. However, given the current profile of the existing disease burden, there maybe a need to re-explore the allocation of disease-specific funds. It may be necessary, for example, to direct more funds toward RH if Liberia continues to experience high maternal mortality.

Regarding the next steps for NHA in Liberia specifically, the Liberia NHA team will disseminate the NHA data to a wide range of stakeholders. Additionally, in the spirit of a recent West African Health Organization (WAHO) regional workshop of exchange on NHA, the team is committed to institutionalization and regular production of NHA. The team will work on a number of activities to increase the capacity of its members, strengthen data sources for NHA, and ensure that NHA data is used to affect policy.

ANNEX A: NHA MATRICES

GENERAL FINANCING SOURCE X FINANCING AGENT (FSXHF)

FINANCING SOURCE x FINANCING AGENT (FSxHF)										
GENERAL NHA FY'07/08										
Code	Financing Agent (HF)	Financing Source (FS)					Row Total	HF as a % of THE		
		FS.1 Public Funds		FS.2 Private Funds		FS.3				
		FS.1.1.1 government revenue (MOF)	FS.1.1.3 Employer Funds	FS.2.1 For Profit Companies	FS.2.2 Household Funds	FS.3 Rest of the world (Donors)				
HF.1.1.1.1	MOHSW	\$ 11,459,825				\$ 16,900,166	\$28,359,991	28%		
HF.1.1.1.2	Other Ministries (JFK)	\$ 3,942,977				\$ 324,714	\$4,267,691	4%		
HF.1.1.2.1	Counties					\$ 318,458	\$318,458	0%		
HF.1.2	Social security funds (NASSCORP)				\$ 167,455		\$167,455	0%		
HF.1.1.4	Parastatal companies	\$ 15,000	\$ 24,218		\$ 71,987	\$ 634,786.06	\$745,991	1%		
HF.2.2	Private insurance enterprises		\$ 28,925	\$ 39,226	\$ 95,525		\$163,676	0%		
HF.2.3	Households out of pocket				\$ 35,017,315		\$35,017,315	35%		
HF.2.4	Non profit institutions serving households (NGOs)					\$ 28,906,451	\$28,906,451	29%		
HF.2.5.2	Private for profit companies			\$ 2,568,581		\$ 1,773	\$2,570,354	3%		
	Column Total (THE)	\$15,417,802	\$53,142	\$2,607,807	\$35,352,283	\$47,086,349	\$100,517,382		\$100,517,382	\$ 100,517,382.21
HF.healthrelated	Financing agents for health related spending	\$ 1,420,436				\$ 1,558,602.76	\$2,979,039			
	Column Total (NHE)	\$ 16,838,238	\$ 53,142	\$ 2,607,807	\$ 35,352,283	\$ 48,644,951	\$103,496,421			
	FS % of THE	15%	0%	3%	35%	47%				

GENERAL FINANCING AGENT X PROVIDER (HFXHP)

FINANCING AGENT x PROVIDER (HFxHP)												
GENERAL NHA FY'07/08												
Financing Agent (HF)												
Code	Provider (HP)	HF.A Public Sector									Row Total	HP as a % of THE
		HF.1.1.1.1	HF.1.1.1.2	HF.1.1.2.1	HF.1.2	HF.1.1.4	HF.2.2	HF.2.3	HF.2.4	HF.2.5.2		
		MOHSW	Other Ministries (JFK)	Counties	Social security funds (NASSCORP)	Parastatal companies	Private insurance enterprises	Households out of pocket	Non profit institutions serving households (NGOs)	Private for profit companies		
HP.1.1.1	Government owned hospitals (Public)	\$ 10,699,407	\$ 4,129,764	\$ 182,166	\$ 167,455		\$ 15,586	\$ 2,856,873	\$ 5,751,949	\$ 32,717	\$ 23,835,918	24%
HP.1.1.2 + HP.3.4.3.2 + HP.1.2	Private Providers (Hospitals/Clinics)	\$ 336,494					\$ 131,622	\$ 18,627,933	\$ 2,176,642	\$ 2,527,948	\$ 23,800,639	24%
HP.1.2	Mental health hospitals (Grant)	\$ 14,845							\$ 43,430		\$ 58,275	0%
HP.3.3.1	Mobile vendors							\$ 4,462,361			\$ 4,462,361	4%
HP.3.3.2	Traditional healers (incl. herbalists)							\$ 1,273,618			\$ 1,273,618	1%
HP.3.3.4	Trained traditional midwives								\$ 1,350,666		\$ 1,350,666	1%
HP.3.3.5	Community health workers	\$ 3,426,847				\$ 57,758.75			\$ 1,701,133		\$ 5,185,738	5%
HP.3.4.1	Family planning centers					\$ 290,101.34			\$ 34,295		\$ 324,397	0%
HP.3.4.5.1	Government health centers/clinics	\$ 4,836,956	\$ 137,926.67	\$ 136,291.70				\$ 2,377,381	\$ 10,013,205		\$ 17,501,760	17%
HP.4.1	Dispensing chemists (individual pharmacies, drug outlets)							\$ 3,280,142		\$ 1,773	\$ 3,281,915	3%
HP.4.9	Shops							\$ 2,139,007			\$ 2,139,007	2%
HP.5	Provision and administration of public health programs	\$ 6,428,352				\$ 398,130.67			\$ 2,971,222		\$ 9,797,705	10%
HP.6	General Health administration and insurance	\$ 2,617,090					\$ 16,468.36		\$ 4,863,910		\$ 7,497,469	7%
HP.9	Rest of the world									\$ 7,916	\$ 7,916	0%
	Column Total THE	\$28,359,991	\$4,267,691	\$318,458	\$167,455	\$745,991	\$163,676	\$35,017,315	\$28,906,451	\$2,570,354	\$ 100,517,382.21	
HP.8.1	Research		\$ 236,921								\$ 236,921	
HP.8.2	Education and training		\$ 415,265						\$ 139,697		\$ 554,963	
HP.8.3	Food hygiene and drinking water control								\$ 545,559		\$ 545,559	
HP.8.4	Environmental health								\$ 873,347		\$ 873,347	
HP.8.5	Bureau of Social Welfare	\$ 768,250									\$ 768,250	
	Subtotal for health related	\$ 768,250	\$ 652,186						\$ 1,558,603		\$ 2,979,039	
	Column Total: NHE	\$ 29,128,241	\$ 4,919,877	\$ 318,458	\$ 167,455	\$ 745,991	\$ 163,676	\$ 35,017,315	\$ 30,465,054	\$ 2,570,354	\$ 103,496,421.27	
	HF as a % of THE	28%	4%	0%	0%	1%	0%	35%	29%	3%		

