

A photograph of a woman in profile, facing left. She has her hair in braids and is wearing a purple t-shirt. A red plastic bag is balanced on her head. A young child is strapped to her back with a colorful patterned cloth. The background is a dirt path and green foliage.

# LIBERIA

## REBUILDING BASIC HEALTH SERVICES

### ANNUAL REPORT

1 OCTOBER 2010  
THROUGH  
30 SEPTEMBER 2011

## **Rebuilding Basic Health Services (RBHS) Mission Statement**

RBHS supports the Ministry of Health and Social Welfare to establish and maintain a comprehensive range of high quality health services for the Liberian people through the pillars of the National Health and Social Welfare Plan (human resources, infrastructure, the Basic/Essential Package of Health Services, support systems) and mobilizing communities for health. RBHS is committed to the principles of partnership, participation, capacity building, and evidence-based decision-making. Youth sensitivity and gender equity are emphasized in all RBHS activities.

The Rebuilding Basic Health Services (RBHS) Project is funded by the United States Agency for International Development (USAID) through Cooperative Agreement No: 669-A-00-09-00001-00 and is implemented by JSI Research and Training Institute, Inc., in collaboration with Jhpiego, the Johns Hopkins University Center for Communication Programs (JHU/CCP), and Management Sciences for Health (MSH). This document is made possible by the generous support of the American people through USAID. The contents are the responsibility of JSI Research and Training Institute, Inc., and do not necessarily reflect the views of USAID or the United States Government.

## ABBREVIATIONS

ACT	Artemisin-based Combination Therapy
AED	Academy for Educational Development
AIDS	Acquired Immune Deficiency Syndrome
ANC	Ante-Natal Care
ARI	Acute Respiratory Infections
ART	Anti-Retroviral Therapy
ASRH	Adolescent Sexual Reproductive Health
BAG	Breastfeeding Advocacy Group
BCC	Behavior Change Communication
BLSS	Basic Life-Saving Skills
BPHS	Basic Package of Health Services
CCM	Community Case Management
CHC	Community Health Committee
CHSD	Community Health Services Division
CHDC	Community Health Development Committee
CHEST	Community Health Education Skill Tools
CHSWT	County Health and Social Welfare Team
CHV	Community Health Volunteer
CM	Certified Midwife
CMO	Chief Medical Officer
CYP	Couple-Years of Family Planning
DHIS	District Health Information System
DOD	Department of Defense
DOTS	Directly Observed Therapy – Short course
EBSNM	Esther Bacon School of Nursing and Midwifery
EHT	Environmental Health Technician
EMMP	Environmental Mitigation and Monitoring Plan
EmONC	Emergency Obstetric and Neonatal Care
ENA	Essential Nutrition Actions
EPI	Expanded Program on Immunization
EPHS	Essential Package of Health Services
ETS	Effective Teaching Skills
FBO	Faith-Based Organization
FHD	Family Health Division
FP	Family Planning
GBV	Gender-Based Violence
gCHV	(General) Community Health Volunteer
HBLSS	Home-Based Life Saving Skills
HCT	HIV Counseling and Testing
HIS	Health Information System
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HPD	Health Promotion Division
iCCM	(Integrated) Community Case Management
IEC	Information, Education and Communication
IMNCI	Integrated Management of Neonatal and Childhood Illness
IPC	Inter-Personal Communication
IPT	Intermittent Preventive Treatment
IR	Intermediate Result
IRC	International Rescue Committee
IRS	Indoor Residual Spraying
ITN	Insecticide-Treated Net
IU	Infrastructure Unit
IUD	Intra-Uterine Device

JHU/CCP	Johns Hopkins University Center for Communication Programs
JSI	John Snow Research & Training, Inc.
LARC	Long Acting and Reversible Contraceptive
LBNM	Liberia Board of Nursing and Midwifery
LISGIS	Liberia Institute of Statistics & Geo-Information Services
LMDC	Liberian Medical and Dental Council
MCH	Maternal and Child Health
MCHIP	Maternal and Child Health Integrated Program
M&E	Monitoring and Evaluation
MH	Mental Health
MNCH	Maternal, Neonatal, and Child Health
MOHSW	Ministry of Health and Social Welfare
MOU	Memorandum of Understanding
MSH	Management Sciences for Health
MTI	Medical Teams International
NACP	National AIDS Control Program
NDS	National Drug Service
NDU	National Diagnostic Unit
NGO	Non-Governmental Organization
NHPP	National Health Policy and Plan 2007-2011
NHSWPP	National Health and Social Welfare Policy and Plan 2011-2021
NLD	Normal Labor and Delivery
NLTCP	National Leprosy and Tuberculosis Control Program
NLTWG	National Laboratory Technical Working Group
NMCP	National Malaria Control Program
NTCL	National Traditional Council of Liberia
OC	Obstetrical Complications
OIC	Officer in Charge
OPD	Outpatient Department
OR	Odds Ratio
PA	Physician's Assistant
PAC	Post Abortion Care
PBC	Performance-Based Contract
PBF	Performance-Based Financing
PLAL	Positive Living Association of Liberia
PLWHA	Persons living with HIV/AIDS
PMTCT	Prevention of Mother-To-Child Transmission
POU	Point of Use
PP	Post-Partum Care
PPAL	Planned Parenthood Association of Liberia
QA	Quality Assurance
QIT	Quality Improvement Committee
RBHS	Rebuilding Basic Health Services
RH	Reproductive Health
RN	Registered Nurse
RUD	Rational Use of Drugs
SBMR	Standards-Based Management and Recognition
SOPs	Standard Operating Procedures
SP	Sulfadoxine-Pyrimethamine (Fansidar)
TB	Tuberculosis
TFR	Total Fertility Rate
TNIMA	Tubman National Institute for Medical Arts
TOT	Training of Trainers
TTM	Trained Traditional Midwife
USAID	United States Agency for International Development
WASH	Water, Sanitation and Hygiene Promotion

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## EXECUTIVE SUMMARY

Rebuilding Basic Health Services Project (RBHS) is the United States government's major project in support of the Liberian Ministry of Health and Social Welfare's (MOHSW) National Health and Social Welfare Policy and Plan (NHSWPP). The project is being implemented from November 2008 to October 2013, while this annual report covers the period from October 2010-September 2011. During the third year of implementation, RBHS employed a three-pronged strategic approach:

- Strengthening and extending **service delivery** through performance-based contracts to NGO partners (Intermediate Result [IR] 1);
- Strengthening Liberia's **health system** in the areas of human resource management, infrastructure, policy development, and monitoring and evaluation (IR 2);
- Preventing disease and promoting more healthful behaviors through **behavior change communication** and community mobilization (IRs 1, 2 and 3).

During this third year of implementation, the RBHS team and its four NGO partners, through five Performance-Based Contracts (PBCs), and a grant to a fifth NGO partner, have ensured the delivery of a package of basic health services at 112 facilities and their surrounding communities in seven counties. RBHS continued to document improvements through a range of indicators, especially those related to maternal and reproductive health and malaria. Systems-strengthening activities have continued to strengthen both pre-service and in-service training, support rollout of a revised national Health Management Information System (HMIS), and contribute to the new NHSWPP. Behavior Change Communication (BCC) activities have included an effective national Insecticide Treated Net (ITN) campaign, facility- and community-level activities, and capacity building of national staff.

RBHS has made important contributions to many of the successes and is a key collaborator in addressing the major gaps. During the reporting period, RBHS effectively rolled out a Quality Assurance (QA) approach that has been adopted as a national model; successfully piloted integrated Community Case Management (iCCM) of childhood infections; strengthened supervisory systems and feedback to facilities; and substantially expanded coverage of several key interventions (see below). Regarding health systems strengthening, RBHS has upgraded curricula and improved teaching skills at Liberian mid-level health training institutions; made major contributions to the NHSWPP; built capacity of MOHSW staff at central level; and made good progress on the rehabilitation of nursing schools and health facilities. RBHS' national BCC campaign to promote ITNs has been effective in reaching its audience, with high rates of positive behavior.

Among the most important successes over the past year has been the implementation of PBCs and grants. Although RBHS has contracts with implementers that include agreed upon deliverables and targets, this relationship is considered a collaborative partnership. Great emphasis is therefore placed on regular communication, feedback, sharing of lessons learned, and joint problem solving. RBHS continues to prioritize scaling up access to evidence-based interventions and developing a "data-driven culture".

Most importantly, RBHS has started to provide more intense technical support on Performance-Based Financing (PBF) to MOHSW, including harmonization of PBF approaches. RBHS technical advisors have assisted MOHSW to finalize indicators, determine baselines and set targets for PBCs in seven counties. Tools and templates have been drafted for target setting and bonus determination, as well as a Monitoring and Evaluation (M&E) dashboard. MOHSW staff recently participated in the data validation process for Q8, along with RBHS County Coordinators and M&E staff, to learn the RBHS approach. Moreover, short-term technical advisors from RBHS have contributed substantially to early drafts of MOHSW's PBF operations manual, initiated by the World Bank. Recently, MOHSW appointed a new PBF Focal Point, who has provided much-needed leadership and management.

RBHS has further strengthened its M&E system during the reporting period to better track project progress; identify problems, and document successes and challenges. County coordinators and technical staff make frequent visits to the field sites to monitor progress, provide constructive feedback, and further develop a culture of partnership. Through this collaborative approach, RBHS has been able to record some notable achievements over the past twelve months, including but not limited to:

- 88% average score on the MOHSW 2011 Accreditation. RBHS partners: Medical Teams International (MTI) and Africare ranked first and equal second respectively at national level;
- 68% increase in facility-based deliveries;
- 115% (10,845 CYP) increase in Couple-Years of Family Planning (CYP) protection;
- 25% increase in pregnant women receiving a second dose of Intermittent Preventive Treatment of malaria (IPT2);
- 151,524 children treated for malaria, averting an estimated 3,030 deaths;
- 84% of the target population reached with messages on ITNs; with a documented utilization rate of 78% among respondents and 80% of their children in households that owned an ITN;
- 22,797 individuals tested for HIV, an increase of 69% from July 2010 through June 2011;
- Improved high administrative performance: 95% of facility staff were paid on time and 93% of facilities experienced no stock-outs;
- Participated actively in 32 national working groups, task forces, and steering committees;
- Made substantial contributions to the development of the Country Situational Analysis Report, National Health and Social Welfare Policy, National Health and Social Welfare Plan, County Health Plans, and Essential Package of Health Services.

In spite of these successes, there were also several challenges. Some infrastructure and Water, Sanitation and Hygiene (WASH) activities were delayed or were sub-standard due to under-performance of contractors and logistics in remote locations. Delays in obtaining a USAID drug waiver and problems with implementation of national supply chain Standard Operating Procedures (SOPs) contributed to a substantial number of stock-outs of essential drugs. Some community-level BCC activities were slow to start, due to delays in production of key materials and job aids. Emergency Obstetric and Neonatal Care (EmONC) services have not progressed as far as planned, because of inadequate infrastructure, equipment, staffing, and postponement of the release of MOHSW's roadmap for the reduction of maternal mortality. RBHS continues to work with MOHSW and partners on these issues and progress is being made in addressing each of them.

Among the most significant challenges continues to be the capacity of counterparts within MOHSW and County Health and Social Welfare teams (CHSWTs). RBHS takes seriously its role in building capacity of MOHSW staff but several counterparts lack capacity, willingness or time. As a result, transfer of skills has been sub-optimal in many instances. Consistent with the new USAID-Liberia strategic shift, RBHS has undergone major project redesign. USAID will be transitioning all responsibilities for PBF from RBHS to MOHSW. By July 2012, RBHS will no longer implement PBCs or be involved in health service delivery, and greater emphasis will be placed on capacity building of MOHSW colleagues and strengthening of health systems, both at central and county levels. This will require a more strategic approach by RBHS to capacity building, including a baseline needs assessment and the identification of joint objectives and targets with MOHSW. Developing this important strategy will be a major activity in the coming months.

The on-going issues of competing demands and priorities remain among the health sector's major challenges. President Ellen Johnson-Sirleaf likes to say that, "In Liberia we must prioritize our priorities". RBHS and partners are dedicated to the management of this broad range of priorities and the many associated expectations of MOHSW and other stakeholders.

## BACKGROUND AND INTRODUCTION

Rebuilding Basic Health Services (RBHS) is the United States government's largest project in support of the Liberian Ministry of Health and Social Welfare (MOHSW). The project commenced in November 2008 and is being implemented over a 5-year period, ending in September 2013. RBHS is managed by JSI Research and Training Institute, Inc. in partnership with three US-based agencies<sup>1</sup>. During the first phase of implementation (years 1-3), RBHS has employed a three-pronged strategic approach:

- Strengthen and extend **service delivery** through performance-based contracts and a grant to five non-governmental organization (NGO) partners<sup>2</sup> at 112 health facilities in seven counties (Intermediate Result [IR] 1);
- Strengthen Liberia's **health systems** in the areas of human resources, infrastructure, policy development, and monitoring and evaluation (IR 2);
- Prevent disease and promote more healthful behaviors through **behavior change communication** and community mobilization (IRs 1,2 and 3).

The RBHS project also has specific responsibilities in the areas of Maternal and Child Health (MCH), Family Planning (FP)/Reproductive Health, malaria, HIV, Tuberculosis (TB), and WASH. All RBHS activities are designed to harmonize with and support implementation of MOHSW's priority policies and plans. Close partnership with MOHSW and stakeholders continues to be the most important principle guiding RBHS strategy and activities. Exemplary of this principle is RBHS' support to the development of MOHSW's 2011-2021 NHSWPP. From July 2010 to the official launch in July 2011, RBHS was the most active collaborator, providing multi-faceted technical expertise and assistance, tools for evidence-based decision-making and ongoing document review.

During the period under review, USAID changed RBHS project design entailing:

- Transition of current PBCs to MOHSW by July 2012;
- Expansion of health system strengthening activities, with greater emphasis on capacity building of MOHSW at both central and county levels;
- Expansion of RBHS activities to include responsibility for four additional areas:
  - a. Management of the Participant Training and Human Capacity Development Project (FORECAST Project), following the cessation of the Academy for Educational Development (AED) contract in May 2011;
  - b. Coordination of technical assistance to MOHSW's Infrastructure Unit (IU);
  - c. Provision of funding to support a research study by the Royal Tropical Institute of the Netherlands (KIT), on behalf of MOHSW;
  - d. Assistance to the Liberian Board of Nursing and Midwifery and to the Liberian Medical and Dental Council (LMDC) to develop accreditation procedures for health training institutions.

Consistent with recent changes to USAID in-country strategy, RBHS will be working even more closely with MOHSW for the remainder of the project, gradually shifting away from service delivery and placing greater emphasis on capacity building and health systems strengthening.

Largely due to the leadership, vision, and effective planning of MOHSW, the health sector has the reputation of being the highest performing Ministry in Liberia. It has consistently employed a participatory approach to the development of key policies, plans, and programs; it has welcomed contributions from international partners, while at the same time affirming its central leadership role; and it has maintained a commitment to transparency and accountability, thereby earning the trust and cooperation of its partners. Because of this effective management, several large donors have made substantial contributions to MOHSW's Pool Fund – an innovative multi-donor trust fund that is managed by MOHSW. Moreover, from July 2012 all US government funds in support of service delivery will be channeled through MOHSW-managed PBCs.

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<sup>1</sup> The four core partners of RBHS are JSI Research and Training, Jhpiego, the Johns Hopkins University Center for Communication Programs (JHU/CCP), and Management Sciences for Health (MSH).

<sup>2</sup> RBHS implementing partners are: Africare, EQUIP, International Rescue Committee (IRC), Medical Teams International (MTI), and MERCI.

Impressive progress has already been documented since the role-out of the 2007-2011 National Health Policy and Plan (NHPP). In the January 2011 MOHSW accreditation survey, 82% of health facilities were assessed as providing the Basic Package of Health Services (BPHS) – up from 36% two years earlier. Household ownership of ITNs has more than doubled and malaria prevalence among children has reduced by almost half. Other important developments include the re-opening and strengthening of several nursing schools, the establishment of important technical units within MOHSW (e.g. Nutrition Division), and the development of a number of important policies, plans, and technical documents (e.g. National Malaria Strategic Plan 2011-2015).

Nonetheless, many challenges persist. Some important health outcomes have not improved (e.g. maternal mortality ratio of 994 deaths/100,000 live births) and coverage rates for some key services have made little progress. There are still major gaps in health worker numbers and skills, especially in rural areas. The institutional capacity of MOHSW is limited and county-level capacity remains weak. Gaps in key policies and plans persist, while others remain to be implemented; and several support systems remain underdeveloped, such as the supply chain.

This annual report reviews the successes, challenges, and lessons learned from year three of RBHS implementation, from October 2010 to September 2011. While the report covers October 2010 to September 2011, data covers the period of July 2010 to June 2011 because there is a quarter lag in reporting and validation. A summary is presented for each of the 13 project sub-objectives, while annexes provide additional details on specific topics.



National BCC Capacity Building Graduation, Gbarnga



## INTERMEDIATE RESULT 1

Increased access to basic health services

Through improved provision of quality health services and

Adoption of positive health behaviors

## INTERMEDIATE RESULT 1:

### Increased access to basic health services through improved provision of quality health services and adoption of positive health behaviors

#### OVERVIEW

**Table 1. Health Facilities by County**

County	# Facilities
Bomi	2
Bong	16
Grand Cape Mount	22
Lofa	20
Montserrado	2
Nimba	35
River Gee	15
<b>RBHS Total</b>	<b>112</b>

Working through implementing partners, RBHS has increased the range and quality of services available at facility and community levels in seven counties: Bomi, Bong, Grand Cape Mount, Lofa, Montserrado, Nimba and River Gee (Table 1). RBHS promoted more healthful behaviors and mobilized communities around priority public health issues through an integrated BCC strategy that included facility and community-level activities, complemented by a series of phased national campaigns. PBCs were issued to four NGO implementing partners, with overall management provided by RBHS but in close collaboration with MOHSW. The contracts started on July 1, 2009, and currently cover 112 health facilities and their surrounding communities.

One NGO partner, MERCI, has a grant from RBHS, although the process for management and oversight of this grant is almost identical to the PBCs. Table 2 shows the catchment populations covered by each NGO, but does not include two hospitals in which RBHS is supporting only EmONC services.

**Table 2. RBHS Performance-Based Partners**

Partner	# Facilities	Catchment	Counties
Africare	16	143,075	Bong
EQUIP	23	237,097	Nimba
IRC-Lofa	20	76,381	Lofa
IRC-Nimba	13	110,533	Nimba, Monteserrado
MERCI	15	69,864	River Gee
MTI	25	125,761	Grand Cape Mount, Montserrado, Bomi
<b>RBHS Total</b>	<b>112</b>	<b>762,712</b>	<b>7</b>

Among many success during this reporting period RBHS, under IR1, has achieved:

- An 88% average score on the MOHSW 2011 Accreditation. RBHS partners: MTI and Africare ranked first and equal second respectively at national level;
- A 68% increase in facility-based deliveries;
- A 115% (10,845 CYP) increase in CYP protection;
- A 25% increase in pregnant women receiving a second dose of IPT2;
- Treatment of 151,524 children for malaria;
- 84% of the target population reached with messages on ITNs;
- 22,797 individuals tested for HIV, an increase of 69% from July 2010 through June 2011.

Key challenges, as summarized at the end of this section, include slow feedback following the QA assessments, delays in drug procurement, chronic stock-outs of MOHSW commodities, delayed BCC activities, slow roll-out of EmONC activities due to infrastructure constraints and inadequate HIV/TB services.

## SUB-OBJECTIVE 1.1:

### Increase the number of health facilities providing the full BPHS, supported by performance-based financing

#### Meet national accreditation standards

In 2009 MOHSW, assisted by Clinton Health Access Initiative (CHAI), established a health facility accreditation process to measure implementation of the BPHS at all health facilities in Liberia.

110 RBHS facilities (two hospitals were not included) were part of the 2011 accreditation survey, with an average score of 88%, up from 84% for the same facilities in 2010 (not including three that were not assessed in 2007). RBHS facilities, on average, scored 12% higher on the

accreditation than MOHSW facilities and 4% higher than the average for all of the ten NGO managed facilities. Seventy-eight percent of RBHS facilities met one-star standards (a score of at least 85%) and 13 facilities two-star status (a score of 95% or greater). Seventy percent of RBHS facilities achieved an increase in score over 2010. Two of the three top scoring NGOs nationally were RBHS partners: MTI (average facility score of 92%) and Africare (average facility score of 91%), with EQUIP and IRC not far behind (89% and 88% respectively). Detailed comparison results are shown in Table 3. The scores of IRC-Nimba and MERCI, who were the top performers in 2010, dropped considerably in 2011, illustrating the difficulty in maintaining a consistently high level of performance over time. Alternatively, EQUIP, which was nearly level with IRC-Nimba and MERCI last year, succeeding in achieving ongoing improvement and RBHS made substantial improvements overall.

