MINISTRY OF HEALTH

REPUBLIC OF LIBERIA

2014 ANNUAL REPORT

Table of Contents

List of Figures and Tables

List of Abbreviation

ACT	Artemisinin-based Combination Therapy
AFP	Acute Flaccid Paralysis
AIDS	Acquired Immune deficiency Syndrome
ARI	Acute Respiratory Infection
ART	Anti- Retroviral Therapy
ARV	Antiretroviral
CCC	Community Care Center
CDDs	Community Directed Distributors
CDTI	Community Directed Treatment with Ivermectin
CHV	Community Health Volunteer
CHT	County Health Team
DOTS	Direct observed therapy short course
DST	Drug sensitivity testing
EPI	Expanded Program on Immunization
EVD	Ebola Virus Disease
ETU	Ebola Treatment Unit
EQA	External quality assurance
FBO	Faith based organization
GAVI	Global Alliance for Vaccines and Immunization
gCHV	General Community Health Volunteer
GoL	Government of Liberia
GFATM	Global Fund for AIDS Tuberculosis and Malaria
HCT	HIV Counseling and Testing
HF	Health Facilities
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
IC	infection control
IEC/BCC	Information, education and communication
IMS	Incident Management System
IPT	Intermittent Preventive Treatment
ITN	Insecticide Treated Nets
M&E	Monitoring and evaluation
MC	Microscopy center
MDGs	Millennium Development Goals
MDR-TB	Multi drug resistant tuberculosis
MOHSW	Ministry of Health and Social Welfare
NACP	National AIDS Control program
NDS	National drug service
NLTCP	National Leprosy and TB Control Program
NMCP	National Malaria Control Program
NNT	Neonatal Tetanus
NTDs	Neglected Tropical Diseases
NSP	New Smear Positive
OPD	Out-patient Department

PB	Pauci Bacillary
PMTCT	Prevention of Mother to Child Transmission
QA	Quality Assurance
QC	Quality control
RBHS	Rebuild Basic Health Services
SDA	Service Delivery Area
SNRL	Supranational Reference Laboratory
STI	Sexually Transmitted Infection
TB	Tuberculosis
OPV	Oral Polio Vaccine
PENTA	Pentavalent
RI	Routine Immunization
SIAs	Supplemental Immunization Activities
TT	Tetanus Toxoid
tOPV	Trivalent Oral Polio Vaccine
UNICEF	United Nations Children's' Fund
UNDP	United Nations Development Program
USAID	United States Agency for International Development
VPDs	Vaccine Preventable Diseases
WHO	World Health Organization
YF	Yellow Fever

Executive Summary

The Ministry developed a 10 year National Health Policy and Plan (2011-2021) with a mission to reform and manage the sector, to effectively and efficiently deliver comprehensive, quality health services that are equitable, accessible and sustainable for all people in Liberia. The policy vision is a healthy population with social protection for all, and the goal is to improve the health and social welfare status of the population of Liberia on an equitable basis. The ten-year plan adapts the WHO health systems framework and includes seven health system building blocks: governance and leadership, health financing, human resources, information systems, management and organization, medical products and technology, and infrastructure network. In the execution of this goal, mission and vision, the Ministry in 2014 did not achieve much due to the Ebola crisis that engulfed the entire country, affecting every county.

The Ministry of Health and Social Welfare during the year under review had the Department of Social Welfare detached and integrated with the newly established Ministry of Gender, Children and Social Protection as part of the Government's reform agenda. In the midst of wide spread transmission of the Ebola pandemic, the Ministry of Health provided health services with support from the Government of Liberia, donors, development partners and stakeholders.

Essential health care were still being delivered in counties at different times in the year depending on when it started to have Ebola Virus Disease (EVD) cases which lead to the interruption of health services provision. In 2014, 77,864 deliveries were reported, of which 70,557 occurred in health facilities and were assisted by skilled birth attendants. This translates to 39 percent delivery by skilled staff, and reflects a 7 percent decline from 2013. Curative consultations across the country were 2,536,868 visits and malaria accounts of 41 percent of all curative consultations. In-patient admission was 91,126 patients and malaria accounts for 33 percent of total admission. Immunization coverage data shows that only 46% of children under age one were fully immunized, 58 percent were vaccinated against Measles, 54percent against yellow fever, 62 percent against polio (OPV3) and 73 percent against tuberculosis (BCG).

The Ministry during the same period placed 1,410 health workers on the Government of Liberia payroll thus increasing the number of health workers on government payroll to 5,537.

Ebola

The Ministry of Health declared the Ebola outbreak on March 22, 2014 and subsequently by the World Health Organization as a Public Health Emergency calling on the global community to join the fight against the deadly disease in West Africa. The extent of the crisis cannot be determined comprehensively until the outbreak cease and a post EVD evaluation is commission and executed. However, the EVD impact on the health sector is unprecedented due to the magnitude of the situation. The outbreak has led to a major break down of Liberia's health care system which was striving to improve key health indicators such as institutional delivery, immunization coverage, antenatal care, infant mortality, outpatient department consultations, maternal mortality and quality of care. The health system in few counties collapsed (e.g.;

Lofa, Margibi, Bong and Montserrado) with others at a point of a near collapse including major referral and tertiary hospitals (e.g.: Redemption Hospital, Phebe, C. B. Dunbar, Catholic, Tellewoyan, C. H. Rennie, J.F.K Medical Center, etc). However, most of these facilities are gradually opening as a result of declining cases and all counties are preparing their restoration of basic health services plan. The disease toll on the Liberian population is unconceivable with 3,471reported deaths and 8,115 reported cases (3,198-suspected, 1,805-probable and 3,116-confirmed) as of December 31, 2014 (SitRep 230). There were 370 cases of health care workers being infected by EVD and 178 deaths recorded. By the close of the year, an average of 1.0 confirmed case per day were reported compared to an average of 50 -60 confirmed cases per day seen between September and November 2014.

Key Accomplishments include:

- Through the collaborative efforts of the Ministry of Health Incident Management System, partners, line ministries, donors, health care workers, response teams and communities, the EVD Outbreak was brought under control by the close of the year.
- Two-thirds of children under one received pentavalent 3 vaccines and 95% received pneumococcus first dose vaccines.
- Liberia introduced Pneumococcus Conjugate Vaccine (PCV) and named and ambassador for immunization.
- Distributed 900,000 insecticide treated nets to health facilities for ANC clients.
- Screened and surgically repaired 59 fistula victims (32 were completely dry after surgery) and 10 survivors were economically empowered and reintegrated into their communities, while 24 awaits the completion of their training cycle program;
- Finalized the National Donation Guidelines of Liberia (NDGL) and the National Medicine Policy of Liberia pending official launch by the Ministry of Health.
- Planned, organized and hosted the 15th Assembly of ECOWAS Health Ministers Meeting in Monrovia in April 2014;

Challenges

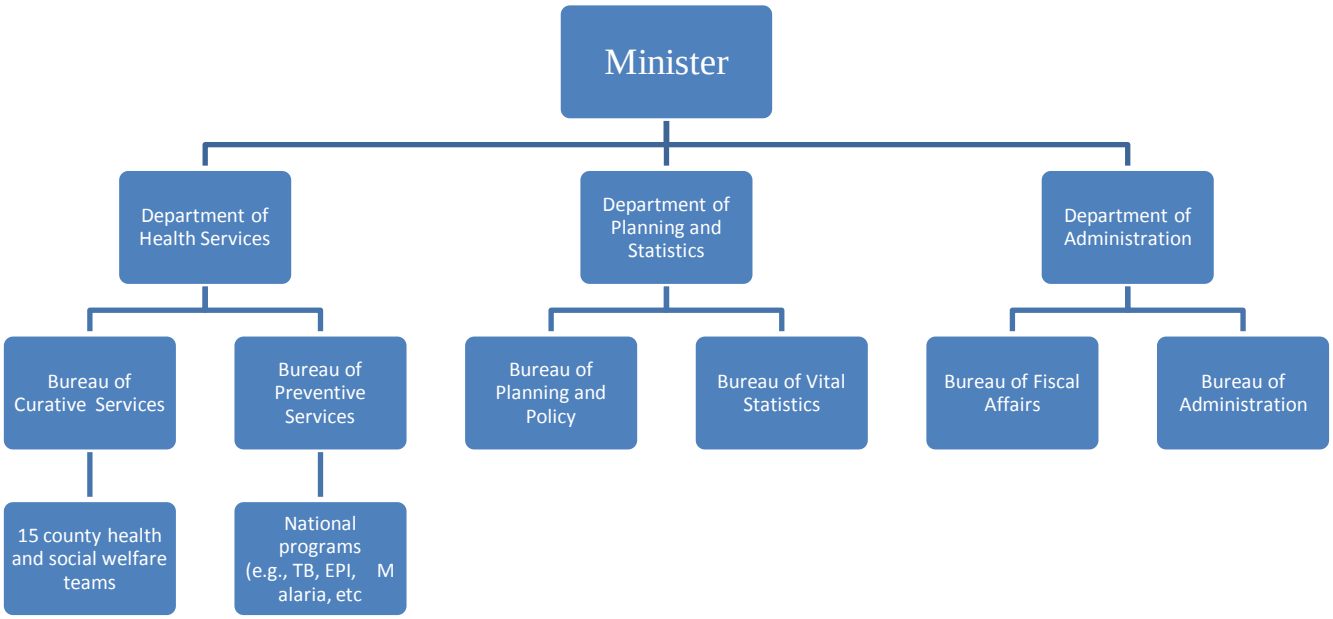
- Eradicating EVD from Liberia;
- Restoration of basic health care services within an ongoing EVD outbreak;
- Accelerating the reduction of maternal mortality and improving maternal health services;
- Improving the quality of health services, particularly, health infrastructure to conform to infection prevention and control standards;
- Improving human resources for health and placing over 5,000 health workers on the Government of Liberia payroll and standardizing incentive payment;
- Strengthening the supply chain systems with focus on the National Drug Services (NDS) to provide efficient services and support to county depots for proper storage and management of health commodities.

Chapter 1: Introduction

The Minister of Health, who chairs the Health Sector Coordination Committee (HSCC), governs the health sector. The HSCC is comprised of the major actors and stakeholders in the sector. Its membership consists of UN agencies (WHO, UNFPA, UNICEF, etc), donors (EU, USAID, Irish Aid, DFID, etc), NGOs (MERLIN, AFRICARE, AHA, EQUIP, Save the Children, IRC, MDM, etc), Civil Society Organizations and relevant line ministries (Ministries of Finance and Development Planning, Public Work, etc).

There arethree deputies and five assistant ministers at the MOH. These deputy ministers are;Deputy for Administration, Deputy for Health Services and also the Chief Medical Officer of the Republic of Liberia, and the Deputy Minister for Planning, Resource and Human Development. The five Assistant Ministers are for Curative Services, Preventive Services, Planning and Policy, Administration, and Health and Vital Statistics. See the Ministry's structure below for further information.

The Ministry is decentralized at the district and county levels where policies and plans are implemented, while the national level is responsible for policy and strategic plans formulation and resource mobilization. Below is the structure of the MoH.



At the operational level, County Health Officers (CHOs) head the County Health Teams (CHTs), while Officers in Charge (OICs) manage health services at the facility level and District Health Officers supervise health activities within their respective districts.

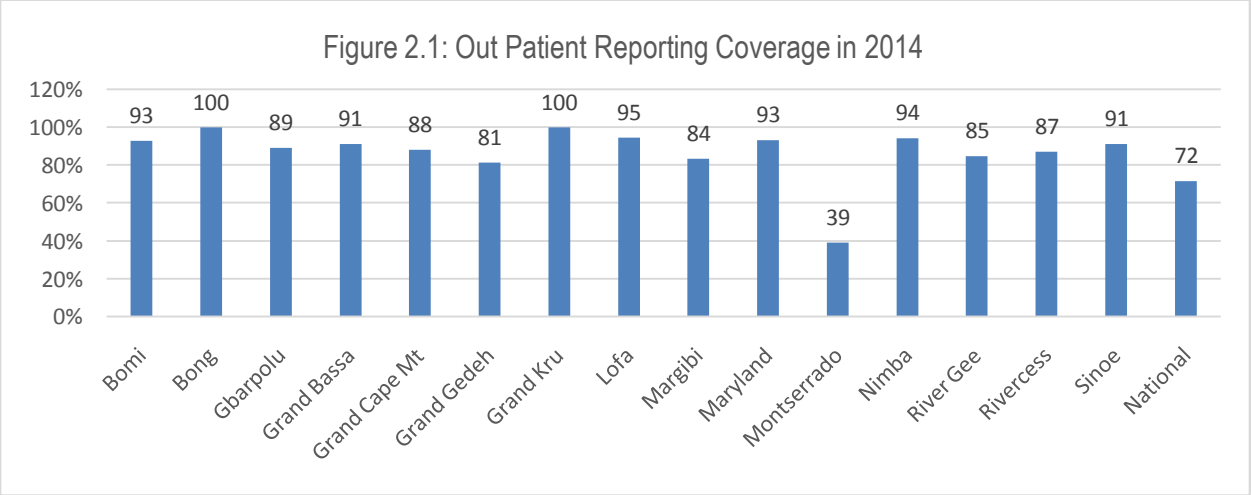
Chapter2: Department of Health Services

2.1 Bureau of Curative Services

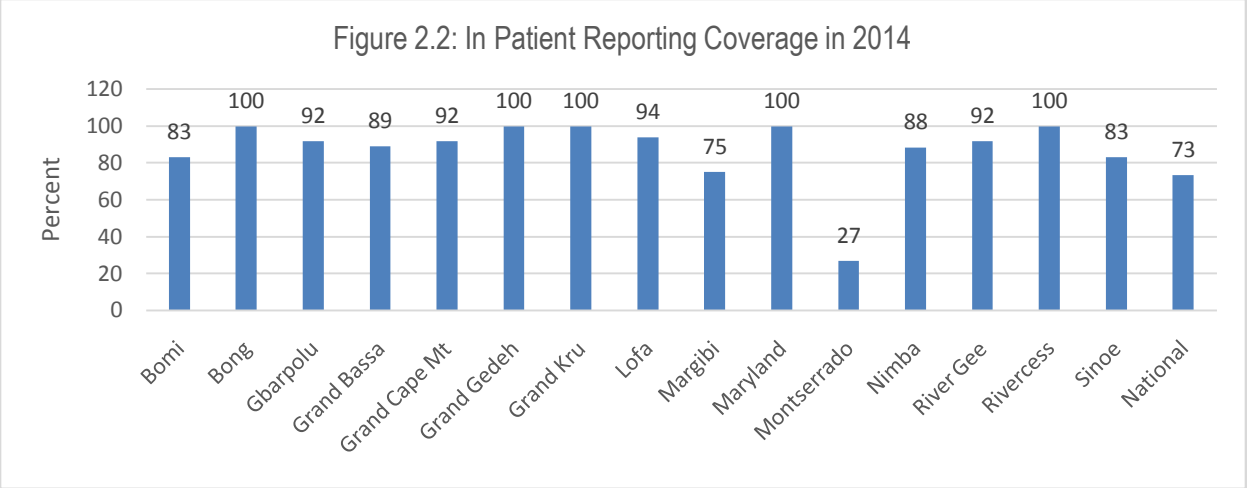
The Bureau of Curative Services is composed of the Ministry's operational level, which is the county health teams and health facilities (e.g., clinics, health centers and hospitals). The Bureau deals with services provided at health facilities within Liberia.

2.1.1 Counties Reporting Coverage

Out-PatientDepartment (OPD) reporting isgradually improving since the integration and harmonization of data gathering and reporting tools. However, individual counties reporting continues to show fluctuation over the years and the emergence of the Ebola Virus Disease has derailed the gains made in 2013 and in the recent past. The current national out-patient department reporting coverage declined by 11% from 2013 (83%). In 2014, two counties (Bong and Grand Kru) reported 100% coverage. The lowest reporting county is Montserrado (39%). Table A in annex A provides the number of functional health facilities by county, expected number of reports and actual reports received.



Reporting from health centers and hospitals (In-patient Department) across the country has shown great improvement in recent years. It increased from 40% in 2011 to 80% in 2013. However, in 2014, reporting coverage from IPD services declined by 7%. Montserrado (27%) and Margibi (75%) were the lowest reporting counties. Figure 2.2 presents In-patient reporting coverage by county in 2014. Table B in annex A provides the number of functional in-patients facilities and their reporting coverage.



Health facility reporting coverage and data quality continue to improve as a result of trainings in data management and reporting, data use for decision making, quarterly data verification and quality checks exercisesand the initiation of the performance based financing program.

2.1.2 Health Facility Utilization

Utilizationof health services in Liberia is measure by Primary Health Care (PHC) and curative consultations[1] visits across the country. In 2014, 72% of the functional health facilities(682) in the country reported on health services provided. Utilization records show *3,325,076*visits across the country with 32% (1,015,796) of these visits made by patients' under-5 years old. Curative consultations account for76% of all visits.

The utilization rate for 2014 is 0.8per inhabitant with variations across counties, ranging from 0.4 in Gbarpolu to 1.3 in Bomi County. Utilizationof health services reduced by 39% in 2014 from previous year. The major contributor to this decline in health services utilization is the Ebola outbreak that devastated the entire health system. Poor access and the quality of health care delivery in Liberia impede utilization of services.Twenty-nine percent (1.5 million people)of the population has to walk over 5 kilometers or over one hour to reach the nearest health facility. Table 2.1 presents data on health facilities utilization by county.

Examination of patients' utilization records across Liberia in 2014 shows an average of 19visits/day/facility (22working days/month)[2]. However, this varies greatly between and within counties. The highest utilization of health facility on average per day was reported in Bong (32 visits/day/facility), Nimba

[1] PHC head count means the number of visits made to health facilities that includes preventive and curative services while curative consultation refers to health services provided at health facilities to patients that exclude preventive services such as immunization, counseling and family planning. Both preventive and curative consultation data provides an opportunity to assess the utilization of services at health facilities and within each county and the country.

[2] Estimation is based on 657 reported health facilities with a total of 3,211,745 PHC visits within 264 working days (excluding Saturdays, Sundays and holidays especially for health clinics).

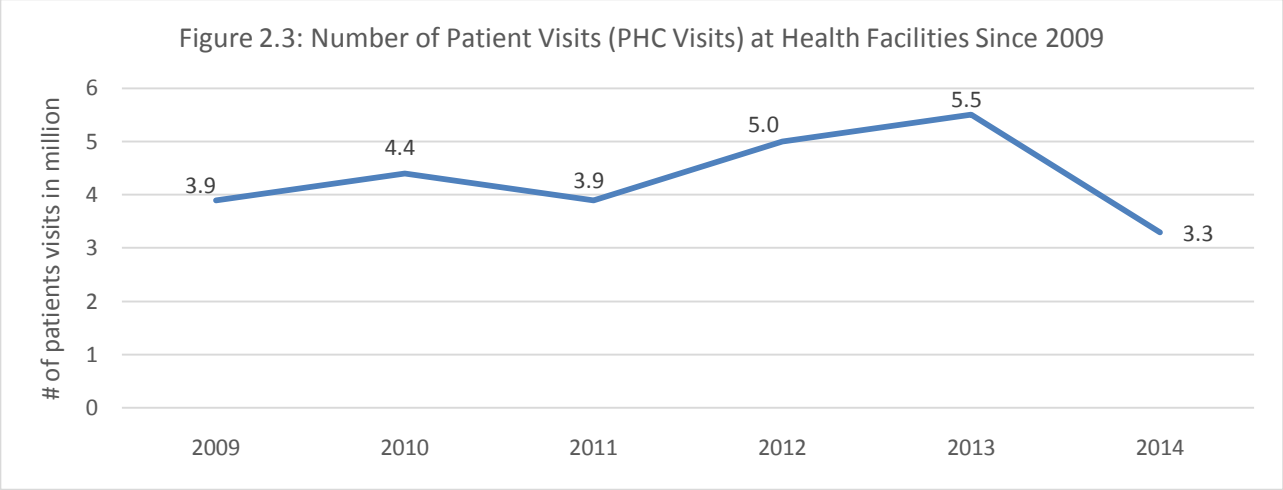
(28visits/day/facility), and Grand Bassa (26 visits/day/facility). The lowest average patientvisits to health facility per day were seen in Grand Cape Mount (10 visits/day/facility), Sinoe (10 visits/day/facility), and Gbarpolu (11 visits/day/facility). This indicates 39% declined in services utilization across the country from 2013. The low utilization of health services is merely attributed to the Ebola crisis coupled with by poor health seeking behavior (cultural practices and beliefs), difficult access to health care (an estimated 29% or 1.5 million population living more than one hour walk from a health facility), poor road network, health workers attitudes to patients, long waiting time, and theerratic stock out of essential drugs.

Table 2.1: Utilization of Health Facilities by County in 2014

County	Projected Catchment Population In 2013	PHC Head Count			Curative consultations (OPD)			% ofCur. Cons.	Utiliz. Rate
		< 5 yrs	5yrs and above	Total	< 5 yrs	5yrs & over	Total		
Bomi	95,290	37,994	89,786	127,780	35729	80560	116,289	91.0%	1.34
Bong	377,768	108,693	224,730	333,423	82865	156707	239,572	71.9%	0.88
Gbarpolu	94,462	12,800	31,986	44,786	14576	30350	44,926	100.3%	0.47
Grand Bassa	251,135	57,782	144,300	202,082	48454	113721	162,175	80.3%	0.80
G. Cape Mt	143,952	35,124	57,672	92,796	29158	49614	78,772	84.9%	0.64
GrandGedeh	141,893	31,820	77,240	109,060	20970	54436	75,406	69.1%	0.77
GrandKru	65,604	23,047	47,672	70,719	19349	38767	58,116	82.2%	1.08
Lofa	313,631	108,205	248,357	356,562	83055	186400	269,455	75.6%	1.14
Margibi	237,801	60,854	132,041	192,895	43566	104670	148,236	76.8%	0.81
Maryland	153,991	40,292	88,259	128,551	30717	64622	95,339	74.2%	0.83
Montserrado	1,266,747	308,972	654,133	963,105	182536	459929	642,465	66.7%	0.76
Nimba	523,385	158,788	313,987	472,775	146965	281495	428,460	90.6%	0.90
River Gee	75,659	24,311	60,466	84,777	19674	42316	61,990	73.1%	1.12
Rivercess	81,006	17,258	36,277	53,535	12517	25303	37,820	70.6%	0.66
Sinoe	115,989	25,653	66,577	92,230	23362	54485	77,847	84.4%	0.80
National	**3,938,313**	**1,051,593**	**2,273,483**	**3,325,076**	**793,493**	**1,743,375**	**2,536,868**	**76.3%**	**0.84**

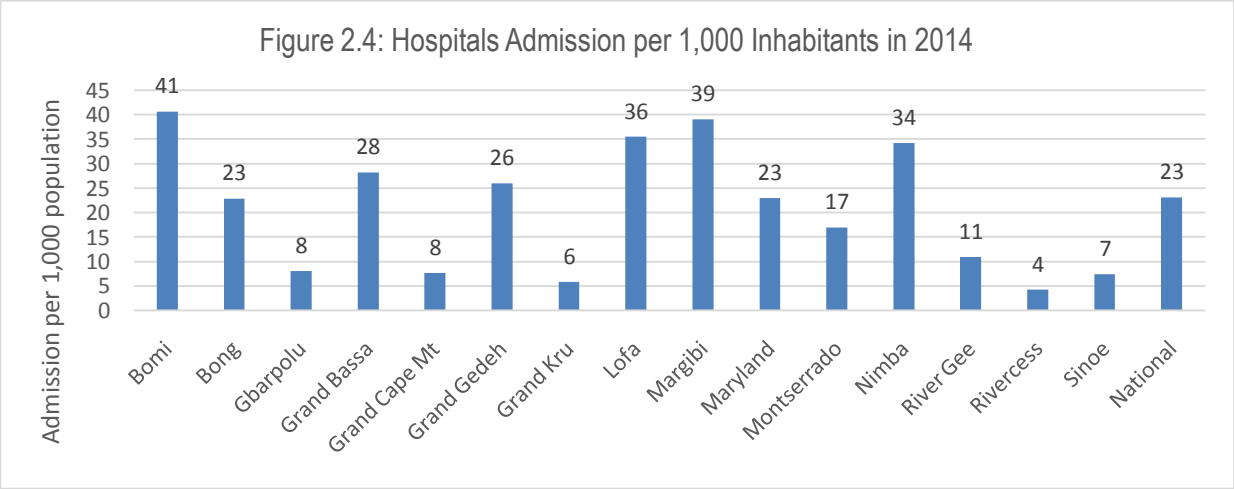
2.1.2.1 Out-Patient Department Consultations

In recent years, patients' visits to health facilities across Liberia for different ailment appear to be increasing. The number of patients'attendance increased from 3,935,901 in 2009 to 5,455,431 in 2013. In2014, attendance at health facilities decreased by 39% from 2013 (5.5 million visits in 2013 to 3.3 visits in 2014). This huge decline is attributed to the EVD geographic spread that obstructed normal service delivery and created fear in patients to seek medical services for illnesses and health workers to attend to patients presenting EVD like symptoms. Curative consultationsalso ballooned from 2,854,920visits in 2009 to 3,304,919 in 2013 but declined by 23.2% in 2014 (2,536,868 visits). Curative consultative visits at health facilities constitute 76% of all attendance visits. Figure 2.3 presents the number of patients' visits to health facilities from 2009 to 2014.



2.1.2.2 In-Patient Department Consultations

Hospitals records from across Liberia documented 91,126patients admission for various medical conditions. One –fourth of the admission occurred in Montserrado, followed by Nimba with 20% of the total admission. However, admission analysis by inhabitant shows that Bomi and Margibi had the highest admission per 1,000 population. The data indicates that for every 1,000 population in Bomi and Margibi, 41 and 39 patients were admitted while in Rivercess only 4 and nationally 23. One –third of the patients were admitted for malaria in 2014. Figure 2.4 depicts inpatients admission per inhabitant by county. Table C in annex A presents in-patient admission by causes and by county.