GENERAL FINANCING AGENTS X FUNCTION (HFXHC)

FINANCING AGENT X FUNCTION (HFxHC)													
GENERAL NHA FY'07/08													
		HF.A Public Sector					HF.B Non Public Sector					Row Total	HC as a % of THE
		HF.1.1.1.1	HF.1.1.1.2	HF.1.1.2.1	HF.1.2	HF.1.1.4	HF.2.2	HF.2.3	HF.2.4	HF.2.5.2			
Function (HC)		MOHSW	Other Ministries	Counties	Social security funds (e.g. NASSCORP)	Parastatal companies	Private insurance enterprises	Households out of pocket	Non profit institutions serving households (NGO)	Private for profit companies			
HC.1.1+HC.1.3	Curative Care	\$8,297,457	\$4,267,691	\$318,458	\$167,455	\$347,860	\$147,208	\$25,135,805	\$13,345,824	\$2,555,354	\$54,583,112	54%	
HC.5.1	Pharmacies and other medical non durables							\$9,881,510	\$124,809		\$10,006,320	10%	
HC.6.1	MCH; FP and counseling	\$362,443				\$178,626			\$2,420,565		\$2,961,635	3%	
HC.6.2	School Health Services					\$75,074			\$39,726		\$114,801	0%	
HC.6.3	Prevention of communicable diseases	\$10,845,797							\$7,401,994		\$18,247,791	18%	
HC.6.9	All other public health programs					\$144,430			\$375,447		\$519,877	1%	
HC.7.1	General government administration of health	\$2,617,090									\$2,617,090	3%	
HC.7.4	Other health administration and insurance						\$16,468		\$4,863,910		\$4,880,379	5%	
HC.R.1	Capital formation	\$6,237,203							\$334,175	\$15,000	\$6,586,378	7%	
	Column Total THE	\$28,359,991	\$4,267,691	\$318,458	\$167,455	\$745,991	\$163,676	\$35,017,315	\$28,906,451	\$2,570,354	\$100,517,382	100%	
HC.R.6	Social welfare programs	\$768,250									\$768,250		
HC.R.2	Education and training		\$415,265						\$139,697		\$554,963		
HC.R.3	Research and development		\$236,921								\$236,921		
HC.R.4	Food hygiene and drinking water control								\$545,559		\$545,559		
HC.R.5	Environmental health								\$873,347		\$873,347		
	<i>Sub total column</i>	\$768,250	\$652,186						\$1,558,603		\$2,979,039		
	Column Total NHE	\$29,128,241	\$4,919,877	\$318,458	\$167,455	\$745,991	\$163,676.14	\$35,017,315	\$30,465,054	\$2,570,354	\$103,496,421		
	HF as a % of THE	28%	4%	0%	0%	1%	0%	35%	29%	3%	100%		

GENERAL PROVIDER X FUNCTION (HP X HC)