**Table 3: RBHS 2010 and 2011 MOHSW Accreditation Results**

Partner	2010		2011		Improvement	# Increase	# no change	# Decrease
	Facilities	1 and 2 Stars	Facilities	1 and 2 Stars				
Africare	16	50%	16	88%	38%	13	1	2
EQUIP	22	77%	23	87%	10%	15	1	6
IRC-Lofa	19	58%	19	84%	26%	18	0	1
IRC-Nimba	10	100%	12	58%	-42%	2	0	8
MERCI	15	80%	15	33%	-47%	2	2	11
MTI	25	12%	25	96%	84%	25	0	0
<b>RBHS Total</b>	<b>107</b>	<b>57%</b>	<b>110</b>	<b>78%</b>	<b>21%</b>	<b>75</b>	<b>4</b>	<b>28</b>

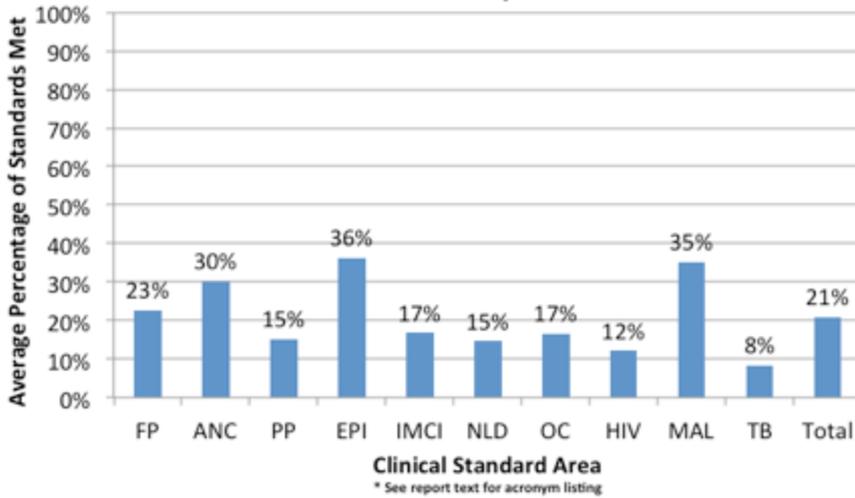
#### Quality Assurance (QA)



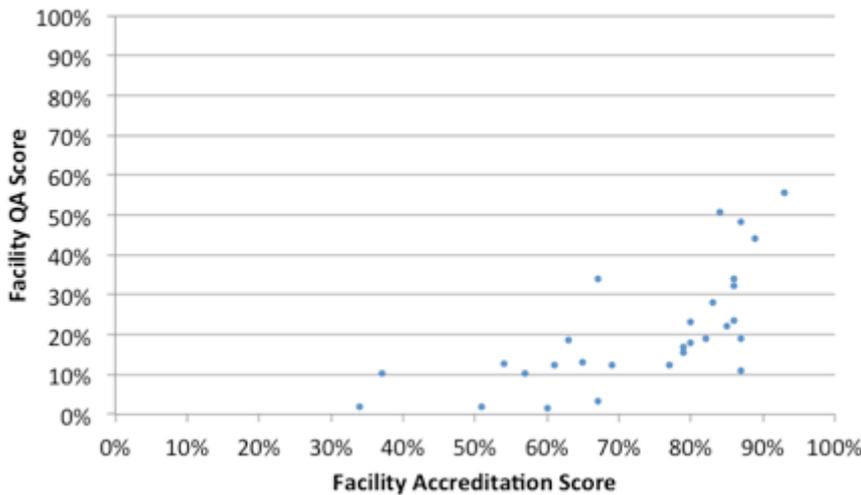
Building upon and complementing the MOHSW Accreditation, RBHS led efforts to assess quality of services, starting with a baseline assessment of RBHS facilities in June 2010. Following the dissemination of the results of the June 2010 QA assessment, MOHSW became interested in examining the potential to introduce continuous QA in all facilities in Liberia. In February 2011, RBHS assisted MOHSW to pilot integration of QA into the national accreditation process.

Grand Bassa County was selected for the pilot, as it had the highest score in the January 2010 accreditation. The clinical standards used in this assessment were a revised version of the core standards used in the RBHS 2010 QA baseline assessment, including ten clinical content areas: Family Planning (FP), Ante-Natal Care (ANC), Normal Labor and Delivery (NLD), Obstetrical Complications (OC), Postpartum care (PP), Integrated Management of Neonatal and Childhood Illness (IMNCI), Expanded Program on Immunizations (EPI), Malaria (Mal), and Tuberculosis (TB). The assessment instrument contained 72 standards, with a range of 3 to 16 standards per content area. Each standard was defined by 3 to 17 verification criteria.

**Figure 1: Grand Bassa QA Assessment  
February 2011**



**Figure 2: Grand Bassa Accreditation and QA Scores  
February 2011**



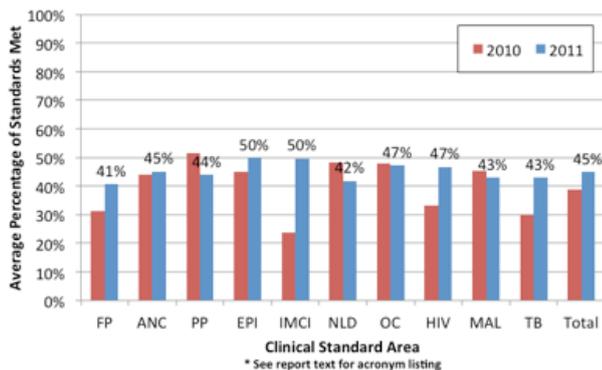
Critical to integrate QA into the accreditation process has been building MOHSW capacity through transfer of skills. In preparation for the February 2011 assessment, RBHS trained 12 staff from central MOHSW and the Grand Bassa CHSWT on the QA assessment process using mobile phones running EpiSurveyor software. The primary finding of the February QA assessment in Grand Bassa was that only 21% of the standards across the ten clinical content areas were met by the 29 facilities assessed. This revealed serious shortcomings in clinical care in the county, as the 72 standards are key to good patient care in accordance with the BPHS. Figure 1 shows the average percentage of standards met by facilities for each clinical area. Facilities performed collectively the worst in TB and HIV, and best in EPI.

As shown in Figure 2, there was an association between the accreditation score and QA score for Grand Bassa facilities: the higher a facility's accreditation score, the higher its QA score was likely to be. By contrast, there was no such association seen in the RBHS baseline QA assessment last year when compared with January 2011 accreditation results.

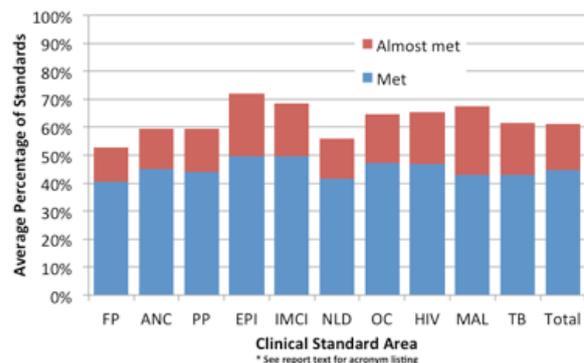
In July 2011, RBHS collaborated with MOHSW to conduct a second QA assessment in 109 (three hospitals were not included) RBHS supported health facilities in six counties. A total of 52 assessors, from central MOHSW, CHSWTs and partners, were trained to use PDA and paper assessment tools. Teams of 2 persons assessed on average five health facilities over five days.

Results of the assessment are shown in Figures 3 through 8. RBHS used a list of standards similar to the Grand Bassa QA. As this was more simplified than the standards used in the 2010 assessment, a comparison showing statistically significant difference was not possible. Findings show a large quality improvement in IMNCI service delivery. A slight decrease in quality was found for ob-

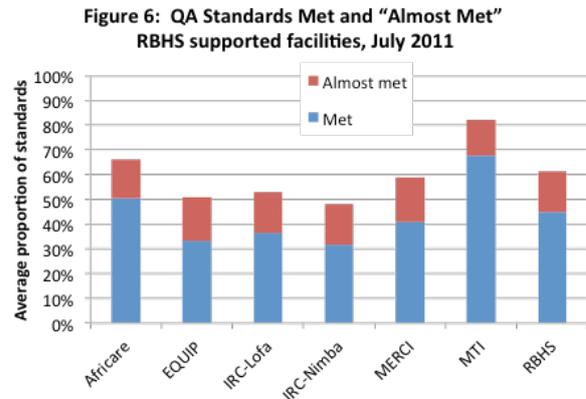
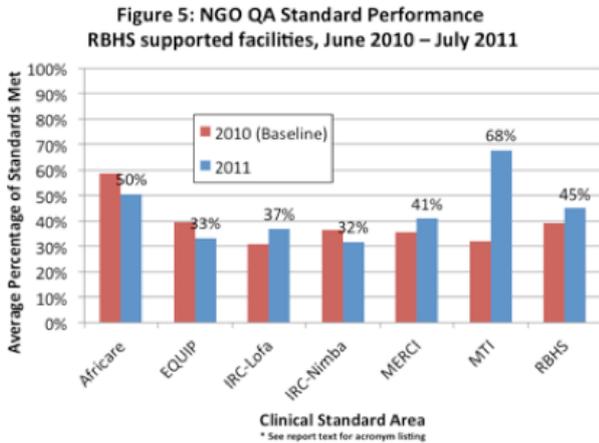
**Figure 3: Standards By Clinical Areas  
June 2010 and July 2011**



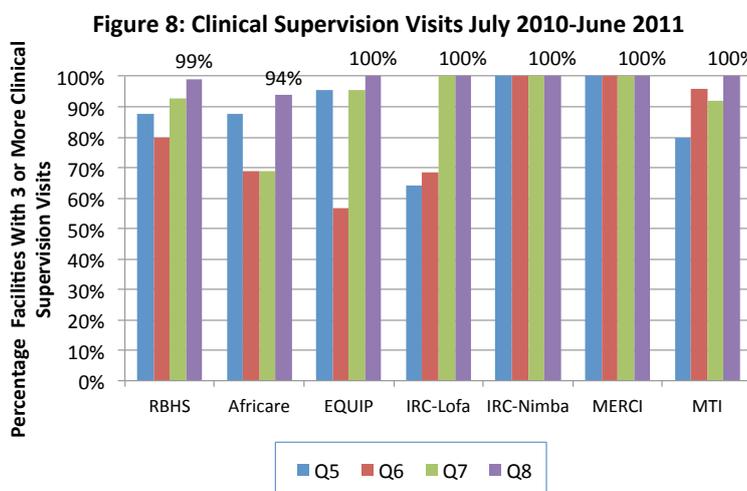
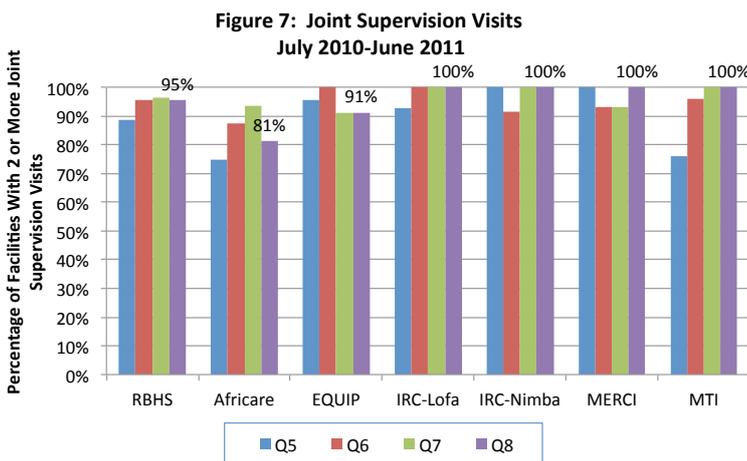
**Figure 4: QA Standards Met and "Almost Met"  
RBHS supported facilities, July 2011**



stretical care. While Figure 3 presents the results as the average percentage for all standards met, Figure 4 examines the results if standards were “almost met”. “Almost met” is defined as a standard in which only one verification criteria was not met. It shows that with a slight improvement (adding one more standard met) the quality of services can be substantially improved. Figures 5 and 6 show the results per implementing partner. The most striking improvement (more than doubled) has been realized in the health facilities managed by MTI.



### Institutionalizing national standards and quality improvement

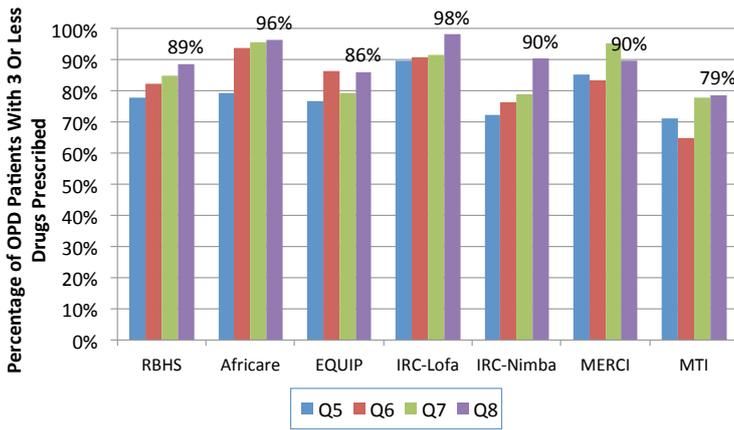


RBHS printed and distributed national guidelines, treatment protocols and job aids to all RBHS supported health facilities during the reporting period. The protocols include ANC, Newborn, NLD, PP and revised Malarial in Pregnancy Case Management.

In addition to institutionalizing the clinical standards, RBHS is addressing quality of care through supportive supervision, by the NGOs alone and in joint partnership with the CHSWT. During year one, RBHS found that many supervision visits were addressing administrative problems (e.g. drug records) and did not focus on quality. To address this, NGOs are required (by two PBC supervision indicators) to make at least two joint supervision visits per facility and three clinical visits per quarter. Facility staff must complete a form describing what was learned.

Figures 7 and 8 show how the NGO partners have performed for joint and clinical supportive supervision. Almost all partners have made good progress, especially in the last half of the year. Drops for some NGOs, especially in the second quarter, were due, not to lack of effort, but to more restrictive definitions for what constitutes supportive supervision, as noted above.

**Figure 9: Rational Drug Use July 2010-June 2011**



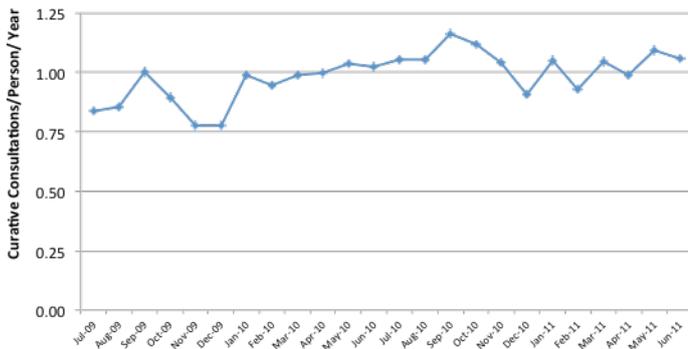
Starting in July 2010, RBHS added another PBC indicator to indirectly measure quality of care: rational drug use, measured by the proportion of outpatient department (OPD) curative consultations during which three or fewer drugs are prescribed. Facility monitoring had earlier revealed that polypharmacy is rampant in Liberia, suggesting not only bad clinical care, but wasting of resources contributing to stock-outs of essential drugs. Figure 9 shows steady progress by all NGOs, with 89% of consultations resulting in no more than three drugs prescribed. NGOs did not do a consistent job of determining baselines, but estimates from June 2010 ranged from 43% to

78%; the proportions from January through March range from 79% to 98%.

In an effort to institutionalize QA, MOHSW, with technical and financial support from RBHS, plans to review and revise the supportive supervision SOPs. The Chief Medical Officer (CMO) recently established a Quality Improvement Committee (QIC). This committee, which includes RBHS, has the responsibility of operationalizing QA. Currently, the committee is working to: (1) combine the accreditation and QA tools (2) use the tools to conduct a baseline assessment to non-RBHS supported facilities and (3) assist the CHSWTs to establish county Quality Improvement Teams (QITs). The QITs will be responsible for quality of services at in all health facilities through supervision and feedback.

**Scale up access to high-impact, cost-effective interventions**

**Figure 10: RBHS facilities Utilization Rates July 2009-June 2011**



During the past twelve months, RBHS-supported facilities treated 782,382 people in OPDs; 248,763 children under five-years and 533,619 children five-years or over. Of those children, over half (61%) presented with fever presumed to be malaria, 14% were diagnosed with pneumonia, and 6% with diarrhea. One internationally recognized measure of access is utilization: the number of annual new curative consultations per capita. Most developing countries have utilization rates in the range of 0.5 to 1.0, meaning that, on average, a person seeks treatment at a facility every one to two years. Facility utilization depends on a wide

range of factors, including availability of drugs, staffing and seasonal variations. Figure 10 shows a leveling off around a utilization rate of 1.0, ranging in the last quarter, from IRC-Nimba’s 0.75 to MTI’s 1.26. While RBHS has been very successful in improving uptake of many preventive measures (e.g. facility deliveries, IPT, FP), as shown by the results later in this report, it was less successful in increasing the number of people who come to its facilities.

**Renovate health facilities**



Renovation activities picked up during the year as a Design Build process was implemented. Two Design Build contractors were hired from fourteen proposals received and the pace of renovations increased. RBHS provided on site supervision and conducted meetings with the contractor regularly to ensure quality, progress and manage cash flow. RBHS reviewed job progress at each site at the end of each month and evaluated the contractor’s monthly request for payment accordingly. Electrical and mechanical consultants conducted inspections to ensure quality work.



Gbeapo Clinic

Renovation activities began in three health facilities in River Gee County in the second quarter including Gbeapo Clinic, River Gbeh Clinic, and Fish Town Health Center. Gbeapo and River Gbeh Clinics were completed in August 2011 on schedule. Fish Town Health Center renovations were done in two phases. The first phase was completed in July. A Certificate of

Substantial Completion (a construction document meaning the building is ready for beneficial occupancy by the client/owner) was issued for Phase 2 on September 30, 2011. A punch list remains to be completed and the operating room light will be installed upon its arrival and release from the port in Liberia.



Fish Town Health Center

Renovations of the Bensonville Health Center in Montserrado began in February 2011 by AAA Engineering, Construction and Real Estate. The contractor did not complete the renovations by the end of September as planned. Delays in work resulted from: (1) unavailable materials in the Liberia market, (2) significant layout changes to the plan to meet comprehensive EmONC center requirements, (3) insufficient oversight, manpower and supplying materials. RBHS will continue to oversee the work, which is to be completed by end of 2011.



Jundu Clinic

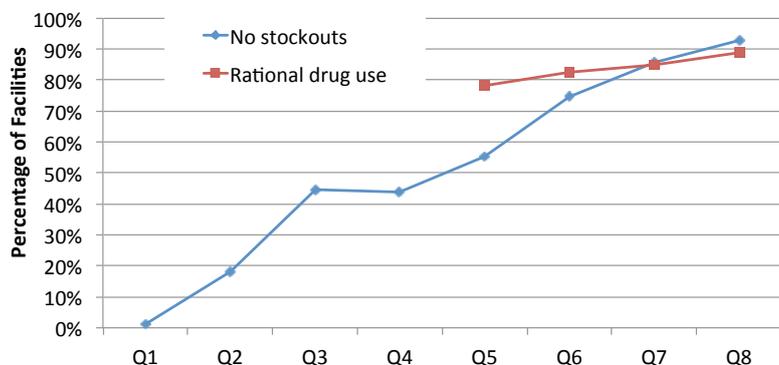
RBHS emergency renovations of Jundu Clinic in Grand Cape Mount were completed in October 2010.

In addition to the above, RBHS NGO partners undertook 3 large repairs and 60 minor repairs including replacing window glass, doors and door hardware, repairing leaking roofs, painting, flooring, and partitioning rooms. RBHS and its partners installed power systems at 32 facilities including 18 generators (2.5 to 5. KVA), 3 solar-powered refrigerator systems, and 11 solar-powered lighting systems.

erator systems, and 11 solar-powered lighting systems.

## Provide essential medicines and improve drug management

Figure 11: RBHS Facilities Drug Management July 2009-June 2011



RBHS is providing essential medicines to all health facilities, with the exception of drugs provided through the vertical programs (e.g. anti-malarials, anti-retrovirals, FP commodities, etc). During this reporting period, RBHS procured a new order of drugs, which is currently being distributed. Although drug procurement has continued to be complex, RBHS kept NGO partners supplied during the past year, resulting in fewer stock-outs (Figure 11). Additionally, NGOs have continued to improve drug supply management and follow supply chain SOPs. For commodities not under the control of RBHS, stock-outs continue to

be a problem. An RBHS investigation in Lofa and Grand Cape Mount found that records were not kept properly and procedures were not followed.