Hospital admission declined by 36% from 2013 to 2014 (133,910 patients in 2013 and 86,027 in 2014). This dropped in admission is attributed the Ebola Virus Disease outbreak that led to the closure and abandonment of many public health facilities particularly in Montserrado, Grand Cape Mount, Bong and Lofa Counties.

A total of 8,035 in-patients deaths were recorded in hospitals in Liberia. This number is grossly under-stated due to the fact that many persons died in communities because of limited access to health services during the EVD outbreak. Table D in annex A presents admissions and deaths by county in 2014.

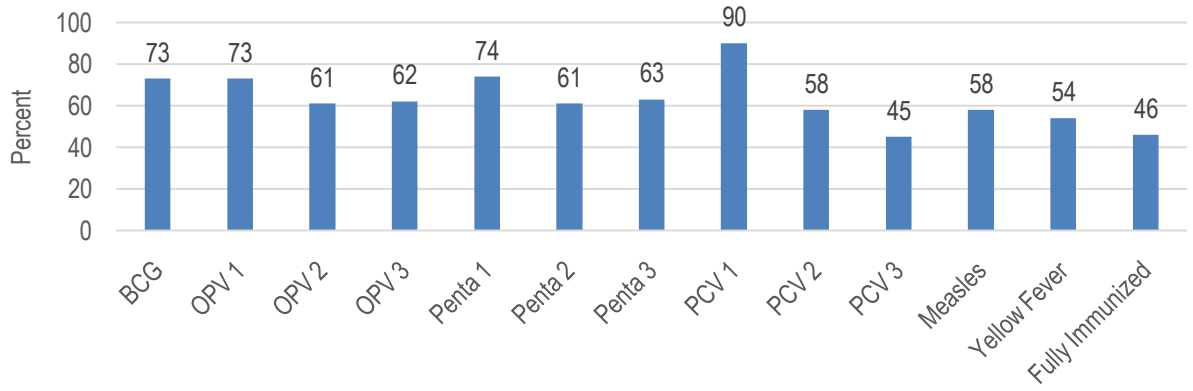
2.1.3 Child Health

The health sector has prioritized cost effective child health interventions at the community and health facility levels to quickenthe achievement of MDG 4- under-five mortality reduction. These child survival activities include immunization, integrated management of neonatal and childhood illnesses (IMNCI), ITNs distribution, Vitamin A supplementation and nutrition. Achievements during the year are presented below.

2.1.3.1 Immunization

Liberia face a herculean task in achieving universal immunization coverage.However, significant improvementsweremade in recent years (2010 - 2013). Liberia introduced pneumococcus conjugate vaccines (PCV) in 2014 in addition to the already five antigens available to children less than one year (BCG, Polio, Pentavalent, Measles and Yellow Fever). In 2015, the Expanded Program on Immunization (EPI) is expected to launch the Human Papolumus and Rubella Vaccines. Antigens administered to children age 0-11 months in 2014 coverage are as follows: BCG (73%), OPV3 (63%), Penta-3 (63%), Measles (58%), Yellow Fever (54%), PCV-3 (45%) and fully immunized (46%). Figure 2.5 presents national immunization coverage by antigens in 2014.

Figure 2.5: Immunization Coverage by Antigen in 2014

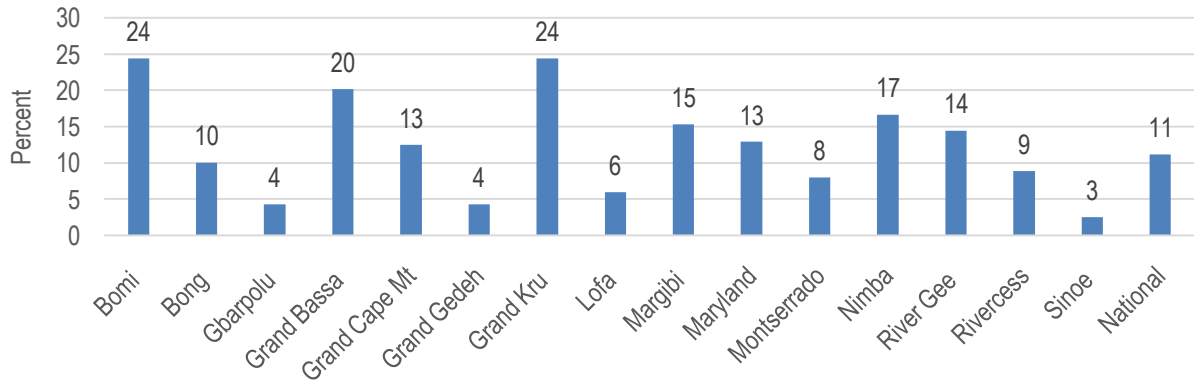


Whilst most counties were determined to vaccinate children during the EVD crisis to avoid the outbreak of childhood diseases such as Measles, Polio and Whooping cough, others counties were petrified. Counties with the lowest immunized coverage were; Rivercess (34%), River Gee (36%) and Grand Gedeh (39%). Overall, 4 out of 10 infants were fully immunized in 2014. This undesirable EPI Services and decline in coverage has increase children under -five vulnerability to vaccine preventable illnesses. Table E in annex A presents immunization coverage by county.

The variance between Penta1 and Penta 3 (dropout rate) is used as a performance indicator for the immunization program. In 2014, counties with the highest dropout rates were Grand Kru (25%), followed

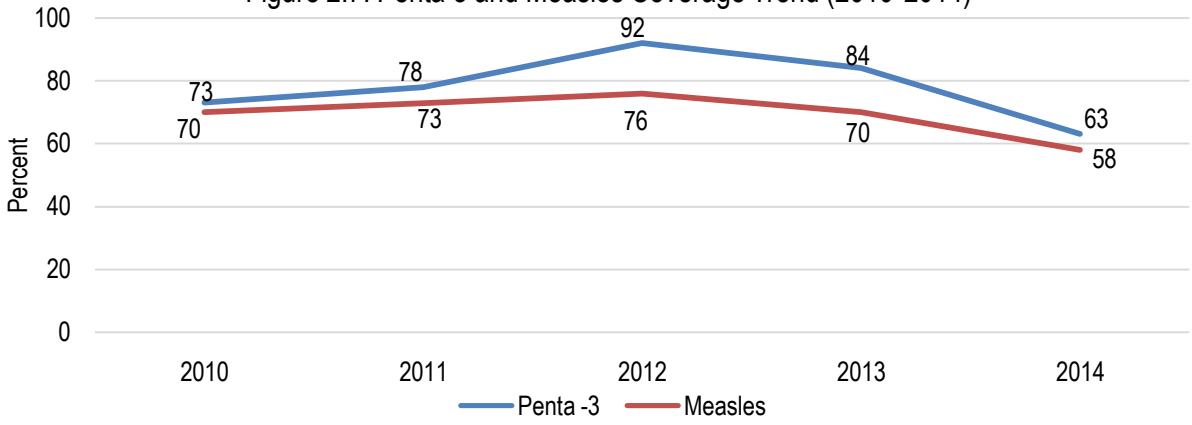
by Bomi (22%), and Nimba (16%). Also, counties with lower dropout rates were Sinoe, Grand Gedeh (4%), Lofa (6%) and Gbarpolu (6%). Figure 2.6 presents pentavalent dropout rates in 2014.

Figure 2.6: Penta Drop Out Rate in 2014



Immunization data analysis shows declining trends since 2012. Pentavalent coverage declined from 92% in 2012 to 84% in 2013 and by 21% in 2014. Additionally, measles coverage dropped by 6% from 2012 to 2013 and by 12% in 2014 from 2013.This major reduction in immunization services was attributed the EVD situation in Liberia. Figure 2.7 shows immunization coverage trends by Penta 3 and Measlessince2010.

Figure 2.7: Penta 3 and Measles Coverage Trend (2010-2014)



2.1.3.2 Integrated Management of Neonatal & Childhood Illness (IMNCI)

In Liberia, high childhood mortality is associated with diseases and health conditions such as malaria, diarrhea, pneumonia, acute respiratory infection and malnutrition. To accelerate the attainment of MDG 4, the Ministry has prioritized the Integrated Management of Neonatal and Childhood Illness (IMNCI) as criticalchild survival interventions. In 2014, Malaria accounted for the highest disease burden among children under-five years old, followed by Acute Respiratory Infection (ARI) and Pneumonia. The proportion of children under-five diagnosed of Malaria is 46%, ARIor Pneumonia accounts for 27% and diarrhea 3.4%. Table F in annex A presents selected under-five diseases by county in 2014.

2.1.3.3 Vitamin A Supplementation

Vitamin A supplement is administered to children under the age of five to reduce diarrhea episodes, shorter and lessen severe attacks of measles, pneumonia and reduce the overall childhood morbidity and mortality. In 2014, 32,369 infants were provided Vitamin A supplements, while44,381 postpartum mothers received Vitamin A. The proportion of infants that received Vitamin A is 21%, while postpartum mothers accounts for 25%. Though the routine Vitamin A supplementation data is reporting very low coverage,Vitamin A supplementationduring integrated immunization campaigns conducted in 2014 for under-5s nationwide was high.Table G in annex A presents Vitamin A supplementation coverage by county.

2.1.3.4 Child Mortality

The 2014 health facilities records show that curative services (diagnosis and treatments) for children under –five years accounts for 31% (793,493) of the 2,536,868 curative consultations during the year. A total of 6,854 under five deaths were reported by health facilities nationwide in 2014. This is a 41% childhood mortality increased from 2013. Malaria accounts for 30%,ARI 10%, anemia 9.7% and injuries 6% of reported under-five deaths in health facilities. Table H in annex A presents under-five mortality by causes and by county in 2014.

Since 1990, the global under-five mortality rate has dropped by 41 percent from 87 deaths per 1,000 in 1990 to 51 in 2011. The 2012 Atlas for MDGs 4 indicates that Liberia is among eight countries that have made significant progress in achieving reduction of under-5 mortality. Liberia attained the fastest rate of annual reduction of under-5 mortality among these eight countries at a rate of 5.4%. In 2014, the Liberia Demographic and Health Survey report released, revealed thatinfant mortality rate decline from 72 deaths per 1,000 live births in 2007 to 54 deaths per 1,000 live births in 2013, while under five mortality decline from 111 deaths per 1,000 live births in 2007 to 94 deaths per 1,000 live births.This has placed Liberia among countries on track of achieving MDG 4. However, the EVD outbreak has derailed progression and has compromised our attainment of this goal.

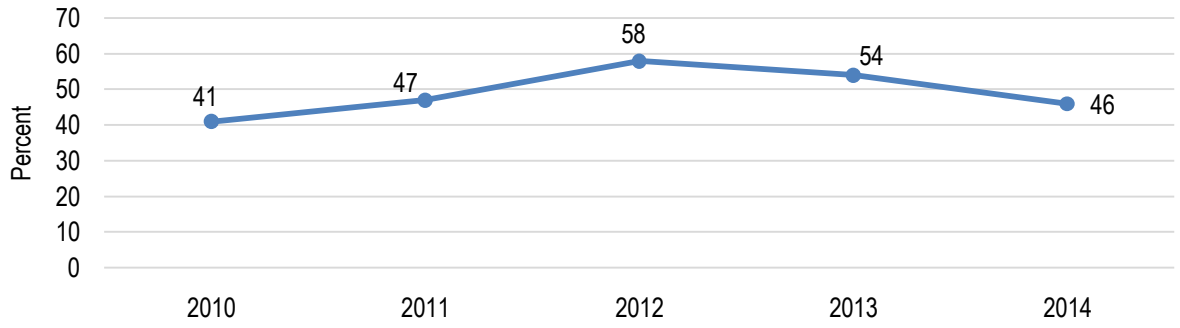
2.1.4 Maternal Health

Improving maternal health (MDG 5) is a staggering task for the Ministry of Health. The health sector has formulated an Essential Package of Health Services (EPHS) with well-defined maternal health interventions at both the community and health facility levels to accelerate attainment of health related MDGs and other development agenda. The EPHS is an assortment of health services that the Ministry is committed to providing in every health facility. Maternal healthinterventions describe in this report include, antenatal care, delivery, postnatal services, IntermittentPreventive Treatment, Family Planning and Tetanus Toxoid immunization services.

2.1.4.1 Antenatal Care

Antenatal services are a cost effective maternal health intervention that is globally encouraged to ensure that pregnant women are assessed periodically and prepared for labor and delivery. ANC coverage[3] data is used to derive the proportion of pregnant women who received care during pregnancy. With an estimated 5% of the general population expected to be pregnant women, the 1st ANC visit that documentsnew pregnancies reported 62% in 2014 and for 4th visit 46%. The current ANC coverage declined by 14% for first visit and 9% for fourth visits from 2013. Figure 2.8 presents ANC 4th visit trend since 2010. There arehugeANC coverage disparities across counties. Four counties (Gbarpolu, Grand Cape Mount, River Gee and Montserrado) recorded 3 out of every 10 pregnant women that received four and more antenatal care in 2014 while another set of counties (Bong, Grand Bassa, Grand Gedeh and Nimba) documented 6 out of 10 pregnant women that received similar antenatal care. Table I in annex A presents ANC visits by county.

Figure 2.8: ANC 4th Visits Trend (2010-2014)

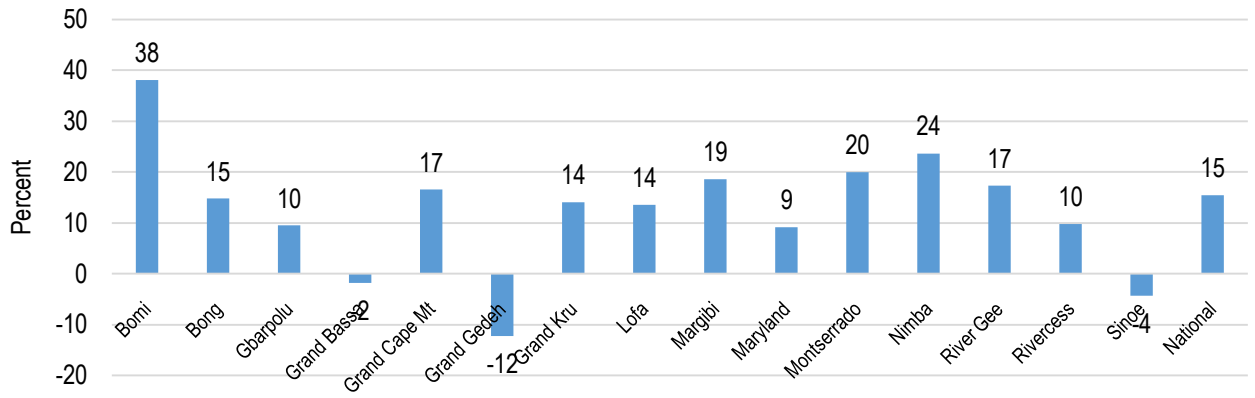


ANC Dropped Out Rate

ANC drop-out rate is determined by the difference between those attending ANC first and 4th visits. In 2014, the national drop-out rate is 15% with variations across counties. Bomi (38%) and Nimba (24%) reported the highest drop-out rates while Maryland (9%), Rivercess (10%) and Gbarpolu(10%) reported lowest ANC drop-out rate in 2014.Three counties (Grand Bassa, Grand Gedeh and Sinoe) had negative drop-out rate which is unusual. This abnormal presentation of ANC stats could be attributed to either huge migration of pregnant women to these counties for many reasons or due to poor data quality.Figure 2.9 presents ANC dropped out rate by county.

[3]ANC coverage is calculated by dividing the number of ANC visit by the expected number of pregnant women in the catchment population

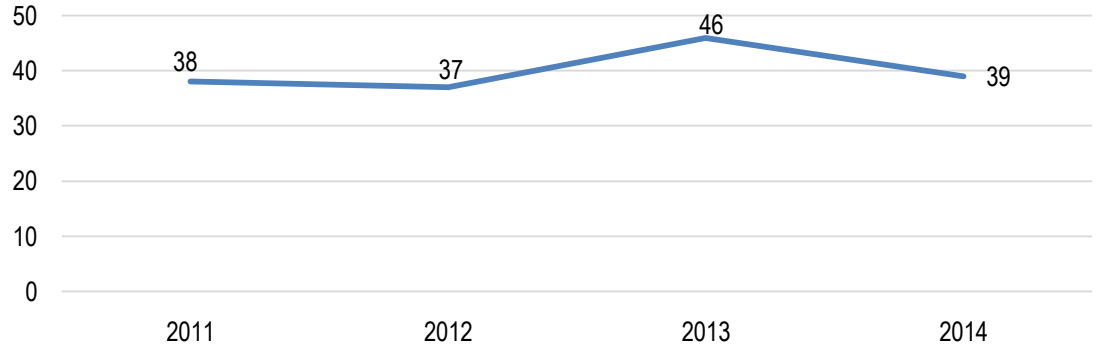
Figure 2.9: ANC Drop-out Rate by County in 2014



2.1.4.2 Delivery

The expected number of deliveries[4] for 2014 was projected to be 174,244. However, only 42% of these deliveries were reported (77,864). Institutional deliveries account for 40% of the expected deliveries while reported home deliveries represent 4% of the expected deliveries. The proportion of deliveries attended by skilled personnel is 39%. Deliveries by skilled birth attendants declined by 7% from 2013 to 2014.The declined in reported and institutional deliveries is attributed partly to the EVD outbreak and largely to the inadequate access to skilled birth attendants across Liberia coupled with the fact that most rural pregnant women prefer being assisted by a tradition midwife than a professional health worker. Table J in annex A presents deliveries by places, by county and by skilled attendance.Comparative analysis of delivery data shows a decline using estimates of either reported or expected deliveries and indicates thatLiberia's progression towards the attainment of MDG 5 is been inhabited by stagnated institutional delivery trends and insufficient access to skilled birth attendants. Figure 2.10 presents deliveries statistics in 2014.

Figure 2.10: Deliveries by Skilled Birth Attendants (2011-2014)



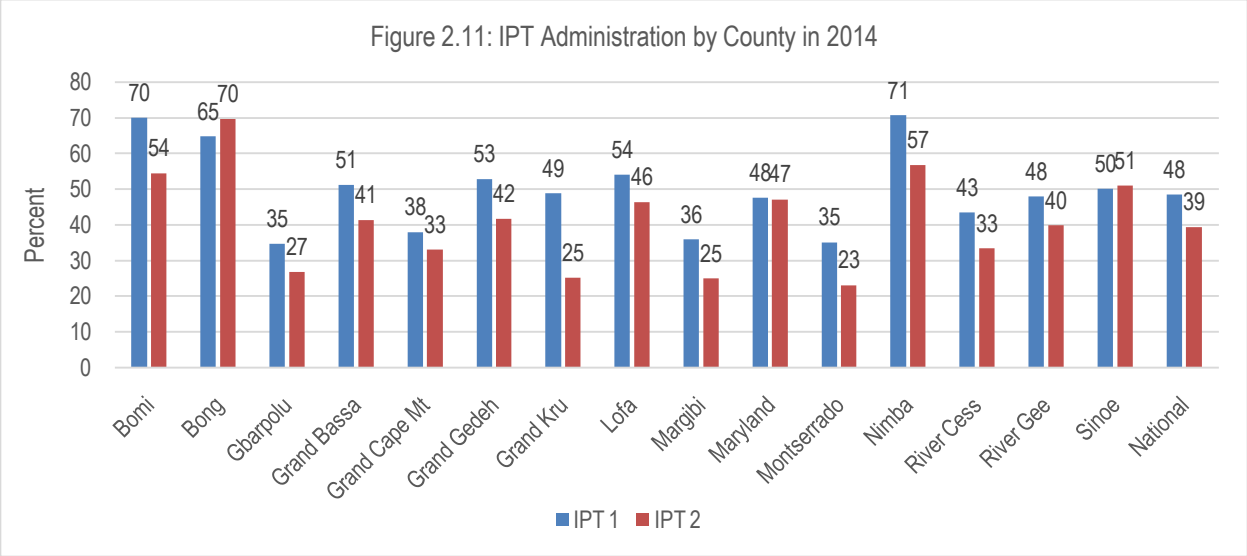
[4] Expected deliveries is derived by estimating 4.5% of the population

2.1.4.3 Postnatal Care

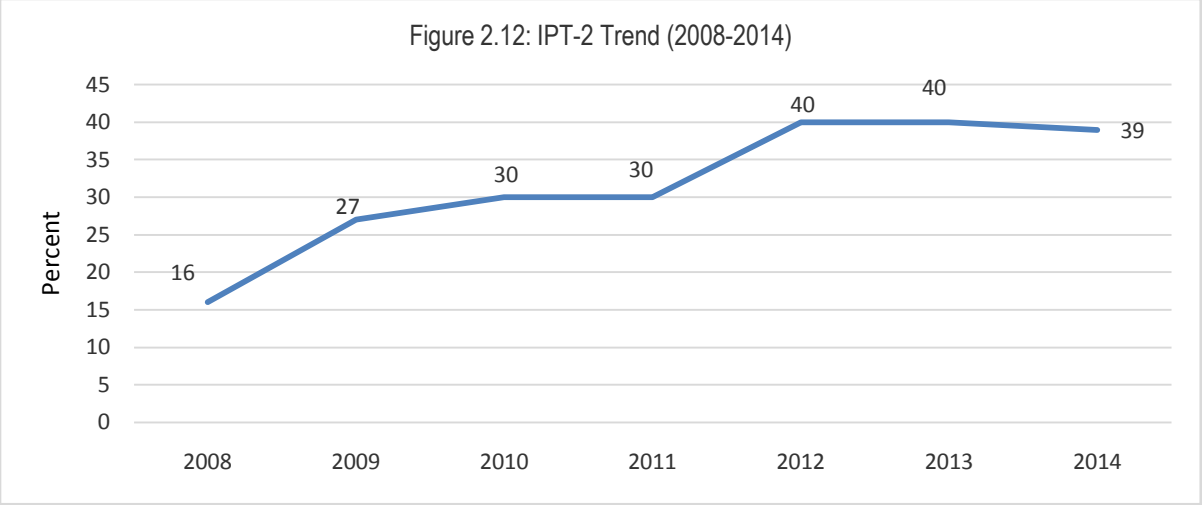
A critical maternal and neonatal health intervention to reduce postpartum hemorrhage and other complications is postnatal care. It is where both the mother and the newborn are assess for complications and provided early preventive treatment. Regardless of where the delivery occurs, newborns and their mothers must attend postnatal care to be examined by trained health worker within 42 days afterdelivery. In 2014, only 28% (48,922) of expected postpartum mothers received postnatal care services. On average, only 3 out of 10 newborn mothers received postnatal care. Table K in annex A shows PNC visits by county. However, postpartum visits reported are not disaggregated by visits (first, second or third) due to lack of additional PNC information.

2.1.4.4 Intermitted Preventive Treatment (IPTp)

The administration of Intermitted Preventive Treatment (IPTp) to pregnant women is an effective strategy endorsed by WHO and Rollback Malaria to reduce severe malaria in pregnancy and the associated complications. Pregnant women are encouraged to take at least two doses of IPTp to prevent severe malaria whilst pregnant. Figure 2.11showsIPTp administration in 2014. Nationally, IPT1 first dose coverage is 48% while IPT2 is estimated to be 39% with variations across counties.



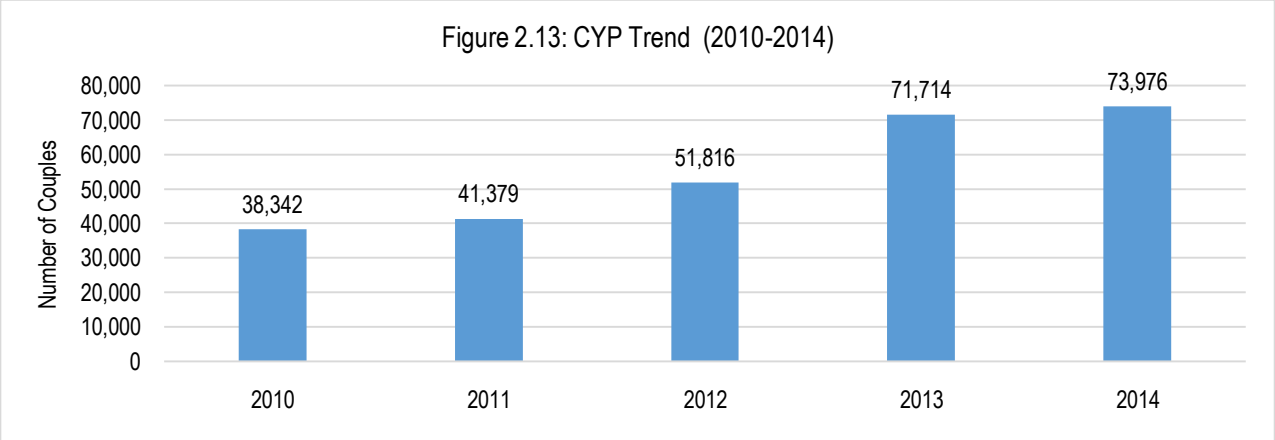
Over the past seven years, Intermitted Preventive Treatment (IPT-2) second dose coverage has been increasing, though still unsatisfactory. Analysis of IPT-2 coverage showsprogressive trend from 2008 to 2013. However, coverage dropped by 1% from 2013 to 2014. Figure 2.12 presents IPT 2 coverage trend since 2008.



2.1.4.5 Family Planning

Contraceptive prevalence rate is gradually increasing in Liberia. It has increased by 8% over a six years period, from 11% in 2007 to 19% in 2013 (LDHS). However, unmet need (36%) for family planning services is still high and the inequity in access between rural and urban residents is unacceptable. Increased access to family planning services is an important component of fertility control, and the reduction of maternal and infant mortality. In 2014, 298,172women of reproductive age (15-49 years) were provided family planning services, excluding those that opted for condoms. Oral pills and injectables (Depo) were widely accepted. IUCD and implant were barely used by femalespartly due to limited service provision as well as inadequate access to information. Only 581 women opted for IUCD and 10,633 accepted implants. However, implant users double over the past two years (2013& 2014). Table Lin annex Ashows family planning commodities issued by type and by county in 2014.