PROVIDER x FUNCTION (HP x HC)
GENERAL NHA FY'07/08

		Provider (HP)																						
		HP.1.1.1	HP.1.1.2 + HP.3.4.3.2 + HP.3.1	HP.1.2	HP.3.3.1	HP.3.3.2	HP.3.3.4	HP.3.3.5	HP.3.4.1	HP.3.4.5.1	HP.4.1	HP.4.9	HP.5	HP.6	HP.9		HP.8.1	HP.8.2	HP.8.3	HP.8.4	HP.8.5			
	Function (HC)	Government owned hospitals (Public)	Private Providers (Hospitals/Clinics)	Mental health hospitals (Grant)	Mobile vendors	Traditional healers (incl. herbalists)	Trained traditional midwives	Community health workers	Family planning centers	Government health centers/clinics	Dispensing chemists (individual pharmacies, drug outlets)	Shops	Provision and administration of public health programs	General Health administration and insurance	Rest of the world	Row Total	Research	Education and training	Food hygiene and drinking water control	Environmental health	Bureau of Social Welfare	NHE Row Total	HC as a % of THE	
HC.1.1+H C.1.3	Curative Care	\$17,423,841	\$23,457,970.31	\$21,986		\$1,273,618		\$57,759	\$324,397	\$12,013,854	\$1,773				\$7,916	\$54,583,112								54.3%
HC.5.1	Pharmacies and other medical non durables				\$4,462,361			\$124,809			\$3,280,142	\$2,139,007				\$10,006,320								10.0%
HC.6.1	MCH, FP and counseling		\$105,638			\$1,350,666		\$75,880		\$838,835			\$590,616			\$2,961,635								2.9%
HC.6.2	School Health Services		\$3,437	\$36,290									\$75,074			\$114,801								0.1%
HC.6.3	Prevention of communicable diseases	\$543,959	\$38,199					\$4,582,961		\$4,096,501			\$8,986,172			\$18,247,791								18.2%
HC.6.9	All other public health programs		\$11,709					\$344,329		\$17,996			\$145,843			\$519,877								0.5%
HC.7.1	General government administration of health												\$2,617,090			\$2,617,090								2.6%
HC.7.4	Project Support (admin)												\$4,880,379			\$4,880,379								4.9%
HC.R.1	Capital formation	\$5,868,119	\$183,686							\$534,573						\$6,586,378								6.6%
	Column Total-THE	\$23,835,918	\$23,800,639	\$58,275	\$4,462,361	\$1,273,618	\$1,350,666	\$5,185,738	\$324,397	\$17,501,760	\$3,281,915	\$2,139,007	\$9,797,705	\$7,497,469	\$7,916	\$100,517,382.21								100.0%
HC.R.6	Social welfare programs																				\$768,250.00	\$768,250.00		
HC.R.2	Education and training																	\$554,963					\$554,962.61	
HC.R.3	Research and development																\$236,921.00						\$236,921.00	
HC.R.4	Food hygiene and drinking water control																	\$545,559					\$545,558.75	
HC.R.5	Environmental health																			\$873,346.70			\$873,346.70	
	Column Total-NHE																\$236,921.00	\$554,963	\$545,558.75	\$873,346.70	\$768,250.00	\$	103,496,421.27	
	HP as a % of THE	24%	24%	0%	4%	1%	1%	5%	0%	17%	3%	2%	10%	7%	0%	100%								

MALARIA FINANCING SOURCE X FINANCING AGENT (FSXHF)

FINANCING SOURCE x FINANCING AGENT (FSxHF)								
Malaria FY'07/08								
Financing Source (FS)								
Code	Financing Agent (HF)	FS.1 Public Funds		FS.2.1	FS.2.2	FS.3	Row Total	HF as a % of THE
		FS.1.1.1	FS.1.1.3			FS.3		
		Central government revenue (MOF)	Parastatals Employer Funds	For Profit Companies	Household Funds	Rest of the world		
HF.1.1.1.1	MOHSW	1,271,812				8,011,601	9,283,413	21%
HF.1.1.1.2	Other Ministries	1,498,331				123,391	1,621,723	4%
HF.1.2	Social security funds (e.g. NASSCORP)				63,633		63,633	0%
HF.2.2	Private insurance enterprises		9,885	13,406	32,647		55,939	0%
HF.2.3	Households out of pocket				21,674,759		21,674,759	49%
HF.2.4	Non profit institutions serving households (NGO)					10,523,645	10,523,645	24%
HF.2.5.2	Private for profit companies			966,685			966,685	2%
HF.nsk	Financing Agent not specified by any kind					121,681	121,681	0%
	Column Total (THE)	2,770,143	9,885	980,092	21,771,039	18,780,319	44,311,478	\$44,311,478
	Column Total (NHE)	\$ 2,770,142.84	\$ 9,885.44	\$ 980,091.68	\$ 21,771,038.95	\$ 18,780,318.97	44,311,478	
	FS % of THE	6%	0%	2%	49%	42%		

MALARIA FINANCING AGENT X PROVIDER (HFXHP)

FINANCING AGENT x PROVIDER (HFxHP)											
Malaria FY'07/08											
Financing Agent (HF)											
Code	Provider (HP)	HF.A Public Sector				HF.B Non Public Sector				Row Total	HP as a % of THE
		HF.1.1.1.1	HF.1.1.1.2	HF.1.2	HF.2.2	HF.2.3	HF.2.4	HF.2.5.2	HF.nsk		
		MOHSW	Other Ministries	Social security funds (e.g. NASSCORP)	Private insurance enterprises	Households out of pocket	Non profit institutions serving households (NGO)	Private for profit companies	Financing Agent not specified by any kind		
HP.1.1.1	Government owned hospitals (Public)	\$ 2,065,939	\$ 1,569,311	\$ 63,633	\$ 5,923	\$ 1,095,456	\$ 2,663,803	\$ 12,433	\$ 69,223	\$ 7,545,719	17%
HP.1.1.2+HP.3.4.3.2, HP.3.4.5.2, HP.3.4.5.3, HP.3.1, HP.1.1.2, HP.1.1.3	Private Providers (Hospitals/Clinics)	\$ 127,868	-	-	\$ 50,016	\$ 12,674,956	\$ 1,177,435	\$ 954,253	\$ 667	\$ 14,985,195	34%
HP.3.3.1	Black Baggers (mobile vendors)					\$ 1,722,463				\$ 1,722,463	4%
HP.3.3.2	Traditional healers (incl. herbalists)					\$ 41,109				\$ 41,109	0%
HP.3.3.5	Community health workers	\$ 3,426,847					\$ 185,355			\$ 3,612,202	8%
HP.3.4.5.1	Government health centers/clinics	\$ 3,005,610	\$ 52,412			\$ 1,547,539	\$ 3,831,307		\$ 51,791	\$ 8,488,659	19%
HP.4.1	Dispensing chemists (individual pharmacies, drug outlets)					\$ 2,454,229				\$ 2,454,229	6%
HP.5	Provision and administration of public health programs	\$ 657,150					\$ 2,665,745			\$ 3,322,895	7%
HP.4.9	Shops					\$ 2,139,007				\$ 2,139,007	5%
	Column Total THE	\$9,283,413	\$1,621,723	\$63,633	\$55,939	\$21,674,759	\$10,523,645	\$966,685	\$121,681	\$44,311,478	\$ 44,311,477.87
	Column Total: NHE	\$ 9,283,413.14	\$ 1,621,722.64	\$ 63,632.96	\$ 55,938.96	\$ 21,674,758.67	\$ 10,523,644.86	\$ 967,352.73	\$121,681.17	\$ 44,311,478	
	HF as a % of THE	21%	4%	0%	0%	49%	24%	2%	0%		