## Improved Drug Management – New Warehouse

During the reporting period, RBHS initiated discussions with the National Drug Service (NDS) and researched drug warehousing needs and design. Currently the total warehouse space consists of approximately 2,530 square meters. To improve drug management, RBHS, NDS, CHAI and DELIVER focused on determining the size and scope of a new warehouse. Research and assessments determined that a building of 3300 square meters would meet current need and allow space for future growth. (Two USAID funded warehouse studies including one in Malawi and the Liberia Network Optimization Technical Report were the primary source documents used).

RBHS visited two proposed sites and recommended that both were unacceptable. One was too small and the other was in a wet location (requiring \$200,000 or structural fill and 1 year to stabilize the site). This was supported by a US architect/engineering firm (Masada) who visited the site at the request of the Minister of Health. Two subcommittees were set up by NDS, one to determine the requirements for the size and type of building and another to research alternate sites. The former group never materialized. In the last quarter of the year NDS and the MOHSW proposed another potential site, owned by a GOL agency. RBHS and the IU of MOHSW made two site visits. Discussions are underway to survey and mark the site, transfer ownership to MOHSW and/or NDS, and conduct an environmental assessment given that the site was part of an old oil refinery.

RBHS’s budget of \$1 million is not sufficient to build the 3300 square meter facility. In the last quarter, USAID increased funding to \$1.9 million, which will now go through MOHSW rather than RBHS. The Global Fund has also indicated interest in contributing \$1.5 million to the new warehouse. USAID and the Global Fund’s combined commitments make the warehouse build possible.

Currently, RBHS is working with NDS and DELIVER to establish a Warehouse Working Group to clearly define the suitability of the proposed site and document ownership; and to document funding commitments through a MOU with USAID, GOL, and the Global Fund. Also, work has started to develop the specifications and scope of work for the procurement in the first quarter of Year 4.

## Manage Performance-Based Contracts (PBCs)

While RBHS’ NGO partners must report over 120 data elements each quarter, from which 70 indicators are calculated, only 17 of those indicators are used in the PBCs that affect quarterly bonus payments and/or penalty to NGOs. Quarterly reports are due to RBHS within 30 days of the end of a quarter, at which point RBHS county coordinators begin a detailed data validation process with visits to randomly selected facilities (a total of 18 per quarter) to check NGO-reported data with the CHSWTs, facility staff and against facility registers. RBHS M&E staff simultaneously check NGO-reported data against the paper forms submitted by facilities to the CHSWTs and the DHIS database maintained by the MOHSW HMIS Unit. The result of those checks is always a series of inconsistencies that is presented to the NGOs for explanation and/or documentation. The full process can take two months or more, although the goal is to finalize quarterly payments within 30 days of receiving the NGO quarterly report.

Table 4 and Figures 12 and 13 show how the NGO partners have performed against their administrative and service delivery targets from July 2010- June 2011. Note that targets for the second PBC year were set

Figure 12: RBHS Partner Performance by Administrative Indicator July 2010-June 2011

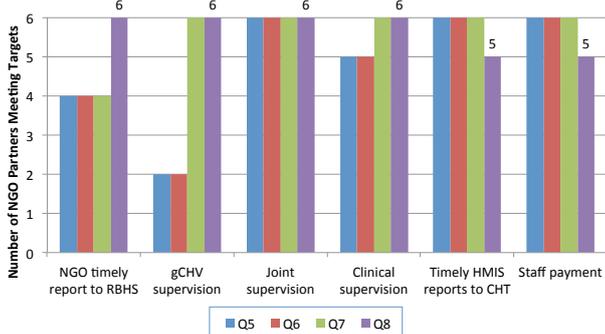
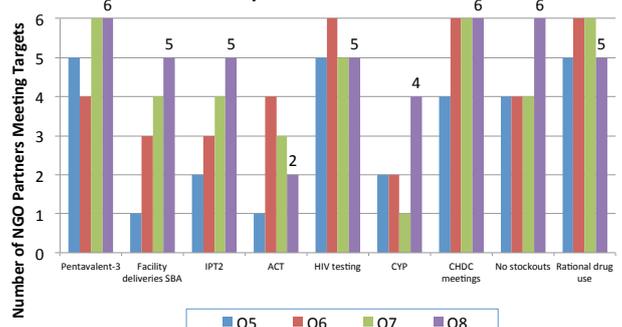


Figure 13: RBHS Partner Performance by Service Indicator, July 2010-June 2011



**Table 4: Quarterly Targets and Performance Q8**

	Indicator	Africare		EQUIP		IRC-Lofa		IRC-Nimba		MERC I		MTI	
		Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Administrative (penalty indicators)	NGO timely report to RBHS	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	gCHV supervision	80%	96%	85%	97%	85%	91%	85%	86%	95%	96.9%	80%	84%
	Joint supervision	80%	81%	78%	91%	79%	100%	83%	100%	87%	100%	88%	100%
	Clinical supervision	62%	94%	87%	100%	79%	100%	83%	100%	87%	100%	84%	100%
	CHSWT	94%	100%	96%	33%	95%	100%	92%	100%	95%	100%	96%	100%
	Staff payment	97%	98%	95%	83%	97%	100%	97%	100%	95%	100%	98%	100%
Service delivery (incentive indicators)	Pentavalent-3	95%	111%	95%	107%	95%	110%	82%	128%	80%	94%	95%	109%
	Facility deliveries SBA	53%	67%	47%	61%	70%	76%	33%	67%	53%	61%	35%	59%
	IPT2	71%	87%	85%	93%	78%	82%	71%	77%	54%	53.9%	69%	93%
	ACT	95%	91%	96%	91%	96%	93%	95%	96%	95%	95%	95%	91%
	HIV testing	1,650	2,051	1,250	1,324	250	215	800	814	550	752	500	1,259
	CYP	800	944	750	399	600	389	400	420	550	741	750	764
	CHDC meetings	80%	81%	70%	100%	79%	95%	79%	100%	67%	80%	72%	96%
	No stockouts	80%	81%	83%	87%	89%	89%	92%	100%	87%	93%	84%	96%
	Rational drug use	88%	96%	61%	86%	75%	98%	80%	90%	60%	90%	88%	79%
	Accreditation scores												
	QA scores	63%	50%	48%	33%	37%	37%	50%	32%	53%	41%	28%	68%

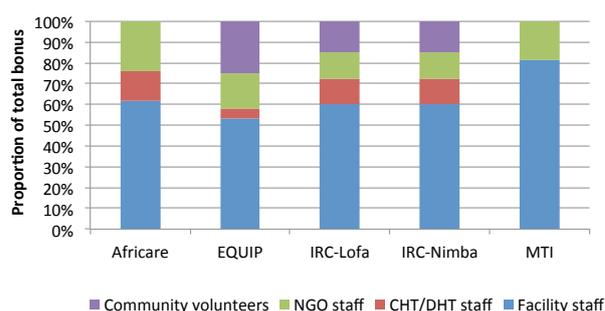
in June 2010 (though some negotiations extended well into the contract period), and that targets generally increase over time, meaning that NGOs must improve performance over time simply to meet targets. Also note that the target levels vary among the project areas reflecting the differences in socioeconomic and health developments status of the county and partners' strengths. For example, the targets for facility skilled birth attendance varied from 35% for MTI to 70% IRC-Lofa. The IPT 2 target ranged from 54% for MERCI to 85% for EQUIP.

Figure 12 shows that all of the NGOs met all of their administrative indicators by Q8 with the exception of EQUIP. Most impressive are the dramatic improvements in two indicators: gCHV supervision (each gCHV must be supervised at least once per quarter) and clinical supervision (each facility must be supervised at least three times per quarter).

As shown in Figure 13, service delivery progress over the four quarters has been substantial, with the number of partners meeting targets rising or staying at an already high level for each indicator except Couple Years of Protection (CYP) and Artemisinin-based Combination Therapy (ACT). The challenges for CYP will be discussed in SO 1.6, but these targets were ambitious (a doubling of CYP over the course of the year) and assumed provision of Intra-Uterine Devices (IUDs) and implants, which all NGOs but Africare have been slow to implement. Likewise performance for children under 5-years diagnosed with malaria who are treated with ACT has improved over time. RBHS has found that the target of 95% on this indicator is not feasible given that a substantial number of children with malaria may need to be treated with other drugs. Hence in PBC year 3, RBHS has decided to set this target for a maximum of 90%.

Data quality issues remain, as evidenced by unreasonably large values for some NGOs for pentavalent-3 coverage among children under one (in Q7, Africare reported 152% coverage and IRC-Lofa: 127%) and IPT2 coverage among pregnant women (EQUIP reported 153%). While data quality has improved over the 21 months of the PBCs, reporting and record keeping continue to be flawed. In the case of pentavalent-3 and IPT2, field data validation found that children over one-year of age were reported and double counting was likely. For ANC4+ IRC-Lofa reported 186% and MERCI 133%. The problem was found to be that all pregnant women visiting facilities in Lofa and River Gee Counties are marked down for ANC visits, irrespective of the reason of their visit. IRC and MERCI and their respective CHSWTs have not been successful at properly training facility staff to correct this problem. In response to the feedback from data validation undertaken by RBHS, RBHS partners have begun to validate their own data. EQUIP, for example, re-submitted the data for Q7 to address the over

**Figure 14: RBHS PBC Performance Bonus Distribution July-March 2011**



reporting. IRC-Lofa has done a detailed investigation of data accuracy. RBHS continues to work with partners to fix these problems.

Since July 2011, performance bonuses have been given quarterly. Anecdotal evidence suggests that the bonuses have incentivized staff. For the first year, bonuses were a mix of cash and non-cash, with approaches varying widely by NGO. Non-cash incentives proved to be problematic to implement and less motivating to facility staff, so the trend has been toward cash incentives. As an example, Figure 14 shows the distribution of bonuses the last quarter of the first year. For the year 1 distribution, the average payment to facility staff was \$73 (ranging from \$38 to \$144 depending on the NGO), with many staff at high-performing facilities receiving more than a full month's salary. For the first quarter of year 2, payments were even higher relative to the time period: \$56 (ranging from \$38 to \$65) reflecting the facilities' and NGOs' improved performance.

Regular communication with partners is a key to success of RBHS PBC management. RBHS held regular monthly and quarterly meetings with PBC partners to provide feedback and discuss program implementation and PBC. The RBHS year 3 proposals from partners were reviewed and approved. Monthly meetings at the county level are supposed to take place with RBHS (represented by the county coordinator), the respective CHSWT and implementing partners, but some CHSWTs continue to make meetings a low priority.

**Table 5. RBHS Monitoring Visits**

County	# Facilities	Visits
Bong	16	41
Grand Cape Mount	25	71
Lofa	20	37
Nimba	35	74
River Gee	15	40
<b>RBHS Total</b>	<b>111</b>	<b>263</b>

Independent of any CHSWT and NGO supervision, RBHS county coordinators, and occasionally other RBHS staff, make unannounced visits to facilities to observe consultations and talk with staff and patients. Between October 2010 and September 2011, RBHS staff has documented a total of 263 monitoring visits to 111 different facilities, as shown in Table 5. The objective is for county coordinators alone to make one visit per quarter to each facility.

### Ivorian Refugee Response

By the end of March 2011, an estimated 111,300 refugees from Cote d'Ivoire had crossed into Liberia due to the political crisis and civil conflict that began in December. Of these, an estimated 68% took refuge in Nimba County, with less than 1% in River Gee. RBHS and its partners were among the first to respond to the influx, adapting a standardized assessment tool, training MOHSW and partner staff on rapid assessments, and leading an inter-sectorial Initial Rapid Assessment in Nimba County. This early information was among the first objective data available to government officials and partners to guide the humanitarian response.

RBHS partners, EQUIP and IRC, responded by expanding services at health facilities (e.g. Buutuo and Beo Yoolar Clinics), reallocating staff to meet expanded needs, operating mobile clinics, repairing hand pumps, and providing protection services. By necessity, much of the initial response was made possible by resources provided through RBHS. Both EQUIP and IRC have since secured additional funds and resources from other donors to cover most of the identified needs. Nonetheless, refugees continue to attend RBHS-supported health facilities for both preventive and curative services.

In addition to responding to the crisis at county level, RBHS was able to secure a pre-release version of the 2011 version of the *Sphere Minimum Standards for Humanitarian Response*. Orientations on the updated standards were provided to the Humanitarian Action Committee and Health Coordinating Committee in Monrovia, with training on the standards provided to responding agencies in Nimba County. Copies of the standards were distributed to the various cluster leads for subsequent dissemination to operational partners.

## SUB-OBJECTIVE 1.2:

### Expanded service delivery to communities

Community health is an integral component of the health care delivery system in Liberia. To improve community health, RBHS provides technical and financial support to the implementing partners and the CHSWTs to ensure access to adequate service delivery to community members, especially women and children under five-years. RBHS also has a BCC team that works with the MOHSW Health Promotion Division. This year's messaging products included: the Community Health Education Skills Tool (CHEST) Kits, the Journey of Hope Kits, and a radio drama serial based on six national health priority areas under the BPHS. RBHS continues to work with Community Health Committees (CHCs) through the implementing partners and the CHSWTs to improve the health and development of their communities.

### Inform and mobilize communities

As part of the effort to inform and mobilize communities RBHS initiated an entertainment-education radio serial based on six national health priority areas under the BPHS. Using the "reality programming" approach the serial seeks to capture the views, concerns and aspirations of the target population to promote better health practices, compliment gCHV outreach activities and improve interaction between health workers and catchment communities. Target audiences for the serial include: Adolescent youth between 13-24 years as well as parents, teachers and service providers. The six topics covered under the serial drama magazine program include; Family Planning, Maternal and Neonatal Health, Child Health, Communicable Disease, C-IMNCI, and Mental Health.

Following script writing, field pretesting, recording and production of the first 13 episodes, airing of the 26-part 30-minute radio drama serial highlighting teen pregnancy /Adolescent Sexual Reproductive Health (ASRH) information began on June 28, 2011. The serial is broadcast over two Monrovia-based stations (ELBC and UNMIL Radio) and eight community-based stations (Radio Gbarnga, Radio Nimba, Voice of Tappita, Radio Piso, Radio Gee, Voice of Webboe, Radio Kintoma, and Radio Life.) At the time of this report, the stations are about to complete airing of the first 13 episodes. As a monitoring mechanism, 40 listening groups (eight per county) were established through collaboration with RBHS county coordinators, CHSWTs, and gCHVs. Each listening group has 10-15 participants within selected clinic catchment communities. RBHS provides support for the listening group sessions with items such as forms to record discussions and radio batteries.

### Community Health Education Skills Toolkit (CHEST)

The CHEST kit is an integrated tool RBHS is using to inform and mobilize communities. It is a package of activities, health information and materials that aid service providers to facilitate one-on-one and group education sessions. The CHEST kit remains the primary tool for engaging and interacting with community members at the household level with BCC activities. In collaboration with MOHSW and health partners, RBHS organized training for 20 trainers and 238 gCHVs (83 in Lofa under IRC-supported facilities and 155 in Bong under Africare supported facilities). See Annex 4 for TOT and gCHV CHEST Trainings.

### Services delivered at community level

Table 6: ICCM Pilot Communities and gCHVs Trained

Partner	County	District	Facility	# Communities	# gCHVs
Africare	Bong	Jorquelleh	Janyea	13	10
		Suakoko	Fenutoli	17	17
		Tukpahblee	Botota	13	12
IRC	Lofa	Zorzor	Konia	5	10
			Barziwen	2	2
			Yeala	3	3
			Borkeza	3	1
			Fissebu	3	4
IRC	Nimba	Gbelleh Geh	Gbeivonwea	3	5
		Sanniquellie	Lugbeyee	6	10
EQUIP	Nimba	Saclepea	Duo	9	12
			Bunadin	6	8
<b>RBHS Total</b>	<b>3</b>	<b>7</b>	<b>12</b>	<b>83</b>	<b>94</b>

At the end of 2010, RBHS conducted a six-month pilot study on integrated Community Case Management (iCCM) of malaria, Acute Respiratory Infections (ARI) and diarrheal diseases. A total of 94 gCHVs were trained (Table 6). At the end of the pilot, a team of technical experts from JSI arrived to evaluate pilots.

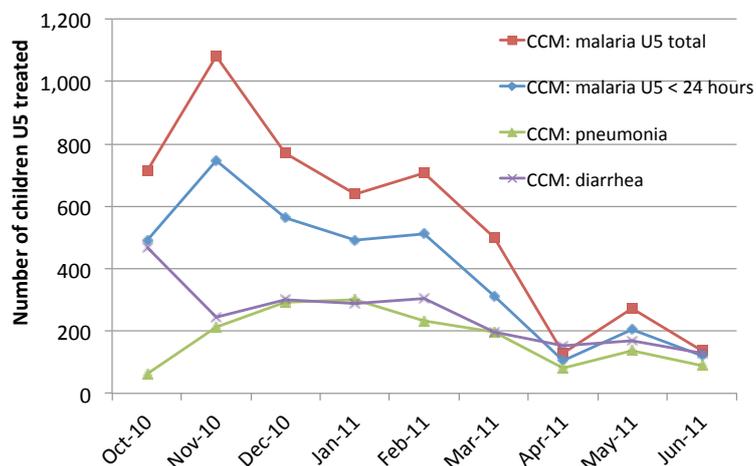
**Table 7: ICCM Statistics**

Partner	RDT			Malaria			ARI	Diarrhea	
	Tested	# Positive	% Positive	Treated	# in 24 Hours	% in 24 Hours	Treated	Treated	Referred
Africare	1,865	1,248	67%	1,347	842	63%	582	461	48
Equip	2,998	2,006	67%	1,947	1,290	66%	295	695	124
IRC Nimba				779	706	91%	96	140	18
IRC Lofa				209	209	100%	157	103	73
<b>Total</b>	<b>4,863</b>	<b>3,254</b>	<b>67%</b>	<b>4,282</b>	<b>3,047</b>	<b>71%</b>	<b>1,130</b>	<b>1,399</b>	<b>263</b>

In collaboration with NMCP, the Community Health Services Division, Breastfeeding Advocacy Group (BAG), and implementing NGOs, RBHS travelled to Nimba and Bong to interview CHSWTs, gCHVs, traditional midwives, and

mothers of children under five-years who were treated in the last month by trained gCHVs. Results from the assessment indicate that gCHVs are capable of managing three diseases if they are adequately supervised and provided with an uninterrupted supply of drugs and supplies. Female volunteers were found to perform better than their male counterparts. Findings and recommendations from the assessment are being used to upgrade the community health policy and strategy for the scale up of iCCM.

**Figure 15: CCM, Oct 2010-June 2011**



time, which roughly matches the drop in cases seen in facilities.

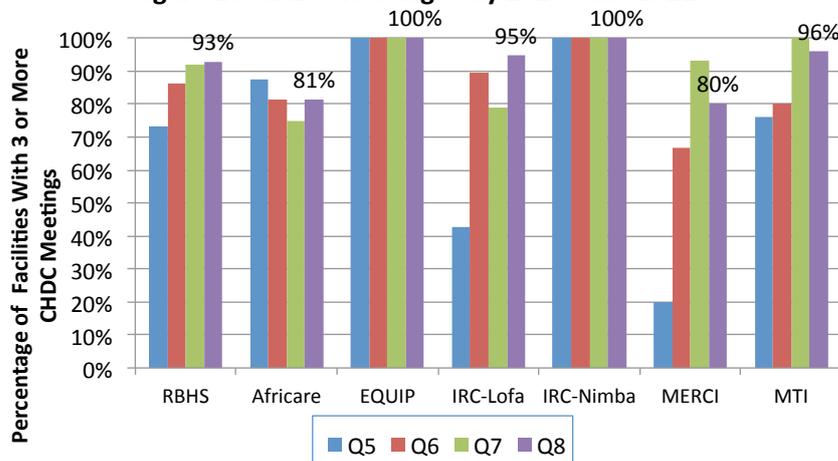
The success of iCCM is heavily dependent on close supervision of gCHVs so this was added to the list of RBHS PBC indicators. Between July 2010 and June, 2011 the percentage of gCHVs receiving at least one supervision visit per quarter rose from 32% to 93%. (The indicator includes all gCHVs, not just those doing iCCM.)

Data from NGO reports are shown in Table 7. A total of 3,254 children tested positive for malaria, two thirds of the total tested. Of those treated, almost three-quarters were treated within 24 hours. Fifty-nine percent of the treatments were for malaria, 24% for diarrhea, and 17% for ARI. Figure 15 shows how the treatments varied over the six-month period, with malaria dropping consistently over

**Engage communities in managing health services**

During the validation of the community health policy, operational guidelines of the Community Health and Development Committee (CHDC) were reviewed and adapted. RBHS partners have continued to work with CHDCs and keep them active. Progress continues to be made in the quantity of meetings (95% of RBHS-supported facilities had CHDCs that met at least once per month – see Figure 16). Moreover, Africare orientated community health and development committees on their roles and responsibilities and motivated them to promote quality health service delivery in the health services.