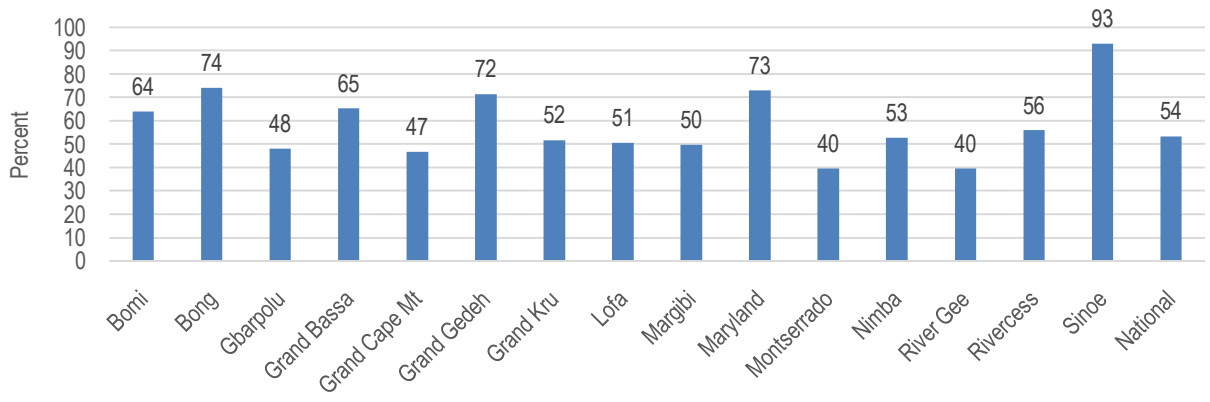
There has been a gradual increase in family planning uptake since 2010. Couples years of protection (CYP) continue to increase with a number of new users. The number of couples that were protected from being pregnant in 2014is 73,976. Figure 2.13 presents trend in couples' years of protection.Table M in annex A presents couples years of protection by county in 2014.



2.1.4.6 Tetanus Toxoid (TT)

Tetanus Toxoid (TT) vaccines are administered to pregnant and non-pregnant women of childbearing age (15–49 yrs) to protect their unborn children from neonatal tetanus. In Liberia, TT vaccines are administered through routine immunization services. In 2014, 322,221doses of TTvaccines were administered to women of reproductive age, with pregnant women being the most beneficiaries (61%). However, 54% of pregnant women received TT2 doses. Figure 2.14 shows TT -2 and more coverage by county.Table L in annex A provides details on TT administration by County.

Figure 2.14: Proportion of Pregnant Women that Received TT2 Vaccines in 2014



2.1.4.7 Maternal Mortality

Liberia is among countries with dire maternal mortality rates at 1,072[5] deaths per 100,000 live births. To ensure that this undesired rate tumbles, the health sector has elaborated maternal and newborn mortality reduction road map with cost effective interventions. Factors affecting maternal health include, limited access to basic emergency obstetric services, low utilization of family planning services, low coverage of antenatal and postnatal services, insufficient number of skilled birth attendants, delays in referrals, and weak referral systems. Despite the under-reporting of maternal deaths by health facilities for fear of been investigated, criticized and punished and the lack of verbal autopsy, maternal deaths remains very high. Maternal deaths recorded for 2014 indicate that for every 1,000 live births there were 2 maternal deaths. Counties that reported high maternal deaths were Gbarpolu (12 deaths per 1,000 live births) and Maryland (5 deaths per 1,000 live births). It is worth noting that maternal deaths recorded(149) excludethose that occurred in communities. The majority of maternal deaths in Liberia are due to postpartum hemorrhage, obstructed or prolonged labor, complications from unsafe abortions, eclampsia, malaria and anemia. Table Nin annex Ashows the distribution of maternal deaths by county.

[5] Liberia Demographic and Health Survey, 2013

2.1.5 Morbidity and Mortality

This section of the report discusses three major diseases (Malaria, Tuberculosis and HIV/AIDS) that have generated both national and international interest and are very relevant to Liberia's MDGs accomplishments. These priority diseases account for a significant proportion of Liberia's disease burden, mortality and are of major public health concern. However, other communicable and non-communicable diseases are equally of public health relevance and have been provided due attention.

2.1.5.1 Malaria

Liberia has made efforts towards reducing the untold sufferingand burden associated with malaria. However, it remains a major public health problem in Liberia, taking the greatest toll on young children and pregnant women. To address the malaria burden, the MOHSW introduced a policy and strategic plan for malaria control and prevention. Measures institutedare attempts to fulfill the Roll Back Malaria (RBM) objective for reducing malaria morbidity and mortality.

In 2014, malaria accounts for 41% of curative consultations (2,536,868) across Liberia. The number of children under-5 diagnosed ofmalaria represents40% of all malaria cases. Approximately, 83% of all diagnosed malaria cases were treated with ACT. It is worth noting that either Rapid Diagnostic Test (RDT) or microscopy confirms these malaria cases. Table O in annex A presents malaria cases (diagnosed and treated) by county.

The overarching goal of the National Malaria Strategic Plan for 2010-2015 is to reach Millennium Development Goal 6: to have halted by 2015 and begun to reverse the incidence of malaria and other major diseases. Liberia has adopted four major strategies to control malaria in the country. The first strategy is to improve treatment by scaling up the availability, accessibility and use of artemisinin-based combination therapy (ACT), the first-line treatment for malaria. The second strategy is an Integrated Vector Management (IVM) approach, and the third strategy addresses malaria in pregnancy. The fourth approach to malaria prevention is to increase support for advocacy, health education, and behavior change.

In fulfillment of these strategies, the MOHSW with support and collaboration from partners have made substantial gains. First, treatment with ACT has improved from 66% in 2011 to 83% in 2014. Second, mosquito net ownership increased from 18% in 2005 to 50% in 2012 and 58% in 2013 (2013 LDHS). Third, IPTp administration increased from 16% in 2008 to 49% in 2014(HMIS). Fourth, the use of mosquito net increased from 6% in 2005 to 32% in 2011 and 40% in 2013 (LDHS 2013). Also, the prevalence of malaria in children under the age of five reduced from 66% in 2005 to 49% in 2012.

2.1.5.2 Tuberculosis

Liberia is amongst countries with the highest prevalence and burden of tuberculosis in sub–Saharan Africa. Though few cases of TB were detected between 2005 and 2007, an increase in notification was observed from 2008 to 2014. This huge notification was largely due to the expansion of the program through funding from the Global Fund. The estimated number of all forms of TB cases in 2014 was expected to be 10,712

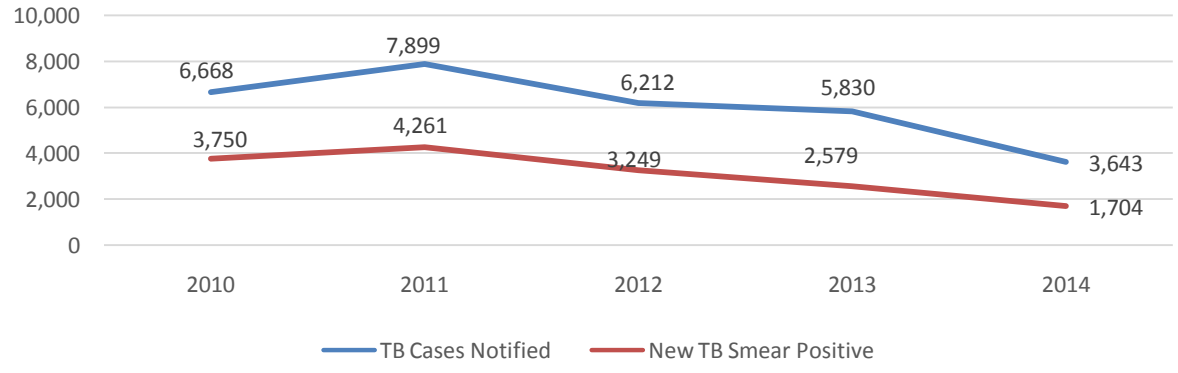
while the smear positive cases were projected to be 4,647. However, the actual cases of all forms of TB notified were 3,206, which is 34% of the expected cases. The reported number of new smear positive cases detected during the year was 1,422,which is 37% of the projected smear positive cases. Table 2.1 provides information on the expected and confirmed TB cases from 2007-2014.

Table 2.2: TB Cases Estimated and Reported from 2007 – 2014

Classification	Years							
	2007	2008	2009	2010	2011	2012	2013	2014
Estimated Population	3,419,317	3,476,608	3,549,617	3,624,159	3,700,266	3,777,972	3,857,309	3,938,313
Estimated TB Cases of All Forms	9,301	9,447	9,655	9,858	10,065	10,276	10,492	10,712
Estimated Smear Positive TB Cases	4,035	4,111	4,189	4,277	4,366	4,458	4,552	4,647
TB Cases Notified (***New Smear Positive***)	2,850	3,042	3,796	3,750	4,261	3,249	2,579	1,422
TB Cases Notified (***All Forms of TB***)	4,535	5,007	5,964	6,668	7,899	6,212	5,830	3,206
Case Detection Rate (***New Smear +ve***)	70%	74%	91%	88%	98%	77%	57%	37%
Case Detection Rate (***TB Cases of All Forms***)	49%	53%	62%	68%	78%	60%	56%	34%

TB notification trend over the years have shown uneven pattern. Cases increased from 6,668 in 2010 to 7,899 in 2011 and decline to 3,643 cases in 2014.On the other hand,TB smear positive cases detected in 2014decreased by 875[6] over theone-year period. Thisdropped in TB positive case detection could be attributed to the low level of public awareness and education on TB and access to services.Figure 2.15 presents TB notification by years.

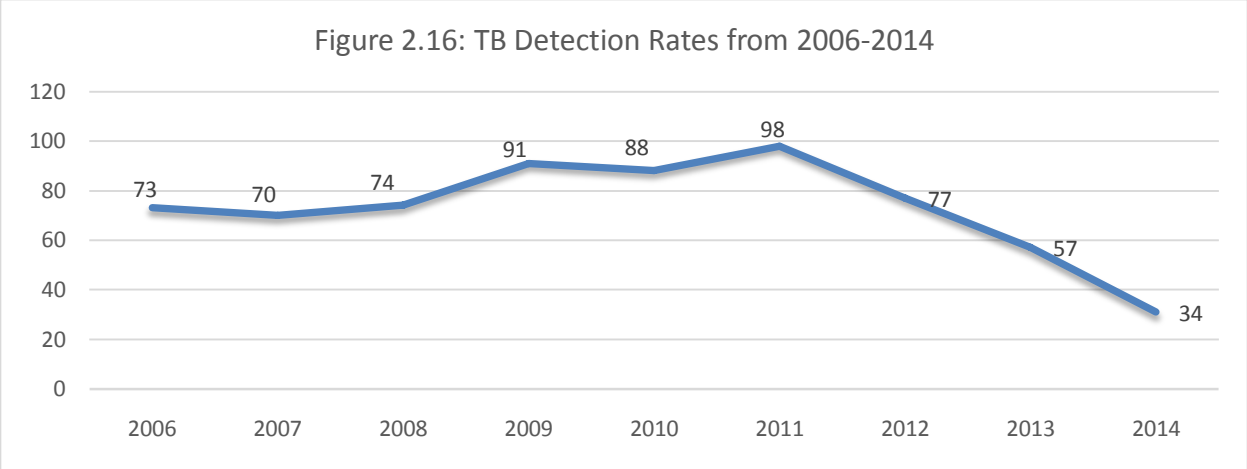
Figure 2.15: TB Cases Notified and New TB Smear Positive



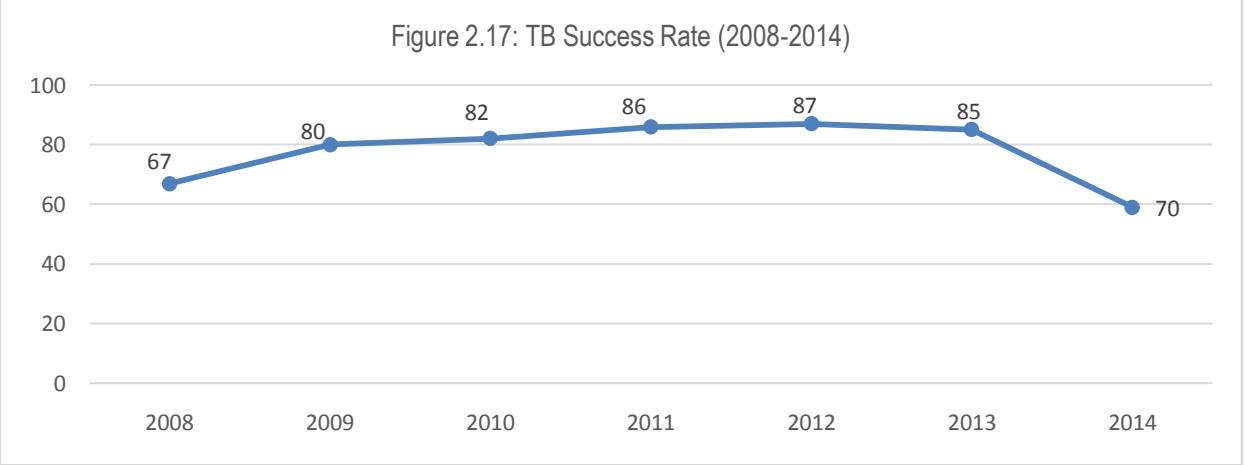
TB positive case detectionrate declinedfrom 98 cases per 100,000 inhabitants in 2011 to 77 in 2012 and further decline by 20 casesper 100,000 inhabitants in 2013. The current new smear positive detection rate

[6] TB 2014 data (# of Notified TB Cases, success rate, etc) is based on only 3 quarters report (Jan-Sept.)

is 34[7]cases per 100,000 inhabitants. This current figure is far below the WHO recommended target of 70 new cases per 100,000 inhabitants. Therefore, all efforts must be mustered to meet and sustain the recommended target by expanding services and by creating greater access. Figure 2.16 presents TB detection rates from 2006-2014.



Treatment Success Rate: TB treatment success rate (total number of patients who completed TB treatment and were declared cured) has mesa over the past five years. There has been no significant change, since 2009. However, TB successful rate declined by 15% from 2013 to 2014. Figure 2.17 shows TB treatment success rates since 2008.



Treatment Outcome: Cured, completion, defaulters, deaths and treatment failure rates reported from 2008 to 2014 indicate that the program has made gains in maintaining low death, and failure rates. On the other hand, TB cured rates continue to fluctuate with an increase of 3% from 2012 to 2013, and a decrease of

[7] TB 2014 success rate is based on 3 quarters reports (January to September 2013) because of their reporting cycle and the Government's mandate to submit report to the Parliament before the 4th week of January.

7% from 2013 to 2014. The number of patients that defaulted treatment reduced from 13% in 2008 to 5% in 2013 and further increased by 10% from 2013 to 2014.Death rates continuous to show a stable pattern since 2011, however, it increased by 3% from 2013 to 2014. The program targets for defaulter and death rates are less than 5%, and 4% for failure respectively. The program did not achieve its targets for defaulter rate (5%) and failure rate (4%) in 2014.The program needs to assess the situation that led to failure in 2014 that are not EVD crisis related and plan for improvement in 2015 and beyond. Table 2.3 presents TB treatment outcome from 2008 to 2014.

Table 2.3: TB Treatment Outcome

Outcome	Years						
	2008	2009	2010	2011	2012	2013	2014
Cured Rate	56	65	57	64	57	60	53
Completion Rate	11	18	25	22	30	25	17
Defaulter Rate	13	10	9	6	4	5	15
Death Rate	5	4	5	4	4	3	6
Failure Rate	1	2	1	1	1	2	1

2.1.5.3 HIV/AIDS

Liberia has a generalized epidemic with a national prevalence rate of 1.9%. As the country accelerates efforts towards attainment of the Millennium Development Goals (MDGs), active surveillance must be guaranteed. HIV and AIDS remains one of the leading causes of death among women and children and the second leading cause of mortality among young people. Despite being a post conflict country with many challenges, Liberia has significantly reduced the HIV prevalence among pregnant women from 5.7% in 2006 to 2.5% in 2013 and has initiated strategies to reduce the chances of mother to child transmission (MTCT) of the disease.

HIV Counseling and Testing: HIV counseling and testing services remains a key component of prevention and treatment. Voluntary and providers' initiative counseling and testing remains vital program strategies to scale up counseling and testing services. During the year under review, there was a huge declined in HIV counseling and testing services. This was due to EVD outbreak.

A total of 106,108 persons were tested in all fifteen counties during the period and 99.8% of them received their results compared to 98% in the previous (2013) year. This is a significant improvement because most people tested are now receiving their results. In the past, huge portion of people tested for HIV were not going through post-test counseling. There was a reduction in the rate of positivity from 3.7% in 2013 to 2.7% in 2014. Maryland, Montserrado, and Grand Gedeh counties recorded the highest positive rate of 5.5%, 4.6% and 3.8% respectively while Gbarpolu recorded the lowest 1.8%. Nimba and Grand Kru counties both recorded the lowest testing opt in rate of 93.5% while River Gee recorded a 100% testing opt in rate. Table 2.4 presents HIV counseling and testing since 2011.

Table 2.4: HIV Counseling and Testing Services (2011-2014)								
Indicator(s)	**2011**		**2012**		**2013**		**2014**	
Number and percent of women and men who received a pre-test counseling for HIV	131,392	6.8%	220,331	11.0%	113,553	5.7%	110,240	5.2%
Number and percent of women and men who received HIV test	115,840	6.0%	208,070	10.4%	110,137	5.5%	106,108	5%
Number and percent of women and men who received an HIV test who know their results	112,983	5.8%	205,506	10%	109,384	5.5%	105,872	5%
Number of sites providing HIV counseling and testing services	230		366		368		368	

Prevention of Mother to Child Transmission (PMTCT): The prevention of mother to child transmission is fundamental to ensuring the reduction in the incidence of HIV. With PMTCT being one of the core indicators of the Ministry of Health, NACP is gradually ensuring that the service is provided by all public health facilities carrying out ANC in the Country. At present there is at least one PMTCT center in every county in Liberia, and sites have been increased from 335 in 2012 to 336 in 2014.

During the period under review, 71,992 pregnant women were tested for HIV with 99.9% (71,919) receiving their results. Out of those tested for HIV, a total of 894 (1.2%) were positives. Montserrado County recorded the highest rate of positive (2.2%) while Rivercess recorded the lowest (0.6%).

A total of 748 pregnant women were recorded to have received ARVs (2 or 3 ARVs combined) or ART during the year. Sixty-one percent (61%) of these women received ARVs during pregnancy while 31% received ARVs during delivery for the first time. Meanwhile, 8% of all pregnant women treated were eligible and received ART either before or during the pregnancy. Table 2.5 presents PMTCT Services provided from 2011 to 2014.

Table 2.5: PMTCT Services Provided Since 2011								
Indicator(s)	**2011**		**2012**		**2013**		**2014**	
Number and percentage of pregnant women who were tested for HIV and who know their results	67,217	36%	123,343	65%	65,058	34%	71,992	99%
Number and percent of HIV positive pregnant women who received antiretroviral treatment to reduce the risk of mother to child transmission	809	48%	866	57%	641	42%	748	61%
Number and percent of infants born to HIV-infected women receiving a virological test for HIV	444	96%	598	99%	336	56%	237	23%
Number of sites providing PMTCT services	230		335		336		336	

HIV & AIDS Care, Treatment and Support Services (ART): People living with HIV and AIDS can live healthy and productive lives when they have access to information, treatment, care and support. Support means acceptance, affection, respect and love from friends and family and from the community. Care includes moral support and access to necessary medical treatments, a healthy diet, clean water and accommodation.

HIV care, treatment and support services are paramount in the implementation of services. The aim of HIV and AIDS care and support is to improve the quality of life of people living with the condition, their families and communities. With substantial financing from the Global Fund to Fight AIDS, Tuberculosis and Malaria, and other bilateral, multilateral and domestic sources, there has been a rapid expansion of HIV services in Liberia. Up to date, 52 functional ART sites are providing care and treatment services in all 15 counties.

The cumulative number of adults and children with advanced HIV infection currently receiving antiretroviral combination therapy at the end of 2014 is 6,910. Female > 14 years constitutes 66% (4,566) of the total number of people on ART whereas children (0 – 14yrs) account for 5.9% (406). At the time of this report, 1.7% (120) of patients taking ART were pregnant.

A total of 10,280 patients are currently enrolled into HIV care and treatment, receiving cotrimoxazole Preventive Therapy as treatment for Opportunistic Infections. Higher percentage (13.4%) of children are enrolled into care compare to those initiated on ART. With the implementation of the new WHO recommendations of initiating ART, a greater proportion of people tested HIV positive will start early ART.

The challenges of convincing HIV positive clients to move into care and treatment is enormous such that the National program and other stakeholders are still thinking about new strategies that will encourage people tested positive to enroll into care. Getting clients in care to take co-trim is similarly difficult as enrolling positive clients on ART. Table 2.6 presents ART services from 2011 to 2014.

Table 2.6: ART Services Provided Since 2011

Indicator(s)	2011		2012		2013		2014	
Number and percent of eligible adults and children with advance HIV infection receiving ART	5,269	35.2%	5,478	31%	6,429	36%	6,910	41%
Number and percent of eligible children with advance HIV infection receiving ART	570	13%	474	12%	346	9%	406	5.9%
Number of sites providing HIV Care and Treatment services	36		44		46		52	

2.2 Bureau of Preventive Services

The Bureau plans and coordinates activities related to the prevention and control of diseases of public health concern, including communicable and non-communicable diseases, as well as mental health. It coordinates the MOHSW response to health emergencies, facilitate monitoring activities for control of emergencies and disease outbreaks. The below sections describe activities and achievements within the Bureau of Preventive Services during 2014.

2.2.1 Family Health Division

The Division of Family Health is responsible for setting standards and guidelines, developing policy, planning, coordinating and monitoring of activities related to: reproductive health, child survival, adolescent and women's health programs in the country. The Division also oversees the development of strategies designed to promote and strengthen family-centered primary health care initiatives at the community and

facility levels. The division has Reproductive Health, Child and Adolescent Health as sub units. Below are key accomplishments of the Division:

- Trained 40 trainers of trainers and 88 skilled birth attendants at all public health facilities in Margibi and Grand Bassa on PPH prevention, sepsis management and the use of partograph in monitoring progress of labor.
- Trained 48 health professionals (Maryland -27 and Grand Gedeh-21 Counties) in Home based maternal and newborn care
- Conducted IMNCI pilot training in Bong County for health workers
- Trained 96 service providers in family planning methods including counselling
- Conducted blood drives in Montserrado and Bong Counties andreceived 83 units of safe blood.
- 20 units of safe blood were donated to JFK Maternity,20 units to JDJ, 30 units to Redemption Hospital, and 13 units were kept in the regional blood bank for emergencies.
- 24 units of blood were collected from Bong County and donated to Phebe Hospital.
- Revised the Maternal and Newborn Health, Prevention of Mother To -Child Transmission protocols to accommodate option B+ to support zero new infection goal and eliminate of HIV among those born to HIV positive mothers
- Finalized the Essential Newborn Action Plans Guidelines
- Developed Maternal Newborn Death Surveillance Reporting guidelines, Handbook on caring for the Newborn and Children under five, ASRH health workers training manual.
- Printed and disseminated the SOP and training manual for one stop center service provision and Community family planning manual.
- Provided mobile and desk phones to 8 health facilities in Montserradoto report MNH services
- Recruited, screened, and surgically repaired 59 fistula victims; 32 were completely dry after surgery
- Economically empowered and reintegrated 10 survivors into their communities, while 24 await the completion of their training cycle program
- Successfully hosted a retreat for 75 fistula patients & survivors to share their experiences
- 5,000 community members in Bomi, Grand Bassa, Margibi&Montserrado Counties were reached through advocacy meetings & sensitization for fistula prevention and identification
- 19 pregnant women benefited from the ongoing revolving fund loan scheme in Owensgrove District (1 ectopic pregnancy, 3 HIV due to lack of PMTCT test kits, 2 retained placenta, 4 inadequate pelvic, 1 abortion, 5 prolonged labor, 1 bleeding in pregnancy, 1 severe anemia, and 1 malaria in pregnancy). 18 of the beneficiaries had safe health facility deliveries and are doing well in their various communities including the one for abortion.
- 20 fistula survivors trained as advocates for fistula prevention sensitization, and identification of new cases during & after Ebola epidemic
- Conducted supportive supervision/mentoring to actively promote systematic bladder catheterization following prolonged obstructed labour in 8 hospitals
- Upgraded 3 health facilities to provide one stop service for GBV survivors in Grand Gedeh, Margibi and River Gee thereby bringing the total # of OSCs nationwide to 10

- Trained 120 health workers in Clinical Management of Rape (CP Target 2014 - 45) and hosted a three days Coordination and refresher session for 50 service providers in the one stop centers to review and harmonize service provision and reporting
- Worked with partners to finalize, print and disseminate the SOP and training manual for one stop center service provision
- Strengthened data collection by ensuring that the Medical Examiners in the OSCs are computer literate and provided Computers for examiners to ensure that both electronic and manual data systems are maintained.
- Increased awareness at community level and quality of service provision has resulted into increase SGBV case presentation and reporting at One Stop Centers. (CP Target 2014 - 150) achieved 1162.
- Trained all service providers at the 10 existing One Stop Centers in Infection Control and adequate use and disposal of the PPEs.
- Provided Infection Control Materials and PPES for health workers at the One Stop Centers
- Procured and distributed rape kits to all One Stop Centers and referral hospital in the country

2.2.2 Nutrition Division

The Nutrition Division is the central level coordinating office for nutrition services and support. The Division promotes cooperation among partners working in the field of nutrition, and regulates all nutrition activities in the health sector. It also has numerous partners under the umbrella of the National Nutrition Coordinating Committee that is comprised of the government ministries, NGOs and other development partners. Major activities and achievements of the Division are as follows:

- Conducted Vitamin A and De-worming exercise during the African Vaccination Week (AVW, 2014)
- Trained 901 health workers to provide nutrition care services in 17 Inpatient Facility (IPF) and 93 Out Patient Program (OPP) sites in 15 counties. Of those trained, 2% are doctors, 42% are registered nurses and 56% other health professionals (e.g., CMs, PAs, etc).
- Developed ENA implementations plan and masters trainers trained from both central and county levels.
- Trained 736 health workers and 951 community volunteers from 235 facilities in 5 counties (Bomi, Nimba, Maryland Grand Gedeh and River Gee) in nutrition counseling and active case finding at the community level
- Developed and translated Nutrition messages into local dialects (Gio, Grebo, Krahn, Kru, Gola, and Mano) and aired on 15 radio stations across the country.