MALARIA FINANCING AGENTS X FUNCTION (HFXHC)

FINANCING AGENTS x FUNCTION (HF x HC)											
MALARIA FY'07/08											
Financing Agent (HF)											
Function (HC)		HF.A Public Sector							HF.nsk	Row Total	HC as a % of THE
		HF.1.1.1.1	HF.1.1.1.2	HF.1.2	HF.2.2	HF.2.3	HF.2.4	HF.2.5.2			
		MOHSW	Other Ministries	Social security funds (e.g. NASSCORP)	Private insurance enterprises	Households out of pocket	Non profit institutions serving households (NGO)	Private for profit companies	Financing Agent not specified by any kind		
HC.1.1 + HC.1.3	Curative Care	\$5,199,416	\$1,621,723	\$63,633	\$55,939	\$15,359,060	\$6,978,308	\$966,685	\$121,681	\$30,366,445	69%
HC.6.3.1.1	IPT	-	-	-	-	-	\$262,718	-	-	\$262,718	1%
HC.6.3.1.2	Distributional of nets	\$3,426,847	-	-	-	-	\$771,876	-	-	\$4,198,723	9%
HC.6.3.1.3	Indoor residual spraying	-	-	-	-	-	\$16,401	-	-	\$16,401	0%
HC.6.3.1.4	Vector management (other than IRS)	-	-	-	-	-	\$15,878	-	-	\$15,878	0%
HC.6.3.1.5	IEC	-	-	-	-	-	\$354,862	-	-	\$354,862	1%
HC.6.3.1.6	Surveillance and monitoring	-	-	-	-	-	\$512,188	-	-	\$512,188	1%
HC.6.3.1.7	Home based management	-	-	-	-	-	\$83,402	-	-	\$83,402	0%
HC.6.3.1.8	MCH and Family Planning and Counseling Programs that have malaria component	-	-	-	-	-	\$86,856	-	-	\$86,856	0%
HC.6.3.1.9	Malaria prevention programs not disaggregated	\$487,150	-	-	-	-	\$1,441,156	-	-	\$1,928,306	4%
HC.Nsk	Not specified by any kind	\$170,000	-	-	-	-	-	-	-	\$170,000	0%
HC.5.1.1	Malaria Pharmaceuticals and other non-durables	-	-	-	-	\$6,315,699	-	-	-	\$6,315,699	14%
Column Total THE		\$9,283,413	\$1,621,723	\$63,633	\$55,939	\$21,674,759	\$10,523,645	\$966,685	\$121,681	\$44,311,478	100%
Column Total NHE		9,283,413	1,621,723	63,633	55,939	21,674,759	10,523,645	967,353	121,681	\$44,311,478	
HF as a % of THE		21%	4%	0%	0%	49%	24%	2%	0%	100%	

MALARIA PROVIDER X FUNCTION (HP X HC)

FINANCING AGENT x PROVIDER (HPxHC)													
Malaria FY'07/08													
		Provider (HP)											
		HP.1.1.1	HP.1.1.2+HP.3.4.3	HP.3.3.1	HP.3.3.2	HP.3.3.5	HP.3.4.5.1	HP.4.1	HP.4.9	HP.5			
Function (HC)		Government owned hospitals (Public)	Private Providers	Black Baggers (mobile vendors)	Traditional healers (incl. herbalists)	Community health workers	Government health centers	Dispensing chemists (individual pharmacies, drug outlets)	Shops	Provision and administration of public health programs	Row Total	NHE Row Total	HC as a % of THE
HC.1.1+HC.1.3	Curative Care	\$7,458,862.83	\$14,981,885.11	-	\$41,109	-	\$7,884,588	-	-	-	\$30,366,445	-	69%
HC.5.1.1	Malaria Pharmaceuticals and other non-durables	-	-	\$1,722,463.36	-	-	-	\$2,454,229	\$2,139,007	-	\$6,315,699	-	14%
HC.6.3.1.1	IPT	-	\$3,309.90	-	-	\$34,517	\$24,773	-	-	\$200,118	\$262,718	-	1%
HC.6.3.1.2	Distributional of nets	-	-	-	-	\$3,452,753	\$216,983	-	-	\$528,987	\$4,198,723	-	9%
HC.6.3.1.3	Indoor residual spraying	-	-	-	-	-	-	-	-	\$16,401	\$16,401	-	0%
HC.6.3.1.4	Vector management (other than IRS)	-	-	-	-	-	-	-	-	\$15,878	\$15,878	-	0%
HC.6.3.1.5	IEC	-	-	-	-	\$27,014	\$138,502	-	-	\$189,346	\$354,862	-	1%
HC.6.3.1.6	Surveillance and monitoring	-	-	-	-	-	\$22,511	-	-	\$489,677	\$512,188	-	1%
HC.6.3.1.7	Home based management	-	-	-	-	-	\$83,402	-	-	-	\$83,402	-	0%
HC.6.3.1.8	MCH and family planning and counseling Programs that have malaria component	\$86,856.04	-	-	-	-	-	-	-	-	\$86,856	-	0%
HC.6.3.1.9	Malaria prevention programs not disaggregated	-	-	-	-	\$97,918	\$117,899	-	-	\$1,712,488	\$1,928,306	-	4%
HC.Nsk	Not specified by any kind	-	-	-	-	-	-	-	-	\$170,000	\$170,000	-	0%
Column Total-THE		\$7,545,718.87	\$14,985,195.01	\$1,722,463.36	\$41,109	\$3,612,202	\$8,488,659	\$2,454,229	\$2,139,007	\$3,322,895	\$44,311,478	44,311,478	100%
Column Total-NHE		7,545,719	14,985,195	1,722,463	41,109	3,612,202	8,488,659	2,454,229	2,139,007	3,322,895	44,311,478	\$ 44,311,477.87	
HP as a % of THE		17.03%	33.82%	3.89%	0%	8%	19%	6%	5%	7%	100%		