**Figure 16: CHDC Meetings July 2010-June 2011**



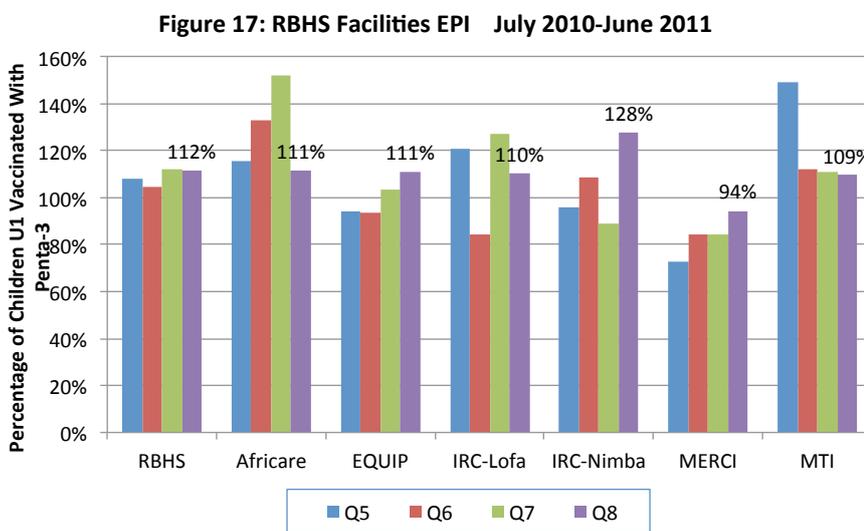
### SUB-OBJECTIVE 1.3:

#### Increase access to comprehensive MNCH services

RBHS and its implementing partners have continued to work with the Family Health Division (FHD) of MOHSW to improve access to quality maternal, newborn and child health services. In the context of many competing priorities, RBHS' NGO partners have focused on high-impact interventions. These interventions include ensuring full coverage of childhood vaccination, supporting trainings on IMNCI, and prioritizing ANC and EmONC.

The data presented on maternal health indicators such as skilled birth attendance, IPT2, ANC, and TT2 will look different from earlier reports. This is because RBHS reviewed the demographic factor estimates used to derive program target populations and found that the estimated pregnant women population had been underestimated. It was estimated to be 3.25% of the total population while revised analysis suggests that it is 3.6%. RBHS, therefore, adopted the 3.6% factor and applied it to all data from July 2009. Hence, values of maternal health indicators will look lower by a given factor but trends remain unchanged.

#### Implement high impact MNCH interventions



RBHS tracks a single indicator, coverage of the third (final) dose of the pentavalent vaccine, to measure performance on EPI. Figure 17 shows the percentage of coverage by each NGO Partner. This was calculated using the number of children under one-year reported vaccinated by facilities, both in the facility and on outreach as the numerator. The denominator is the expected number of children under one, based on 2008 census data. As noted under SO 1.1, there are data quality issues with facility HMIS reports, however, since facilities use multiple tools for recording

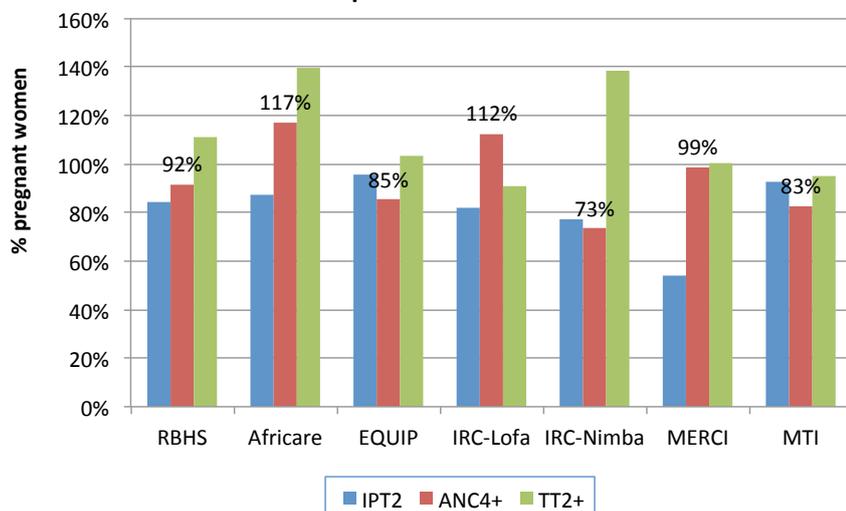
vaccinations (tally sheets, EPI register, U5 register), the root of the problem is likely to be simple recording errors and double counting. Another cause may be that the denominator has been underestimated, in particular in counties affected by the Ivorian crisis. RBHS has been working closely with the partner M&E teams to address these issues. RBHS continues to provide key support to national immunization campaigns. In the past year, all RBHS county coordinators and some Monrovia-based staff have acted as campaign supervisors or monitors for polio and measles campaigns, and the NGO partners have provided both technical support and vehicles.

RBHS has also worked with MOHSW to rollout the Reaching Every District/Reaching Every Pregnancy (RED/REP) strategy. RBHS facilitated TOT in Nimba County on RED/REP to build the technical expertise of county, district and facility level staff. Subsequently, these trainers have trained 134 health workers at the district level.

Another key intervention aimed at reducing infant and child mortality is the IMNCI algorithm. The roll out of IMNCI training has been slower than RBHS would have liked. The FHD's requirement that training be 11 days performed in Monrovia by FHD trainers makes the training very expensive and pulls critical staff out of facilities for unreasonably long periods. Efforts are being made to work with FHD and decentralize the training to the county levels as well as to shorten the training to 6 days as is being done in other countries using the revised WHO IMNCI training materials. Although pneumonia and diarrhea make up a relatively small proportion of facility-based curative consultations for children under five (14% and 6%), RBHS-supported facilities still treat large numbers of cases, increasingly following IMNCI, and also provide vitamin A to all children under five as appropriate.

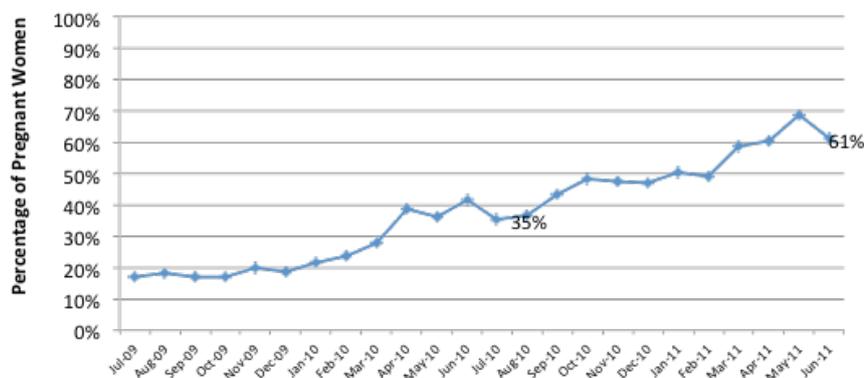
Antenatal care is an important tool for preventing maternal and neonatal mortality and morbidity. RBHS tracks ANC coverage with two indicators: the proportion of expected pregnant women who visited a facility for their fourth or more ANC checkup and who receive the second or higher doses of tetanus toxoid (TT2+) vaccination (Figure 18).

**Figure 18: RBHS Facilities, IPT2, ANC4, TT2 April-June 2011**



ners' and MOHSW M&E teams to address these issues. Additionally, an M&E workshop for the partners is planned for the coming quarter.

**Figure 19: RBHS Facility deliveries July 2009-June 2011**



(TTMs) who accompany the woman to the facility. The implementing partners have distributed more than 2000 “mama kits”; (3) Several partners are facilitating the construction of waiting rooms to address the delay in transfer from community to facilities, compounding complications during labor and (4) all of the implementing partners have established TTM networks where facility midwives meet with community TTMs to encourage appropriate referrals of pregnant women.

RBHS conducted an analysis of the effectiveness of “mama kits” and other incentives to examine associations with kit distribution at individual facilities and number of deliveries at those facilities over time. Results were conflicting, showing a strong effect for IRC-Nimba’s use of “mama kits” (38% increase in the percentage of expected deliveries in facilities associated with use of kits), a smaller effect for MTI (12% increase), but no effect for EQUIP or IRC-Lofa. In order to improve the skills of TTMs, RBHS is supporting partners and communities in training on Home Basic Life Saving Skills (HBLSS), specifically to train TTMs on recognizing danger signs, to promote early referrals and to emphasize the benefits of facility delivery. In collabo-

Over the past year, both measures have hovered close to or above 100%, suggesting that coverage is high, but that reporting is probably faulty. As noted, there are several factors contributing to this issue. For the TT2, one issue again may be double counting from outreach and clinic records. In terms of ANC4+, a potential problem may be that clinics will record problem visits as ANC visits, creating a situation where women are also doubly counted. The HMIS ledger itself may be a problem, as it is difficult to track one woman continuously throughout her pregnancy. The RBHS M&E staff is working both with the part-

RBHS’ dramatic first-year gains in facility-based deliveries continued unabated (Figure 19). Several factors have contributed to the remarkable gains in facility-based deliveries including (1) Sharing approaches and lessons learned related to facility-based deliveries has been among the most frequent topics at RBHS monthly partners meetings; (2) The distribution of “mama kits”, which contain items such as baby clothes, a lapa and soap. All NGOs now provide “mama kits” to women who deliver in facilities as well as to Trained Traditional Midwives

ration with MTI and MOHSW, RBHS facilitated a TOT for the HBLSS program in Grand Cape Mount County. Ten master trainers were trained and subsequently 50 TTMS have been thus far. Further TOTs on the HBLSS program are planned for the coming year.

RBHS is also committed to analyzing why women fail to deliver in facility as well as why they do deliver in facilities. RBHS sponsored an MPH student who conducted a cross-sectional study with MTI in Grand Cape Mount County in January. Factors, which were significantly associated with delivery in facilities, were as follows:

- Some education (Odds Ratio [OR]=1.9, p=0.037)
- Proximity to facility (OR=2.0, p=0.035)
- Ability to pay supposed delivery costs (OR=2.1, p=0.014)
- Previous facility delivery (OR=4.1, p<0.005)
- Danger signs during pregnancy (OR=2.3, p=0.003)

The above statistics suggest that women who are more likely to deliver babies in health facilities include women who have had previous deliveries in a facility, who were identified to have danger signs, who are able to pay, who have some level of education, and who live near the facility.

**Table 8: RBHS Facilities with Certified Midwives (CMs)**

Partner	County	Jul-09		Mar-11	
		#	%	#	%
Africare	Bong	11	69%	16	100%
EQUIP	Nimba	8	36%	11	48%
IRC-Lofa	Lofa	7	50%	19	100%
IRC-Nimba	Nimba	2	17%	5	42%
MERCI	River Gee	8	53%	13	87%
MTI	Grand Cape Mount, Bomi, Montserrado	18	72%	22	88%
<b>RBHS Total</b>		<b>54</b>	<b>52%</b>	<b>86</b>	<b>78%</b>

Another important achievement over the past year has been the efforts of all NGOs to increase the number of facilities with Certified Midwives (CMs). Overall, there has been a 50% increase in the number of facilities with CMs. Africare has succeeded in working with the Bong CHSWT to install CMs at each of its facilities, with

others finding creative ideas to temporarily fill the gap, such as MTI's effort to hire Registered Nurses (RNs) on short-term contracts, train them in critical midwifery skills, then place them in facilities that have no CM. Most facilities that do not have a CM in the midwife position now have RNs acting there. Table 8 shows the current status for each NGO and the progress made since the beginning of the PBC contracts.

### Establish Emergency Obstetric and Neonatal Care (EmONC) centers

Given the high rates of maternal and neonatal mortality in Liberia, a priority for RBHS has been the establishment of EmONC services. Of the 112 health facilities supported by RBHS, five have been designated as comprehensive EmONC centers and nine as basic EmONC centers (see inset). Partners for the comprehensive EmONC Centers and the associated facilities are: IRC, MTI, and MERCI. RBHS recruited two technical staff, one directly (EmONC Advisor on the RBHS team) and the other through IRC (EmONC Technical Coordinator). During March and April of 2011, the pair conducted assessments in 13 of the 14 RBHS designated EmONC facilities to determine quality of services provided in those facilities, availability of equipment/supplies and trained staff, status of physical infrastructure, and implementation and use of the signal EmONC functions. The visits revealed the following:

- 3 of the 5 Comprehensive sites were providing all signal functions;
- 0 of the 9 Basic sites were providing all signal functions;

#### RBHS Supported EmONC Centers

##### Comprehensive

1. Sinje Health Center (Grand Cape Mount)
2. Curran Lutheran Hospital (Lofa)
3. Bensonville Health Center (Montserrado)
4. J. Davies, Jr. Memorial Hospital (Montserrado)
5. Fish Town Health Center (River Gee)

##### Basic

6. Bong Mines Hospital (Bong)
7. Gbonota Clinic (Bong)
8. Salala Clinic (Bong)
9. Damballa Health Center (Grand Cape Mount)
10. Konia Health Center (Lofa)
11. Saclapea Health Center (Nimba)
12. Zekepa Health Center (Nimba)
13. Gbeapo Health Center (River Gee)
14. Sarbo Health Center (River Gee)

- Most skilled health providers are trained in BLSS;
- Few service providers are trained to use MVA;
- Water and sanitation facilities were lacking at all but one of the centers;
- All five comprehensive centers had functioning ambulance and referral systems;
- Every facility visited had a motorcycle for outreach purposes.

In order to address these deficiencies several key activities have been completed. First, as described in SO 1.1, physical renovation of health facilities (including the upgrading of four health centers to include an operating room) is in progress. The renovation of two comprehensive EmONC centers at Bensonville (Montserrado) and Fish Town (River Gee) started in the second quarter. Fish Town was finished in September 2011, with the exception of a few last minute changes and the installation of the operating room lights, which shipped with other EmONC equipment from the US in September. Bensonville completion is expected in the next quarter. A contract was signed with Space Design and Construction during the last quarter to renovate a third comprehensive EmONC center at Curran Hospital at Zorzor in Lofa. Space Design and Construction delivered material to the site in September and Curran Hospital was given notice that renovations were ready to start. RBHS is also coordinating with the US Department of Defense (DOD) for the fourth comprehensive EmONC renovation at Sinje Health Center in Grand Cape Mount. The DOD had expected to start work in October 2010 however work was delayed. The problems have been resolved and a contract should be signed to start work shortly. Three basic EmONC centers are scheduled for major renovations. Gbeapo in River Gee was started March and completed in August 2011. Konia in Lofa County and Zekepa in Nimba County, were assessed in the third quarter and are included in Design Build Task Orders signed in August 2011. They will start shortly.

Specifications for EmONC equipment were finalized in collaboration with the FHD during this reporting period. The procurement and distribution of standardized equipment, drugs and supplies is still ongoing through international and local providers. The locally procured equipment has been distributed to the implementing partners, while the international procured equipment will arrive and be distributed during the next reporting period.

RBHS is also working with partners to provide high quality emergency obstetric services. One challenge in this area has been ensuring that skilled staff are available at all facilities, in particular at designated EmONC centers. While at the time of the initial assessment conducted by the EmONC advisor and technical coordinator, many of the CMs at the facilities had been trained in BLSS, many of these CMs have been subsequently transferred to other facilities. One goal of the RBHS EmONC program is to have all CMs at EmONC facilities trained in BLSS. As such, RBHS has facilitated a BLSS training with IRC and anticipates subsequent trainings with other partners in the next reporting period. Additionally, RBHS will work to coordinate with MOHSW and FHD to ensure that appropriately trained staff are not transferred from EmONC facilities if possible. Finally, to address the lack of skills in post-abortion care (PAC), RBHS facilitated PAC training for 17 clinic providers.

RBHS has been working to promote coordination of EmONC services between partners, MOHSW staff, and other stakeholders. RBHS conducted a two-day workshop with EmONC stakeholders to discuss components of EmONC services and collaboratively plan for the coming year. Participants included the CHSWT RH Supervisors, Medical Coordinators, RH supervisors from RBHS partner organizations, and the RBHS County Coordinators.

Plans for the coming year include completion of the renovations, distribution of equipment and drugs, training on use of specialized equipment, collaboration with community leaders to strength the referral networks, consultative meetings with community groups, and to continue support for trainings on BLSS, HBLSS TOTs, and PAC. Additionally, clinical trainings will be done with staff at the comprehensive EmONC centers to improve surgical skills and post-operative management. Finally, in collaboration with MOHSW, the RBHS EmONC team will work to develop job aids to improve the obstetrical clinical care at all facilities.



### EmONC Success Story: Maternal death averted in River Gee

In October 2010, Dekontee, a 17-year old girl, delivered a baby at home with the assistance of a traditional birth attendant in Konowroken but had excessive postpartum bleeding. Fish Town Health Center, the only referral health facility in River Gee County that provides comprehensive emergency obstetric care, received a call from Jimmyville Clinic where Dekontee had been taken for treatment. The ambulance was sent and transported Dekontee to Fish Town where she was received by Mr. Moses King and Ms Denise Boimah, nurses, who found that there were still fragments of placenta in the uterus and that she had a very low hemoglobin level. Mr. King and Ms Boimah had received EmONC training during their nursing degree programs and had taken the Basic Life Savings Skills (BLSS), an emergency obstetric care training supported by the RBHS project. Together, they immediately started intensive treatment for Dekontee by starting an intravenous line and carrying out an evacuation of uterus. They removed the fragments of retained placental products, infused antibiotics and oxytocin, and transfused her with 2 units of blood. The clinical status of Dekontee soon improved dramatically.

According to Dekontee's mother, when the excessive bleeding started, they were confused on what to do because they had visited the 2 nearest health facilities. "I was told by some people to go to traditional healer but I was not convinced. I decided to take her to the clinic. The personnel at the clinic decided to call the ambulance and send us to Fish Town. On arrival at Fish Town the nurses were very kind to us, and thank God my daughter has no more bleeding, and is sitting up and eating." Dekontee was delighted as evidenced by her smile while looking at her baby.

From March 2010 to January 2011, River Gee reported 7 maternal deaths. Audit reports showed that these deaths were due mainly to the lack of referral and delays in transport. Cognizant of the high number of maternal deaths and its impact on the families, RBHS, in collaboration with the CHSWT and NGO partner MERCI has started implementing strategies to save women from obstetric complications. RBHS's strategies include 1) use of mobile phones for timely communication with the referral health facility; 2) availability of ambulances at the referral center and 3) establishing emergency obstetric centers. RBHS continues to improve emergency obstetric services by supporting MOHSW to upgrade 5 health centers and a hospital into comprehensive emergency obstetric care centers and 9 health clinics into basic emergency obstetric care centers. RBHS has trained 59 midwives on BLSS training and works to empower their catchment communities to prepare and support women for obstetrical emergencies.

### **Improve nutrition: Institutionalizing the Essential Nutrition Actions (ENAs)**

RBHS continued its efforts to integrate the ENAs into health services and to raise awareness of the importance of nutrition. Several measures have been taken to strengthen ENA over this past reporting period. Primarily RBHS, in collaboration with UNICEF, worked with MOHSW to establish a separate Nutrition Division with a new director, outside the FHD. USAID (for RBHS) and UNICEF signed a Memorandum Of Understanding (MOU) for support to the MOHSW on the institutionalization and scale up of ENA in Liberia. The MOU outlines how the two agencies will collaborate to support the implementation of the ENA plan and avoid duplication of support. Additionally, an RBHS consultant worked with MOHSW and UNICEF to assess the nutrition-training curriculum for gCHVs and contributed to the revision of the nutrition component of the IMNCI training course in order to incorporate ENA. RBHS, through its pre-service initiative, also collaborated with Food for Peace to train instructors from the paramedical training institutions and community level workers on the ENA. Finally, RBHS worked with Africare to facilitate a TOT for health workers on ENA and an advocacy meeting was conducted in four communities of Lofa and Bong Counties, attended by 120 gCHVs, TTMs, town chiefs, elders, women and youth leaders, CHDC, CHCs, and pregnant women. RBHS is an active member of the National Nutrition Coordinating committee.

### **Institutionalize Pregnant Woman and Child Health Cards**

Through close collaboration with MOHSW FHD, EPI, NMCP and all relevant partners agencies RBHS facilitated the development and production of the “Child Health Card” and the “Pregnant Woman’s Card”. In addition to being home-based records, the Child Health Card and the Pregnant Woman’s Card are Information, education and Communication (IEC) materials for mothers and caregivers to keep at home. These cards include the key elements of both the Road to Health Card and the MOHSW’s Mothers’ Card. The new cards allow not only documentation of important family health data, but also provide families with health information in a manner that is culturally relevant and easy to comprehend (i.e. graphics and script). The health information in these cards is to be used by health workers for counseling and negotiation with families. These integrated tools aim to establish and strengthen linkages between households, health facilities and communities as well as enhance service provider and client interactions.

To orient service providers to these new tools a TOT was conducted for 49 participants including CHSWTs, RBHS County Coordinators, CMs and Officers in Charge (OICs) who are to train other colleagues during their routine supervisory visits. RBHS started working with partners to incorporate usage of health cards for facility staff into upcoming training. This was also initiated as part of the mentoring activities during field visits and discussions, which are currently ongoing. Such visits have already been made to 24 facilities. Site coaching for 52 service providers on the use of the integrated family cards has already been conducted.