2.2.3 Expanded Program on Immunization (EPI)

The Expanded Program on Immunization (EPI) Division is responsible for all vaccinations in the country. The division with support from partners continues to improve the immunization status of children as evidenced by zero case of Wild Polio Virus (WPV) and the reduction in the outbreak of measles cases according to the HMIS and AFRO Polio monthly updates. The EPI's objective is to reduce morbidity and mortality due to vaccine preventable diseases among children from birth to five years.

This section presents the system and support components of Immunization and strategies in the context of the Reaching Every District (RED) and other pioneering child survival strategies. Activities implemented during the period include but not limited to the following: routine immunization (RI), synchronized immunization activities, surveillance, vaccines quality, safety and supplies and program management.

Routine Immunization (RI)

Routine Immunization services are provided in 517 health facilities within the country through multiple strategies (fixed, outreach, mobile). Unfortunately, an average of 340 (66%) health facilities reported on immunization services due to the EVD situation that led to drastic decline in immunization coverage. This decline in service provision halted the attaining of the program's target of at least 85-90% coverage for penta-3 and 75-80% coverage for measles respectively.

Supplemental Immunization Activities (SIAs) and Supply Chain

The cold chain system is regarded as the heartbeat system of any immunization programme. A total of 1,228,900 doses of vaccines were procured and delivered in 2014 for RI and 1.1million doses of OPV for planned SIAs for the year. The table below is a summary the bundle vaccines issued for the period January – October 2014.

County	BCG	Penta.	PCV 13	Measles	OPV	TT	YF
Liberia	325,046	308,500	325,046	313,690	443,740	387,950	192,300

Logistics and materials procured in 2014 for SIAs are as follow:

- 15 generators were procured by UNICEF and installed in 11 of the 15 counties (*pending construction of Regional Stores for installation in Bong and Grand Gedeh*) in collaboration with Central EPI /CHTs.
- Procured 2 vehicles from GAVI HSS to support central EPI activities (coordination, supervision and distribution of EPI supplies spare parts).
- 15 vehicles procured from GAVI HSS Grant through UNICEF and distributed to all counties for integrated immunization activities.
- Assorted IPC materials procured by UNICEF to be distributed to vaccinators for maximum protection and confidence building in the restoration of intensive immunization services nationwide.

Surveillance of Vaccine Preventable Diseases (VPDs)

As part of efforts to monitor, control, eliminate and ultimately eradicate some Vaccine Preventable Disease, (VPDs), surveillance unit became an essential component of Expanded Program on immunization in Liberia Health System. Since then diseases were ranked based on priority and placed under active surveillance at all levels. Some of the diseases include but limited to the following:

- ✓ Poliomyelitis;
- ✓ Measles;
- ✓ Yellow Fever;
- ✓ Neonatal Tetanus; etc

AFP Surveillance

The national non-polio AFP rate at the national level is 1. 3. Seven (7) counties (Gbarpolu, Grand Cape Mount, Bomi, Rivercess, Sinoe, River Gee and Grand Kru) reported an AFP rate more than 2, another seven counties (Bong, Nimba, Grand Gedeh, Montserrado, Margibi, Grand Bassa and Maryland) reported a non- Polio AFP rate less than 1 and only Lofa County was silent for the year.

Regarding AFP cases with stools within 14 days of onset, this indicator was achieved 100% in Liberia. Fourteen counties achieved this indicator with the exception of Lofa that was silent.

The indicator for Non- Polio Entero Virus was not monitored because, some specimen are in country pending shipment to the inter lab for analysis due to band place on all specimen transportation out of Liberia as a result of the Ebola outbreak.

In 2014 there were twenty (22) reported cases of Measles with CFR 0% from Grand Cape Mount (3), Lofa (10), Grand Bassa (1), Bomi (1) and Nimba (2) while two results are pending. The non-Measles febrile illness rate is 0.5 at national level. Three (3) counties (Grand Cape mount, Grand Gedeh and Lofa) reported Non Measles febrile illness rate of > 2, three (3) counties (Bomi, Grand Bassa and Nimba) reported Measles febrile illness rate < 2 and nine (9) counties (Bong, Gbarpolu, Margibi, Montserrado, Grand Kru, River Gee, Maryland, Rivercess, and Sinoe) were silent.

Laboratory results received from Institute Pasteur in Abidjan confirmed ten of the samples negative for both Measles and Rubella IgM, while the other ten samples were considered and tested as Ebola samples due to the outbreak in Liberia.

Yellow Fever: there were four (4) reported cases of suspected Yellow Fever, one each from Grand Cape mount, Grand Gedeh, Lofa and Nimba Counties. The case from Nimba was confirmed positive with the CFR of 25% at national level.

Neonatal Tetanus: There were two (2) reported cases of Neonatal Tetanus, one each from Bong and Grand Bassa counties with CFR 0%.

National Polio Certification Committee Activity: The committee held one internal meeting on March 4, 2014 and one external Orientation Meeting from 9th – 11thJuly, 2014 at Ouagadougou, Burkina Faso.

Administration: During the period under review, EPI received a total of one million seven hundred ninety nine thousand nine hundred twelve dollars eighty nine cents **($ 1, 799,912.89**) as budgetary support toward the implementation of agreed activities within the annual work plan and budget (AWPB). The below table gives detailed summary breakdown of all funds received during the period under review:

EPI Financial Summary, 2014							
#	Activities	GAVI	UNICEF	WHO	Others	Expenditures	Balances
1	Cold Chain		14,740			14,740	
2	GAVI Support to Operation	1,105,193.89				170,540	934,653.89
3	African Vaccine Week			40,327			40,327
4	Urban Immunization (2nd quarter support)		15,600			15,600	
5	Salary and Incentive for EPI Staff		18,000			15,000	3,000
6	Support to 3rd & 4th Quarters Urban Immunization Strategies		31,200				31,200
7	Support for Routine Immunization (RI) in Counties for 3 months		111,030			103898.64	7,131.36
8	Money to be use to replace EPI Vehicle that got damaged due to accident				28,629		28,629
9	Cost and financing of HPV Vaccine Introduction or campaign	198,468					198,468
10	Cost and financing of inactivated Polio Vaccine Introduction campaign	124,968					124,968
11	2014 African Vaccination Week support transferred in Health Promotion Account/MOH		111,757			111,757	
	Partners Support in 2014	1,428,629.89	302,327	40,327	28,629	431,535.64	1,368,377.25
	Total Fund Received in 2014	**1,799,912.89**				**431,535.64**	**1,368,377.25**

In addition, 15 vehicles (new GAVI HSS Grant) and 30 motorcycles (WHO) were procured to support active integrated immunization activities (RED/REP) in all counties and 2 vehicles (old GAVI HSS Grant) for coordination of central EPI activities.

As a result of the Ebola outbreak in the country, the implementation of the below listed activities in 2014 were deferred to 2015:

1. 2 rounds of Polio and 1 Integrated Measles SIA
2. Construction of regional cold stores in Bong and Grand Gedeh
3. Introduction of new vaccines (IPV, HPV & Rota)
4. Effective Vaccine Management Assessment (EVM)
5. Review and update the Comprehensive Multi-year Plan (cMYP)
6. SARA

Others Activities

- Equity and coverage improvement – Three rounds of Periodic Intensification of Routine Immunization activities has been planned for December 2014, and January and February 2015 depending on the EVD situation;
- Mid-term review of Comprehensive Multi-Year Plan, cMYP – Revision of cMYP has been postponed to early first quarter of next year (2015);
- Polio & Integrated Measles Campaigns – Three rounds of Polio campaigns and one round of integrated Measles campaign have been rescheduled for next year; and
- Construction of regional cold stores in Bong and Grand Gedeh counties – construction process is expected to start early January 2015 due to EVD outbreak

2.2.4 National Health Promotion

The National Health Promotion Division is an integral part of the MOHSW within the bureau of preventive services. The core functions of the Division are; to create public awareness, facilitate community involvement and participation, promote activities that foster and maintain healthy behavior and advocate for an environment that enables individuals, families and communities to translate health information into desired action to promote health.

The health promotion unit headed and coordinated social mobilization activities in Liberia during the EVD crisis. Messages, awareness creation, capacity building and community engagement were major activities performed by the unit.

2.2.5 National Malaria Control Program

The National Malaria Control Program (NMCP) is responsible for the implementation of malaria control and prevention activities.

The overall objective of the program is to reduce morbidity and mortality caused by malaria and subsequently eliminates the spread of the disease. The program has four strategic approaches to controlling the spread of malaria. They are the provision of prompt and effective treatment, the effectuation of integrated vector management and the use of information, education and behaviour change communication.

In 2014, the National Malaria Control Program implemented several activities geared towards achieving its national goals and objectives of controlling and or preventing the spread of malaria. The program ambitiously set a target to reduce morbidity and mortality caused by malaria by 75% by 2015. Against this background, the following activities were implemented and deliverables achieved:

- Completed the National Malaria Program Review with 'Aide Memoire' signed by major stakeholders and the Government of Liberia

- Drafted the National Malaria Strategic Plan (2015 to 2020) with support from the World Health Organization and Roll Back Malaria.
- Distributed 90,000 Long Lasting Insecticide Treated Nets to health facilities implementing Ante Natal Care services. UNICEF and Global Fund procured the LLINs.
- Developed the ANC LLINs Distribution Plan for the planned distribution of 250,000 + LLINs in facilities providing ANC services in partnership with PMI and partners
- Conducted the LLINs Micro Planning Process nationwide in collaboration with Plan Liberia and Sub Recipients. A Final Micro Plan and budget was prepared and submitted to the Global Fund. This activity was a condition precedent set by the GF for the mass distribution of 2.8 million LLINs nationwide.
- Developed and finalized the Technical Guidelines for Malaria in Pregnancy.
- Procured 2.8 million Long Lasting Insecticide Treated Nets for mass distribution nationally in early 2015
- Tested **2,013,317** patients for fever out of which 785,454 were positive of malaria in all health facilities and 923,725 patients were treated with ACT and over the period.
- Conducted Durable Lining Study in Bomi County in partnership with Mentor Initiative
- Abt Associates turned over to the NMCP Indoor Residual Spraying equipment and other office supplies. This marked the official closing of Abt Associates IRS activities in Liberia.
- Renovation the Warehouse at LIBR Compound, Charlesville, Margibi County. This warehouse will be used to store IRS equipment which were turned over to the Program by Abt Associates
- Set up mobile insectary at the NMCP Office with support from USAID.
- Updated the Malaria Phase II Procurement and Supply Management Plan.
- Conducted 2 rounds of Mass Drugs Administration covering 600,000 + people in selected communities in Monrovia
- Revised key working documents including ANC Strategy and Diagnostic guidelines
- Conducted 4 rounds of vector mapping and vector susceptibility studies in Liberia
- Developed and introduced the NO TOUCH Policy for ICCM in Liberia
- Conducted quarterly monitoring and supervision activities nationwide

2.2.6 National Leprosy and TB Control Program

While Tuberculosis continue to disproportionately affects the poor, the National Leprosy and TB Control Program operating under the Ministry of Health and Social Welfare of Liberia continue to exert efforts to ensure that the economic and social disadvantaged groups do not face barriers that keep them from seeking treatment. This effort was highly affected by the outbreak of EVD that devastated the whole health sector in the entire nation. The overall goal of the National Leprosy and TB Control Program is to reduce the national burden of TB in Liberia by 2015 in line with the MDG and the stop TB partnership targets. The program also provides multidrug therapy to leprosy patients.

This report covers the period January to September 2014, which marks the implementation of the consolidated round 7&10 GFATM grant. The report discusses progress, challenges, issues and lessons learnt in the implementation of TB control activities in the 15 counties of Liberia. During the year, the total number of TB cases notified is 3,395, of these cases New Smear positive TB Cases notified is 1,494, the treatment success rate for the cohort of New Smear positive TB Patients placed on treatment January to December 2013 is 71.8%. The default rate was 14.37% and Death Rate was 8.02%. These results clearly demonstrate the performance of the TB program in Liberia during the period.

The program conducted an external review of the implementation of the National TB strategic plan covering the period 2007 – 2012. The Review was conducted due to the expiration of the 2007 – 2012 National TB Strategic Plan. The external review informed the development of the New National TB Strategic Plan 2014 – 2018, upon the completion of the National TB Strategic Plan.The program completed the development of Grant proposal for the Phase –II of the Consolidated Round 7 & 10 TB Grant. The new strategic plan (2014 – 2018) was validated.

Decentralizing TB control services into the primary health care system of Liberia remained at a standstill and the quality of TB services has dropped below the required international standard. The program made no significant progress in TB Control in 2014. Below are achievements during the year:

- Registered 3,395 TB cases of all forms (January to September 2014) of which 1,494 were pulmonary Smear Positive TB cases;
- Treatment Success rate of cohort of registered TB patients (January –September 2013) is 71.77%;
- Recorded the HIV test result of 2,441 TB patients out of 3,395 TB patients;
- 49% (174/350) HIV positive TB patients were placed on CPT;
- 14% (350/2441) of TB Patients tested for HIV were HIV Positive
- 23% (82/350) of HIV Positive TB patients were placed on ART Care
- Validated the National TB Strategic Plan (2014 – 2018)
- Initiated five MDR-TB patients on treatment

TB diagnostic Laboratory forms the foundation for TB control efforts in Liberia. Therefore, the quality of AFB diagnostic services throughout the country needs to be at its best at all times. The program has a network of 161 microscopy centers implementing TB AFB microscopy services across the country. To ensure that AFB Microscopy centers are performing in line with the required WHO Standards, the Program in collaboration with the National Diagnostic Unit performed EQA Panel testing of 78 AFB Microscopy centers during the period under review. 62 (**79%**) out of 78 AFB Microscopy centers that took part in the EQA Panel testing method, performed according to EQA standard, while the remaining of 21% performed below EQA standards. Out of the 62 AFB Microscopy Centers that performed according to EQA status, 2 facilities from Bong County were excellent (***China Union Hospital and Salala Health Center***). Eighteen (18) Labs performed very well, 24 were good, while 23 were fairly good and 11 performed poorly. Therefore, the national percentage of the AFB Microscopy centers performing according to EQA Guidelines/standards is 79%.

Culture and DST Services

Activities at the TB Culture and DST Lab remained operational up to June 2014. The Biosafety cabinet was expected to be validated and certified before the end of June 2014, but the validation process could not be carried on because the Medical Equipment Engineer from Spain who finally installed the equipment could not come in Country to certify and validate the Biosafety cabinet due to the EBOLA outbreak, this led to the halt of TB Drugs Sensitivity Testing.

Since the halt of TB Drugs Sensitivity Testing, culturing of samples continued up to the end of September 2014. Currently, the TB Culture and DST Laboratory is not functioning. The TB Program in collaboration with the Central MOHSW is working on the necessary processes for the arrival of the Medical Equipment Engineer.However, during the period, 60 retreatment cases were eligible for DST, 24 were tested for Drug Resistant at the TB Culture and DST Lab. Out of the 24 retreatment TB Cases tested for Drugs Resistant, 7 were cultured positive, 5 were confirmed MDR-TB cases and 2 were confirmed mono-Resistant cases. 21 new TB Cases were also tested for Drugs resistant, out of the 21 new TB cases tested for Drugs Resistant, 7 were cultured positive and one was confirmed as MDR-TB case.

Five MDR-TB patients were enrolled on treatment during the period; however, there have been delays in procuring MDR-TB Drugs for patients. Currently, the program is stock-out of MDR-TB drugs and 8 patients were confirmed as MDR-TB Patients during the period.

Leprosy

Leprosy remains a major public health problem in Liberia. Liberia is one of the few countries that have not attained the global target for leprosy elimination of less than 1 case per 10,000 population. The present prevalence rate of leprosy in Liberia is 1.7%. The country data over the last three years show a trend of continuous transmission of the disease.

The National Leprosy & TB Control Program (NLTCP) continues to provide leprosy services. However, very few health facilities in the counties have the capacity to diagnose and treat leprosy cases. Leprosy cases are reported in all counties and the highest notifications are from Nimba, Grand Kru, Grand Gedeh and Grand Bassa Counties. Current interventions focused mainly on high burden counties and the primary means of case detection is facility based. Multi drug therapy (MDT) is provided with support from WHO to facilities that detects positive cases. Table 2.7 below shows the trends in Liberia leprosy cases.

Table 2.7: Leprosy Cases Trend in Liberia

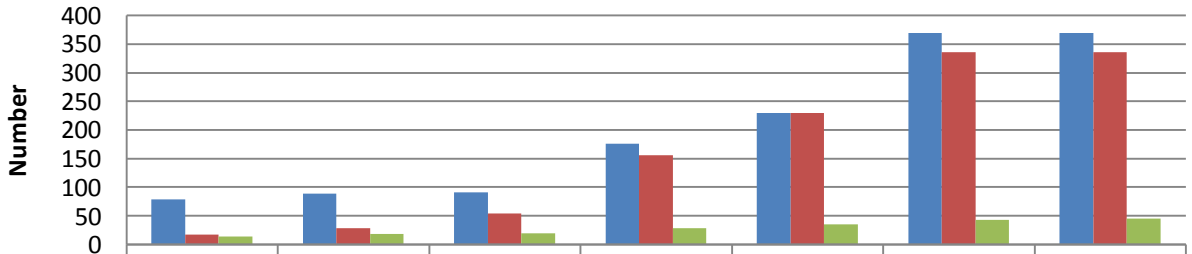
Cases	Years								
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total new Cases	418	410	414	415	482	293	91	206	
New MB Cases	270	301	302	307	357	179	64	129	
New Children Cases	68	45	47	43	84	13	8	19	
New Cases with Disability	22	0	0	6	6	26	3	3	
New Female Cases	220	388	150	138	178	118	40	69	

2.2.7 National AIDS and STI Control Program (NACP)

The National AIDS and STI Control Program (NACP) is responsible for coordinating and monitoring the provision of quality care and treatment and support services for people affected and infected with HIV and AIDS.The major program objectives include: (1) prevent new infections in the general population and from mother to child transmission; (2) provide quality care to those affected and infected by the HIV/AIDS; and (3) mitigate the impact caused by HIV and AIDS. In order to achieve these objectives, HIV Counseling Testing, Prevention of Mother-to-Child Transmission, and Antiretroviral Therapy (ART) interventions were introduced.

Access to HIV/AIDS services is a critical aspect of prevention and control of the disease. The Ministry, with support from partners, especially Global Fund has increased the number of service delivery points since 2007. Counseling and testing facilities increase from 79 centers in 2007 to 369 sites in 2012, PMTCT sites increase from 18 centers in 2007 to 335 in 2012 while ART centers increase from 15 in 2007 to 46 in 2012. Although, service delivery points increased over the period, there was no additional establishment in 2014 due to lack of funds. Figure 2.18 shows HIV/AIDS services centers trend since 2007.

Figure 2.18 HIV/AIDS Services Centers



	2007	2008	2009	2010	2011	2012	2013
HCT	79	89	91	176	230	369	369
PMTCT	18	29	55	156	230	335	335
ART	15	19	20	29	36	44	46

2.2.8 Division of Mental Health

The Mental Health Division is the policy and technical arm of the Ministry that is responsible to ensure that the Mental Health National Policy and Strategies are implemented.

The National Mental Health Policy mandates that mental health services be integrated into existing PHC system in Liberia, using a decentralized approach to ensure that health workers receive mental health training to enable them manage people with psychological problems visiting their facilities. The Policy further mandates that at least one psychiatric nurse or a registered nurse with training in basic psychiatry serve as a county mental health promotion officer who will collect mental health related data for monthly reporting to ensure that a sufficient supply of drugs is available for distribution to all health facilities providing mental health services. Mental health education should be promoted through education and

public awareness activities. Thus, the policy calls for training of general practitioners and nurses to diagnose and treat basic psychiatric and mental health conditions.

To combat the EVD, the psychosocial committee saw the need to build the capacity of different categories of staff working with infected and affected individuals, community members and Ebola survivors. Dealing with psychosocial issues is one of the key elements in fighting the EVD because there are varying social, emotional and psychological implications for the disease outbreak such as psychological, mental health and social support that should be provided for patients, their families, community and health workers. In this regard, efforts were made to deal with cross-cutting issues including Psychological First Aide training for the above categories of people to prepare them psychologically, social, and emotionally to fighting the disease to help reduce the level of fear, panic, anxiety and stigmatization. Below are number of people who received mental health and psychosocial training during the prescribed period.

- Trained 250 mental health clinicians & Social Workers from the 15 counties;
- Trained 30 Burial Team from Montserrado county;
- Trained 100 religious leaders (Calvary Baptist Church);
- Trained 155 parents and care givers on parental skill training with affected & infected children;
- Trained 85 Community Welfare Committee (CWC) in Montserrado, Bomi and Lofa;
- Trained 30 health workers in Psychological First Aide (PFA) in Montserrado, Lofa and Bomi counties.

2.2.9 Environmental and Occupational Health

The Division of Environmental and Occupational Health is mandated with ensuring better environmental health programs to improve the health of Liberians, including ensuring water quality control for all public water points, food safety, food safety and quality control, basic sanitation/environmental sanitation, Occupational health and Safety among all occupations in Liberia, proper health care waste management practices and sanitation of all public buildings and places including hospitality industries, schools, health facilities. Activities implemented and accomplishments are indicated below:

The major activities during the year was supervision and coordination of dead body management, training of burial team staff, regular fumigation of health facilities and public buildings, disinfectant of EVD affected homes and health facilities.

2.2.10 Community Health Services

The Community Health Services Division is responsible for setting standards, developing policy and coordinating community health programs nationally. Facility based health workers and community health providers are responsible for implementing the EPHS at the community level. Community health activities are rapidly being scaled up in all counties with the intentto increase access to basic health care services.

The Community Health Services Division (CHSD) of the Ministry of Health and Social Welfare (MOHSW) has been reorganized to increase and improve access to quality basic health services at the community level. In order to provide these services, the division coordinates and collaborates with County Health and Social Welfare Teams (CHSWTs) as well as other programs, partners and communities to scale up community health activities in the counties.*The overall goal is to improve the health and social welfare status of the* population of Liberia on an equitable basis at community levels. The main objectives are to ensure that health promotion and health seeking behavior activities are practiced in all communities, make health and social welfare services more responsive to people's needs, demands and expectations by transferring management and decision making to lower administrative levels ensuring a fair degree of equity and make health and social welfare protection available to all Liberians regardless of socio-economic status at a cost that is affordable.

Developed and costed the Road Map for community health services in Liberia: This Community Health Road Map document provides guidance to the Ministry of Health and Social Welfare to coordinate and activate the existing community health structures and support systems at all levels, as well as accelerate the implementation of a standardized package of community health services.

Developed the community health management information system (c-hmis) standard operational manual and conducted national training of trainers training.

Integrated Community Case Management (ICCM): Integrated Community case management (ICCM) is a strategy to deliver life-saving curative interventions for common childhood illnesses for malaria, pneumonia and diarrhea particularly in areas where access to facility-based services is low. ICCM programs is planned and implemented in fewer counties of Liberia and faced with serious challenges of drug supply, supervision and reporting. See below report from six counties:

	Maryland	G. Gedeh	River Gee	Sinoe	Nimba	Montserrado	Total
Malaria	936	3160	1383	3536	810	200	**10,025**
Diarrhea	5448	192	282	1737	900	237	**4,388**
Pneumonia	2538	713	415	1446	980	199	**4,430**
Total	**8922**	**4065**	**2080**	**6719**	**2690**	**636**	**25,112**

Establish Community Health Development Committee (CHDC): CHDC established in 80% of the health facilities and meet monthly with health facility Officers-In-Charge (OICs).CHDC provides over sight responsibility for facility operations, including regular monitoring of quality services, such as resource management and surveillance information. They also mobilized communities to provide local materials including; timbers, sticks, sundried dirt bricks and labor for the construction of staff quarters and maternal waiting rooms. CHDCs contributed significantly to the constructions of the two clinics staff quarters.

2.2.11 Neglected Tropical Diseases (NTDs)

The Neglected Tropical Diseases program in Liberia was established after the 5th Mano River Union meeting held in Monrovia from October 28-30, 2009. The Mano River Meeting on onchocerciasis was held by the MOHSW in collaboration with APOC/WHO and Sight Savers and aimed at providing a platform for sharing experiences and lessons learnt among MANO River Union Countries with regards to the implementation of CDTI and co-implementation with other NTDs.

2.2.12 Pharmacy Division

The Pharmacy Division is one of the several units under the Health Services Department. The Division reports to the Deputy Minister for Health Services through the Assistant Minister for Curative Services.

Conducted a survey to determine the exact human resource in the pharmaceutical sector. The survey reveals the following data:96 licensed practicing pharmacists nationwide 96 (females 14 and 85 males); 1 foreign licensed pharmacist; 3 licensed pharmacists, 99 temporary practicing pharmacists;40 in public sector and 26 intern pharmacists nationwide.