RH FINANCING SOURCE X FINANCING AGENT (FSXHF)

FINANCING SOURCE x FINANCING AGENT (FSxHF)								
RH Subaccounts FY'07/08								
Financing Source (FS)								
Code	Financing Agent (HF)	FS.1 Public Funds		FS.2.1	FS.2.2	FS.3	Row Total	HF as a % of THE
		FS.1.1.1	FS.1.1.3			FS.3		
		Central Government Revenue (MOF)	Parastatals Employer Funds	For Profit Companies	Household Funds	Rest of the world		
HF.1.1.1.1	MOHSW	\$ 27,744				\$ 71,265	\$99,009	1%
HF.1.1.1.2	Other Ministries	\$ 37,628				\$ 32,079	\$69,707	1%
HF.1.1.2.1	Counties					\$ 318,458	\$318,458	5%
HF.1.2	Social Security Funds (e.g. NASSCORP)				\$ 1,453		\$1,453	0%
HF.1.1.4	Parastatal Companies	\$ 15,000	\$ 24,218		\$ 71,987	\$ 634,786	\$745,991	11%
HF.2.3	Households Out of Pocket				\$ 840,775		\$840,775	12%
HF.2.4	Non Profit Institutions Serving Households (NGO)					\$ 4,680,771	\$4,680,771	69%
HF.2.5.2	Private for Profit Companies			\$ 13,249		\$ 1,773	\$15,022	0%
HF.nsk	Financing Agent not specified by any kind							0%
	Column Total (THE)	\$80,372	\$24,218	\$13,249	\$914,215	\$5,739,132	\$6,771,185	
	Column Total (NH)	\$ 80,372	\$ 24,218	\$ 13,249	\$ 914,215	\$ 5,739,132	\$6,771,185	
	FS % of THE	1.2%	0.4%	0.2%	13.5%	84.8%		

RH FINANCING AGENT X PROVIDER (HFXHP)

FINANCING AGENT x PROVIDER (HFxHP)											
RH Subaccounts FY'07/08											
Financing Agent (HF)											
Code	Provider (HP)	HF.A Public Sector					HF.B Non Public Sector				Row Total
		HF.1.1.1.1	HF.1.1.1.2	HF.1.1.2.1	HF.1.2	HF.1.1.4	HF.2.3	HF.2.4	HF.2.5.2		
		MOHSW	Other Ministries	Counties	Social Security Funds (e.g. NASSCORP)	Parastatal Companies	Households Out of Pocket	Non Profit Institutions Serving Households (NGO)	Private for Profit Companies		
HP.1.1.1	Government Owned Hospitals (Public)	\$ 60,650	\$ 38,614	\$ 182,166	\$ 1,453		\$ 17,757	\$ 822,149		\$ 1,122,789	
HP.1.1.2+HP.3.4.3.2, HP.3.4.5.2, HP.3..., HP.1.1.3, HP	Private Providers (Hospitals/Clinics)	\$ 2,949					\$ 21,081	\$ 374,645	\$ 13,249	\$ 411,924	
HP.3.3.5	Community Health Workers					\$ 57,759		\$ 251,843		\$ 309,602	
HP.3.4.1	Family Planning Centers					\$ 290,101		\$ 34,295		\$ 324,396	
HP.3.4.5.1	Government Health Centers/clinics	\$ 35,409	\$ 595	\$ 136,292			\$ 466,582	\$ 1,548,224		\$ 2,187,102	
HP.4.1	Dispensing Chemists (Individual Pharmacies, Drug Outlets)						\$ 230,337		\$ 1,773	\$ 232,110	
HP.5	Provision and Administration of Public Health Programs					\$ 398,131		\$ 305,476		\$ 703,607	
HP.nsk	Providers not specified by any kind		\$ 30,498				\$ 105,019	\$ 1,344,138		\$ 1,479,655	
	Column Total THE	\$ 99,009	\$ 69,707	\$ 318,458	\$ 1,453	\$ 745,991	\$ 840,775	\$ 4,680,771	\$ 15,022	\$ 6,771,185	
	HF Totals From FS x HF Table	\$ 99,009	\$ 69,707	\$ 318,458	\$ 1,453	\$ 745,991	\$ 840,775	\$ 4,680,771	\$ 15,022	\$ 6,771,185	
	Column Total: NHE	\$ 99,009	\$ 69,707	\$ 318,458	\$ 1,453	\$ 745,991	\$ 840,775	\$ 4,680,771	\$ 15,022	\$ 6,771,185	