To date 40,000 copies each of mother and child cards, have been printed and distributed to RBHS-supported counties to be used by all health facilities. In order to promote these tools widely RBHS has developed and produced 5,000 promotional posters for the Pregnant and Child Health Cards along with 5,000 posters and 5,000 stickers for the promotion of the accompanying “Healthy Life” brand and ready for dissemination to facilities and catchment communities as part of a broader strategy to generate demand and visual recognition.



CHDC Meeting in Gbonyea Town

**SUB-OBJECTIVE 1.4:**

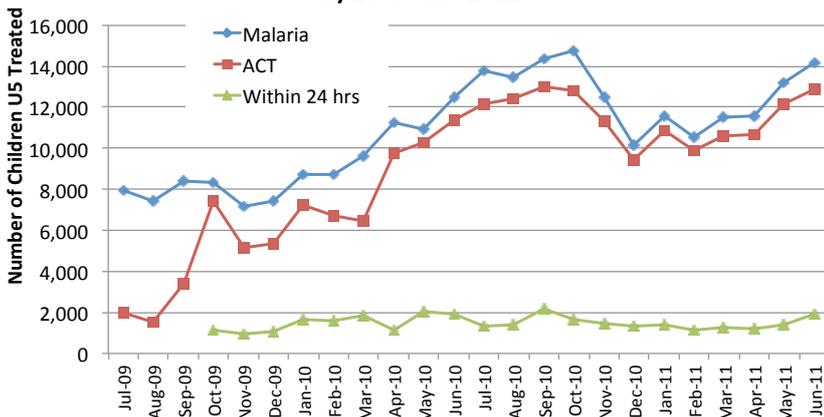
**Increase uptake of four critical malaria interventions: Treatment with ACT, prevention for pregnant women, sleeping under ITNs, and IRS**

Malaria is the major cause of morbidity and mortality in Liberia, accounting for 33% of all in-patient deaths nationally and 61% of diagnoses among children under the age of 5 in RBHS supported facilities over the past nine months. RBHS activities for malaria prevention were designed in close consultation with the National Malaria Control Program (NMCP) and linked to the priority interventions outlined in the Malaria Operational Plan of the President’s Malaria Initiative: early treatment with ACT; preventive treatment of pregnant women; sleeping under ITNs; and Indoor Residual Spraying (IRS). The RBHS activities reported have been categorized as follows: (1) service delivery at facility and community levels; (2) BCC activities; (3) monitoring and evaluation (with focus on BCC); and (4) training (pre-service education and in-service education). Design and implementation of these activities have been achieved in close collaboration with the NMCP with a strong component of on-the-job capacity building.

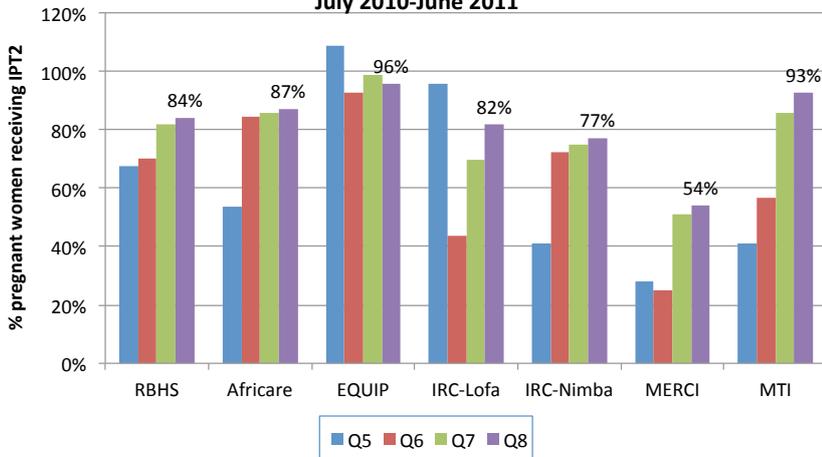
**Service delivery at facility and community levels**

61% of all RBHS curative consultations for children under five at RBHS supported facilities were for fever presumed to be malaria - a total of 151,524 children. Of those, 91% (138,178) were reported as treated with ACT. See Figure 20 for a graphical representation of how ACT treatments make up an increasing proportion of malaria treatments. Reporting on the number of children treated within 24 hours of onset of fever remains unreliable, because caregivers are rarely able to pinpoint the time of onset of fever. With that caveat, treatment within 24 hours held steady through all four quarters at 12%, far below the figure of 71% reported by community volunteers during the iCCM pilot test (see SO 1.2). The total 151,524 malaria cases treated represent (assuming a 2% case fatality rate in childhood untreated malaria) 3,030 deaths averted over the year. The drop in malaria cases from November to December has not been explained yet. It is not matched by national data (national level reporting is unreliable as it is missing data for many facilities). Nonetheless, it is speculated that the high coverage of ACT has led to a decline in malaria transmission, as has been documented in other countries.

**Figure 20: RBHS Facilities, Malaria July 2009-June 2011**



**Figure 21: RBHS Facilities, IPT2 July 2010-June 2011**



**Community Case Management (see SO 1.2)**

RBHS worked with the MOHSW Community Health Services Division (CHSD) and NMCP to pilot an iCCM in seven districts in Nimba, Bong, and Lofa Counties. The pilot began October 2010 and ended March 2011 with final report submissions in April and May 2011. During the pilot a total of 3,254 children tested positive for malar-

...treatment within 24 hours held steady through all four quarters at 12%, far below the figure of 71% reported by community volunteers during the iCCM pilot test (see SO 1.2). The total 151,524 malaria cases treated represent (assuming a 2% case fatality rate in childhood untreated malaria) 3,030 deaths averted over the year. The drop in malaria cases from November to December has not been explained yet. It is not matched by national data (national level reporting is unreliable as it is missing data for many facilities). Nonetheless, it is speculated that the high coverage of ACT has led to a decline in malaria transmission, as has been documented in other countries.

Another critical intervention is preventive treatment of pregnant women against malaria with SP/Fansidar. RBHS tracks the number of women who have received a second dose of SP Intermittent Preventive Treatment (IPT) of malaria (Figure 21). Over the past twelve months, IPT2 coverage continued the dramatic increases seen in the previous year, rising from 67% to 84% (a 25% increase).

ia, two thirds of the total tested. Of those treated, almost three-quarters were treated within 24 hours. Fifty-nine percent of the treatments were for malaria, 24% for diarrhea, and 17% for ARI.

### BCC activities

RBHS developed new integrated BCC tools for malaria-related activities in support of MOHSW's National Malaria Communication Strategy, which still includes a major campaign to promote ITNs and the inclusion of malaria messages, including IRS. Also an early case management campaign "Healthy Baby Happy Mother" was rolled out.

RBHS in collaboration with MOHSW through NMCP have been conducting a phased national mass media and social mobilization Malaria ITN Campaign, "Take Cover, " since November 2009. For this reporting period, RBHS along with partners continued the ITN campaign, with phased intensity of mass media messaging. Seven community radio stations continue to air the messages in English and six local languages. Between October 2010 and September 2011, the community radio stations (Radio Gbarnga, Super Bongies, Radio Nimba, Radio Piso, Radio Gee, Voice of Webboe, Radio Life, and Radio Karn) recorded a total of 10,224 airings. Two Monrovia based stations (ELBC Radio and UNMIL Radio) also aired over 1,500 spots in English and 10 local languages. Total plays October 2010 through September 2011 is over 11,700 airings or 195 playing hours. Materials were produced and have been widely disseminated including 30,000 Posters, 30,000 Household leaflet, 5,000 Reminder cards (for gCHVs) and 5,000 Stickers.

As part of this phased campaign RBHS and partners optimized the advocacy role of National Traditional Council of Liberia (NTCL) on malaria prevention and treatment and remained engaged with the NTCL and Crusaders for Peace in sharing the information about malaria prevention with their membership throughout Liberia. RBHS gave NTCL and Crusaders for Peace an orientation on early case management, IPT, and IRS and developed an advocacy document highlighting the malaria burden in Liberia, preventive methods, especially use of ITNs, prompt treatment using ACT, IPT for pregnant women and IRS. The document also defined the expected role of the local leaders in the fight against the disease.



During the reporting period the NTCL, through the Chairman, Chief Zanzan Kawah, and in collaboration with the Crusaders for Peace concluded their tour of Liberia and conducted nine county-level Advocacy Meetings to disseminate information on the use of ITNs at community and household levels; bringing together over 1350 chiefs, women, and community group members.

To further expand the reach of the malaria campaign all integrated BCC tools and materials developed have a malaria component. RBHS included malaria prevention and treatment messages/topics in the 26-part radio serial drama magazine program. It includes IPT and IRS (see SO 1.2), increased capacity of gCHVs and TTMs to educate and engage communities on malaria through the CHEST Kit and Child and Pregnant Woman's Health cards (see SO 1.2)

Following on the ITN campaign, RBHS and partners developed the "Healthy Baby Happy Mother" campaign to promote early case management of malaria. One poster, one brochure and four audio messages were created to address early detection, home management, prompt referral and compliance. About 30,000 posters and 50,000 brochures were printed. Dissemination of posters is currently in progress. Mass distribution of printed brochures among students is pending the resumption of the academic year. Airing of radio campaigns began on two Monrovia-

based stations (ELBC and Radio Veritas) and 8 community radio stations (Radio Nimba, Radio Karn, Voice of Peace, Radio Piso, Radio Gbarnga, Super Bongies, Radio Life, Radio Kintoma, Radio Gee and Voice of Webboe.) The total airings, for this period, account for 4896 spots or 81.6 hours.

### Monitoring BCC media coverage

To monitor exposure to these materials and messages, RBHS has been conducting quarterly “dipstick” household surveys since January 2010 to measure how many people are being reached and through which media. The surveys follow a cluster design; interviewing mothers of children under-five in randomly selected communities in RBHS catchment areas in Grand Cape Mount, Lofa, Bong, Nimba, and River Gee Counties. Four teams of three or four people conduct the surveys using an electronic questionnaire implemented on Nokia E63 cell phones.

The summary results of all five dipstick surveys, show that 84% of respondents have seen or heard a “Take Cover” message however only 53% of the households surveyed had a net present. Community-level progress continues to be less than expected, with few people hearing messages from chiefs or from gCHVs, and when they do, it tends to be about keeping surroundings clean rather than sleeping under a net, summarized in Figures 22 and 23. The survey revealed that about a quarter of women have heard a message about fever management, and of those, most have heard that they should take children to a health facility or sponge/bathe the child with cold water. Measuring exposure to the campaign must consider that almost a quarter of women reported having heard a jingle/radio spot that has never been aired.

### Training

#### Pre-service training (see SO 2.2)

The pre-service curriculum for each cadre of health worker has been finalized, incorporating results of the task analysis exercise (described in RBHS’ previous annual report to USAID). The following topics have been added/updated for all mid-level health workers: transmission and epidemiology, vector control, malaria in pregnancy, malaria case management, and health systems support for malaria. Some training institutions have already started using the new curriculum from the last semester. RBHS has also finalized the *Handbook for Health Workers in Liberia*, which includes an updated section on malaria. Five hundred copies are currently being printed in the U.S. and are expected in country soon.

#### In-service training (see SO 2.6 and Annex 4)

RBHS co-facilitated and co-funded a 21-day TOT workshop in Bong County in October 2010. RBHS also collaborated with MOHSW to conduct an 8-day integrated in-service training in December, which included a module on malaria case management. A total of 74 health workers were trained. Over the reporting period, RBHS’ NGO partners have trained 404 health workers in malaria treatment and prevention.

Figure 22: Comparison of RBHS Take Cover Exposure Jan 2010-Jan 2011

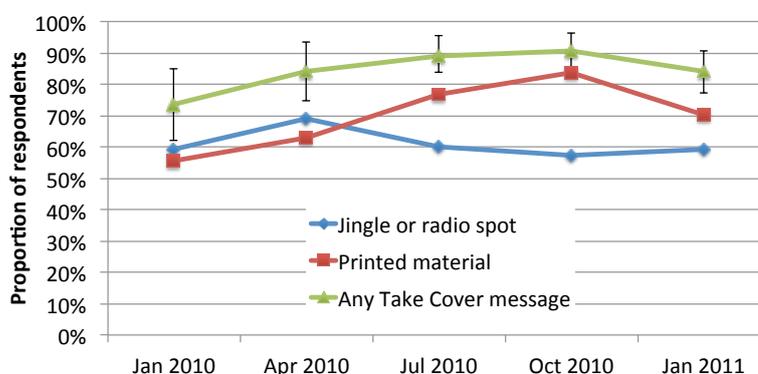
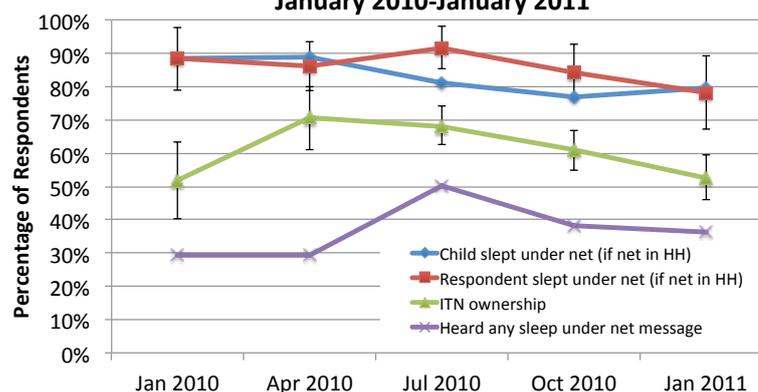


Figure 23: Comparison of ITN Behavior Outcomes January 2010-January 2011



## SUB-OBJECTIVE 1.5:

### Increase access to quality HIV/AIDS and TB services, with an emphasis on prevention

MOHSW, through the NACP and NLTCP, continued to work with implementing partners to scale up and strengthen HIV/AIDS and TB services throughout the country. RBHS remains committed to collaborating with the MOHSW to align and implement their activities according to the NHSWPP. The RBHS HIV strategy links prevention to care, treatment and support. All activities to scale up access to services continue to be coordinated with the NACP. During the reporting period, RBHS's experience with HIV service delivery parallels that reported by NACP: success in meeting targets for the number of service outlets; expansion and uptake of HIV services; regular supportive supervision with emphasis on effective feedback giving; and proper recording and documentation. However, concerns regarding the quality of services as well as enrollment and retention of patients in care still remain a major challenge and need improvement. Similarly, while significant progress has been made in expanding access to TB services, including community-based directly-observed therapy short course (DOTS) program, which has significantly increased case detection and treatment success rates in some RBHS supported counties, quality of care, patients' enrollment and retention, proper reporting and follow-up still require substantial improvement.

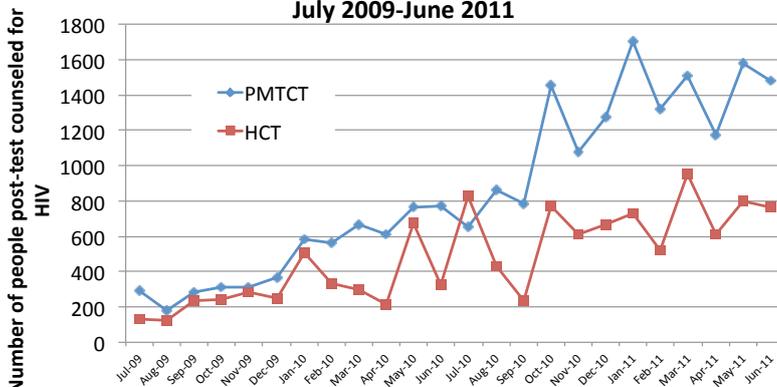
#### Support HIV service delivery

With the national HIV prevalence rate at 1.5% and HIV prevalence among pregnant women at 4.0%, RBHS in collaboration with NACP, has successfully implemented a scale-up plan thus increasing the number of facilities providing HIV services. One major gap identified in the first half of the year was that most NGO and CHSWT supervisors were not being trained, making it difficult for them to effectively supervise facility staff who had been trained. To correct this problem, RBHS, in collaboration with NACP and NLTCP, conducted two mass trainings in November 2010 for 42 supervisors and staff and in August 2011 for 43 partners' supervisors and staff on the new Prevention of Mother-To-Child Transmission (PMTCT) guidelines, enabling supervisors to provide quality supervision to facility staff, which will enhance the quality and sustainability of HIV/TB services. Additional trainings were undertaken by the CHSWT and implementing partners, which have significantly increased HIV service outlets in RBHS supported counties. During the reporting period HIV Counseling and Testing (HCT) was introduced at 36 facilities increasing the total number of facilities to 69, PMTCT was introduced at 60 facilities, bringing the total number to 76 and ART is now at 6 facilities (Table 9).

**Table 9: Facilities With HIV Services**

County	Total Facilities	Jun-10		Sep-11		
		HCT	PMTCT	HCT	PMTCT	ART
Bomi	2	0	0	2	2	0
Bong	16	6	2	7	8	1
Grand Cape Mount	22	2	1	13	16	1
Lofa	20	0	0	6	13	1
Montserrado	2	1	1	1	1	0
Nimba	35	19	11	26	23	2
River Gee	15	5	1	14	13	1
<b>RBHS Total</b>	<b>112</b>	<b>33</b>	<b>16</b>	<b>69</b>	<b>76</b>	<b>6</b>

**Figure 24: RBHS Facilities, HCT and PMTCT July 2009-June 2011**



With progress made in expanding HIV services to more facilities, the number of people receiving HCT has also increased to 22,797 persons, exceeding the annual target of 14,000. Of the total number of people that received HCT, a high number were pregnant women because HCT is recommended for every woman attending a health facility contrary to Voluntary Counseling and Testing (Figure 24). Workshops to provide technical updates on HIV for instructors and preceptors were held in October 2010 for a total of 88 participants.

#### Support to persons living with HIV/AIDS (PLWHA)

RBHS served as an active board member of the Positive Living Association of Liberia (PLAL). During the reporting period, RBHS reviewed proposals and reports for PLAL, participated in board meetings, and provided technical assistance. PLAL's only grant expired six months ago and its activities have reduced considerably.

During year four, RBHS will continue to provide technical assistance and a little financial assistance to the association to help with office space and basic office stationeries to continue operations.

### Increase access to TB services

Significant progress has been made in expanding TB services to RBHS supported facilities through training however proper reporting remains a problem. One area that helped increase case detection and treatment success rates especially in Bong & Grand Cape Mount, was the establishment of 22 additional community-based DOTS sites, bringing the total to 32 facilities. In collaboration with NLTCP, RBHS along with its implementing partners conducted TB case management trainings for 42 facilities and opened 7 additional diagnostic sites, bringing the TB treatment sites to 73 and TB diagnostic sites to 38 facilities (Table 10).

**Table 10: Facilities With TB Services**

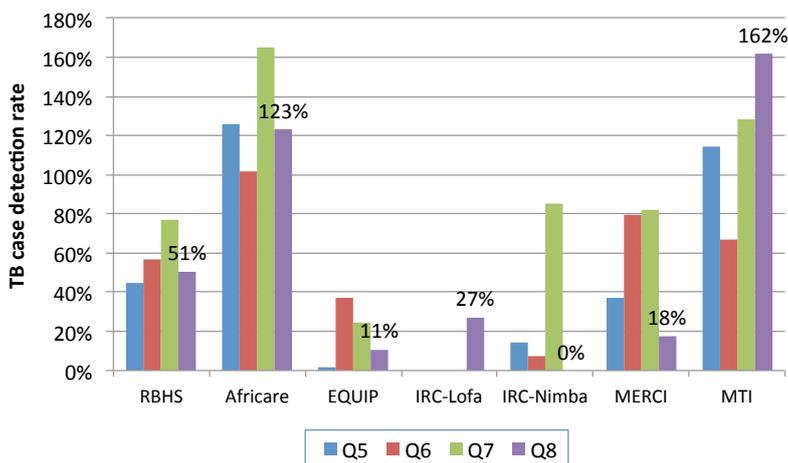
County	Total	Jun-10		Sep-11		DOTS
		Diagnosis	Tx	Diagnosis	Tx	
Bomi	2	0	0	2	2	
Bong	16	4	6	4	11	10
Grand Cape Mount	22	4	5	4	22	22
Lofa	20	3	4	3	9	
Montserrado	2	1	1	1	1	
Nimba	35	12	8	16	16	
River Gee	15	7	7	8	12	
<b>RBHS Total</b>	<b>112</b>	<b>31</b>	<b>31</b>	<b>38</b>	<b>73</b>	<b>32</b>

Many counties have been plagued by the departure of trained facility staff, leaving facilities that once provided TB services with no one to continue services. Diagnostic sites have been hit especially hard. For almost the full reporting period, RBHS had no functional diagnostic sites in Lofa. Many of the NGO partners are struggling to maintain even the previous level of micro-

scopes, with many being taken away for repair and never returned.