Conducted a drug utilization survey in Montserrado County and the survey reveals the following data:

- All government owned health facilities were completely stock out of all essential medicines;
- Rampart irrational use of medicine across all health facilities both private and public;
- Very poor storage conditions predominantly in public facilities;
- Very limited dispensing time with patients;
- Finalized the following pharmaceutical policy documents pending official launching of by the Ministry of Health:The National Donation Guidelines of Liberia (NDGL) and The National Medicine Policy of Liberia;
- Trained 45 health workers on the Rational Use of Medicines in Bomi County through the WHO Technical Assistance to the Pharmacy Division;
- Developed training materials on the awareness of the Ebola Virus Disease (EVD) for the pharmaceutical sector of Liberia covering pharmacy and medicine stores personnel;
- Organized 21 licensed pharmacists to benefit from a training package from a Swiss based organization to prepare a brand of sanitizer called Alcohol Based Hand Rub (ABHR).

The Division in collaboration with the LMHRA registered 857 retail pharmacies and medicine stores nationwide in collaboration with the Pharmacy Board of Liberia.

2.2.13 Nursing and Midwifery Division

The Nursing & Midwifery Division of the Ministry of Health & Social Welfare is responsible to license nurses and midwives practicing in Liberia. The Division also issues Yellow Fever Vaccination Cards and administers yellow fever vaccines to travelers and collaborates with Nursing and Midwifery Institutions and Associations.

In 2014, the Nursing and Midwifery Board documented 3,711 Registered Nurse (RN), 57 Registered Nurse Midwife (RNM), 89 Registered Midwives (RM), 1,097 Certified Midwives (CM), 67 Mental Health Clinician (MHC), 195 Licensed Practical Nurse (LPN) and 18 others (foreign nurses).

Accredited 18 health-training institutions in Liberia. Below is the list of school.

1. Esther Bacon School of Nursing and Midwifery
2. Midwifery training Program South Eastern
3. Phebe Training Program
4. Cutting University School of Nursing
5. Tubman National Institute of Medical Arts
6. Winifred J. Harley school of Nursing
7. Smythe School of Nursing
8. Mother Patern College of Health Science
9. Bassa Community College School of Nursing
10. Bomi Community College School of Nursing
11. Lofa County Community College School of Nursing
12. Nimba County Community College School of Nursing
13. Seven Day Adventist University School of Nursing
14. Ruth Ramsay School Nursing
15. Mabel McColm School of Nursing
16. Dujah School of Nursing
17. United Methodist University
18. Tubman University School of Nursing

2.2.14 National Blood Safety Program

The National Blood Safety Program (NBSP) of the Ministry of Health & Social Welfare has the responsibility to provide safe, sufficient and timely supply of blood and blood products for patients requiring transfusions. This is in line with the Ministry's efforts to transition from paid blood donation to voluntary unpaid blood donation. Two regional blood banks and donation centers were established to facilitate the processes; staffs are involved with sensitizing volunteers, collecting, screening, storing, and distributing safe blood units to health facilities across the country. In fulfilling these responsibilities, the NBSP also take all possible steps to ensure that the act of blood donation is safe and does not cause harm to the donor and products derived from donated blood are efficacious and have minimal risk of any infection that could be transmitted to a patient through transfusion.

Chapter 3: Department of Planning

3.1 Bureau of Planning

An assistant minister who supervises three directors and focal persons heads the Bureau of Planning. Major activities include overseeing the county planning process in 15 counties and the successful conduct of the national health conference. As part of its core functions,the bureau provides oversights in the following areas; policy and planning, aid coordination and health financing, and human resources development. Activities and achievements of the various Units are presented below:

3.1.1 Human Resource Division

The Human Resource (HR) Division within the Ministry of Health & Social Welfare (MOHSW) has a mandate to develop and implement various HRH components to meet the demands of the Ministry's 10 years National Health & Social Welfare Policy and Plan (2011-2021). To carry out this mandate, the Division collaborates with other departments, the County Health and Social Welfare Teams, development partnersand UN agencies, Universities and health training institutions to address the human resources needs of the sector at all levels of health service delivery.

The Unit is also responsible to ensure a coordinated approach to MoH human resource planning, enhance performance, productivity and retention; increase the number of trained health workers and their equitable distribution, and ensure gender equity in employment, especially in management positions.

Noticeable accomplishments of the Division in 2013 are:

Integrated Human Resource Information System (iHRIS): In collaboration with Health Management Information System (HMIS) and RBHS, the Human Resource Unit trained 18 Human Resource Managers and other senior and middle level managers at the central and county levels in the operations of the iHRIS software. Following the training exercises and orientation, 14 data entry clerks were contracted for the period of six (months) and equally trained to code and enter the raw data on health workers from the counties and other autonomous public health facilities. Cadres, salary structure, facilities and counties have entered a total of 8,553 health workers into the iHRIS database.

mHERO (Mobil Health Messages System): The MoH also worked with the IntraHealth to introduce and pilot mHERO communication approach in the sector. This approach is an SMS-based mHealth communication strategy built to be use on basic mobile phones. It uses iHRIS and DHIS2 to ensure effective and efficient communications between health workers and the ministries of health globally. It is intended to extend and enhance core health information systems, in terms of communication, planning and management for the health workforce. The mHERO will be used to buttress the iHRIS and DHIS2 to ensure effective and efficient communications between health workers and the Ministry of Health. It is intended to extend and enhance core health information systems, in terms of communication, planning and management for the health workforce.

Local Scholarship: A total of 560 students were beneficiaries of the MoH scholarship program for FY 2013/2014. Of this number a total of 296 graduated in various disciplines in the health field. Accounting for this number include 33 graduates from Esther Bacon school of Midwifery, 65 Phebe school of Nursing, 25 Mother Patern College of Health Sciences, 64 South Eastern School of Midwifery, 48 Cuttington Undergraduate School of Nursing and 6 Cuttington Graduate School and 55 from (UMU/Winifred J. Harley College of Health Sciences).

Training Institutions Service Availability Mapping (Ti-SAM): The HR Unit in collaboration with HMIS with support from the West African Health Organization (WAHO) conducted Training Institution Service Availability Mapping survey (Ti-SAM) in 19 accredited health-training institutions in Liberia. The general objective of this exercise is to determine the country's capacity for the production of health professionals and factors that would favor scaling up their production.

3.1.2 Division of Policy & Health Financing

The Division provides technical guidance during the formulation of subsector policies and plans and coordinateshealth-financing activities. The Planning and Policy Unit organized the county planning process and compiled county plans for the fiscal year. The Unit was also engaged in resource mapping exercises and awarding of scholarships.

The LIBERIA HEALTH EQUITY FUND (LHEF)

The LHEF is a national health insurance scheme that is being developed. It is intended to provide universal health coverage to all Liberians. The LHEF will be composed of various mechanisms to raise additional domestic revenue to finance health care provision in Liberia through a funds pooling and risk sharing system, and a benefit package that will determine which procedures will be covered under the insurance scheme.

A draft legislation on the implementation of the LHEF has been produced to be evaluated by the Health Sector Coordination Committee (HSCC), the proposed Inter ministerial committee (IMCC), cabinet and Health Committees in both houses. Other documents drafted in the year include the LHEF advocacy and marketing plan, preliminary costing projection of the implementation of the LHEF, lessons learn from the Ghana study tour report and the LHEF benefit package review.

National Health Accounts (NHA) 2011/2012

Final draft of the 3rd Round of NHA estimating expenditures for FY 2011/2012 has been completed. To date the analysis captures both institutional components of health spending and households out-of- pocket expenditures. However, completing the data analysis for the Demographic Health Survey (DHS) on household expenditures will be the final stage in the completion of this report by January 2015.

The National Health Accounts as an international recognized tool has been adopted by the Ministry since 2008 for tracking expenditures within the health sector from revenue sources and financing agents to the

end uses of health functions and as a policy and advocacy tool for health care financing. The first NHA report for the FY 2007/2008 reported a high percentage out-of- pocket spending by households at 35% of total health spending (THE). The second NHA estimate for the FY 2009/2010 only included institutional spending without households, reporting an increased donor spending on health (more than 80%) and off budget spending. The NHA will remain as a systemic tool for supporting policy decision-making and will gradually evolve as an institutional framework in the sector for supporting planning and budgeting.

3.1.4 External Aid Coordination Unit

The National Health and Social Welfare Policy and Plan articulated the Ministry's commitment to strengthen coordination mechanisms between the Government of Liberia, donors, Non-For Profit, and Private for Profit organizations, including the Health Sector Coordinating Committee (HSCC), and various technical committees. According to the National Health Policy document, strengthening coordination will be achieved by systematizing collaboration in common planning exercises and resource allocation (by level, by county). Some of the achievements in this area include:

- Planned organized and hosted the 15th Assembly of ECOWAS Health Ministers Meeting in Monrovia in April 2014;
- Organized quarterly Health Sector Coordinating Committee (HSCC) meeting for the health sector;
- Worked with ECOWAS in deploying 39 international health personnel including 10 medical doctors; seventeen nurses and twelve specialists for the ECOWAS' response to the Ebola fight;
- Received four vehicles from West African Health Organization (WAHO) for use by Liberia in the fight against Ebola;
- Helped coordinate Mercy Corps call for Proposals of US$6 million dollars for its Ebola Community Action Platform (E-CAP) project that resulted to the awarding of contracts to about 26 national and international NGO.

3.2 Bureau of Vital Statistics

An Assistant Minister heads the Bureau of Vital and Health Statistics with three directors (Research, HIMS, and M&E), a Principal Registrar, and two coordinators (Birth Registration, and HMIS, M&E and Research). The bureau has the mandate to produce birth and death certificates, collect, compile and disseminate health information (data), supervise health research, and monitor health programs in the country.

3.2.1 Monitoring and Evaluation

The Monitoring and Evaluation Policy and Strategy articulate the approach to monitoring and evaluation of the Ten Year Health and Social Welfare Policy and Plan. The M&E Strategy and its three years operational plan are implemented with visible outcomes. The Ministry's M&E system is developing and getting stronger and better by the day.

The M&E Unit monitors the implementation of the National Health Policy and Plan in line with the M&E Strategy. To measure the performance of key indicators, regular assessment of health programs, projects

at the communities and health facilities are conducted quarterly, whilehealth facilities data are analyze monthly. During the period, only USAID and Pool Fund supported health facilities were assessed and performance measured.

Assessments of health facilities data in 2014revealed that data quality is gradually improving. However, there are systems, organizational and individual or behavior issues that contribute to poor data quality. To improve the quality of health facilities data, quarterly supervision and verification exercises are regularly conducted. These exercises are supported by the USAID's FARA project, the health sector pool fund and global fund. During the year, 222 health facilities' data on key indicators were verified and validated. Additionally, all County Health Team were supported through an MOU initiated by the M&E Unit to verify data from all health facilities with funding from the Global Fund. These interventions have contributed to improvement in data quality.

3.2.2 Research Unit

The mandate of the Research Unit of the Ministry of Health and Social Welfare is to govern, manage and coordinate the health and health related research in Liberia. During the calendar year (2013), the Research Unit was involved with the following:

The Unit coordinated health related studies in 2014, supported the data collection and analysis aspect of the EVD response, and carried out research capacity building initiatives.

3.2.3 Health Management Information System

Health Management Information System (HMIS) is responsible for the provision of data for decision-making and interventions. The National Health Policy avowed that HMIS will be strengthened in order to better collect, organize and maintain relevant data in a timely fashion. The system will have the capacity to produce reports related to health sector development, including the analysis of trends, in order to understand the progression of the health sector over time. With the introduction of the District Health Information Software Version 2 (DHIS) and the standardization of reporting instruments, the coverage of routine health facility reporting has increased and data quality is gradually improving.

The unit key activities and accomplishments are as follow:

- Enhanced the capacity of M&E Officers and data managers skills and knowledge on data management and analysis
- Trained 50 M&E and data management staff on District Health Information System (DHIS) and Integrated Human Resources Information System (IHRIS) usage
- Harmonized DHIS and DHIS data management on a single platform
- Trained County HR officers and Administrators on IHRIS
- Introduced Community Health Information System and trained county and central level trainers of trainers
- Conducted the Performance of Routine Information System Management (PRISM) assessment
- Conducted quarterly data verification exercise

3.2.4 Births Registration

Birth registration is fundamental to ensuring a child's legal status, their basic rights and services (UNICEF, 2006; United Nations General Assembly, 2002). Liberia is a signatory to the UN Convention on the Right of the Child (CRC) and the African Charter on the Right and Welfare of the Child. In fulfillment of these legal obligations, the Ministry has decentralized the registration of births to increase access and coverage. However, the registration of births is face with plentiful challenges that require urgent attention to achieve universal coverage within five years.

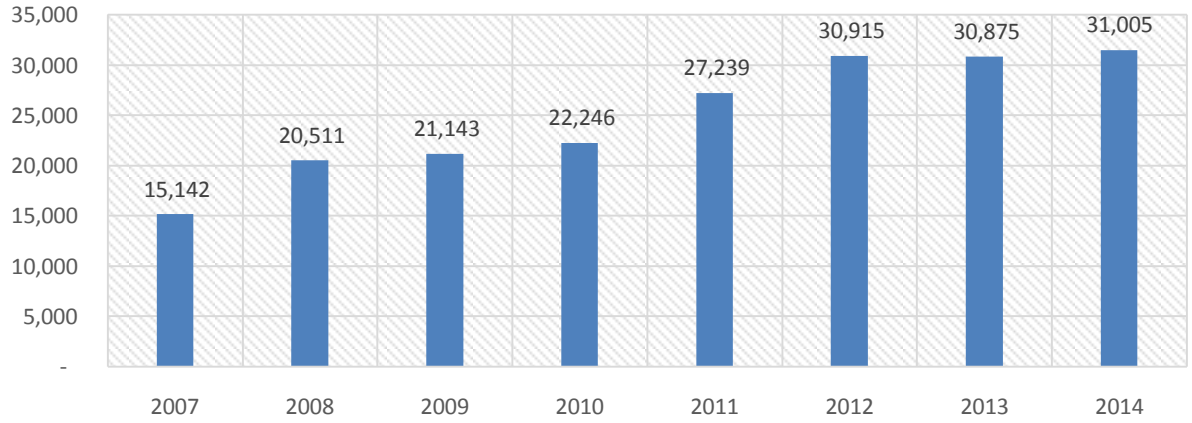
The Bureau of Vital Statistics has the responsibility to produce and issue birth certificates to persons born in Liberia regardless of their economic and social status. The low registration is a result of theover two decades of highly centralized birth registration system, and limited resources (Human, logistics, and financial) for birth registration. However, with the support of partners there are potential for increase access and coverage.

To achieve universal birth registration coverage, several measures have been instituted that include, routine registration of children at various public health facilities, regular birth registration campaigns, collaboration with other institutions,robust resources mobilization and awareness creation.

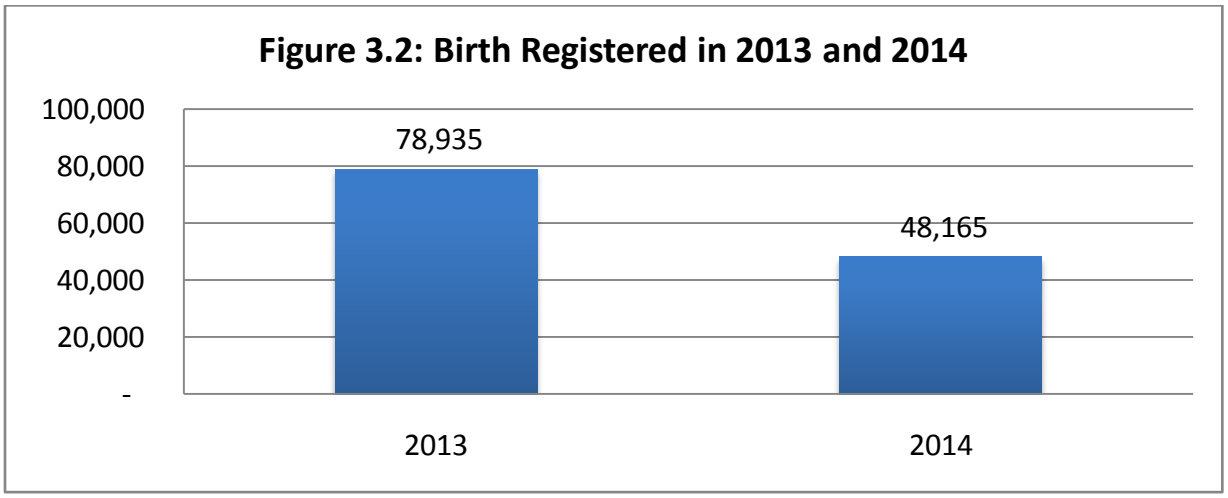
In 2014, the Liberia Demographic Health Survey results shows that children under five registration increased from 4% in 2007 to 24% in 2013. It also revealed no disparity between males and females under five registration. The Bureau conducted birth registration campaigns for children below the ages of 13 years in six counties (Bong, Nimba, Grand Bassa, Maryland, Margibi and Grand Gedeh). BR awareness was conducted through the registration campaigns and radio talk shows.

Births certificates production trend at central MOHSW continues to increase gradually. Though there has been an increase in registration over the past 7 years, Liberia's progress is diminutive compared to the proportion of unregistered persons in the Country.A total of 199,076 certificates have been produced from 2007 to 2014 at the central level that precludes county level under 13-year registration. Figure 3.1 presents birth certification trend (2007 to 2014).

Figure 3.1: Birth Certification Trend (2007-2014)



The decentralization of birth registration for children below the age of 13 started in 2010 with three counties; Bomi, Gbarpolu and Grand Gedeh and currently covered all 15 counties. The Ministry made remarkable progress in 2012 by establishing birth registration centers in the 15 counties of Liberia and these centers are registering children less than 13 years. Over the four years, 150,000 children under 13 years have been registered through the decentralized system across the counties. In 2014, the number of children registered reduced by 38.8% from 2013. Figure 3.2 presents the number of children registered in 2013 and 2014 in the counties.



3.2.5 Death Registration

The Liberian Public Health Law of 1976 mandates the MOHSW to register all deaths within 24 hours after their occurrence. This regulation has not been implemented to its fullest by the Ministry due to limited access to death registration services and information on the importance and need for death certification. As a result of inadequate access, the coverage of registration has always been below 5% annually. Apart from the mentioned plausible reasons for low registration of deaths, traditional and religious practices contribute to lower registration in Liberia. Death certificates are usually processed in Liberia with the intent to obtain insurance benefits, to settle inheritance issues and not as a requirement for burial and documentation of cause of death. The registration of deaths continues to fluctuate over the past sevenyears. In 2007, 548 deaths were registered compared to 624 in 2011 and 549 in 2012. In 2013, 659 deaths were registered compare to 600 in 2014.

Chapter 4: Department of Administration

4.1 Bureau of Central Administration

The Bureau of Central Administration has nine subdivisions: Personnel Services, Procurement & Warehouse Services, Information Technology, Health Infrastructure Development, Internal Audit & Compliance, General Counsel, Transportation Services, Maintenance Services, and Housing & Property Control.

4.1.1 Personnel Services

The Division of Personnel is the section of the Ministry of Health and Social Welfare that handles all personnel related issues of the Ministry including employment, insurance, payroll management, and bank related issues, among others.The Division serves as a link between the Ministry and the Civil Service Agency (CSA) on the one hand and the Ministry of Finance on the other. It also collaborates with the Legal Office of the Ministry to prepare contracts for individuals hired under donor-funded projects to provide professional and other services for and on behalf of the Ministry.

Activities implemented in 2014 include:

1. Placement of 1,410 health workers on the Government of Liberia Payroll. This number has raised the employment strength of the Ministry to 5,537.
2. Placed 460 staff (Nurses, Physician Assistants, Certified Mid-Wives and other) on the Incentive Payroll of the various County Health Teams (CHTs) to serve in hospitals, health centers and clinics.
3. Employed 143 contractors including 88 Top-up allowance contractors; this precludes the 4,803 staff that are on the Incentive Payroll. The Ministry has a total of 10,340 staff within its employ.
4. The MOH lost 116 employees, with 97% being Ebola related.

4.1.2 Procurement Services

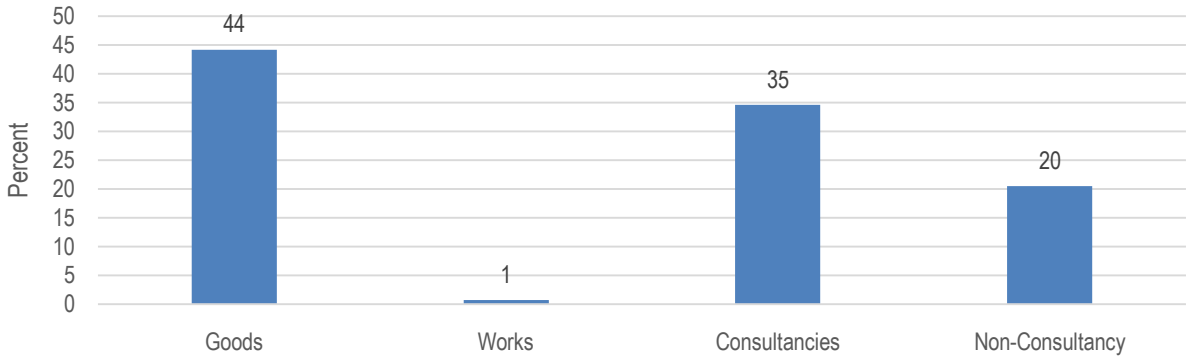
The function of the Procure Unit is to procure goods and services in accordance with the PublicProcurement Concession Commission (PPCC) regulations. The division provides timely and efficient procurement of civil works, goods and services for the Central Ministry of Health & Social Welfare, County Health & Social Welfare Teams, and donor funded projects.

The Ministry continues to maintainher commitment to the rules and regulations governing best practices of good governance to meet her international obligations with partners and national commitments of providing sustainable health and social welfare care to the people of Liberia.

The MOHSW procurement system is ensuring best value for money as well as increasing efficiency and effectiveness and reducing potential risk for corruption that has a positive impact on donor's contributions/funding. The procurement system is use by the Ministry as a key indicator for best practices in financial management implementation.

The total financial execution of the Procurement Unit in 2014 was US$ 7.9 million, with funding from the Government of Liberia (GOL), GAVI, UNICEF, UNFPA, Pool Fund, Global Fund, Sight Savers, Liverpool, FARA, World Bank, WHO, WAHO, APOC, SIDA etc. Major categories of procurement include; Goods (3.5 million), Works (56,796), Consultancies (2.7 million) and Non-Consultancy (1.6 million). Figure 4.1 presents the proportion of expenditures on the four major procurement related activities.

Figure 4.1: Procurement Services by Category in 2014



Goods: In this category, all tangible items in any form including raw materials, products, equipment and objects in solid, liquid or gaseous form, as well as services incidental to the supply of the goods where the value of those incidental services is insignificant in relation to the value of the goods. For the period under review, this constituted 44% of the total execution with petroleum product (fuel & gasoline) for vehicle and generators constituted 30% of the total execution and other equipment and products constituted 36% for the period.

Works: This category includes all works associated with construction, demolition or renovation of a building or structure or surface and includes site preparation, excavation, and any incidental activity under a works contract. During the period this category constituted 1.06% of the total execution.

Consultancies: In this category, we have considered all services related, technical assistance, capacity building and management and advisory services. During the period consulting services constituted 35% of the total execution.

Non-Consultancy: In this category, all of the procurement activities prior to 2012 were consider services, but with the experience and expertise of the Unit growing over the years, this fourth category has evolved with international best practices in procurement to include those services that do not require the use of intellectual ability or technical assistance, and advisory services to produce a report with a measurable deliverables. These services include but not limited to painting services, offset printing services, vehicle rental services, communication cards provision, catering services, vehicle maintenance services, air ticketing and reservation etc.

4.1.3 Infrastructure Development

The Infrastructure Unit is responsible for all health infrastructure related activities within the sector. Key functions of the Unit are; monitoring of constructions (e.g., clinics, health centers, hospitals, drug depots, incinerators, etc), design of health facilities standards, and infrastructure policy. Achievements in 2014 include:

- Supervision of the construction of Ebola Treatment Units
- Assessment of health facilities
- Construction of regional (Bong and Grand Gedeh) vaccine cold room

The Infrastructure Unit was also part of the drive to eradicate Ebola from Liberia by designing and providing supervision in the construction of the first ETU in Liberia at the ELWA Compound. The Infrastructure Unit Designed, estimated cost and provided supervision for the construction of a community care center in Sinje, Grand Cape Mount County while the design and cost estimates for the holding center at Unity Conference was also done by the Infrastructure Unit. All of these projects completed except the Sinje community care center, which is at a standstill due to funding gap.

ELWA first ETU

Conference Center Holding Center

4.1.4 Internal Audit and Compliance Units

The Ministry has made frantic effort and has initiated measures towards promoting transparency, accountability and anti-corruption, which are fundamentals for good governance. These measures are geared towards the prevention and reduction of the risks of corruption in light of the Government Decentralization process. Towards this endeavor, the Ministry established an Internal Audit Unit that includes the Office of Compliance.

The Internal Audit Unit periodically reviews the organization of financial management; assesses the adherence to all financial management procedures and processes prescribed, its regulations and instructions issued by the Minister; evaluates the adequacy of management checks and balances, and controls in the financial management practices within the MOHSW.

During the year 2014, the Internal Audit Unit made the following achievements:

- The deployment of Regional Auditors to enhance internal controls in the counties,

- The training of Central Office Auditors and Regional Auditors in Audit Report writing and procedures,
- The conduct of Risk Assessment of the National Drugs Service (NDS)
- Conducted an Audit of Africare-Bong County Activities for the period July 2012-June 2013,

The Internal Audit Unit also conducted audit reviews for FY July2012-2013 of five (5) County Health Teams and seven (7) Hospital Administrations. The draft reports have been submitted to various County Health Services Administrators and Hospital Administrators for responses.