RH FINANCING AGENTS X FUNCTION (HF X HC)

FINANCING AGENTS x FUNCTION (HF x HC)											
RH Subaccounts FY'07/08											
Financing Agent (HF)											
		HF.A Public Sector				HF.B Non Public Sector				Row Total	HC as a % of THE
		HF.1.1.1.1	HF.1.1.1.2	HF.1.1.2.1	HF.1.2	HF.1.1.4	HF.2.3	HF.2.4	HF.2.5.2		
Function (HC)		MOHSW	Other Ministries	Counties	Social Security funds (e.g. NASSCORP)	Parastatal Companies	Households Out of Pocket	Non Profit Institutions Serving Households (NGO)	Private for Profit Companies		
HC.1.1, 1.3	Curative Care		\$30,102		\$1,453			\$138,266	\$13,249	\$242,262	4%
HC.1.1.1	Deliveries		\$181	\$68				\$433,128		\$433,377	6%
HC.1.1.2	Inpatient Family Planning- Sterilization, Vasectomies							\$21,954		\$21,954	0%
HC.1.1.3	Other RH IP Services- e.g. Treatment of Fibroids, Fistulas							\$77,288		\$77,288	1%
HC.1.3.1	Antenatal Care							\$130,822		\$130,822	2%
HC.1.3.2	Family Planning (not Disaggregated)					\$185,215	\$604,077	\$600,771		\$1,390,063	21%
HC.1.3.2.1	Condoms	\$17,222		\$112,027		\$23,115	\$62	\$1,286,264	\$1,773	\$1,440,464	21%
HC.1.3.2.2	Injectables	\$3,966	\$1,400	\$134,767				\$7,991		\$148,124	2%
HC.1.3.2.3	Pills	\$969		\$71,117		\$4,762.87	\$6,040.73	\$49,072		\$131,961	2%
HC.1.3.2.4	IUD			\$478						\$478	0%
HC.1.3.2.5	Implants					\$19,900	\$102			\$20,003	0%
HC.1.3.2.9	Other Family Planning					\$15,786	\$155	\$50,603		\$66,544	1%
HC.1.3.3	All Other RH	\$17,660	\$7,526			\$52,228		\$383,288		\$460,701	7%
HC.5.1	Pharmacies and Other Medical non Durables						\$230,337			\$230,337	3%
HC.6.1.1	Family Planning and Counseling Programs					\$67,080		\$515,394		\$582,474	9%
HC.6.1.2	Maternal and Antenatal Care Programs		\$30,498			\$111,546		\$721,183		\$863,228	13%
HC.6.2	School Health Services (e.g. Adolescent RH Promotion)					\$75,074		\$5,419		\$80,494	1%
HC.6.9	All Other RH Programs					\$144,430				\$144,430	2%
HC. Nsk	Not Specified by Any Kind					\$46,853		\$259,330		\$306,183	5%
	Column Total THE	\$99,009	\$69,707	\$318,458	\$1,453	\$745,991	\$840,775	\$4,680,771	\$15,022	\$6,771,185	100%
	HF as a % of THE	1%	1%	5%	0%	11%	12%	69%	0%	100%	

RH PROVIDER X FUNCTION (HP X HC)

PROVIDER x FUNCTION (HP x HC)												
RH Subaccounts FY'07/08												
Provider (HP)												
		HP.1.1.1	HP.1.1.2+HP.3.4	HP.3.3.5	HP.3.4.1	HP.3.4.5.1	HP.4.1	HP.5	HP.nsk			
	Function (HC)	Government Owned hospitals (Public)	Private Providers (Hospitals/Clinics)	Community Health Workers	Family Planning Centers	Government Health Centers/clinics	Dispensing Chemists (Individual Pharmacies, Drug Outlets)	Provision and Administration of Public Health Programs	Providers not Specified by Any Kind	Row Total	NHE Row Total	HC as a % of THE
HC1.1.1.1	Curative Care	\$80,320	\$28,297			\$133,645				\$242,262	-	4%
HC.1.1.1	Deliveries	\$98,917	\$50,581						\$283,878	\$433,377		6%
HC.1.1.2	Inpatient Family Planning- Sterilization, Vasectomies		\$21,954							\$21,954		0%
HC.1.1.3	Other RH IP Services- e.g. Treatment of Fibroids, Fistulas	\$77,288								\$77,288		1%
HC.1.3.1	Antenatal Care	\$89,908				\$40,914				\$130,822		2%
HC.1.3.2	Family Planning (not disaggregated)	\$44,927	\$21,081		\$209,208	\$750,862			\$363,986	\$1,390,063		21%
HC.1.3.2.1	Condoms	\$433,474		\$35,032	\$17,334	\$749,357	\$1,772.97		\$203,494	\$1,440,464		21%
HC.1.3.2.2	Injectables	\$85,171				\$62,953				\$148,124		2%
HC.1.3.2.3	Pills	\$68,910		\$2,254	\$2,509	\$52,247			\$6,041	\$131,961		2%
HC.1.3.2.4	IUD	\$275				\$203				\$478		0%
HC.1.3.2.5	Implants			\$2,594	\$17,307				\$102	\$20,003		0%
HC.1.3.2.9	Other Family Planning			\$277	\$20,847				\$45,419	\$66,544		1%
HC.1.3.3	All Other RH	\$89,259	\$179,044	\$17,602	\$52,228	\$122,568				\$460,701		7%
HC 5.1	Pharmacies and Other Medical non Durables						\$230,337			\$230,337		3%
HC.6.1.1	Family Planning and Counseling Programs		\$52,819		\$4,964	\$68,588		\$208,837	\$247,266	\$582,474		9%
HC.6.1.2	Maternal and Antenatal Care Programs		\$52,729			\$205,765		\$275,265	\$329,469	\$863,228		13%
HC.6.2	School Health Services (e.g. Adolescent RH Promotion)		\$5,419					\$75,074		\$80,494		1%
HC.6.9	All Other RH Programs							\$144,430		\$144,430		2%
HC. Nsk	Not Specified by Any Kind	\$54,340		\$251,843						\$306,183		5%
	Column Total-THE	\$1,122,788.59	\$411,924	\$309,602	\$324,396	\$2,187,102	\$232,110	\$703,607	\$1,479,655	\$6,771,185	\$ 6,771,184.91	100%
	Column Total-NHE	\$1,122,788.59	\$411,924	\$309,602	\$324,396	\$2,187,102	\$232,110	\$703,607	\$1,479,655	\$6,771,185		
	HP as a % of THE	17%	6%	5%	5%	32%	3%	10%	22%			