As noted, improving quality has been the main focus over the reporting period, especially given the overall poor performance of facilities on the QA assessment in June 2010, when only 38% of TB performance standards were met. As described under SO 1.1, quality improvement teams have been working with facilities to improve TB quality, along with the other clinical areas. Another critical improvement activity was the November training for supervisors, which included TB components. As stated, reporting still remains a major problem in getting accurate TB data. To improve reporting, a one day cohort training was conducted for NGO M&E and project officers in June however more on the job mentoring needs to be done.

**Figure 25: TB Case Detection July 2010-June 2011**



Also of concern is the extent to which facilities are actively searching for TB cases. Many facilities report no or few cases because “there are no patients”, while others, with the help of the gCHVs, have high case detection rates. Figure 25 shows case detection rates for the past four quarters, and illustrates the wide variation across NGOs. (Note that IRC-Lofa just restarted TB diagnosis in the last quarter) Low rates of detection are especially worrisome in populous Nimba County. Overall, progress is being made, with the RBHS case detection rate up to 73% in Quarter 7, with a decline in Quarter 8.

To improve case detection, other than health education offered at facilities, RBHS is counting on the CHEST kits described under SO 1.2. CHEST kits include materials on TB education intended to help community members recognize when they or family members might have TB, encourage them to seek testing, and if confirmed positive, help monitor treatment.

One activity, through which RBHS had a big influence on TB case detection, is community-based DOTS, currently being implemented by Africare & MTI in Bong and Grand Cape Mount. Initiated by two major trainings, one in December 2010 for 88 gCHVs and CHC members and another in February 2011 for 134 gCHVs; the two partners have substantially increased case detection rates. Africare was able to expand its community-based

DOTS services from the catchment areas of 5 facilities to 10 and MTI to 22. To ensure quality, Africare and MTI are taking direct supervisory roles, working with NLTCP and the CHSWTs (to closely monitor the community DOTS volunteers. In this reporting period, the TB case detection rate has increased: ranging from 45%-77% over the past three quarters with 60% of the cases referred to facilities by gCHVs in communities in Bong and Cape Mount. The treatment success rate has also increased considerably. Suspected cases were detected by gCHVs, with 26 (38%) testing positive and currently under treatment.

### BCC activities

The Journey of Hope kit, is a tool for promoting participatory HIV prevention activities among youth, and other community members, and is the main tool RBHS is utilizing to engage communities pertaining to HIV. The tool promotes open discussion about sexual behavior and HIV/AIDS issues. It involves people in a fun and interactive way, using participatory story telling with visual aids and symbols. It clarifies choices and builds skills that empower people to protect themselves from HIV infection. During the reporting period, RBHS trained 109 supervisors and gCHVs in all five counties of operation on the use of the Journey of Hope Kit (see Annex 4) and distributed kits to all implementing partners.

### Assessment supportive supervision and technical assistance

Three assessments were carried out during the reporting period, where it was discovered that: (1) NGO supervisors needed to be trained in HIV/ TB; (2) more supportive supervision was required; (3) community involvement has helped greatly in case detection and treatment success rates in Africare supported facilities and (4) this initiative is to be introduced in other counties with Cape Mount (MTI) already taking the lead.

### Upgrading laboratory services

RBHS provides permanent representation at the National Laboratory Technical Working Group (NLTWG). A one-day meeting was held on July 29, 2011 with the National Diagnostic Unit (NDU) to discuss NDU priorities for laboratory services and how RBHS can provide aligned support. As part of the NLTWG, RBHS provided technical assistance in the development of the National Laboratory Policy, the National Laboratory Strategy and Operational Plan and the Terms of Reference for the Laboratory Technical Working Group. Presently a sub- committee, including RBHS, has been formed from the NLTWG to develop a standardized laboratory equipment listing. A draft list has been compiled and will be submitted to the NLTWG for review and validation.

For HIV and TB trainings, see SO 2.2, 2.6 and Annex 4.



## **SUB-OBJECTIVE 1.6:**

### **Increase access to comprehensive family planning and reproductive health services**

RBHS, in collaboration with FHD, coordinated the validation and printing of the National Family Planning Strategy, promoted sexual health through training facility staff to respond to victims of sexual assault, and assisted with planning and implementing the Regional RH workshops. The workshops created the environment to reinforce the USAG FP Statutory Regulation and Policy and provided an opportunity to advocate for FP services to county leadership. In addition, RBHS, through its partners, supported MOHSW to provide services to populations that have limited access to FP services, through activities in eight markets in Monrovia and community-based delivery services.

#### **National Family Planning Strategy**

RBHS provided technical assistance to MOHSW to complete the National Family Planning Strategy. 500 copies of the document were printed. During the period, RBHS collaborated with the FHD and UNFPA to plan and implement regional advocacy RH workshops in five counties. A presentation was made on the strategy to give a better understanding to county policy makers. Following the presentation, both health and political leadership of the counties developed a FP plan for their county. The regional RH workshops also served as the beginning of disseminating the FP strategy to all players.

The Liberian FP Strategy was developed based on the principle of healthy timing and spacing of pregnancy, which advised couples to postpone pregnancy for at least two years following successful completion of a term pregnancy; delaying pregnancy until at least 18 years of age for young women, and delaying pregnancy at least 6 months after a miscarriage or abortion. Furthermore, the strategy addressed the special needs of adolescents, survivors of rape, and refugees. The strategy also considered issues of commodity availability, quality of services, and monitoring and evaluation, as well as creating an enabling social environment for family planning through BCC activities.

#### **Build health worker skills**

RBHS continued to collaborate with MCHIP to improve FP services. One effort was the training of 15 trainers who have assisted in step down trainings in the provision of Long Acting and Reversible Contraceptives (LARC) in various locations around the country. As a result of the TOT, RBHS worked with its partners to plan and implement step-down trainings in March and June 2011 for 76 facility staff; building skills for IUD and implant insertion. All participants were able to insert at least one Implant during the trainings, sometimes up to three. In the context of training, having health workers insert IUDs or implants in the facility where they usually work, helped to build community confidence in the health workers' ability to provide services after the "Monrovia people" left. In addition, the training contained activities to assist service providers to initiate discussions on FP. Service providers participating in the training were prepared to deliver FP services to HIV+ clients, postpartum mothers post abortion and ANC clients. Efforts have been made to enhance service providers' ability to assess clients' risk for STIs and assist the client to make decisions about contraception use.

Clients have been more receptive to the idea of using implants rather than IUDs. The emerging trend seems to be that older multiparous women will be the primary clients for IUDs, while younger women will choose implants. The experience from the LARC training in Cape Mount, Lofa, Nimba and River Gee showed that 75% of clients choosing implants were women between 15 and 24 years old, while 90% of those choosing IUD were multiparous women above 25 years of age. Uptake of Depo Provera as a method of choice was low when other long-lasting methods were available.

RBHS recognized that decreasing the unmet contraceptive need will require additional facility staff other than the CM. Therefore, in the trainings conducted over the reporting period, 14 RNs and 6 PAs were trained in LARC services delivery as well as 8 OICs, 5 implementing partners' RH officers, and 2 county RH officers. Expanding the scope of service delivery, 2 clinical supervisors and 4 of RBHS County Coordinators participated as observers.

To ensure that clients seeking other reproductive health services at facilities meet their FP needs, staff from 62 RBHS facilities have been trained to provide services to clients in the post-partum period; those who re-

ceive services for post abortion care, STIs, and HIV; women who bring their children for vaccination; and OPD clients. Hence, initial steps have been taken for integration of services.

A key to expanding both the range and quality of services is ensuring that each facility has qualified staff present. While the scarcity of CMs continues to be an obstacle, 91% of RBHS facilities have either a CM or an RN acting as a midwife, and 98% have at least one staff member who has demonstrated competency in family services counseling.

**Provide services at facility level**

As shown in Figure 26, the numbers of FP counseling visits have risen dramatically over time. Reporting at the beginning of the PBCs was erratic (counseling visits were not included on the MOHSW HIS reporting form); if the first quarter is ignored, the number of counseling visits has risen tenfold since October 2009.

**Figure 26: RBHS Facilities, Family Planning  
July 2009-June 2011**

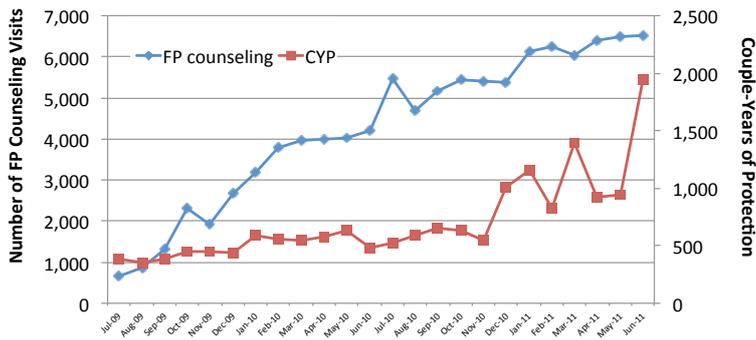
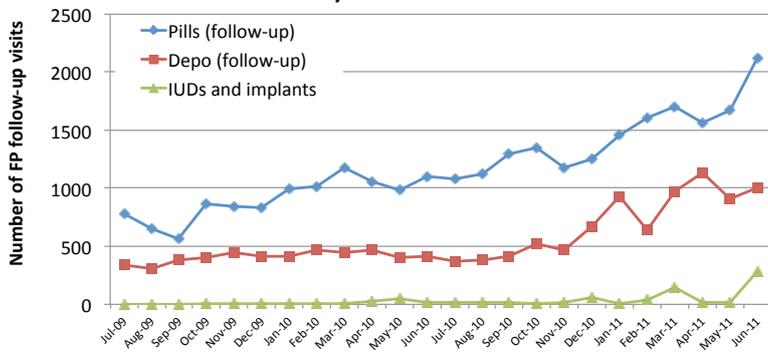


Figure 26 also shows outcomes of FP uptake, measured by CYP (with scale shown on the right-hand side of the figure). The trend is steadily upward, with CYP nearly tripling in the past nine months. The increase in CYP can be attributed to the introduction of long acting FP methods (IUDs and Implants) in four counties (Cape Mount, River Gee, Nimba and Lofa) from March 2011 to date. Earlier during the period, a jump in December was partly associated with the influx of Ivorian refugees in Nimba County and the large distribution of condoms.

**Figure 27: RBHS Facilities FP Regular Users  
July 2009-June 2011**



Since the introduction of implants in the facilities, the demand has constantly increased, but there has been limited amount of supply to the counties. As such, stock outs have continued to play an important role in limiting uptake of the more popular longer lasting methods). Previously, Depo Provera stock-outs were the bottleneck in the supply chain for FP commodities however, in recent times, stock outs of implants have compounded this issue. RBHS has continued to work closely with USAID, UNFPA, and MOHSW to ensure a supply of those commodities. Figure 27 gives the

number of regular users of pills, Depo Provera, and IUDs/implants in the past two years. A sudden jump occurred in the past 12 months for the number of users of all categories, which shows no sign of abating.

RBHS continues to liaise with implementing partners and the CHSWTs to monitor stock-outs of RH commodities and to take action to meet the needs of the clients. One such action was to facilitate and redistribute extra implants mistakenly sent to River Gee. Other actions included arranging with NDS and the FHD to distribute the supplies for counties during training of the facility staff in FP as was the case in Cape Mount, Nimba, and Lofa. Moreover, RBHS facilitates implementing partners' efforts to secure commodities by following up on requisitions made to the FHD.

**Provide services at community level**

Critical to improving access and utilization is ensuring that few or no barriers exist between the service delivery point and the client. To limit these barriers, RBHS in collaboration with its partners in Bong, Grand

Cape Mount, and River Gee is providing contraceptive services in communities through Community-Based Distribution of contraceptives. Africare, has continued to work with 78 gCHVs to deliver condoms and oral contraceptive pills at the community level in Bong County. Those gCHVs have distributed 3,429 cycles of pills and 16,945 male condoms. MTI and MERCI commenced community-based services during this reporting period. The NGOs have trained 33 and 22 gCHVs, respectively. In Grand Cape Mount, MTI distribution activities are ongoing in three districts supported by six facilities. By the time of this reporting, MTI's 33 gCHVs had distributed 274 condoms, including 43 female condoms, and 213 cycles of pills.

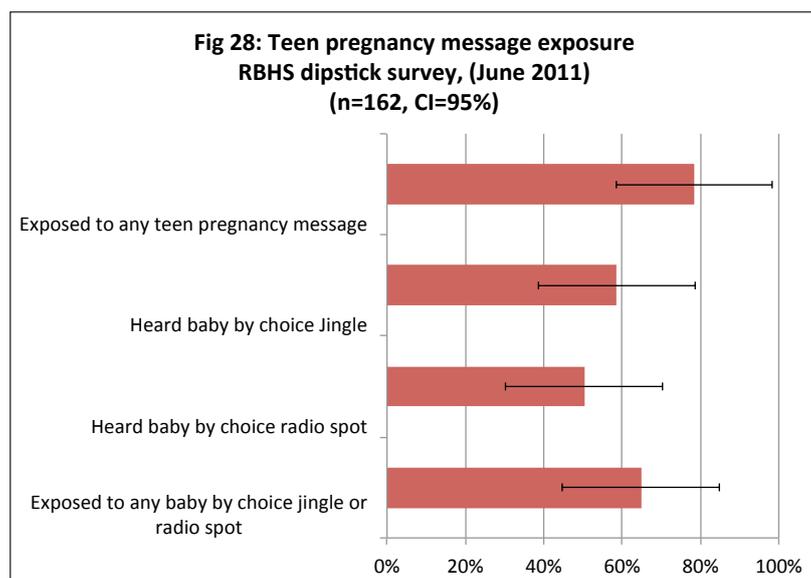
**Table 11: Distribution October 2010 to June 2011**

Contraceptive	CYP
Oral Pills	670
Depo (injection)	1,073
Condoms	82

Building on foundations developed in the previous reporting period, RBHS continued support to Planned Parenthood Association of Liberia to implement the Market Women's Contraceptive Project. During this period, 66 peer providers provided FP services in Gabochov, Paynesville, Logan Town, Duala, Rally Time, Waterside, Nancy B. Doe and Redemption Day markets (Table 11).

### Inform the community, addressing the needs of youth

To complement efforts of partners at county and facility levels to increase demand for FP services, RBHS produced and aired four adolescent FP radio spot messages and jingles under the theme "Baby by Choice not by Chance". During the current reporting period RBHS expanded the airing of "Baby by Choice not by Chance" radio messages to all 7 counties. Airing on nine community-based radio stations started in October 2010 (Radio Gbarnga, Super Bongies, Radio Kergheamahn, Radio Piso, Radio Cape Mount, Radio Gee, Voice of Tappita, Radio Life, and Radio Kintorna.) A total of 13,818 airings have been recorded on the community radio stations. The Monrovia-based stations Sky FM, Truth FM, and King's FM recorded a total of 4,392 airings. Total airings during the reporting period are 18,210 or 303.5 playing hours. UNMIL Radio has also been airing the messages for free but scheduling is irregular.



RBHS conducted a rapid household survey to measure the reach of "Baby by Choice not by Chance" in June 2011. The survey used cluster survey methodology (27 clusters, 7 respondents per cluster, sample size of 189). The survey interviewed girls and boys between 15-24 years of age to learn their exposure to the FP message, their sexual behaviors and use of FP methods. Figure 28 shows that 78% of the men and women heard at least one message on teen pregnancies. 59% percent of them heard the Jingle and 50% heard the Baby by Choice message. Overall, 65% the young men and women heard the message on Jingle or Radio spot. The survey also found that 76% of the respondents

had had sex with an average starting age of 17 years. Half of these respondents had a child and only 1 in 5 young men and women had ever used birth control contraceptives.

To further expand the campaign a total of 7 draft audio lifestyle choice messages have been developed covering the various FP methods available to adolescents as well as one message targeted at health service providers addressing their attitude towards teenagers. Teen pregnancy/ASRH issues have also been highlighted in 9 episodes of the radio serial drama magazine program (see SO 1.2).

During the period under review, RBHS provided technical assistance to the FHD and UNFPA in the development of an advanced draft of the National Adolescent Reproductive Health Strategy. RBHS NGO partners have taken specific actions to address young people's reproductive health needs. For example, MTI

health workers in Damballa, Tienii and Jeneh Wonde initiated outreach activities to schools in their catchment communities, followed by health education sessions with students on concerns of adolescent reproductive health. MTI is also expanding this service through peer education. This is being accomplished through ARH clubs in various schools in Cape Mount. A total of sixty students (29 boys and 31 girls) aged 13-24 years from six schools in Tienii Wonde, Jenneh Wonde, Bo Waterside, Madina, Lofa Bridge and Sinje districts in Grand Cape Mount County were trained.

For the first time in Liberia, RBHS in collaboration with MOHSW, celebrated World Contraceptive Day (WCD) on September 26, 2011. 630 young people, of whom 280 were students, participated in a parade and program at which, 318 women and 150 males were given contraceptives and RH information.

### **Prevent and respond to Gender-Based Violence (GBV)**

Lack of skilled health workers to care for rape survivors has been an issue of concern in the health sector. In an effort to facilitate clinical management of rape and improve health of survivors, RBHS supported IRC and Equip to train 20 facility staff in Nimba. With improved skills, due to the training, fifty-six rape survivors received care. In preparation for the training, and in anticipation of service delivery following the training, drugs required for treatment of rape survivors were acquired from NDS to be distributed to facilities by CHSWTs. This was the beginning of a supply chain for SGBV commodities in Nimba.

At the community level, RBHS partners MTI and IRC jointly conducted TOT training in October 2010 in community GBV using IRC's community GBV training curriculum. The 25 participants included District Health Officers, female school teachers, CHSWT representatives, and representatives of women groups. These trainers have completed step-down trainings of 172 community based GBV volunteers in the reporting period. As was expected, the community volunteers have been increasing awareness on danger of GBV in their various communities. As a result of this activity, two cases of GBV (domestic and sexual violence) were reported to the Senje Health center over this reporting period. This is a giant step, considering that GBV cases have not been frequently reported in Cape Mount.

## CHALLENGES AND CONSTRAINTS: IR1

### Quality Assurance Feedback

Ensuring that the results of the June 2010 QA assessment were reviewed with each of the 103 facilities assessed has proven extremely difficult, primarily for logistical reasons.

*RBHS response:* In almost every county it was the RBHS County Coordinator who, in practice, led the process of scheduling and conducting feedback sessions to facilities, rather than the CHSWT. While not ideal from the perspective of encouraging CHSWTs to take responsibility, such RBHS leadership was necessary to accomplish the task.



### Drug procurement

Delays in drug procurement have continued to plague the project. It took several months to receive a waiver from USAID and the shipment did not arrive until September 2011, leading to stock-outs among the NGO partners.

*RBHS response:* RBHS has solicited MOHSW approval for the NGOs to purchase drugs from NDS on an interim basis. Additionally, NGOs have been cooperating such as when Africare sent drugs to EQUIP, which was experiencing severe shortages due to refugees.

### Supply chain management

Many of the commodities supplied directly by MOHSW were poorly managed. For over a year, RBHS-supported facilities have experienced chronic stock-outs of ACT, SP, and Depo. More recently, national shortages of HIV test kits and contraceptive implants have affected facilities. These stock-outs have had a major impact on treatment of patients as well as the ability of RBHS partners to achieve performance targets (e.g., CYP and treatment of malaria cases with ACT).

*RBHS response:* RBHS conducted a series of investigations in two counties and learned that the supply chain SOPs are not being followed at all levels. RBHS advocated at the highest levels of MOHSW for renewed SOP training. NGO partners are working with CHSWTs to address the problems at the county level. Most recently, the RBHS County Coordinator in Lofa initiated an investigation with the county pharmacist of the county depot in Zorzor, which resulted in the County Health Officer ordering an immediate transfer of the depot contents to the IRC office in Zorzor until a more permanent solution could be found.

### BCC activities

The RBHS-led CHEST and Journey of Hope kit efforts have been delayed by months due to problems with the printer, finalizing the product and locating a supplier for the huge quantity of carrying bags. The delays have had a ripple effect on RBHS activities, slowing down community interventions as well as those specific to malaria, HIV, TB, and FP.

*RBHS response:* RBHS made completion of the kits an even greater priority and expects roll-out to communities to take place over the coming months.

### Slow roll-out of EmONC services

The rehabilitation of all five comprehensive EmONC centers is behind schedule due to procurement and infrastructure problems. Sinje is supposed to be renovated by the U.S. Department of Defense, but construction has yet to begin.

*RBHS response:* Construction at Fish Town, Bensonville, and Curran Hospital finally began in this reporting period. Sinje awaits action by the Department of Defense.

### Low quality of HIV/TB services

While RBHS has followed NACP's ambitious HIV scale-up plans, and worked with NLTCP to expand TB services, both efforts have been hampered by the lack of capacity of CHSWT and NGO staff to supervise services at the facility level. RBHS' ability to respond to the issue was further diminished by the sudden resignation of the HIV/TB Advisor in January.

*RBHS response:* RBHS organized and helped facilitate with NACP and NLTCP an HIV/TB training for supervisors in November. A new HIV/TB Advisor started on the first of April, and has quickly made it a priority to visit facilities in the field and monitor quality.