The prime responsibility of the Office of the Principal Compliance Officer is to coordinate, review and ensure implementation of Internal and External Audits recommendations. The office manages External Audit Engagement processes and design, implement and maintain internal controls. The office ensures administrative and financial compliance with agreements, policies, procedures, etc.

To ensure smooth conduct of the current GAC audit, the Office of the Principal Compliance Officer is managing the audit engagement process ensuring documents requested by GAC are collated and submitted. The office is actively participating in the overall MOH&SW Risk Mitigation Process and contributed in the 1st Quarter Risk Mitigation Actions report writing.

4.1.5 Office of General Counsel

The Office of General Counsel (OGC) is the legal arm of the Ministry. It was established in 2008 by the authority of the Minister of Health & Social Welfare with a sector wide cooperation from the Ministry of Justice. The OGC has the mandate to provide legal services to the Ministry that include; the review of the Health and Social Welfare Laws, representation of the Ministry at all legal proceedings,act as the Ministry's liaison with the Ministry of Justice with respect to requests for legal opinions and advice on all judicial litigation involving the Ministry.

The OGC, for the period under review, was engaged in activities normally associated with any legal section or department. Generally, some activities of the OGC include; (a) conducting comparative legal analyses on a range of issues in a given area, identify legal and policy issues, researching relevant precedents, and proposing appropriate solutions, (b) providing legal support to on-going projects, transactions, cases, and other matters, (c) reviewing documents for adherence to ministry/government legal policies and procedures, and health objectives, (d) Participating in dispute settlement through administrative hearing, mediation, negotiation etc., (e) Providing legal counsel to the ministry relative to legal and policy issues. (f) drafting, reviewing, negotiating and finalizing legal documents for management, (g) conducting legal research and analyses on legal matters relative to the mandate of the Ministry; (h) participating in the preparation and/or drafting of acts/legislation or regulations for the Ministry pursuant to its mandate; (i) preparation of elements of the ministry's legal submissions before national judicial bodies, participating in the preparation and drafting of acts/legislation to be issued by the Ministry pursuant to its powers and mandate etc.

Activities of OGC in 2014

Agreements: The OGC in line with its mandate as summarized above, prepared and/or reviewed more than one hundred thirty (130) agreements (Ebola employment contracts excluded) with value exceeding sixty million United States dollars (US$60,000.00) between the Ministry and service providers, independent contractors, and partners during the period under review. These agreements include Contract for services delivery, contract for works, Contract for procurement for goods and services, memorandum of understanding with partners for service delivery. Additionally, the OGC, reviewed multiple employment contracts and vehicle rental contracts prepared (using OGC provided template) by Personnel and Procurement department respectively.

The most significant of aforesaid agreements (having material monetary values) were drawn with a) UNOPS, WHO, and WFP, for Ebola related services; b) AFRICARE, and IRC under the EPHS; c) AFRICARE, BRAC and MERLIN under the Global found grant sub-recipient- ship; d) AMINATA and DON Kan for petroleum products; e) AFRICA MOTORS, CICA MOTORS for procurement of vehicles and related services; f) Stewart Corporation for clearing and forwarding goods from ports; and g) Africare, MERCI and AHA under the restoration of routine health services as well as thirty (30) private and faith based health facilities under the public private partnership(PPP) arrangement also for the restoration of routine health care.

Dispute Resolution

Further to the above, the OGC was involved in dispute resolutions in the year 2014. Some of the OGC's mediation and dispute resolution efforts included:

1. Being very resourceful in the Ministry's effort that ended the Health Worker Association's strike.
2. Collaborated with Insurance Coordinator and successfully concluded accident (Ebola Sample vehicle collision with Motorbike riders) case involving MOH vehicle with families of deceased victims (motorbike riders)
3. Amicable negotiated settlement of benefit for victims of the fatal accident involving MOH's partially insured Ambulance on December 24, 2014.
4. Negotiated and concluded settlement (payment) for land occupied by Bardnersville Clinic

Litigation

Further to the above, the OGC was also involved in litigation activities during the period. Those litigation activities were:

1. The prosecution and subsequent conviction of Wesley Julu for theft and related offences in collaboration with the Ministry of Justice
2. Represented of National Aids Commission in liaison with the Ministry of Justice in a law suit alleging placement of the Plaintiff's photo and HIV signboard without her consent

Legal Counsel: During the period under review, the OGC was very instrumental and resourceful in providing legal guidance to Ministry especially during the initial stages of the Ebola epidemics; OGC researched the Public Health Law and provided guidance in relation to burying Ebola bodies, quarantines, etc; in short, guided the Ministry on what the law say about the power of the Ministry during an epidemic.

Promulgation of regulation: finally the OGC in concert with the Ministry of Justice promulgated and with the approval of the President, issued the **Anti-Ebola Regulation (MOHSW/R-001/2014)** which inter alia places restrictions on large assembly of people (including all public rallies, demonstrations, and gatherings in public areas including beaches) in an effort to avoid bodily contacts among people since Ebola is, amongst other things, spread through bodily contacts with infected persons.

4.1.6 Transport

The Division of Transport is that unit of the Ministry of Health charged with the responsibilities of ensuring that all MOH Vehicles are secured, Maintained and or repaired regularly in a timely manner thus making them road worthy for programs implementation.

Currently, the Ministry has fleet of 273 Vehicles ranging from cars to mini trucks for the Ministry across the country assigned to various programs. The Division is not fully equipped but has been able to fully record all 273 vehicles and 104 motorbikes own by the Ministry.

Out of the 273 vehicles, 241 new and vehicles were donated exclusively for Ebola activities; these vehicles came from partners, individual and friendly governments to aid in the fight against the deadly Ebola virus disease and other programs of the MOH. Below is a breakdown of donated vehicles to the GoL /MOH, for Ebola Activities:

#	Donor /Partners	# of Vehicles
1	World Bank	55
2	Government of Japan	7
3	CDC Foundation	86
4	OSIWA	3
5	PLAN International	3
6	UNMIL	26
7	UNMEER	10
8	ECO Bank	1
9	UBA	1
10	Indian Community	2
11	Fula Community	1
12	Arcelor Mittal	2
13	WHO	4
14	Lone Star Cell	3
15	SWISS Development Agency	6
16	Hon. Munah E. Pelham Youngblood	1
17	Hon. Jeremiah Koon	3
18	UNDP	1
19	GOL/NTFE	26
TOTAL		***241***

The World Bank made a donation of 45 new vehicle, of which there were 10 Toyota Land Cruiser High Top Ambulances, 18 Toyota Hilux Double Cabin Pickups, 8 Ford Ranger Double Cabin Pickups, 4 JMC-Isuzu Mini Truck, 3 Hyundai Cargo Mini Truck, 1 Mitsubishi FUSO CANTER Mini Truck and 1 Toyota Land Cruiser High Top Jeep. Out of these 45 vehicles, the MOH was able to finally received 44 from the General Services Agency (GSA), the balance of one (1) vehicle (Toyota Hilux Double Cabin Pickup) was taken by the General Services Agency (GSA). Lastly, these 44 World Bank donated vehicles were distributed to health facilities and county health teams throughout the country.

The vehicles donated by the United Nations Mission in Liberia (UNMIL), were distributed across the country for Ebola response activities, but 12 of these vehicles were recalled due to serious mechanical fault and disposed of to the General Services Agency (GSA).

The CDC Foundation donated 86 vehicles to the MOH through eHealth Systems Africa and these vehicles are to take assignment throughout the country on Ebola response activities. From the distributed listing received by the Division of Transport, one of these vehicles was given to the General Services Agency (GSA). Out of the 86 vehicles, 4 are Ambulances and the rest are Toyota Land Cruiser Single Cabin Pickups.

The Ministry has a garage that is not fully equipped with staff and tools. During the period under review, the Ministry of Health garage staff has only been responsible to do assessment on vehicles and contractor garages do repair work through the Procurement Division of the Ministry.

4.2 Bureau of Fiscal Affairs

The Bureau of Fiscal Affairs consists of the Office of Financial Management. It has the responsibility of managing National Government Budget, grants and project funds.

4.2.1 Office of Financial Management

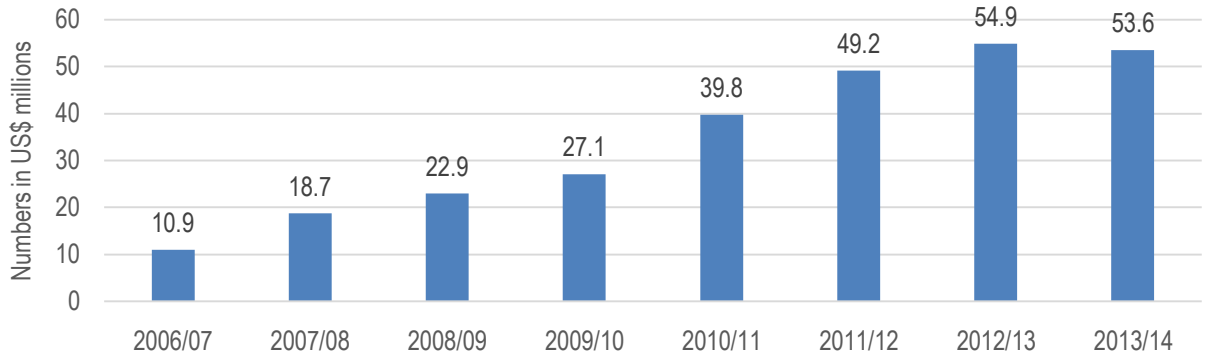
The Office of Financial Management (OFM) has the responsibility for the internal financial administration and accountability of the MoHSW fund, which includes, developing financial policy, accounting, and internal control system.

Financing the health sector is a critical input that requires GOL's and donors' full commitments.To maximize the resources available from all sources, a financing policy was formulated that establishes a mixed approach to mobilize resources that includes a sustainable level of government financing, more efficient use of donor support and potential alternative financing mechanisms. However, the implementation of this policy has just started. The Government of Liberia is committed to doing its part by progressively increasing the share of the national budget that goes to the health and social welfare sector as evidence in the allocation to health over the past eight years.

The national government budgetary allocations to the health sectorcontinue to show a gradual increased over the past eight fiscal years (2006-2014). The health sector budget has increased from 10.9 million in fiscal year 2006/2007 to 53.6 million in fiscal year 2013/2014.Also, the Government has allocated 277.1

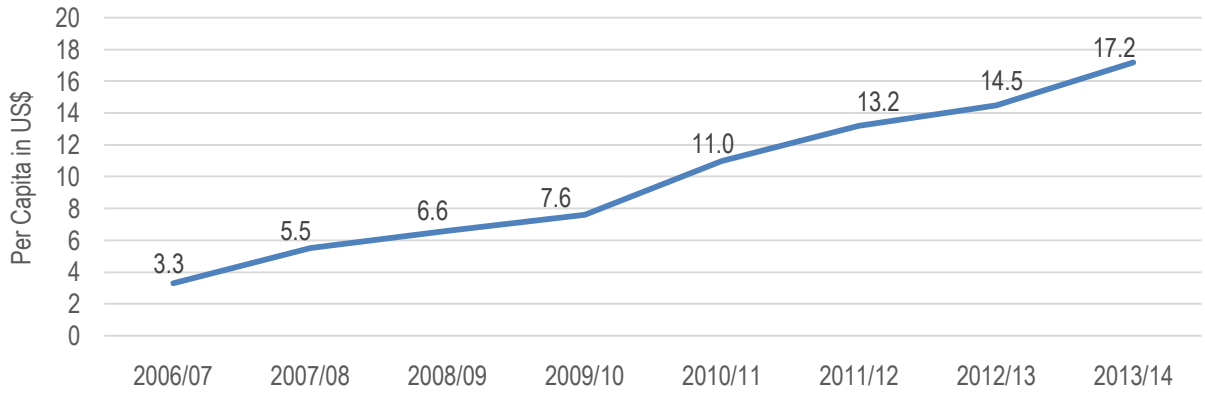
million to the Ministry of Health over the past eight fiscal years (2006-2014). The Ministry's budget has increased by approximately US$ 42.7 million over the past eight fiscal years and however, this increment has not fulfilled the government's commitment to the Abuja Declaration of 15% of National Budgetary allocation to the health sector as declared by African governments in 2000. Figure 4.2 displays government's budgetary appropriation to the Ministry.

Figure 4.2: Government Budgetary Allocation to Health (2006 - 2014)

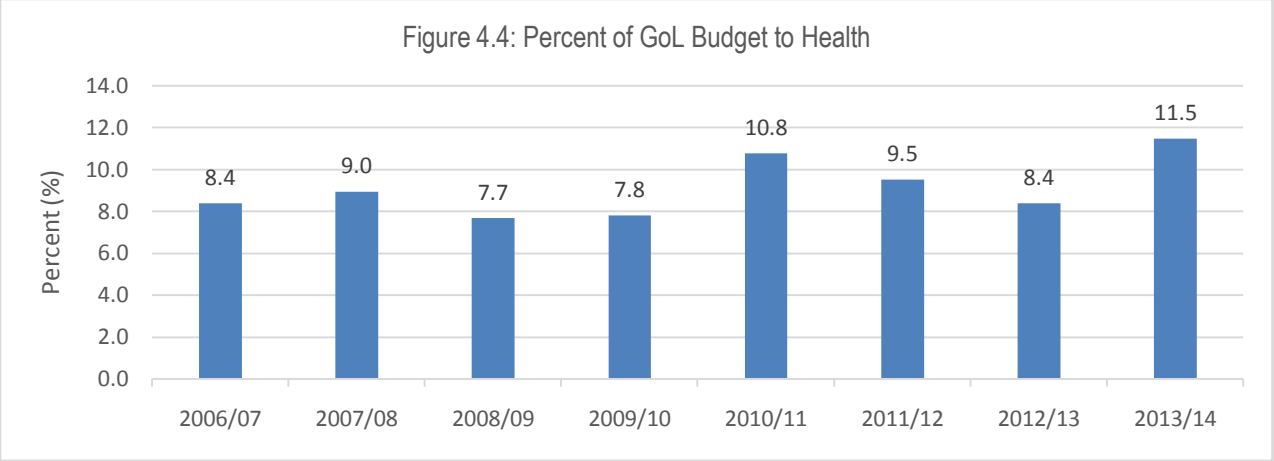


The per capita health expenditure is encouraging, although Liberia is distantfrom achieving the required target that will influence the attainment of the MDGs. In 2006, the per capitahealth expenditure was US$ 3.30 person compare to US$ 17.2 per person in 2014, excluding donors' funds. Investments by the government and her partners have contributed to the improvement of the health sector indicators, especially MDGs 4. Figure 4.3 presents per capita health expenditure in relation to the government's appropriations.

Figure 4.3: Per Capita Health Expenditure (2006-2014)



The percent of the national budgetary allocation to health has not been stable in its progression. It increased from 8.4% in FY 2006/07 to 8.96% in 2007/08 and declined for two fiscal years (2008-2010) to below 8%. However, it increased from 8.4% in FY 2012/13 to 11.5% in FY 2013/14. Figure 4.4 presents the percent of national budget to the health sector.



Over the years, there has been gradual increased in government's allocation to the Ministry of Health and Social Welfare. However, the Ministry has never received what have been appropriated during the five years period. For example, in fiscal 2009/10 the amount of US$ 20.15 million was allocated for the Ministry by only US$ 13.32 million was disbursed by the Ministry of finance. The disparities between government allocation actual disbursements is partly attributed to the delay in the approval and disbursement of the National Budget and the bureaucracy associated with the processing of payments and release of quarterly allotments.

The Ministry received funds from various sources that include, Global Fund, UN agencies, Global Alliance for Vaccines and Immunization (GAVI), USAID, West African Health Organization, the European Union, Foundations, Bilateral and Multilateral Institutions among others. The actual amount of monies received from various funding sources against expenditures is shown below in Table 4.1.

Table 4.1: MOHSW Funding Sources and Expenditures

Category	FY 2008/09	FY 2009/10	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14
Government	12.41	13.32	24.25	34.00	54.9	53.6
Pool Fund	6.84	9.65	4.09	10.45	18.3	10.93
Global Fund	4.12	8.36	13.58	12.49	11.1	11.78
NGOs	0.92	0.44	0	0	0	0
Project Funds	7.32	9.95	10.79	8.65	3.7	7.3
Total Received	**31.60**	**41.71**	**52.70**	**65.61**	**88.0**	**83.61**
Expenditures						
Personnel	6.13	8.55	15.49	24.66	9.55	28.8
Goods and Services	9.14	12.91	21.54	22.27	21.37	23.8
Capital Equipment	2.55	1.71	8.39	5.41	2.54	3.6
Transfer and Subsidies	9.34	7.02	11.63	16.99	0.059	21.6
Total Expenditures	**27.16**	**30.19**	**57.04**	**69.34**	**33.53**	**77.9**

Note: Balances that have been carried forward are not presented in the illustration.

Chapter 5: Ebola Epidemic and Response

5.0 Introduction

When the first reported cases of Ebola appeared in Liberia on March 30, it was completely unexpected. Cases of Ebola had been officially confirmed in Guinea just over a week before, and the spread to Liberia occurred quickly due to the level of cross border movement between both countries. The cases at the time were confined to Lofa County, until one woman traveled to Margibi County, where she died.

Ebola was unprecedented in Liberia, and the health system was not set up to deal with it. Actors such as Médecins Sans Frontières mobilized quickly to set up an Ebola Treatment Unit in Lofa County, and the private company Firestone moved to isolate contacts in Margibi, where the woman had died.

As the number of cases dwindled, and it seemed as though Ebola had left Liberia, the daily meetings transitioned to just few a week, and the number of partners attending dropped dramatically with the thought that Ebola was no longer in the country. However, in June, cases again appeared in Liberia, and on June 17 cases were officially reported in the capital of Monrovia in Montserrado County, a densely populated county with approximately 1.5 million of the 4 million people in Liberia.

5.1 Incident Management System (IMS)

To effectively manage the EVD crisis an IMS was formed with various technical committees. The technical committees that make up the Incident Management System were case management, contact tracing, psychosocial, social mobilization, dead body management and EPI surveillance.

The IMS is composed of key technical partners and donors, which has changed somewhat as the response grows and new organizations arrive in Liberia to support the EVD response. From the beginning partners such as USAID, UNICEF, WHO, CDC, MSF, IFRC/LNRCS, were involved, which has grown to include other organizations such as the World Bank, UNMEER, UNFPA, UNDP, WFP, and others, such as representatives from the Foreign Medical Teams deployed to the country to support the management of ETUs and the like.

The IMS as a body represents more than 137 organizations, from a geographically diverse spread of countries from around the world. There are representatives from the foreign medical teams involved, including Cuba, China, Germany, Sweden, United States and Uganda, as well as support from multilateral organizations such as the African Union that includes delegates from across the African continent. This also includes more than 53 Liberian NGOs that are involved in the response, and more than 59 international NGOs, all working together to end the outbreak in Liberia.

5.1.1 Epi/Surveillance

Data is the foundational tool that underpins all the work of the IMS. During the outbreak, the capacity of the Health Information System Unit at the Ministry of Health was expanded with additional staff members, to facilitate effective generation and analysis of EVD data for rapid response and informed decision-making. The responsibilities of the EPI team is to produce the EVD daily situational analysis report (SitRep), to present the daily SitRep at the IMS meetings, to cross check lab results with reported cases, to collect daily surveillance reports from counties and conduct trainings on EVD data collection and management.

5.1.2 Case Management

When Ebola first hit, there was nowhere to treat patients safely. With the second wave reaching Monrovia, the chapel at ELWA compound was converted into one of the first ETUs in the country. As of December 31st there were approximately 510 beds available for EVD patients in 16 ETUs, with the capacity to scale up immediately to 1350 beds should the need arise. Additional ETUs are still being built, in order to ensure that every county has an ETU to care for suspected and confirmed cases.

Key also within the Case Management portfolio was the creation of the CCC concept, or Community Care Centers. This concept has never been seen before in any response to EVD, but as the concept has evolved there are no temporary spaces to care for suspected patients as they await their test results as a part of rapid interventions, and also more permanent structures that provide effective triage as CCCs near normal health facilities.

ETUs and CCCs are being managed or supported (such as non-medical management, construction) by the following organizations: International Organization on Migration, International Medical Corps, Partners in Health, US Public Health Services, Médecins Sans Frontières, MSB, Project Concern International, Samaritan's Purse, Medical Teams International, Save the Children, Welthungerhilfe, PAE, Aspen Medical Services, Goal, WAHA, International Rescue Committee, Heart to Heart International, American Refugee Commission, Plan International, and Concern Worldwide. Also, foreign medical teams were involved in the establishment and management of ETUs: Germans (German Armed Forces and German Red Cross), Chinese Government, Cubans and African Union.

5.1.3 Psychosocial

Psychosocial support was recognized as integral to the response from the first case of EVD, as patients as well as families and communities affected by Ebola require the support of mental health clinicians and social workers. Mental health was an area prior to Ebola that had few qualified staff, and thus the psychosocial team was required to train and scale up their services quickly. As of December 31st, Psychosocial teams in the counties are providing support to those infected and affected by EVD, including over 3,000 children affected, through services such as Interim Care Centers where survivors and those affected can stay while they are being supported or their communities are being engaged to receive them.

The team is also working with Survivors and has set up a National Survivors Network, with almost 500 participants.

5.1.4 Social Mobilization

The Social Mobilization committee built upon the network of community-based actors, including gCHVs, as well as traditional leaders and chiefs, and media outlets in order to engage communities, broadcast messages on EVD and prevention and actions to take, for behavior change and community support. Through the latest push of training at the end of 2014, the Reach Every District (RED) strategy, in the space of 1 month the Social Mobilization team reached 83% of districts in 14 counties, and trained and deployed 2,158 chiefs and traditional and religious leaders, and 4,300+ district volunteers. The target of this latest strategy is to reach 651,036 households in a door-to-door nationwide campaign, through reaching 30,496 families each month.

5.1.5 Laboratory

When Ebola was first detected in Liberia, there was only the National Reference Lab in Margibi County. The logistics of getting samples to this lab, and the number of samples it was needing to test, meant that there was a long lag time between taking samples from suspected Ebola patients, and the receipt of results. Thanks to the generous support of partners such as the US Department of Defense, as of December 31st Liberia had 8 labs in country, in Montserrado, Grand Gedeh, Bong, Nimba, and Sinoe counties.

5.1.6 Contact Tracing

In both phases of the response, contact tracing has been one of the most important elements as it's critical to follow up on those that may have contracted the disease and isolate them at the first sign of illness. Contact tracing first started with repurposing community-based volunteers, and evolved into a national structure of trained, supervised and incentivized contact tracers. At the end of December there were 5,919 contact tracers trained throughout the counties, following up an average of 6 contacts per confirmed EVD case.

5.1.7 Logistics

Space for supplies at the beginning of the outbreak were extremely limited at the national level, and the Government was unequipped to deal with the logistics for the quantity of supplies that are needed for EVD. Immediately tents were set up within the MOH parking lot by WFP, and the former large conference room at the Ministry of Health was repurposed into a warehouse following a fire. From there a logistics hub was built with the support of partners at the SKD complex, and then an additional 5 Forward Logistics Bases (FLBs) were built in the counties in order to facilitate the transport of supplies from Monrovia to the county levels. These hubs are located in Zwedru, Harper, Buchanan, Voinjama and Gbarnga.

5.2 Key Strategies

There were two phases (Phase zero- Understanding the Virus and One- Hunting the virus) of the response in 2014 that led to the change of strategies. Below is a description of the key strategies employed during each phase:

5.2.1 Phase Zero-Understanding the Virus

The first phase of the epidemic was characterized by lots of unknown, disbelief, myth, limited political will, inadequate resources and fewer cases. The major strategy for prevention and control was training in contact tracing, case management and regular hand washing publicity.The conventional approach of dealing with EVD was initiated. However, due to limited understanding of the situation coupled with inadequate resources, the disease escalated to many parts of the country, devastating lives thus creating a state of national emergency. This period was mid March to August 2014.

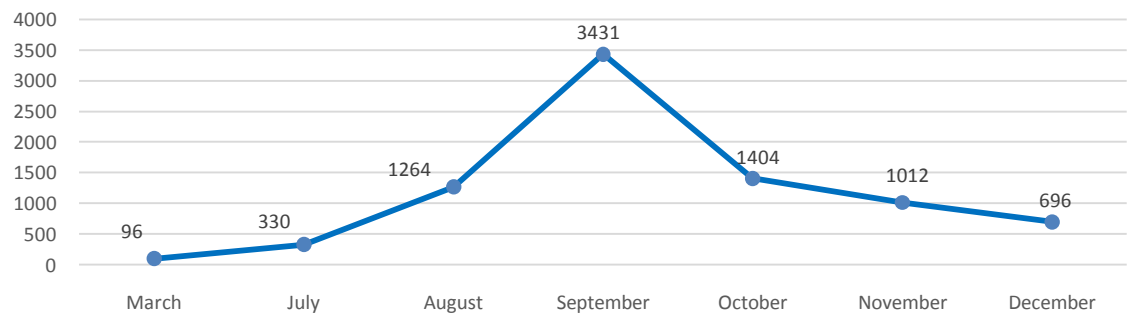
5.2.2 Phase I-Hunting the Virus

Phase I of the EVD crisis was associated with active transmission of cases with huge geographic spread across the country. The strategies deployed included, Rapid Isolation and Treatment of EVD cases (RITE), active case search and contact tracing, event based surveillance, rapid testing of communities dead bodies (swap), community engagement, social mobilization, case management and psychosocial support for survivals and affected families.During this period, the response team was expanded to identify cases and contacts, rapidly remove dead bodies and live patients and vigorously conduct active case finding and contact tracing and cross border surveillance. This period was August 2014 to February 2015.