CH FINANCING SOURCE X FINANCING AGENT (FSXHF)

FINANCING SOURCE x FINANCING AGENT (FSxHF)								
Child Health NHA 07/08								
Financing Source (FS)								
Code	Financing Agent (HF)	FS.1 Public Funds		FS.2.1	FS.2.2	FS.3	Row Total	HF as a % of THE
		FS.1.1.1	FS.1.1.3			FS.3		
		Central government revenue (MOF)	Parastatals Employer Funds	For Profit Companies	Household Funds	Rest of the World		
HF.1.1.1.1	MOHSW	\$ 533,045				\$ 4,021,431	\$4,554,475	33%
HF.1.1.1.2	Other Ministries	\$ 623,230				\$ 51,325	\$674,555	5%
HF.1.1.2.1	Counties					\$ 42,776	\$42,776	0%
HF.1.2	Social security funds (e.g. NASSCORP)				\$ 26,793		\$26,793	0%
HF.2.2	Private insurance enterprises		\$ 2,487	\$ 3,372	\$ 8,212		\$14,071	0%
HF.2.3	Households out of pocket				\$ 5,367,189		\$5,367,189	38%
HF.2.4	Non profit institutions serving households (NGO)					\$ 2,915,759	\$2,915,759	21%
HF.2.5.2	Private for profit companies			\$ 394,249		\$ 272	\$394,521	3%
	Column Total (THE)	\$1,156,275	\$2,487	\$397,621	\$5,402,194	\$7,031,562	\$13,990,138	
HF.health related	Financing agents for health related spending					\$ 298,497	\$298,497	
	Column Total (NHE)	\$ 1,156,275	\$ 2,487	\$ 397,621	\$ 5,402,194	\$ 7,330,059		
	FS % of THE	8%	0%	3%	39%	50%		

CH FINANCING AGENT X PROVIDER (HFXHP)

FINANCING AGENT x PROVIDER (HFxHP)

Child Health NHA 07/08

Financing Agent (HF)

Code	Provider (HP)	HF.A Public Sector			HF.B Non Public Sector					Row Total	HP as a % of THE
		HF.1.1.1.1	HF.1.1.1.2	HF.1.1.2.1	HF.1.2	HF.2.2	HF.2.3	HF.2.4	HF.2.5.2		
		MOHSW	Other Ministries	Counties	Social security funds (e.g. NASSCORP)	Private insurance enterprises	Households out of pocket	Non profit institutions serving households (NGO)	Private for profit companies		
HP.1.1.1	Government owned hospitals (Public)	\$ 821,980	\$ 660,762	\$ 29,147	\$ 26,793	\$ 2,494	\$ 425,761	\$ 876,576	\$ 5,235	\$ 2,848,747	20%
HP.1.1.2+ HP.3.4.3.	Private Providers (Hospitals/Clinics)	\$ 53,839				\$ 11,577	\$3,112,638	\$ 504,246	\$ 389,286	\$ 4,071,587	29%
HP.1.2	Mental health hospitals (Grant)	\$ 2,375						\$ 1,142		\$ 3,518	0%
HP.3.3.1	Black Baggers (mobile vendors)						\$ 811,604			\$ 811,604	6%
HP.3.3.2	Traditional healers (incl. herbalists)						\$ 66,900			\$ 66,900	0%
HP.3.4.5.1	Government health centers/clinics	\$1,350,786	\$ 13,793	\$ 13,629			\$ 368,673	\$ 925,689		\$ 2,672,569	19%
HP.4.1	Dispensing chemists (individual pharmacies, drug outlets)						\$ 581,614			\$ 581,614	4%
HP.5	Provision and administration of public health programs	\$ 454,978						\$ 135,638		\$ 590,616	4%
HP.nsk	Providers not specified by any kind	\$1,870,517						\$ 472,467		\$ 2,342,984	17%
	Column Total THE	\$4,554,475	\$674,555	\$42,776	\$26,793	\$14,071	\$5,367,189	\$2,915,759	\$394,521	\$ 13,990,138	
HP.8.1	Research							\$ 51,059		\$ 51,059	\$ 13,990,138
HP.8.4	Environmental health							\$ 247,439		\$ 247,439	
	Subtotal for health related							\$ 298,497		\$ 298,497	
	Column Total: NHE	\$4,554,475	\$ 674,555	\$ 42,776	\$ 26,793	\$ 14,071	\$5,367,189	\$ 3,214,256	\$ 394,521	\$ 14,288,636	
	HF as a % of THE	33%	5%	0%	0%	0%	38%	21%	3%		