## INTERMEDIATE RESULT 2



Increase the quality of health services through  
Improving infrastructure, health workforce and  
Systems performance by  
Enhancing capacity to plan, manage and monitor  
A decentralized health system

## INTERMEDIATE RESULT 2:

**Increase the quality of health services through improving infrastructure, health workforce and systems performance by enhancing capacity to plan, manage and monitor a decentralized health system**

### OVERVIEW

Support systems represent one of the four main pillars outlined in the 2007 NHPP. The on-going development and strengthening of national health systems will have a major influence on the success of the government's decentralization policy, as well as on increasing the utilization and quality of health services. During the reporting period, RBHS made good progress supporting pre-service education, including curriculum development and renovation of two major nursing schools. Major contributions were made to the development of the 10-year National Health and Social Welfare Policy and Plan. Substantial technical assistance was provided to the MOHSW in areas such as PBF, BCC, QA, FP, mental health, M&E and HMIS.

During the next reporting period, RBHS intends to assist MOHSW to undertake a needs assessment on capacity building at central as well as at county levels. The findings of this assessment will be used to develop a capacity building strategy and implementation plan, which will guide the RBHS team in structuring its capacity building activities in close collaboration with MOHSW.



Launch of National ITN Campaign, Nimba

## **SUB-OBJECTIVE 2.1:**

### **Enhance TNIMA and EBSNM environments and resources**

With major progress in previous years in upgrading the curricula of four cadres of mid-level health care providers, RBHS' pre-service efforts have focused more in the past year on two nursing schools: Tubman National Institute of Medical Arts (TNIMA) and Esther Bacon School of Nursing and Midwifery (EBSNM); in particular implementing the standards-based management and recognition process. (The standards developed for this process have been adopted by the other schools in Liberia, which have successfully applied them to assess quality.) RBHS conducted a follow-up assessment of clinical and educational standards at the two schools, and found substantial improvements, with a combined score of 51% representing an increase of almost one third over the 39% baseline, with the most dramatic improvements in the classroom and clinical areas, reflecting the intense efforts put into monitoring clinical practice sites (three facilities for each school), plus numerous workshops to improve instructor and preceptor teaching skills and technical knowledge. Workshops in the past year have focused on providing technical updates on HIV and TB, ENA, IMNCI, computer literacy, FP, Malaria Prevention and Control, M&E, Interdisciplinary Procedure Manual, Emergency Care, Mental Health, Interpersonal Communication Skills, and Effective Teaching, Skills (ETS).

In addition to upgrading the curricula, teaching skills, and management skills at the training Institutions RBHS is responsible for major renovations at both TNIMA and EBSNM. The rehabilitation of TNIMA began in May 2010 and that of EBSNM in September 2010, and both continued throughout the reporting period. RBHS contracted with a local architect and engineering firm to provide the design and local construction firms for the renovations. As with all RBHS infrastructure work, an environmental mitigation and monitoring plan (EMMP) was included, including training of the selected construction firms. In Lofa the local Ministry of Public Works office was given a set of plans for both buildings and provides monthly inspections of the work.

#### **Tubman National Institute for Medical Arts (TNIMA), JFK Hospital, Montserrado**

AEP Consultants, the design firm, continued in its contracted role to provide construction administration services. Meetings are held every two weeks to review job quality and progress, resolve coordination issues as they arise, review and approve changes to the work, and process the contractor's applications for monthly progress payments.

The project was scheduled to be completed in six months, but has experienced delays primarily due to a 60-year-old plumbing system (water and sanitary sewerage) that is failing and needs to be replaced. RBHS's renovation scope of work is only for TNIMA on the bottom two floors. However the problem includes the three top floors of the west wing, which leak continually, damaging the RBHS contractor's newly installed work. The JFK Medical Center hired a contractor with World Bank funding to repair the plumbing system in the east wing, but the west wing was not included. This is a costly problem and makes it impossible to complete portions of RBHS's renovation scope of work. Estimates to repair only the sewerage piping ranged from \$75,000 to \$100,000. After a long series of negotiations, JFK signed a contract in late March to repair the sewerage piping on all five floors of the west wing. Sewer repairs were completed in September, which will allow the contractor to remobilize and complete the TNIMA area of the renovations. Since a contract for the kitchen repair work could not be signed until the sewerage issue was resolved, RBHS did not instruct the contractor to proceed with sub-contracting for the kitchen equipment until March 2011. The kitchen equipment was approved May 2011 and arrived at JFK in August 2011. Work began on the kitchen renovations in September and is scheduled for completion at the end of 2011.

Additional changes were made to the TNIMA contract to address problems as they arose as is normally the case in renovations. For example, this included items such as leaking roofs, laboratory casework that could not be repaired, cafeteria repairs not included in the contract bill of quantities, and the lack of available materials. The work has been broken up into sections for final inspections to allow areas to be completed and inspected individually, allowing the work to be inspected, finalized, and turned over to the owner rather than waiting for the entire contract to be completed before occupancy.

#### **Esther Bacon School of Nursing and Midwifery (EBSNM), Curran Hospital, Lofa**

Renovations of the Classroom and Girls Dormitory began in September 2010. Both contracts were signed with six-month completion schedules, which was overly optimistic. The initial RBHS construction contracts

included provisions for advancing the contractors 20% of the contract value upon signing the contract. Due to contractor financial problems, RBHS has changed its policy and does not issue advance payments.

### ***Classroom***

Following initial design problems by the architect, the classroom building progress stopped last quarter due to the contractor's (Behold) financial problems. RBHS assisted the contractor to perform and complete the contract, while ensuring the quality of the work, protecting its interests and recovering as much of the advance as possible before the contractor could go any further. After close monitoring and assistance, a Cost-to-Complete was calculated which indicated there was a \$65,000 shortfall between the amount left in the contract and what was needed to complete the contract. At this point RBHS sought legal counsel, and informed USAID and JSI/Boston of its recommendation to terminate the contract for convenience.

### ***Girls Dormitory***



Work on the dormitory began in September 2010 and has proceeded at a consistent but slow pace. Again the contract period of six months was unrealistically too short. The contractor's slowness has been primarily due to poor financial management, poor quality equipment and vehicles, poor road conditions during the rainy season, and weak administration. Daily on site supervision has maintained the quality of the material and workmanship. By the end of Year 3 work had progressed slowly but steadily to about 87% completion. Completion is expected in the first quarter of Year 4.

### ***Water System Rehabilitation***

In December 2010 USAID informed RBHS that the costs of the first design to rehabilitate the old water system based on a spring collection system, chlorination and 2 stage pumping system were too high. RBHS, with a local engineering firm, Walker Engineering, then redesigned the system based on a combination of new and existing borehole wells and presented the concept to USAID for approval. After receiving USAID approval, RBHS completed the redesign and selected the most responsive local bidder. USAID approval to subcontract was received in July and a contract signed with Space Design and Construction in August 2011. A preconstruction meeting was held with the contractor and submittals and mobilization began in September 2011. The project is scheduled to take 6 months.

The drilling of two new borehole wells as part of EBSNM/Curran water system rehabilitation had previously been bid, approved and contracted outside the water system procurement. The two boreholes were drilled in August 2011 and yield tested in September. RBHS hired a consultant to witness and verify the well testing. We are expecting the contractor well reports imminently and will proceed with setting the pumps and completing the concrete head works as soon as it has been reviewed and approved.

### ***Electric System Rehabilitation***

In Year 2 the rehabilitation of the electrical system was designed and redesigned and put for bid twice. The initial design and bid had attracted 1 bidder. The redesign attracted 6 bidders, but the prices were very high. In September 2010 the design architect AEP Associates scaled back the project, but upon review the revised scope appeared only provide partial campus security lighting and did not supply electricity to either the new classroom or girl's dormitory. Further action was put on hold until the redesigned water system scope of work was defined to understand the electrical requirements of the water system. A local electrical engineering consultant was engaged to review the previous design and develop alternate designs that incorporated the power requirements of the approved water system design, provide power to the newly renovated classroom building, small staff house and dormitory, provide limited security lighting and repair components of the Curran Hospital power supply. The water and electrical system procurement were issued in one RFP and bids were received in June. USAID approval was received in July and a contract was signed with the most responsive bidder, Mega Store and Construction, in August 2011. A preconstruction meeting was conducted in September including a submittal schedule and mobilization was planned for October 2011. The project schedule duration is 26 weeks.

### **Small projects**

In addition to the major work, RBHS completed during the reporting period the design and bidding of a number of small activities. Those included a small two-unit staff house, the EmONC operating room renovation, improvements to the maternity ward including an emergency entrance ramp for wheel chair and stretcher accessibility, and a sanitary facility. These small projects were designed, planned, and bid in the second quarter of the year. USAID approval was received in the fourth quarter, but by that time RBHS doubted the ability of the contractors Behold and JPA to undertake the work given the issues with completing the dormitory and classroom building. In August the work was then shifted to Space Design and Construction, who began to mobilize and submit material samples in September. The work is scheduled to take 4 months.

### **Furniture**

RBHS procured locally made classroom chairs, and tables for the training facilities and beds for the girls' dormitory at EBSNM.

### **Skills lab, computer lab, and library**

In addition to the infrastructure work described above, RBHS has also completely upgraded a computer lab at TNIMA, including networking, computers, and furnishing. To stock the schools' computer labs and libraries, RBHS has supplied an array of equipment and materials, including:

Laptops (3), Desktop computers (18), Computer desks and chairs (23), LCD projectors (4), photocopiers (4), computer printers (6), overhead projectors (4), cameras (2), Whiteboard flipcharts (10), Copies of EHT curriculum (4) and various textbooks and instructional guides (11).

At EBSNM, RBHS has supplied an array of equipment and materials, including: Multimedia projector (2), Photo copier (2), HP desk jet printer (4), Overhead Projector (1), White Board flipchart stand (4), Lap top (1), Cannon photo Camera (1) In addition, RBHS procured equipment for the skills labs at the schools, including adult sphygmomanometers and stethoscopes, adult and infant weighing scales, Doppler's and gel, advanced child birth simulators, newborn baby and Neo Natalie (Helping Baby Breathe) models for neonatal resuscitation, pelvic models, gauze bandages, Baby blankets, towels, baby socks, baby caps, and scissors. While promoting the humanistic approach in teaching and learning, these materials are being used in line with the curricula, allowing students to master a procedure in the simulation center on models before performing the procedure on patients.

## **SUB-OBJECTIVE 2.2: Improve capacity of training institution staff to utilize modern teaching methods and improve management**

RBHS continued to implement pre-service education activities to improve the teaching skills of instructors and clinical preceptors; the educational environment in both classrooms and clinical sites; the overall management of selected teaching institutions; and the postsecondary/ undergraduate curriculum of mid-level health care providers (see SO 2.3). All activities were undertaken in collaboration with MOHSW, professional and regulatory bodies, training institutions and other key stakeholders. Efforts were directed primarily at improving the education for trainee lab technicians, RNs, PAs, CMs and EHTs at TNIMA and for trainee CMs/RMs at EBSNM.

### **Standards Based Management and Recognition (SBMR) Training**

As part of RBHS efforts to improve the quality of the two nursing schools, the second module of SBMR training was conducted over three days in October 2010 for 16 instructors, clinical preceptors and representatives of the Liberian Board of Nursing and Midwifery (LBNM). After the workshop, using the pre-service education standards, external assessments were done at TNIMA and EBSNM in four areas: 1) classroom and practical instruction and learning assessment; 2) clinical instruction, practice, and assessment; 3) institution, infrastructure, and training materials; and 4) institution management.

Overall, TNIMA met 50% of the standards, while EBSNM met 55%; the combined total of 51% represents an increase of almost a third over the 39% baseline assessment score. The most dramatic improvements were in the classroom and clinical areas (those under direct control of instructors and preceptors, who have had training and mentoring from RBHS). There was little improvement in the administrative performance of the schools, in significant part because they are overseen by other institutions (TNIMA by JFK Medical Center, EBSNM by Curran Lutheran Hospital). RBHS will attempt to address these issues in the next reporting period. Performance against infrastructure standards declined slightly, due to the increase in the number of classes at EBSNM without a commensurate increase in classroom space. Once the renovation work at both schools is completed, substantial improvements are expected.

Liberia's six other schools for mid-level health workers, as well as the associated professional boards and associations have adopted several of the strategies, standards, and tools developed by RBHS. The LBNM adopted the pre-service standards in 2009 and has used them to assess the readiness of potential nursing and midwifery schools for establishment as well as for accreditation of existing nursing schools. RBHS developed standards were also used by Midwifery Training Program/South Eastern Region to develop the performance appraisal form for teachers, for developing the job description for clinical preceptors, and to design and furnish the school appropriately.

### **Monitoring**

Monthly monitoring visits are being conducted at the two schools and all six facilities. Feedback is provided to each facility and the results discussed to inform next steps. For example, few women were coming to the six clinical sites for postpartum visits, but after feedback from monitoring visits, most facilities are now implementing activities to increase postpartum visits, with an increase as a percentage of facility deliveries from 5% in July 2010 to 11% in March 2011. Emphasis during monitoring is placed on SBMR for quality improvement, recorded date indicators, reporting forms and on implementation of plans as well as ensuring that the revised curricular are being used for teaching.

### **Teaching skills and technical updates**

RBHS continues to provide technical updates for instructors and clinical preceptors in a variety of areas and to work closely with them on the Effective Teaching Skills (ETS) needed in both classrooms and clinics. Workshops and updates include not just TNIMA and EBSNM instructors, but those from other training institutions in Liberia as well. See Annex 4 for this year's trainings.

### **Environmental health**

The activities described focused on education for PAs, RNs, and CMs. RBHS also supported development of upgraded education for Environmental Health Technicians (EHTs) through a workshop to finalize the revised EHT curriculum and a stakeholder meeting to promote curriculum implementation (see Annex 4).

### **SUB-OBJECTIVE 2.3:**

#### **Update and strengthen PA, RN, EHT, and CM curricula**

The four curricula for RNs, CMs, PAs and EHTs were finalized during the first two years of the RBHS project, but due to changes that had to be made as a result of last year's task analysis, the curricula have only recently gone through final editing and formatting; they are now in the process of being printed. However, the revised course syllabi for the first year are already being used pending completion of printing and distribution of the entire curriculum for each cadre.

Editing of the handbook for mid-level health workers is completed and the book is currently being printed. In addition to the accepted use of the handbook by PAs in clinics as primary reference, the handbook is being used to teach the Simplified Diagnosis and Treatment course in the PA school. As a result of the task analysis that course is now included in the RN and CM curricula as well.

Since the project was designed, RBHS has also been asked to take on the laboratory technician curriculum and progress continued during the past year with a two-day lab technician curriculum validation workshop in Monrovia for 20 participants. Participants adapted the draft revised job description, core competencies, and course sequence for the curriculum, and reviewed and revised the syllabi for over 16 courses in the three-year curriculum. This curriculum has been accepted as the national curriculum for training Medical Laboratory Technicians. It has already been used at TNIMA for training the first class of lab techs since the war, admitted in March 2011.

RBHS conducted two major workshops to develop the Learning Resource Package Procedure Manual including 30 participants from the 8 mid-level health related training institutions, the 6 facilities serving as clinical sites, the MOHSW Training Unit and LBNM. The first workshop was to identify and outline all procedures and skills to be performed by Nursing, Midwifery and PA students in the health facilities. The second phase of the workshop was to complete the validation of new and existing tools for student assessment to be included in an interdisciplinary Procedure Manual. A total of 183 checklists were developed, revised and adopted by the participants.

In June 2011, an internal evaluation of the Pre-Service Education (PSE) component of RBHS was conducted. At each school, instructors, clinical preceptors, and students were interviewed as well as stakeholders on the Education & Training National Working Group (ETN WG). The technical updates and trainings on effective teaching and clinical skills were noted as being one of the key achievements of PSE. Noted areas for improvement focused on improving clinical site strengthening activities including: supplies and equipment as well as support for capacity building of schools and the regulatory bodies, advocacy for increased academic recognition (degree granting, increase salary and benefits) and opportunities.

## **SUB-OBJECTIVE 2.4:**

### **Strengthen MOHSW systems and capacity at central level**

RBHS has provided extensive support to the MOHSW during the reporting period, through direct technical assistance, secondment of staff, training, mentoring, material production, and participation in various technical working groups. A large proportion of the effort was in support of the 10-year NHSWPP, but several MOHSW departments and units also benefitted directly from RBHS assistance.

#### **Support development of the NHSWPP**

RBHS was a major source of technical support to the MOHSW in the development of its 10-year NHSWPP— an important initiative that will guide the strengthening and expansion of the national health system over the next decade. The NHSWPP was successfully launched at the National Health Review in July. RBHS staff and consultants participated substantially in almost every activity related to the development of the NHSWPP. Major contributions have included:

#### ***Drafting and launching of the Roadmap to Develop the NHSWPP***

An RBHS consultant led the development of the Roadmap to Develop the National Health and Social Welfare Policy and Plan. The document presented a clear sequence to develop the NHSWPP, including widespread consultation with stakeholders. President Ellen Johnson Sirleaf, at a workshop facilitated by the same RBHS consultant, subsequently launched the Roadmap.

#### ***Drafting of the Country Situational Analysis Report (CSAR)***

This report was developed to provide an overview of the progress and current status of the health system in Liberia, thereby informing the development of the main national policy and planning documents. Separate working groups drafted individual chapters (e.g. Context; Financing; Human Resources; Health Service), which were edited and compiled into a single volume by an RBHS consultant. The document provides historical information, salient data and analysis, and proposes implications on future policy. It was a central tool for the policy and planning development. RBHS technical staff provided feedback and edits on the early draft of the CSAR.

#### ***Drafting of the National Health and Social Welfare Policy (NHSWP)***

The same RBHS consultant led the drafting of the NHSWP. The document builds on the Ministry's National Health Policy of 2007 and National Social Welfare Policy of 2009, and integrates the two. The policy and the plan were successfully launched at the 2011 National Health Review in July. The overall policy development was participatory throughout and there is a strong sense of ownership by the MOHSW of its principles and key policy orientations. RBHS technical staff provided extensive feedback on each draft.

#### ***Contributing to County-level Health Planning***

MOHSW insisted that policy and planning development be a “bottom up” process, engaging the counties from the outset. RBHS made important contributions to the county-level planning process, including:

- a.) **Linking communities to facilities:** RBHS created and printed over 200 maps showing each community in the country and its preliminary association with a unique health facility. RBHS then collaborated with the Ministry's M&E Unit to conduct half-day workshops in 14 of the 15 counties to finalize catchment areas for each facility in the country. With definitive community-facility assignments, RBHS next calculated county-by-county statistics on facility catchment populations and distances people live from facilities. This data was critical to guide the development of the county-level health plans, including the expansion and rationalization of health facilities.
- b.) **Kick-starting the planning process at county level:** MOHSW organized three-day workshops in February for each of the CHSWTs. The objectives were to review the NHSWP, to outline the steps in the planning process, to review the CSAR, and to conduct a gap analysis of service delivery points. RBHS staff and consultants developed the agenda, several presentations, planning templates, and other resources for the workshops. Moreover, they facilitated the workshops in five different counties.
- c.) **Advising on flexible staffing patterns:** RBHS conducted analyses of staffing levels in each facility relative to catchment populations and utilization, developing quantitative guidance for counties in how to apply

principles of flexible staffing. The analysis was presented at a national workshop in March and integrated into guidance for county planning activities.

- d.) County-level planning: RBHS County Coordinators actively participated in the county planning meetings that led to the development of the county-level plans.

### **Reviewing policy and planning documents**

RBHS staff provided extensive feedback and edits on several other important documents related to the policy and planning process, including: the *National Health Financing Policy and Strategic Plan*; *Essential Package of Health Services: Primary, Secondary and Tertiary*; the *National Health Promotion Policy*; the *Community Health Policy and Strategy* and the *Family Planning Strategy*.

### **Institutionalize Performance-Based Financing (PBF)**

Since October 2009, MOHSW has supported delivery of health services at 120 health facilities in six counties through their own PBCs. Twenty of these facilities are supported through a contract with the Bomi CHSWT (“contracting-in” model), while the other facilities are supposed to follow the “management contracting” approach used by RBHS. Up until July 2011 these contracts have not followed a performance-based model – there had been no agreed-upon performance indicators, no baselines determined, no targets set, and no bonuses distributed. The contracts were more consistent with an “input financing” approach. Moreover, the management of PBF at the MOHSW has been fragmented among several units and effective leadership has been lacking.

During the reporting period, several important developments occurred: RBHS provided more intense technical support on PBF to the MOHSW, including harmonization of PBF approaches; MOHSW appointed a new PBF Focal Point, who has provided much-needed leadership and management; and USAID has decided to transition all responsibilities for PBF from RBHS to the MOHSW.