5.3 EVD Statistics

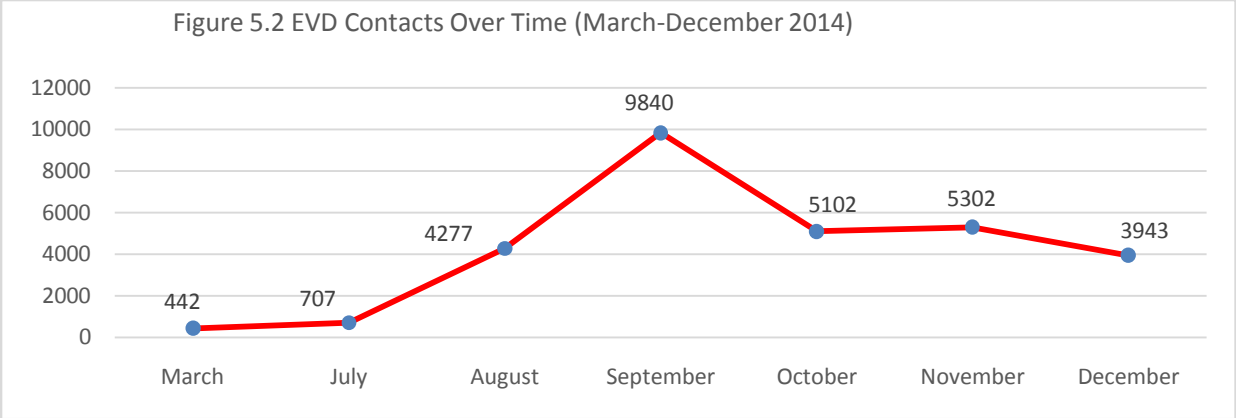
Since the EVD outbreak in March 2014, 8,048 cases (3,150-suspected; 1,786-probable and 3,112-confirmed) were reported across the country. The number of cases increased from 96 in March to 3,431 in September and declined to 696 in December. Figure 5.1 presents EVD cases per month in 2014. The reduction in cases is attributed to improvements in the various response teams, support by the national Government, citizens, and partners.

Figure 5.1: EVD Cases over Time (March - December 2014)



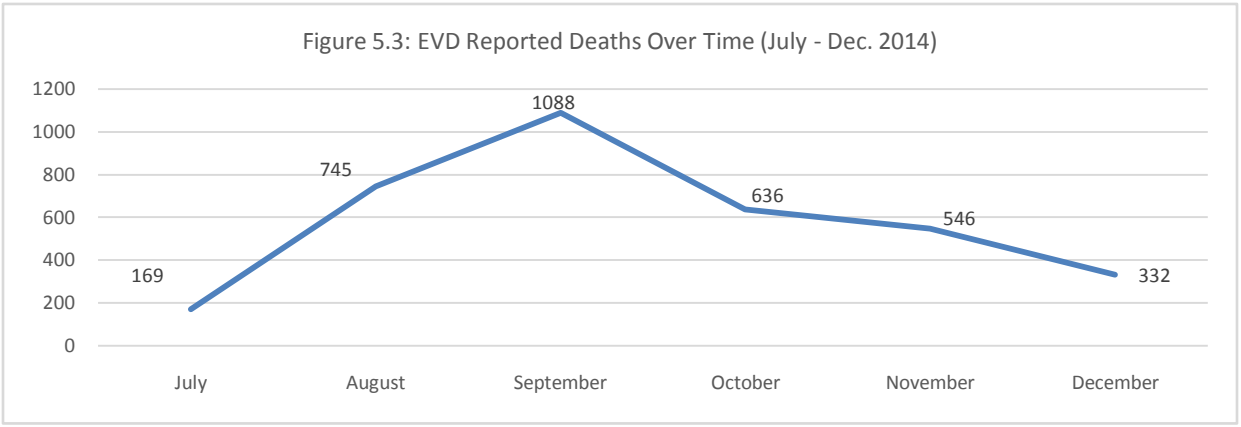
Source: MOH consolidated SitRep, 2014

Over 30,000 persons became contacts to EVD cases. The number of contacts ballooned from less than 500 in March to nearly 10,000 in September. With improved investigation of cases and contacts coupled with the reduction in cases, EVD contacts dropped to less than 4,000 in December. Figure 5.2 depicts EVD contacts during the year.



Source: MOH consolidated SitRep, 2014

During the EVD outbreak, all deaths were reported as Ebola deaths. This was because of the magnitude of the situation and the limited capacity to test and provide timely laboratories results to families' members. A total of 3,446 deaths were documented as EVD related from July to December. The number of deaths increased from 169 in July to 1,088 in September and dwindled to 332 in December 2014. Figure 5.3 presents EVD reported deaths trend in 2014.

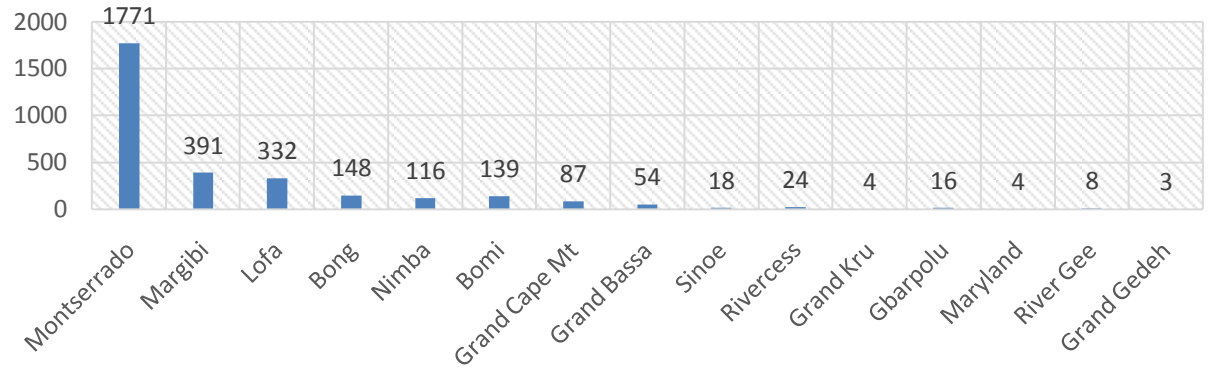


Source: MOH consolidated SitRep, 2014

The highest hit counties were Montserrado (54% of EVD cases) where one-third of the country's population resides, Margibi (16% of EVD cases) and Lofa (8% of EVD cases). Counties that recorded lower cases include Grand Gedeh, River Gee, Maryland and Gbarpolu. Though over 8,000 EVD cases were reported nationally in 2014, only 42% were laboratory confirmed. The majority of the cases were suspected and probable. Three counties Grand Gedeh (3), Maryland (4) and Grand Kru (4) reported less than 5 EVD

confirmed cases in 2014. Montserrado County recorded 56% of the confirmed cases, followed by Margibi and Lofa. Figure 5.4 depicts EVD cases by county in 2014.

Figure 5.4: EVD Confirmed Cases by County (March - December 2014)



Source: MOH consolidated SitRep, 2014

5.4 EVD Impact

The EVD crisis impacted the entire country enormously. The health sector was devastated bythe loss of health workers, schools were closed due to active transmission and fear of exposure to the virus, while the economic sector came to a near collapse due to the imposition of a state of emergency and restriction on flights and movement of people. Below is a brief description of the EVD impact on the country.

5.4.1 Health Sector

The extent of the crisis cannot be determined comprehensively until the outbreak cease and a post EVD evaluation is commission and executed. However, the EVD impact on the health sector is unprecedented due to the magnitude of the situation. Major referral and tertiary hospitals (e.g: Phebe, C. B. Dunbar, Catholic, Tellewoin, C. H. Rennie, J.F.K Medical Center, etc) were either closed or partially open. There was reduction in the already insufficient health workforce due to either fear of being infected by the virus or death. As of December 31, 2014, 370health workers were infected, 192 survived and 178 died. Most health facilities turned patients away who exhibited EVD like signs and symptoms with almost no referral facility to address their conditions. Additionally, patients were afraid of seeking health care due to the wave of cross infection in health facilities and infection of patients and care providers.

The EVD crisis exacerbated the already weak health system that had human resources for health challenge, erratic stock out of medical supplies, weak referral systems and poor quality of care including infection prevention and control. The health system in few counties collapsed (e.g; Lofa, Margibi, Bong and Montserrado) with others dysfunctional.

5.4.2 Educational Sector

The educational sector was impacted greatly also by the EVD crisis. All schools were ordered closed by the Government, which led to students wasting an academic year. Apart from students losing an academic year that delayed promotion and graduation, some teachers got exposed and died thus leaving vacancies in schools that might not be filled soon due toinsufficient number of qualified teaching staff.The deaths of parents, sponsors and guidance might deny many students and children of achieving their dreams and aspiration in life. Many students are traumatized by the death of their friends, classmates, parents, teachers and sponsors. This could result into poor performance of students, if they had the opportunity to go back to school.

5.4.3 Economic

The EVD outbreak had far reaching implications on Liberian's food security, local economy, and human development (child welfare). Counties (ie: Lofa, Nimba and Bong) that are major contributors to the country's food basket became the epicenter of the Ebola virus and experienced high death toll on their farming population. This affected food security and the local economy because farming is a major source of income and livelihood for these counties' population. Farmers could no longer farm because of the outbreak, deaths of close family members or heads of families (mothers and fathers), insecurity or abandonment of their products.

The economy was paralyzed due to the imposition of a state of emergency that scares away many investors, flights and traders and restricted movement in and out of the country. Major concessions closed and projects were abandoned thereby reducing tax revenues and employment. The Government experienced drastic declined in revenue that put a halt to many development projects including roads construction.

5.4.4 Psychosocial

Apart from the food insecurity and local economy implications of the EVD, hundreds of children (persons below age 18) have become orphans and are expected to live in traumatic and difficult conditions. The level of care and support needed for proper development will be compromise due to the absence of parental care, control and support. Many children might not be able to attend or graduate from high school because of lack of financial support from their parents or the absence of schools because teachers are not available to teach. This has serious implication for child welfare and Liberia's human development. The consequences of the outbreak far exceed expectation due to the loss of thousands of lives, devastation of families, and local communities.

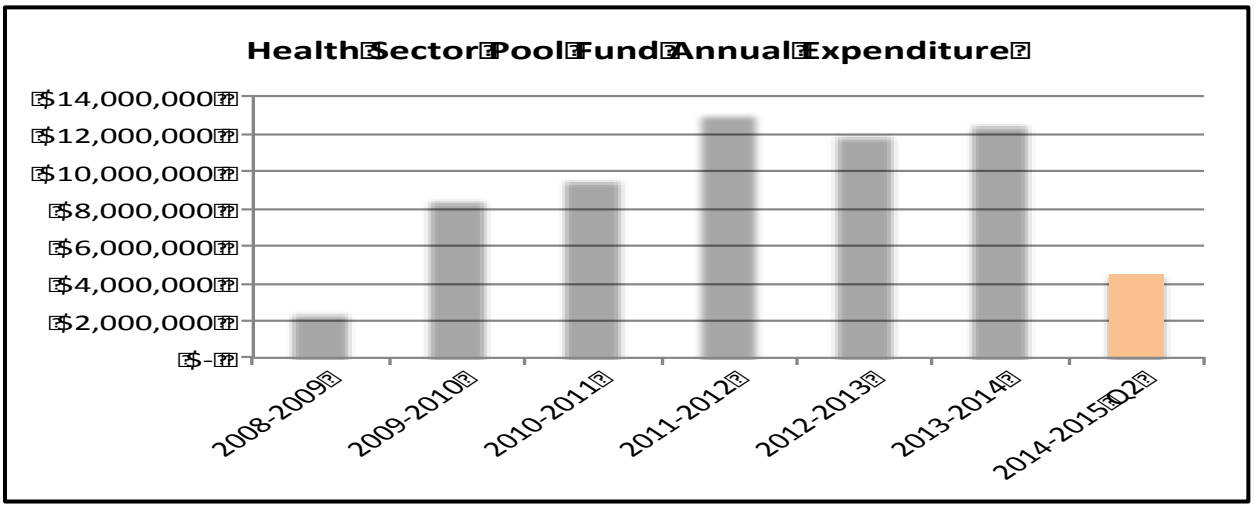
Chapter 6: Health Sector Pool Fund

The Health Sector Pool Fund under the direction and leadership of the Pool Fund Steering Committee chaired by the Minister of Health and Social Welfare continues to provide oversight and decision making for the use of the funds provided by donors to support the National Health Plan. The direction for the use of the funds follows the objectives for which the fund was established in 2008.

The objective of the pool fund is three –fold:

- To help finance priority unfunded needs within the NHP
- To increase the leadership of MOHSW in the allocation of sector resources
- To reduce the transaction costs associated with managing multiple projectsfrom different donors.

Since the establishment of the Health Sector Pool Fund in 2008, the pool fund have received over $ 70 million[8] in contribution of which 99 % has been committed to the unfunded priorities of the National Health Plan and 89% has been spent. Due to the continued commitment by donors to using this mechanism, the Government of Liberia has identified the pool fund as a key feature of the National Health and Social Welfare Financing Policy and Plan. The graph below presents the Health Sector Pool Fund Annual Expenditure 2008- 2014.



The current Donors to the Pool Fund are: Irish Aid, Department for International Development (DFID), Swiss Agency for Cooperation and Development (SDC), AgenceFrancaise de Development (AFD) and UNICEF. The Health Sector Pool Fund has received a total of US $ 6,502,521 for 2014(inclusive of bank interest), which cuts across two fiscal periods (FY 2013-2014 & 2014-2015) received at different times in the year. The highest contribution during this year was received in December 2014.

[8] **Pool Fund Quarter 2 Report –FY 2014-2015**

Donor Contribution – January – December 2014	
Donor	**Contribution (US$)**
Irish Aid	4,927,160
UNICEF	500,000
AFD	1,000,000
Sub Total	**6,427,160**
Bank Interest [1]	75,361
Total	**6,502,521**

On average the Pool Fund annual expenditure ranges between US $ 11-12 million. The development of the Annual Strategic priorities and Plan for FY 2014-2015 was done based on the changes in the funding situation, experiences in implementation from the previous year and assumption of expected contribution for FY 2014-2015 from a few donors.

January – December 2014: Currently there isadditional commitment of US $ 6,868,703 million made by contributing donors for FY 2014-2015. This includes US $ 1,578,947 committed by the SDC, US $ 4,289,756 by DFID and US $ 1,000,000 by AFD for this fiscal year (July 2014- June 2015).

Strategic Priorities for FY 2013- 2014, (2014-2015) January – December 2014

The health sector pool fund within this year have supported the implementation of the National Health Plan based on strategic priorities identified and proposal developed and submitted to the Pool Fund Steering Committee for approval.

In the 1st six months of this year, support was provided to the Central MOHSW Support system and the CHSWTs in 10 counties and the 2nd half of the year support covered critical areas to complement the GOL allotment for the counties and continued central level support.

I. January – June 2014 (FY 2013-2014)

This period focused on support to the central level MOHSW support systems (Office of Financial Management, Internal Audit and Compliance, County Health Services, Monitoring and Evaluation and External Aid units/departments) the implementation of the risk management project, supervision and monitoring, training and capacity building in financial management for county level personnel and county level support focusing on personnel, performance based financing bonuses, goods and services inclusive of drugs and medical supplies , operational funds for the counties , capital cost and overall support to the

Pool Fund Management firm which cuts- across both periods. Contracting –In with the CHTs and Contracting –Out with NGOs was still ongoing for this period.

II. JULY – DECEMBER 2014 (FY 2014-2015)

At the start of FY 2014-2015, there was a shift in the annual priorities funds and mechanism for funds counties activities. The last 2 NGOs (MERCI and AHA) funded through Pool Fund contracts ended and were not renewed due to funding situation. A non- cost extension was given for all projects up to September 2014 for the completion of activities and easy transition to the CHTs.

In July 2014, the Pool Fund Steering Committee approved the pool fund's Annual Plan of Strategic Funding Priorities for 2014-2015. The budget accompanying the annual plan was US $8.3 million allocated across four investment areas: human resources (63%), essential medicines, (29%) risk management (7%), and pool fund administration (1%)[9]. Based upon a recommendation by the Pool Fund Steering Committee to increase the proportion of the annual pool fund budget allocated to risk management, the MOHSW submitted a revised budget that was approved by the committee in October 2014, in the amount of US $8.8 million, out of US $9.2 million in total funds available for fiscal year 2014-2015.

- **HUMAN RESOURCES:** This covers Incentive payment for health workers and CHSWTs as well as key support system staffs at central MOHSW at an estimated cost at about of US $ 5,6 million for this fiscal year. Incentives are being paid for CHSWT & Health workers at 10 counties (2709) and Support system (48). This covers about 26% of the estimated 10,767 staff in the health workforce paid through the pool funds**.**

- **ESSENTIAL DRUGS AND MEDICAL SUPPLIES** An amount of US $ 2.6 million was allocated for the procurement of essential medicines, supplies, basic equipment, Laboratory reagents/supplies and administrative and logistical funds for NDS which includes of storage at NDS warehousing facilities, distribution of pharmaceuticals and supplies, monitoring/inventory control, and reporting on the use of commodities. This underpins the delivery of the EPHS as a complement to drugs and medical supplies procured by the GoL (estimated US $ 3.7 million) and other donor sources .The amount allocated is usually insufficient to cover the actual drugs and medical supplies needs annually. Currently there are about US $ 1.8 million essential drugs and medical supplies procured through Mission Pharma being delivered from previous year's allocation.

- **RISK MANAGEMENT AND MITIGATION:** There are two primary types of risk to be considered and addressed with relation to the HSPF: programmatic and fiduciary. The current pool fund allocation for risk management activities supports the overall MOHSW fiduciary risk management plan. This is very essential to ensure the right systems are in place for the management of funds provided to the counties, at central level and that they used for the intended purpose.

[9] Portion of funding already covered under the previous fiscal period

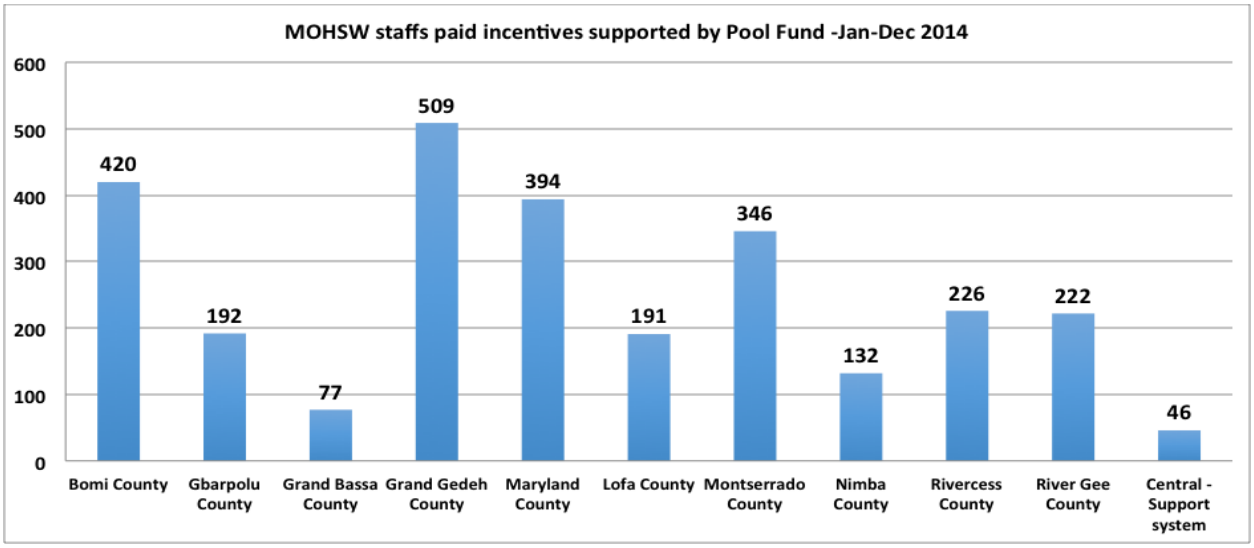
The key areas/activities being supported are:

1. Independent Annual Audit
2. Regional Auditors support to counties
3. Integrated supervision and monitoring visits
4. Independent project evaluation
5. OFM, Internal Audit and Compliance support
6. Monitoring and Evaluation support

- **POOL FUND ADMINISTRATION:** The HSPF management firm continues to have two principle responsibilities: 1) management of the pool fund mechanism, and 2) management and control of the fiduciary risk associated with use of the pool fund. PF administrative cost for fund management is covered by the Pool Fund .The PFMF will continue to efficiently and effectively manage the pool fund mechanism and control fiduciary risk associated with the fund. Performance Assessments is conducted periodically by a team of representatives from the Pool Fund Steering committee and the MOHSW to assess the Management firm based on the Terms of Reference for Fund Management. In this period an assessment was conducted between May - June 2014 with final results discussed with the Management firm and presented at the July 3rd Pool Fund steering committee meeting .The overall results of the assessment was satisfactory with a few areas indicated for improvement. The PF management firm contract, which ends on March 6, 2015, was extended for a period of 1 year ending March 6, 2016. The current Management firm (Hughes Development Inc.) have served as fund management firm since November 2012.

KEY ACHIEVEMENTS

- **Human resources:** Payment of Incentives for health workers, CHT and support staffs at the central level remains the highest proportion of the annual PF budget for this year and has been a crucial unfunded gap covered under the PF. This has contributed to having health workers at health facilities in remote areas in the counties, as this has been the only source of income for those who are not on GoL payroll. A total of 2755 staffs (Health workers -95%, CHT staffs -4% and Support system -2% have been paid for this period.



- Joint Monitoring visits: the M&E team along with staffs visited all counties from other departments including the PF secretariat team. Out of the counties supported by the PF, 9 out of 10 [10]counties were visited with 48 out of 144 (33%) pool fund supported health facilities covered during monitoring visits. Additional counties were visited to support the payment of Health care workers in the response, review of financial management issues.
- **Essential Drugs and Medical supplies:** Out of over US $2.2 million essential drugs and medical supplies funded through the Pool Fund and managed by NDS, US $ 1.4 million were distributed across the 15 counties.
- **Payment of PBF bonuses:** In addition to incentives paid to the staffs in 8/10 PF supported counties, PBF bonuses in an amount of US $130,721 earned bonuses were also paid for 4 quarters (2 in this period) prior to the shift in the annual priorities for FY 2014-2015.

1. **Risk Management: The following were some activities completed under the risk management project**

- Recruitment and deployment of regional auditor to support the CHSWTs
- Training on the Electronic financial management system for CHT staffs (136) and follow-up
- Follow-up of audit recommendations
- Procurement review at the county level
- Field Audits at the county level
- Annual pool fund Audit
- Fiduciary risk assessment
- Capacity building plan developed

[10]Rivercess not visited due to the Ebola situation

2. Pool Fund Administration

- The recruitment of a national Fund manager as part of the transitional plan for future handover of Fund management role to the MOHSW
- Organized four successful (March 6th, July 3rd, October 28 and December 11, 2014) Pool Fund Steering committee meetings with prepared packages with relevant documents, circulated as per schedule, documented all resolutions passed and minutes of all meetings.
- PFMF provided technical support and secretariat services for the MOHSW in the development of the Annual strategic priorities proposals, as well as other key activities lead by the MOHSW.
- Production of monthly financial updates, quarterly and annual reports as well as presentation on the HSFP at forums.
- Support in the management, coordination and response to the health workers strike and Ebola response
- PF manager was seconded to serve as the Deputy Incident Manager to support the Ebola Response

Chapter 7: FARA Project

7.1 Background

The Fixed Amount Reimbursement Agreement (FARA) is an innovative funding mechanism in the Health Sector in Liberia. It is a Government-to-Government pilot initiative established in July 2011, with a budget of US$ 42 million dollars, covering a period of four years. The project was established to support the implementation of the National Health Policy and Plan 2011- 2021 and contribute to strengthening the health service delivery through the implementation of the Essential Package of Health Services (EPHS) in Bong, Lofa and Nimba counties. FARA uses the government's financial and technical systems for implementation, as a means of strengthening quality of care program implementation, and financial management and control across levels of the health system. In July 2014, the project was modified, to include key activities and deliverables in support of the national Road Map to decrease Maternal and Newborn Morbidity and Mortality. A new Sector Program Assistance (SPA) was concomitantly signed between the USG and the GOL covering a period of three years (2014 – 2016)to the tone of $1.2 million. While the FARA comprehensively supports the NHPP, specifically, the SPA assists the GOL to achieve important impacts to reduce maternal and neonatal mortality, in line with the broader MM reduction Roadmap. Since its modification in July 2014, FARA now supports maternal and newborn health interventions in 3 additional counties: Grand Bassa, Margibi and Montserrado.

As a part of the FARA mechanism, reimbursement of funds for implementation of the AAP is based on achievement of targets for a set of indicators based agreed upon, with special emphasis on activities that will strengthen the underlying systems in the health sector, encourage policy reform, build institutional capacity by: (1) increasing the access to quality comprehensive and basic emergency obstetric and neonatal care (EmONC) and essential maternal and neonatal health (MNH) care; (2) improving access to and utilization of quality family planning services; (3) strengthening and expanding outreach and community-based service delivery; and (4) improving management of MNH services at the national and county levels.

Achievements: During the year under review, the following achievements were recorded:

FARA Framework per Key Activity Areas:

7.2 Technical Management Support

- A total 15 Key local Consultants recruited between 2012 and 2014 (5Management and 10 technical) were maintained and provided support to key functions in the roll out of the NHPP.
- A sustainability plan for ensuring transitioning of key consultants and other service delivery staff from the FARA personnel list has been developed and a total of 150 health workers at county level (Bong, Nimba, and Lofa) transitioned to the Civil Service. The process continues.

- Support provided to the M&E Unit to update the national Monitoring and Evaluation Plan. The plan is used as a guide for monitoring activities on all 105 indicators across the country.