CH FINANCING AGENTS X FUNCTION (HF X HC)

FINANCING AGENTS x FUNCTION (HF x HC)											
Child Health NHA 07/08											
Financing Agent (HF)											
		HF.A Public Sector				HF.B Non Public Sector					
		HF.1.1.1.1	HF.1.1.1.2	HF.1.1.2.1	HF.1.2	HF.2.2	HF.2.3	HF.2.4	HF.2.5.2	Row Total	HC as a % of THE
Function (HC)		MOHSW	Other Ministries	Counties	Social security funds (e.g. NASSCORP)	Private insurance enterprises	Households out of pocket	Non profit institutions serving households (NGO)	Private for profit companies		
HC.1.1+H C.1.3	Curative Care	\$1,124,467	\$674,555	\$42,776	\$26,793	\$14,071	\$4,785,575	\$1,954,487	\$394,521	\$9,017,244	64%
HC.5.1	Pharmacies and other medical non durables						\$581,614			\$581,614	4%
HC.6.1.3	Breast feeding supplement program							\$99,417		\$99,417	1%
HC.6.1.4	Immunization	\$2,968,652						\$6,474		\$2,975,127	21%
HC.6.1.6	All other child health programs							\$708,682		\$708,682	5%
HC.6.3	Prevention of communicable diseases							\$82,874		\$82,874	1%
HC.R.1	Capital formation	\$461,356						\$63,823		\$525,179	4%
	Column Total THE	\$4,554,475	\$674,555	\$42,776	\$26,793	\$14,071	\$5,367,189	\$2,915,759	\$394,521	\$13,990,138	100%
HC.R.3	Research and development							\$51,059		\$51,059	
HC.R.5	Environmental health							\$247,439		\$247,439	
	Column Total NHE	\$4,554,475	\$674,555	\$42,776	\$26,793	\$14,071	\$5,367,189	\$2,915,759	\$394,521	\$14,288,636	
	HF as a % of THE	33%	5%	0%	0%	0%	38%	21%	3%	100%	

CH PROVIDER X FUNCTION (HP X HC)

PROVIDER x FUNCTION (HP x HC)															
Child Heath NHA 07/08															
Provider (HP)															
		HP.1.1.1	HP.1.1.2+HP.3.4.3	HP.1.2	HP.3.3.1	HP.3.3.2	HP.3.4.5.1	HP.4.1	HP.5	HP.nsk		HP.8.1	HP.8.4		
	Function (HC)	Government owned hospitals (Public)	Private Providers (Hospitals/Clinics)	Mental health hospitals (Grant)	Black Baggers (mobile vendors)	Traditional healers (incl. herbalists)	Government health centers/clinics	Dispensing chemists (individual pharmacies, drug outlets)	Provision and administration of public health programs	Providers not specified by any kind	Row Total	Research	Environmental health	NHE Row Total	HC as a % of THE
HC1.1, HC	Curative Care	\$2,756,475	\$3,996,972	\$3,518	\$811,604	\$66,900	\$1,381,775				\$9,017,244				64%
HC.4.1	Clinical lab														0%
HC.4.2	Diagnostic imaging														0%
HC.5.1	Pharmacies and other medical non durables							\$581,614			\$581,614				4%
HC.6.1.3	Breast feeding supplement program						\$53,844			\$45,574	\$99,417				1%
HC.6.1.4	Immunization		\$6,474				\$643,157		\$454,978	\$1,870,517	\$2,975,127				21%
HC.6.1.5	IEC														0%
HC.6.1.6	All other child health programs		\$4,316				\$141,834		\$135,638	\$426,894	\$708,682				5%
HC.6.3	Prevention of communicable diseases						\$82,874				\$82,874				1%
HC.R.1	Capital formation	\$92,271	\$63,823				\$369,085				\$525,179				4%
	Column Total-THE	\$2,848,747	\$4,071,587	\$3,518	\$811,604	\$66,900	\$2,672,569	\$581,614	\$590,616	\$2,342,984	\$13,990,138				100%
HC.R.3	Research and development											\$51,059		\$51,059	
HC.R.5	Environmental health												\$247,439	\$247,439	
	Column Total-NHE											\$51,059	\$247,439	\$ 14,288,636	
	HP as a % of THE	20.4%	29.1%	0.0%	5.8%	0.5%	19.1%	4.2%	4.2%	16.7%	100.0%				

ANNEX B: BIBLIOGRAPHY

Liberia Institute of Statistics and Geo-Information Services (LISGIS) [Liberia], Ministry of Health and Social Welfare [Liberia], National AIDS Control Program [Liberia], and Macro International Inc. 2008. *Liberia Demographic and Health Survey 2007*. Monrovia, Liberia: Liberia Institute of Statistics and Geo-Information Services (LISGIS) and Macro International Inc.

National Malaria Control Program (NMCP) [Liberia], Ministry of Health and Social Welfare [Liberia], Liberia Institute of Statistics and Geo-Information Services (LISGIS), and ICF Macro. 2009. *Liberia Malaria Indicator Survey 2008-09*. Monrovia, Liberia: NMCP, LISGIS, and ICF Macro.

World Bank. December 2007. "Liberia Public Expenditure Review." Draft.