- Support provided to the Office of the Principal Compliance Officer for the roll out of the MOH/USAID/GEMS Risk mitigation plan. All FARA supported counties receive technical backstopping on risk mitigation and have consequently put in place measures of technical and financial control. A major orientation workshop on key aspects of the plan was conducted for all other counties, resulting in a plan of work for risk migration.

7.3 Supports to MOH Supervision Activities

7.3.1 Joint Integrated Supportive Supervision (JISS)

- The Department of Health Services was supported to conduct, three joint supervision visits to all 15 counties. A desk review of implementation of recommendations from previous findings was also carried out through the Department of Health Services. Details are provided in the JISS reports submitted by this department.

7.3.2 Quarterly EPI Data Quality Harmonization Review

- FARA supported implementation of the process for harmonizing EPI data quality in all counties. Incrementally, a discrepancy between data submitted through the HMIS has significantly decreased. In 2012, at the start of this process supported by FARA, data accuracy score ranged between 40—50%, As at December 2014 this score rose to 87%, with variation in counties. Though the average accuracy score is favorable, there is stillroom for improvement, especially around the quality of the data.

7.4 Management of Performance Based Contracts

Performance Contracts were awarded to 2 international NGOs ***(AFRICARE and International Rescue Committee)*** for the implementation of the EPHS in Bong, Nimba and Lofa counties. Results show significant increase in performance around the 22 Performance Based Financing Indicators. The model is defined as a strategy, which employs two management teams for service delivery as a means of capacity building through healthy competition, employing the Four-One principles:

- One County Plan
- One Monitoring system and plan
- One oversight Leadership and Governance mechanisms
- One Reporting

The model aims to systematically transfer full management functions of service delivery from the NGO to the CHT in a phased manner. Experience from Bong, the pilot county provides the following advantages:

- Increased sense of management and ownership
- Strengthened collaboration between CHT and Partners; better dialogued
- Transfer from instruction to collaboration/ working together. Some advantages mentioned by the Bong CHT include transformation in the management of the sector
    - ❑ From referee to player
    - ❑ From total dependence to cooperation, sharing responsibility
    - ❑ From antagonism to dialogue
    - ❑ Parallel reporting

A status of implementation was conducted by the FARA office in December 2014, and consequently proposed a framework for a formative research to learn lessons and inform decision-making on this style of management in the health sector.

Due to the impact of Ebola on service delivery, these indicator The MOH awarded performance contracts for the restoration of routine health services in 9 hospitals and 14 Health centers in the five most affected counties. The FARA office, based on its long-standing experience on awarding and managing performance contracts was requested by the MOH to lead this process. Funds available for these interventions were provided by the GOL, to the tone of 6 MIL Dollars. Under this arrangement, Africare, a FARA supported NGO support 2 facilities in Nimba: JW Harley Hospital in Sanniquellie and Bahn Health Center in Bahn as well one health center in Bong: C.B. Dumbar. The contracts entered into between the NGO and MOH cover the period December 2014- June significantly declined.

A similar contractual arrangement through a memorandum of understanding was entered into between the MOH,FBO and private entities. The MOU request private providers to l reduce cost of a select package of patient care up to 35% reduction.

7.5 Support to MOH Capacity Building Program

- Support to the Division of Human Resources was provided for conducting performance appraisal of management consultants paid through the FARA mechanism. Efforts are underway for institutionalization of these processes, across central and counties. To date, HRs in the FARA supported counties have been supported to do the same. There is still major room for improvement.
- The project ensured that all consultants developed annual work plans and reported on a monthly basis. Salaries were paid upon deliverables as per the consultants' work plan.

7.6 Management Challenges

- Management challenges featured low remittance of funds. As per the FARA Agreement, an amount of US$14,101,752 was budgeted for Year 3 (FY 2013/2014). However, the Ministry of Finance (MOF) appropriated only US$11,000,000 in its FY2013/14 National Budget, as support to the FARA work plan. Despite the low appropriation, the MOF only disbursed US$5,693,093 in FY 2013/2014. Further

reduction has been made in the Project Year 4 (July 2014-June 2015). This disbursement falls short of the 14,101 702 reimbursable amount stipulated in the FARA Agreement. Overall, the project has suffered a 48% reduction in funds. Of the US$14,101,752 reimbursable, the MOF has appropriated only US$8,400,000 for project implementation in FY 2014-2015. This reduction is occasioned by financial challenges in the Revenue Envelop of the country.

- The below illustration of the project's final position shows a positive position. However if the constant reduction is not halted, it could pose challenges to the financial position of the project and hamper smooth operation and achievable results in Year 4. Below, please find the summary of FARA financial position as at June 30, 2014.

Chapter 8: Challenges and Recommendations

To achieve the National Health Policy goal and objectives, the international and regional goals such as the Millennium Development Goals (MDGs 4, 5 and 6) and the Roll Back Malaria Targets, the Ministry hasto address wide range of hurdles and bureaucratic bottlenecks in the delivery of health services. The below matrix summaries the health systems issues and recommendations.

Health Systems Building Blocks	Issues	Recommendations
Leadership and Governance	• Weak leadership and governance the county, district and community levels.	• Strengthen leadership and management capacity at all levels of interventions
Drug and Medical Supplies	• Erratic stock out of essential drugs and medical supplies at health facilities • Inadequate capacities (limited refrigerators, cold boxes, transport, etc) at county and district levels to manage and distribute vaccines, drugs, medical products and related supplies • Poor stock management and accountability systems	• Establish a robust supply chain management systems • Enhance the capacity of supply chain managers at all levels • Procure sufficient drugs and medical supplies
Health Service Delivery	• High proportion of unimmunized children contributed to high dropout rate • Weak referral system partly due to limited GSM coverage and ambulance services • Inadequate skilled and qualified health workforce especially physicians and certified midwives • Limited access to basic health care (ie: over one million people lacks access within 5KM)	• Implement fully the Reach Every District Strategy (RED) • Create physical access to under serve population • Train and deploy skilled and qualified health workers • Improve referrals systems
Human Resources for Health (HRH)	• Low incentive and salary, leading to poor quality of services and high turn over • Fewer health training institutions with uneven distribution that impedes enrollment and production of health workers • High proportion of contractors • Limited benefit and job security for health workers	• Place 5,000 contract workers on GOL payroll to motivate them and increase their productivity and commitment to service. • Increase health worker remuneration and benefit • Increase health training institutions and their capacity
Health Information Systems	• Poor data quality • Untimely reporting and low coverage • Limited qualified staff and capacity	• Strengthen health management information system
Health Financing	• Insufficient national budget to construct additional health facilities, place health workers on Government payroll and procure adequate drugs and medical supplies	• Increase budgetary allocations to implement the 10 year National Health Plan

Annex A: Reporting Coverage and Health Services Utilization Data

Table A: Reporting Coverage by County in 2014 (OPD)

County	No. of facilities per county	Reports Received	Expected Reports	Reporting Coverage	Reports On Time	Percent On Time
Bomi	24	268	288	93%	153	53%
Bong	39	468	468	100%	318	68%
Gbarpolu	14	150	168	89%	113	67%
Grand Bassa	29	318	348	91%	247	71%
Grand Cape Mt	32	339	384	88%	183	48%
Grand Gedeh	21	205	252	81%	153	61%
Grand Kru	17	204	204	100%	197	97%
Lofa	59	671	708	95%	375	53%
Margibi	31	311	372	84%	208	56%
Maryland	24	269	288	93%	107	37%
Montserrado	264	1242	3168	39%	543	17%
Nimba	63	714	756	94%	640	85%
River Gee	17	173	204	85%	134	66%
River Gee	19	199	228	87%	174	76%
Sinoe	34	372	408	91%	279	68%
National	**687**	**5903**	**8244**	**72%**	**3824**	**46%**

Table B: Distribution of functional Health Centers and Hospitals by County and by Reporting Status in 2014

Name	No. of facilities per county	Actual Reports	Expected Reports	Expected Report Percent	Reports On Time	Percent On Time
Bomi	1	10	12	83.3	6	50
Bong	3	36	36	100	26	72.2
Gbarpolu	1	11	12	91.7	7	58.3
Grand Cape Mt	3	32	36	88.9	20	55.6
Grand Bassa	1	11	12	91.7	6	50
Grand Gedeh	1	12	12	100	4	33.3
Grand Kru	1	12	12	100	12	100
Lofa	4	45	48	93.8	12	25
Margibi	2	18	24	75	11	45.8
Maryland	1	12	12	100	2	16.7
Montserrado	10	32	120	26.7	8	6.7
Nimba	5	53	60	88.3	46	76.7
River Gee	1	11	12	91.7	8	66.7
Rivercess	1	12	12	100	9	75
Sinoe	1	10	12	83.3	7	58.3
National	**36**	**317**	**432**	**73.4**	**184**	**42.6**

Table C: In-patients Admission by causes and by county 2014										
County	***Malaria***	***Anemia***	***ARI***	***STI***	***Hypertension***	***RTA***	***Other injuries***	***Typhoid***	***Others***	***Total***
Bomi	2,062	212	199	132	83	159	132	53	849	3,881
Bong	2,836	587	156	152	87	174	207	110	4353	8,662
Gbarpolu	407	19	4	19	18	7	15	12	259	760
Grand Bassa	2,445	514	675	177	225	107	294	436	2218	7,091
Grand Cape Mt	652	143	50	17	34	20	14	14	164	1,108
Grand Gedeh	1,161	253	29	79	42	88	48	9	1992	3,701
Grand Kru	57	18	1	8	4	8	5	4	285	390
Lofa	3,373	607	531	888	169	186	130	276	4997	11,157
Margibi	3,565	437	337	499	222	317	180	550	3193	9,300
Maryland	2,335	122	29	57	60	155	43	12	740	3,553
Montserrado	3,909	1,734	1881	4488	1576	295	821	264	6601	21,569
Nimba	6,804	2,011	374	1345	302	202	370	440	6064	17,912
River Gee	297	15	25	5	6	10	22	13	440	833
Rivercess	126	29	4	56	6	2	0	3	119	345
Sinoe	415	28	16	18	24	22	4	5	332	864
National	**30,444**	**6,729**	**4,311**	**7,940**	**2,858**	**1,752**	**2,285**	**2,201**	**32,606**	**91,126**

Table D: In-patient admissions and deaths by county in 2014							
		Inpatient Deaths					Proportion of maternal deaths
County	Admission	< 5 yrs	5 yrs and above	Neonatal deaths	Maternal	Total	
Bomi	3,432	157	52	8	10	227	4.4
Bong	9,142	432	152	59	31	674	4.6
Gbarpolu	553	65	23	5	14	107	13.1
Grand Bassa	7,994	100	125	7	8	240	3.3
Grand Cape Mt	911	20	21	6	1	48	2.1
Grand Gedeh	3,765	72	124	23	9	228	3.9
Grand Kru	403	3	16	3	4	26	15.4
Lofa	10,730	208	254	26	6	494	1.2
Margibi	3,614	195	372	15	10	592	1.7
Maryland	3,477	30	42	26	12	110	10.9
Montserrado	15,819	4,769	583	72	19	5,443	0.3
Nimba	12,293	614	518	33	17	1,182	1.4
River Gee	873	16	20	13	3	52	5.8
Rivercess	397	170	14	5	4	193	2.1
Sinoe	778	3	7	10	1	21	4.8
Liberia	**74,181**	**6,854**	**2,323**	**311**	**149**	**9,637**	**1.5**

Table E. Immunization Coverage by Antigen and County in 2014

County	BCG	OPV1	OPV2	OPV3	Penta 1	Penta 2	Penta 3	PCV1	PCV2	PCV3	Yellow Fever	Measles	Fully Imm.
Bomi	88	98	84	76	99	85	74	116	66	43	67	70	53
Bong	110	99	78	89	99	78	89	142	87	73	82	83	65
Gbarpolu	55	69	63	64	69	63	64	82	57	41	63	58	55
Grand Bassa	87	86	65	66	86	66	66	110	59	45	55	60	46
Grand Cape Mt	49	63	55	51	64	56	51	99	56	37	45	46	42
Grand Gedeh	62	67	58	62	67	58	62	92	66	56	58	60	39
Grand Kru	73	96	70	67	92	70	67	97	57	44	77	77	63
Lofa	62	73	61	67	73	62	67	68	50	39	48	60	42
Margibi	71	64	51	49	64	51	49	93	52	35	47	55	45
Maryland	68	87	79	74	88	79	75	93	78	59	57	57	50
Montserrado	64	58	47	51	59	48	51	63	43	38	43	47	43
Nimba	78	83	70	67	84	71	67	108	68	46	54	58	41
River Gee	51	52	46	38	52	46	38	83	43	27	42	40	36
Rivercess	74	74	60	65	74	60	65	96	59	44	59	75	34
Sinoe	87	90	85	89	91	85	89	125	83	65	72	73	54
National	73	73	61	62	74	61	63	90	58	45	54	58	46

Table F: Selected Under 5 Diseases by County in 2014

County	Diseases								% of Malaria
	Malaria	ARI/Pneumonia	Diarrhea	Anemia	Malnutrition	Injuries	Others	Total	
Bomi	17,290	18,097	964	1224	263	161	6,622	44,621	38.7
Bong	45,768	18,835	2,956	1128	1112	382	20,085	90,266	50.7
Gbarpolu	6,246	8,502	357	199	6	43	3,544	18,897	33.1
Grand Bassa	24,495	12,899	786	916	446	334	12,661	52,537	46.6
Grand Cape Mt	11,896	13,634	425	921	69	126	8,160	35,231	33.8
Grand Gedeh	14,105	2,799	125	69	883	49	4,426	22,456	62.8
Grand Kru	11,106	3,766	455	153	30	97	3,926	19,533	56.9
Lofa	39,738	33,959	5,347	2173	1492	326	16,922	99,957	39.8
Margibi	19,296	14,534	2,272	1822	778	222	12,826	51,750	37.3
Maryland	19,182	6,266	1,192	249	303	237	4,318	31,747	60.4
Montserrado	104,142	38,872	5,924	5439	4360	1646	38,916	199,299	52.3
Nimba	73,754	53,978	8,441	5059	2412	360	35,439	179,443	41.1
River Cess	11,767	4,316	419	110	271	164	3,177	20,224	58.2
River Gee	6,847	3,188	382	94	65	115	3,540	14,231	48.1
Sinoe	13,412	5,627	840	120	28	171	4,068	24,266	55.3
National	**419,044**	**239,272**	**30,885**	**19,676**	**12,518**	**4,433**	**178,630**	**904,458**	**46.3**

Table G: Vitamin A Supplement Administered to Children under-one and Postpartum Mothers by County				
	Under 1 yr		Postpartum Women	
	Number	Percent	Number	Percent
Bomi	1,031	27	1,026	24
Bong	11,957	79	8,882	52
Gbarpolu	1,272	34	1,086	26
Grand Bassa	2,036	20	2,512	22
Grand Cape Mt	1,442	25	1,465	23
Grand Gedeh	1,909	34	1,674	26
Grand Kru	654	25	643	22
Lofa	3,086	25	6,445	46
Margibi	2,162	23	1,465	14
Maryland	1,696	28	1,303	19
Montserrado	4,197	8	5,447	10
Nimba	7,973	38	9,421	40
River Gee	536	18	762	22
Rivercess	551	17	1,004	28
Sinoe	966	21	1,246	24
National	**32,369**	**21**	**44,381**	**25**

Table H: Under five Deaths by County in 2014										
		Under 5 deaths								Prop of Malaria deaths
County	Consultation	Malaria	Diarrhea	Anemia	ARI	Injuries	Malnut.	Others	Total	
Bomi	31,327	22	1	8	5	0	2	16	54	41
Bong	82,677	250	1	47	7	5	8	110	428	58
Gbarpolu	13,246	45	4	0	0	0	0	5	54	83
Grand Bassa	46,247	34	2	15	9	10	3	26	99	34
Grand Cape Mt	25,523	10	0	1	0	0	0	0	11	91
Grand Gedeh	19,404	20	0	9	3	1	7	30	70	29
Grand Kru	19,157	0	0	0	0	0	0	3	3	0
Lofa	77,508	120	1	39	15	0	1	26	202	59
Margibi	40,587	16	5	1	7	0	0	66	95	17
Maryland	27,541	17	0	2	2	0	3	5	29	59
Montserrado	175,153	1,031	126	482	631	366	87	1,887	4,610	22
Nimba	138,408	289	30	47	13	7	9	179	574	50
River Cess	18,597	4	0	2	0	4	0	4	14	29
River Gee	11,436	33	2	4	1	0	1	128	169	20
Sinoe	22,319	2	0	1	0	0	0	0	3	67
National	**749,130**	**1,893**	**172**	**658**	**693**	**393**	**121**	**2,485**	**6,415**	**30**

Table I.1: ANC 4th Visit Coverage by County Since 2010					
County	2010	2011	2012	2013	2014
Bomi	53.3	67.2	69	57.2	50.9
Bong	70.5	76.8	56	56.1	57.7
Gbarpolu	26.6	38.5	45	29.7	31.2
Grand Bassa	27.3	53.9	57	66.8	60.6
Grand Cape Mt	25.6	42.3	47	48.6	31.2
Grand Gedeh	42.5	47.7	62	55.7	65.3
Grand Kru	29.4	52	55	55.9	42.3
Lofa	62.5	75.6	63	50.1	53.3
Margibi	36.4	42.3	60	57.5	35.9
Maryland	30.4	71.5	63	57.6	54.8
Montserrado	28	26.4	62	48.4	34.4
Nimba	56.5	57.3	62	72.0	60.1
River cess	44	61.7	59	45.0	31.1
River Gee	62	66.6	42	55.2	44.6
Sinoe	17.8	21.3	25	37.1	53.7
National	***40.9***	***47.3***	***58***	**54.4**	**46.3**

Table J: Postnatal Visits by County in 2014				
County	2014 Expected Deliveries	2014 Actual Deliveries	# ofPNC Visit	% ofPNC
Bomi	4,288	2,654	1,440	33.6
Bong	17,000	11,541	7,595	44.7
Gbarpolu	4,251	1,231	920	21.6
Grand Bassa	11,301	4,505	2,957	26.2
Grand Cape Mt	6,478	1,887	1,435	22.2
Grand Gedeh	6,385	2,909	3,183	49.8
Grand Kru	2,952	1,126	889	30.1
Lofa	14,113	8,042	5,085	36.0
Margibi	10,701	4,232	2,212	20.7
Maryland	6,930	2,629	1,690	24.4
Montserrado	57,004	16,563	13,762	24.1
Nimba	23,552	14,838	6,626	28.1
River Gee	3,645	1,379	1,359	39.9
River Cess	3,405	1,573	1,130	31.0
Sinoe	5,220	2,755	1,360	26.1
National	**177,224**	**77,864**	**51,643**	**29.1**

Table K: IPT Coverage by County in 2014					
County	2014 Expected Delivery	Number of1st Dose	Number of 2nd Dose	Percent of 1st Dose	Percent of IPT 2nd Dose
Bomi	4,288	3524	2806	82.2	65.4
Bong	17,000	13664	10633	80.4	62.5
Gbarpolu	4,251	1790	1544	42.1	36.3
Grand Bassa	11,301	7060	5142	62.5	45.5
Grand Cape Mt	6,478	2931	2320	45.2	35.8
Grand Gedeh	6,385	3475	3065	54.4	48.0
Grand Kru	2,952	1816	1682	61.5	57.0
Lofa	14,113	9788	7784	69.4	55.2
Margibi	10,701	5914	4475	55.3	41.8
Maryland	6,930	4391	3557	63.4	51.3
Montserrado	57,004	32461	22577	56.9	39.6
Nimba	23,552	20767	16615	88.2	70.5
River Gee	3,645	2026	1422	59.5	41.8
Rivercess	3,405	1644	1255	45.1	34.4
Sinoe	5,220	2737	2246	52.4	43.0
National	**177,224**	**113,988**	**87,123**	**64.3**	**49.2**

Table L: Family Planning commodities by type and by county in 2014							
	Condoms						
County	Female Condom	Male Condom	IUCD	Depo	Oral Contraceptives	Implant	Total
Bomi	26	5157	1	5828	3528	115	14,655
Bong	126	5708	3	20600	7629	941	35,007
Gbarpolu	47	1897	36	3519	1936	72	7,507
Grand Bassa	30	24069	72	14518	9155	743	48,587
Grand Cape Mt	22	3598	17	4272	2552	102	10,563
Grand Gedeh	89	4755	18	8774	1904	451	15,991
Grand Kru	20	710	0	4633	888	177	6,428
Lofa	841	19196	35	14849	15611	1170	51,702
Margibi	224	10665	10	8631	6449	442	26,421
Maryland	3	1754	0	4391	3255	393	9,796
Montserrado	4072	66767	302	53385	32692	3952	161,170
Nimba	1110	9516	44	20798	6490	1036	38,994
River Gee	0	2	23	6417	495	341	7,278
River Cess	8	1,250	9	3317	852	125	5,561
Sinoe	258	2,860	11	10026	2688	573	16,416
National	**6,876**	**157,904**	**581**	**183,958**	**96,124**	**10,633**	**456,076**

Table M: Couples Years of Protection (CYP) by County							
County	Pills	Implant	Depo	IUD	Male Condom	Female Condom	Total CYP
Bomi	518	34	1,464	4	308	2	2,329
Bong	1,289	265	5,172	11	611	15	7,362
Gbarpolu	190	17	865	18	78	2	1,170
Grand Bassa	1,165	205	3,697	252	499	3	5,821
Grand Cape Mt	434	30	1,069	-	237	0	1,770
Grand Gedeh	384	116	2,154	32	420	0	3,105
Grand Kru	147	48	1,155	-	39	0	1,389
Lofa	2,485	326	3,496	116	1,172	33	7,627
Margibi	1,401	121	2,146	35	1,023	14	4,741
Maryland	519	109	1,104	-	129	0	1,861
Montserrado	4,220	807	12,853	868	4,175	131	23,053
Nimba	1,208	271	5,164	217	705	12	7,577
Rivercess	95	92	1,594	81	1	-	1,862
River Gee	155	31	812	-	62	3	1,062
Sinoe	424	120	2,414	39	250	2	3,248
National	**14,632**	**2,593**	**45,156**	**1,670**	**9,707**	**219**	**73,976**

Table O: Tetanus Toxoid Coverage by County in 2014									
County	Catchment Population	Est. Preg. Women (5%)	TT 1		TT 2+		Total	TT Coverage	
			Non-Preg.	Preg.	Non-Preg.	Preg.		TT1 Preg	TT2 Preg
Bomi	95,290	4,765	2,066	2,388	3,941	3,049	11,444	50	64
Bong	377,768	18,888	3,102	8,962	11,039	14,049	37,152	47	74
Gbarpolu	94,462	4,723	1,256	1,601	3,662	2,281	8,800	34	48
Grand Bassa	251,135	12,557	2,993	5,199	5,718	8,217	22,127	41	65
Grand Cape Mt	143,952	7,198	1,358	2,303	2,374	3,370	9,405	32	47
Grand Gedeh	141,893	7,095	4,149	3,921	7,641	5,074	20,785	55	72
Grand Kru	65,604	3,280	3,718	2,107	1,495	1,702	9,022	64	52
Lofa	313,631	15,682	2,422	7,072	3,957	7,959	21,410	45	51
Margibi	237,801	11,890	2,126	4,029	6,340	5,918	18,413	34	50
Maryland	153,991	7,700	3,427	4,021	4,908	5,633	17,989	52	73
Montserrado	1,266,747	63,337	12,143	28,732	9,931	25,108	75,914	45	40
Nimba	523,385	26,169	3,898	16,136	6,462	13,854	40,350	62	53
River Gee	75,659	3,783	678	874	1,814	1,498	4,864	23	40
Rivercess	81,006	4,050	1,481	1,630	2,275	2,270	7,656	40	56
Sinoe	115,989	5,799	3,161	2,244	6,084	5,401	16,890	39	93
National	**3,938,313**	**196,916**	**47,978**	**91,219**	**77,641**	**105,383**	**322,221**	**46**	**54**

Table P: Maternal Deaths by County in 2014			
County	Deliveries	Maternal Deaths	Rate of Deaths/1,000 Deliveries
Bomi	2,654	10	3.8
Bong	11,541	31	2.7
Gbarpolu	1,231	14	11.4
Grand Bassa	4,505	8	1.8
Grand Cape Mount	1,887	1	0.5
Grand Gedeh	2,909	9	3.1
Grand Kru	1,126	4	3.6
Lofa	8,042	6	0.7
Margibi	4,232	10	2.4
Maryland	2,629	12	4.6
Montserrado	16,563	19	1.1
Nimba	14,838	17	1.1
River Gee	1,379	3	2.2
Rivercess	1,573	4	2.5
Sinoe	2,755	1	0.4
National	**77,864**	**149**	**1.9**

Table Q: Malaria Cases Diagnosed and Treated by County in 2014					
			Malaria Cases by Age		% of Cases Treated with ACT
County	Consultation	Malaria Cases	< 5 years	>=5 years	
Bomi	116,289	40,997	17,290	23,707	77%
Bong	239,572	98,968	45,768	53,200	93%
Gbarpolu	44,926	17,341	6,246	11,095	94%
G. Bassa	162,175	62,739	24,495	38,244	85%
G. C. Mt	78,772	26,872	11,896	14,976	92%
G. Gedeh	75,406	36,091	14,105	21,986	86%
G. Kru	58,116	23,713	11,106	12,607	94%
Lofa	269,455	101,134	39,738	61,396	97%
Margibi	148,236	52,562	19,296	33,266	74%
Maryland	95,339	43,663	19,182	24,481	80%
Montserrado	642,465	306,010	104,142	201,868	71%
Nimba	428,460	164,326	73,754	90,572	86%
River Gee	61,990	25,531	11,767	13,764	94%
River Cess	37,820	16,163	6,847	9,316	94%
Sinoe	77,847	32,838	13,412	19,426	93%
National	**2,536,868**	**1,048,948**	**419,044**	**629,904**	**83%**