Through a series of short-term technical visits, RBHS technical advisors have assisted MOHSW to finalize indicators, determine baselines and set targets for PBCs in seven counties. Tools and templates have been drafted for target setting and bonus determination, as well as an M&E dashboard. MOHSW staff recently participated in the data validation process for Q8, along with RBHS County Coordinators and M&E staff, to learn the RBHS approach to validation. They have participated in RBHS monthly partner meetings, quarterly data reviews, quarterly M&E meetings, and quarterly partner feedback sessions, to learn the RBHS management approach to PBF. Moreover, short-term technical advisors from RBHS have contributed substantially to early drafts of the ministry’s PBF operations manual, which was initiated by the World Bank.

The recruitment of a new PBF Focal Point at the MOHSW has been a crucial step. The Focal Point has overseen the development of a new PBF Technical Team and the re-establishment of the PBF Technical Committee. Since the recruitment of MOHSW PBF focal person, RBHS has intensively worked on developing the knowledge and skills of the PBF team. Moreover, other units within MOHSW are now more engaged in the PBF process. This strengthening of the institutional arrangements for PBF at MOHSW has resulted in new momentum and MOHSW is now positioned to disburse its first performance bonuses based on the results of the July – September quarter.

During the reporting period, USAID also announced plans to consolidate US-government support for PBCs into three contiguous counties by June 2012: Bong, Lofa and Nimba. The responsibilities for funding and management of the PBCs will be transferred from RBHS to the MOHSW by July 2012. Given the current capacities of MOHSW, this transition is being conducted in a phased manner with RBHS providing technical assistance and capacity building in PBF, budgeting, and contracting. The transfer of the PBCs to MOHSW will occur over a timeline that will allow MOHSW to undertake procurement processes for their new contracts. The five RBHS-supported PBCs and the grant for River Gee ended on June 30, 2011. Thereafter, the contract for Lofa County (IRC) and the grant for River Gee County (MERC) were renewed for a period of six months, ending December 31, 2011. The contracts for Bong County (Africare), Nimba County (EQUIP, IRC), and Grand Cape Mount County (MTI) were renewed for 12 months, ending June 30, 2012.

### **Conduct costing exercise for health services**

Since 2009, RBHS has conducted studies at all levels to ensure that MOHSW has access to quality costing information in order to guide health policy and planning. These studies were well received and validated by MOHSW which, used components of the reports to inform the drafting of the National Health Financing Policy.

During the reporting period, the costing for the clinic and health centers was updated, using more recent and accurate utilization data from the HMIS. In addition, updated drug costs were obtained from the NDS. Moreover, the Community Costing Tool adapted for Liberia in July 2010 was reviewed by RBHS and key staff at MOHSW to update assumptions within the model. A basic costing of community health services was then conducted.

Training in CORE Plus was conducted with representatives from each of the 15 counties in Liberia, in which two participants (generally the Accountant and CHSA) from each county were present. The trainings aimed to assist county-level staff prepare their own budgets, as a component of the County Health Planning process.

### **Promote quality assurance/improvement**

RBHS support to the MOHSW on quality assurance is included under SO 1.1.

### **Conduct LiST analysis – identifying priority interventions**

During the reporting period, RBHS coordinated a Lives Saved Tool (LiST) analysis and provided training for MOHSW staff on the LiST tool.

The analysis indicated that the most effective interventions for reducing maternal and child mortality in Liberia include reduction of the total fertility rate, increasing institutional deliveries, increasing exclusive breastfeeding uptake and practice, and improved neonatal care. A model to evaluate the impact of MOHSW's draft Essential Package of Health Services (EPHS) suggests that by 2021 over 96,000 lives could be saved if the high impact interventions are appropriately scaled up. A preliminary analysis was shared with MOHSW in time to inform the NHSWPP.

### **Support development of the Health Management Information System (HMIS)**

RBHS has already provided extensive technical support to the MOHSW in upgrading the HMIS, including finalizing indicators, developing tools, training of trainers, training on the tools, and field testing of the new system. During the reporting period, RBHS contracted to print copies of the five main registers for every health facility in the country, including OPD Registers, Under 5 Registers, FP Registers, ANC Registers, and Delivery Register. Unfortunately, there was some fraudulent activity by one of the owners at the printing firm, resulting in major delays in delivery of the final registers and their distribution to the health facilities. RBHS is waiting for the delivery of the final quantity of registers at the time of writing.

During the annual reporting period, RBHS also printed 100 copies each of the NACP's PMTCT Antenatal Care Register, the PMTCT Labor and Delivery Register, and the HIV Exposed Infant Register as well as 6,000 copies each of Community Volunteer Register and Community Midwife Register.

### **Build capacity of MOHSW technical units**

RBHS has continued with its efforts to build the capacity and provide technical assistance to a number of MOHSW technical units. Chief among these have been the Health Promotion Division, Mental Health Unit, and Family Health Division. RBHS has continued to participate in 26 Ministry committees, working groups and task forces (see Annex 2) and has contributed to the development of nine Ministry policy, strategy and technical documents during the reporting period (see Annex 3).

### **Health Promotion Division (HPD)**

To strengthen management, RBHS sponsored the HPD Director to attend an annual regional course *Leadership in Strategic Health Communication* in Nigeria. In addition, RBHS provided on-going technical assistance and on-the-job training to the HPD. Over a period of 18 months, RBHS has conducted a series of six

quarterly BCC dipstick surveys (see SO 1.4), to assess the impact of BCC messages at the community level. Starting with the fifth survey in January 2011, RBHS involved the Health Promotion Division into survey design and implementation to promote HPD taking on a larger role in evaluating the effects of the health promotion activities it undertakes.

RBHS also staff collaborated with the HPD to develop and begin the roll-out of a “social brand” to be associated with all MOHSW health promotion activities. The “Healthy Life” brand was launched at the National Health Fair in Grand Bassa. It is being applied to MOHSW-endorsed BCC materials, such as the Pregnant Woman’s and Child Health Cards.

### ***Mental Health***

The RBHS Mental Health Advisor (MHA) has been seconded to the MOHSW since 2009 and previously played an important role in the finalization of the National Mental Health Policy and the development of the National Mental Health Strategic Plan. During the reporting period he contributed to the curriculum for the Post-Basic Mental Health for Clinicians Training, developed by the Carter Center and served as a local faculty in the five and half months training of the first cohort of the mental health clinicians from March to July, 2011. The MHA is also participating in the training of the second cohort that began on September 2011. Additionally he has participated in the planning and county-level negotiations regarding the institution of Mental Health Wellness Units at county hospitals; the development of mental health promotional messages to be aired over community radios in 6 counties; the review and modification of the psychotropic medicines included within the MOHSW’s Essential Medicines List and the development of the National Therapeutic Guidelines for mental health conditions.

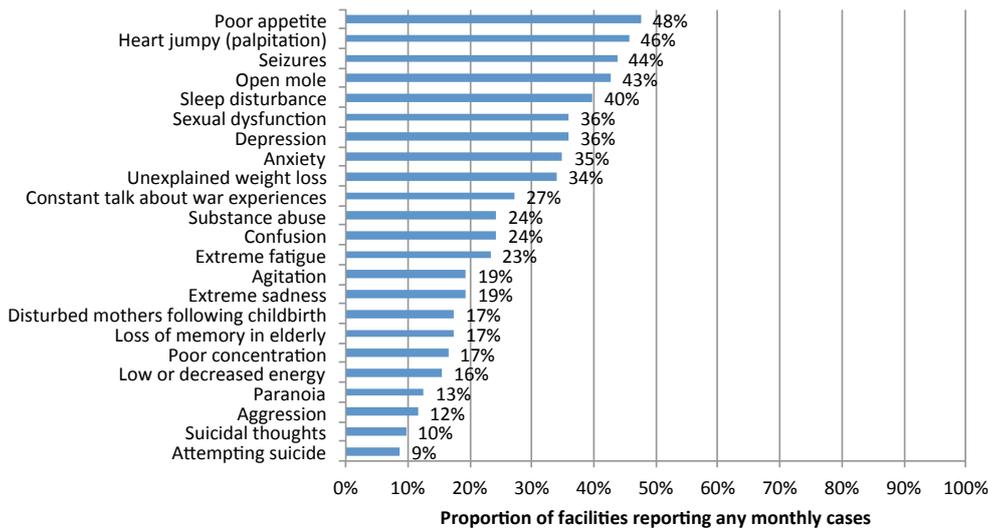
The MHA contributed to the conduct of a survey to establish a baseline data on the availability and utilization of psychotropic drugs, the result of which is still pending. He also participated in the design of the mental health portion of the Essential Package of Health Services for the ten-year policy and plan. He continues to contribute to all MH initiatives within the MOHSW and is a member of the Mental Health Technical Coordination Committee and several sub-committees.

The National Mental Health Policy calls for integrating mental health into the primary health care system of Liberia. Four in-service training modules have been developed to strengthen the skills of mid level health workers who will facilitate the integration. In partnership with the Pre-service team of RBHS, Mental Health Advisor (MHA) participated in rolling out two of the modules (Medical Emergency and Mental Health) during the week of August 14 – 20, 2011. Twenty faculty members and clinical preceptors from six of the health training institutions in the country attended the sessions.

The post-election violence that took place in neighboring Ivory Coast created a serious refugee crisis in several of the fifteen counties. MHA was a part of the team from MOHSW to visit and conduct a mental health needs assessment of the Ivorian refugees in Grand Gedeh and Nimba Counties. The Mental Health Unit at the MOHSW is already collaborating with UNHCR to design programs to meet identified needs of the refugees.

Presently there is no mental health legislation in the country. MHA participated in drafting the first mental health legislation. The draft is being reviewed by the Mental Health Technical Coordinating Committee and partners. A copy of the draft has been given to legal experts working with the legal counsel for MOHSW for review and finalization.

**Figure 29: Mental Health Conditions (103 RBHS Facilities)  
September-November 2010**



Finally, RBHS led a survey in late 2010 to assess the types of MH conditions presenting to and types of MH services provided at RBHS-supported facilities. The survey revealed that MH needs are high in Liberia (Figure 29); that there are few trained professionals available to meet the needs; that most RBHS-supported facilities do not provide MH services; that psychotropic medicines are used infrequently. Recommendations were made concerning training of health staff on MH; provision of appropriate medications, including review of the Essential Medicines List; and the on-going use of data and research to better inform the delivery of services.

provision of appropriate medications, including review of the Essential Medicines List; and the on-going use of data and research to better inform the delivery of services.

**Research Unit**

In February, two research assistants were hired establishing the Research Unit as a viable entity. RBHS has played an important role in building its capacity by working with the unit on survey design, implementation, data cleaning and analysis of the QA assessments as well as training the Unit on the use of the LiST tool.

**M&E Unit**

M&E Unit staff participate in RBHS' quarterly M&E meetings, quarterly data reviews with NGOs, and in the data validation process. Nonetheless, less progress has been made with building capacity of the M&E Unit than planned. The secondment of an M&E Technician in late March to the unit was unsuccessful. The M&E Unit did not engage the technician constructively and the arrangement was discontinued after a few months. RBHS has provided a detailed briefing to MOHSW M&E on RBHS PBC monitoring and evaluation and management. Following it, in order to transfer the skills on data validation to MOHSW PBF and M&E Units, RBHS organized a joint performance data validation of quarter nine in the health facilities and counties.

**Nutrition Division**

RBHS is working with MOHSW and UNICEF to institutionalize the Essential Nutrition Actions (ENA) in the EPHS. Due to technical advice and advocacy by RBHS and UNICEF, a separate Nutrition Division was established within the MOHSW to coordinate this work.

**Family Health Division (FHD)**

RBHS staff have contributed to several FHD documents, including the Family Planning Strategy, Adolescent Reproductive Health Strategy, and Roadmap for Accelerating the Reduction of Maternal and Newborn Morbidity and Mortality. RBHS played a major role in initiating and finalizing the FP Strategy, including the involvement of an international consultant and STTA from JSI Boston. The strategy is due for printing at the time of writing. Further progress on capacity building of the FHD was limited by the lack of appropriate counterparts within the FHD, especially for family planning.

**Support to the FORECAST project**

As part of RBHS's role in capacity building, RBHS took on the support to the FORECAST activities. FORECAST is a 5-year centrally funded contract, which was managed by AED until their contract ended in April 2011. RBHS has been supporting the FORECAST project by providing logistical and financial support to participants. Currently RBHS is supporting the following:

- MPCHS/ Monrovia-Nursing Education: 16 (Aug. 2010-Dec. 2011)
- MPCHS/ Monrovia-Lab Tech: 17 (Dec.2010-June 2012)
- Individual scholarships: 16 (Aug.2009-July 2013)

The 16 individual participants whom we support belong to one of 3 different categories; 1) Those that have completed the program, 2) those that are waiting for graduation and 3) those that are still active. Details on each of the participants is provided in Annex 11.

There have been challenges with taking on the FORECAST project without knowing the financial support history for each participant. As part of the transition of the project, RBHS had a number of meetings with AED staff before the project was over however files did not include documentation stating what actual funds had been disbursed to each participant. As a result, the management burden in supporting this project has been heavier than projected, especially without an AED FORECAST member on staff as originally planned. RBHS has developed good relationships with the participants and has found this to be the only way of getting information on past practices.

**SUB-OBJECTIVE 2.5:  
Strengthen MOHSW systems and capacity at county level**

Up until the end of the second year of the PBCs, RBHS partners have had the primary responsibility for supporting systems at county level and capacity building of CHSWTs – as reflected in the third of the sub-objectives in their PBCs. Nonetheless, the RBHS team itself also has several responsibilities, including training, supervision, data validation, and technical assistance. Support to the county planning process, for example, has been extensive (see SO 2.4). In addition, RBHS works with partners to ensure that the support systems are institutionalized at county level, including the HMIS, supply chain SOPs, and systems of supervision. Moreover, through RBHS county coordinators, regular communications with the CHSWTs and field-level partners are maintained, joint supervisory visits conducted, and RBHS ensures that the county-level plans of partners are aligned with those of the CHSWTs. Commencing in July 2011, RBHS will assume the main responsibility for capacity building of the CHSWTs and this sub-objective will not be included in the third year PBCs.

**Improve health systems management at county level**

**Decentralization Working Group (DWG)**

MOHSW is committed to implementing the national decentralization policy. The Decentralization Working Group (DWG), of which RBHS has previously been an active member, functioned minimally during the reporting period. The DWG is responsible for prioritizing and developing support systems manuals and SOPs, and rolling them out to the counties. During the period under review, little progress was made in these areas, due to staffing changes and competing priorities at MOHSW- most significantly the 10 year policy and planning process. RBHS remains willing to resume its role as an active member, if and when the DWG is re-convened.

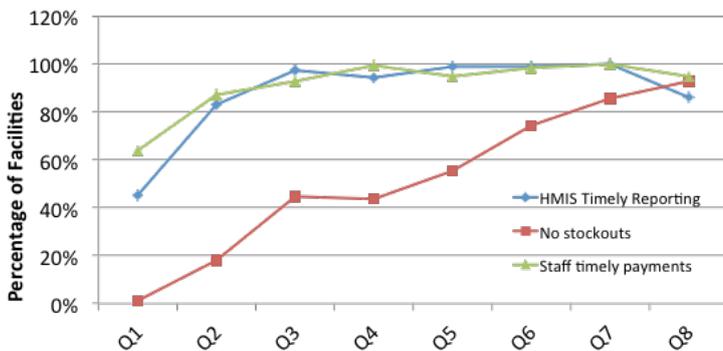
**Human resource management – Supportive supervision**

RBHS recognizes that close, supportive supervision of facility staff is one of the most effective measures in promoting the quality of care. The RBHS County Coordinators have continued to work alongside our implementing partners and CHSWTs to increase the frequency and regularity of supervisory visits. The RBHS PBC indicator for joint supervision was modified to count not average number of visits, but the proportion of facilities that received at least two visits during a quarter. By the end of the reporting period, virtually every facility (97%) was being supervised at least twice per quarter. Although no formal assessment of the quality of supervision has been conducted, the supervisory reports, reviews by RBHS County Coordinators, and the positive feedback provided by facility staff during field visits indicate that the supervisory visits increased in quality and effectiveness.

**County-level reporting**

Overall facility management by RBHS partners is summarized by quarter in Figure 30. RBHS partners have continued to work with the CHSWTs to ensure that monthly HMIS reports are submitted by the facilities on a timely basis. During the latest quarter, monthly reports from all 112 RBHS-supported facilities were submitted to the CHSWT on time.

**Figure 30: RBHS Facility Management  
July 2009-June 2011**



Implementing partners were also requested by MOHSW to assist the CHSWTs to compile their quarterly reports. Little progress was made in this area, with most partners making only minor contributions. The main constraints reported by the NGOs were lack of cooperation by CHSWTs, competing demands, and limited time to dedicate to the process. Improving county-level reporting and planning will be among the main priorities going forward.

RBHS partners maintained their strong performance in on-time payments of staff during the period under review, with all staff in the latest quarter receiving their monthly incentive payment on time. Regular, timely payments are among the most significant factors contributing to staff satisfaction and moti-

vation. Feedback from field visits indicate that facility staff consider this one of the most important contributions made by RBHS, as it helps to make them feel respected and valued.

### **Quality**

The RBHS quality assurance initiative has a strong county-level component. RBHS actively involved CHSWTs in the baseline assessment, data review and feedback to facilities, and development of facility-level quality improvement plans. Quality improvement teams were established in all five counties, but are active in only three – Lofa, Nimba and River Gee – for a range of reasons. See SO 1.1 for further details.

### **Train CHSWT M&E Officers**

As noted under SO 2.4, RBHS has included the Ministry’s M&E staff in its quarterly M&E meetings; the same is true for each of the M&E officers for the five main RBHS counties. Those meetings have been useful in both directions: the M&E officers can contribute their own knowledge of what is happening in county reporting, while they learn about data issues that not only affect them immediately, but will become of increasing importance when they start monitoring non-RBHS PBCs. In addition, RBHS implemented hands-on trainings for county M&E officers, with a one-day training in which each officer came with his laptop and county HMIS data and was expected to produce a graphical analysis of at least two different indicators key to his county. RBHS installed (free) Quantum GIS software on each of their computers, along with community and facility shape files, and taught them how to navigate through the basics of mapping, so that they can immediately support the county planning process in their counties.

### **Train BCC Focal Points**

RBHS conducted the last two BCC capacity building workshops to enhance service providers’ knowledge and skills in “Interpersonal Communication and Counseling” as well as the “Use of Research in Communication Program Development and Evaluation”. RBHS also continued on-site mentoring on the effective use of IEC materials and how to expand BCC activities at the community level. To date, a total of 24 facility staff benefited from the exercises in Grand Cape Mount and Lofa counties.

## **SUB-OBJECTIVE 2.6:**

### **Improve capacity of health facility staff to provide BPHS**

RBHS and its partners collaborated with MOHSW to roll out integrated in-service training to Bong, Nimba and River Gee. A total of 117 health workers were trained from RBHS-supported facilities. In Nimba, the training lasted eight days and included two modules (communicable diseases and emergency care) while in Bong and River Gee, the training lasted for 21 days and included all four modules (reproductive health, communicable diseases, emergency care, and mental health).

Roll-out of MOHSW's integrated in-service training module has been slowed due to the length of the training and the resultant prolonged absence of clinical staff from facilities. CHSWTs are supposed to initiate trainings, but typically are slow to do so due to competing priorities. Consensus was reached that trainings should be broken up into several pieces lasting not more than a week, but most recently MOHSW has gone back to the concept of 21 consecutive days of training. RBHS has held discussions with the Training Unit, for which a director was recently hired, to conduct the training in phases, and a pilot was done in Nimba County in December 2010. Thereafter, it was expected that this would be considered for the training. But quite recently, the Training Unit planned a 21-day training for the Southeast Region, which contradicted the phased plan.

## **SUB-OBJECTIVE 2.7:**

### **Improve facility environmental health and community hygiene practices**

Through direct implementation and coordination with its NGO partners, RBHS focuses on three issues of environmental health:

- Improved water, sanitation, and hygiene practices (WASH) at the health facility;
- Improved medical waste management at the health facility;
- Mitigating any adverse environmental impacts caused by RBHS activities, through implementation of the RBHS Environmental Mitigation and Monitoring Plan (EMMP)

#### **WASH**

RBHS previously surveyed all the RBHS supported facilities to establish the status of the available water and sanitary facilities with the goals of installing or improving a clean safe water source, a pit latrine, and a waste disposal (segregating medical waste, normal wastes, and incineration) system. Existing wells were assessed for proper, safe construction and sufficient quantity. Where no wells existed new wells were provided. New hand dug wells were installed where the conditions permitted and they would not run dry during the dry season. In other cases where hand dug wells would not be successful drilled borehole wells were contracted and installed.

The following water facilities were improved during the year.

- Hand dug wells: Three new wells were installed with hand pumps and seven were repaired through deepening the wells, repairing or replacing the pumps or repairing the concrete head works.
- Boreholes: Five boreholes were needed in River Gee County. RBHS procured and signed a contract with Henriao International, a MPW registered borehole contractor, in August 2010. An advance payment equivalent to 2 boreholes was paid to the contractor and due diligence was conducted prior to signing the contract (e.g., seeing the drilling rig in operation which the contractor stated he owned). Geophysical surveys were done and the contractor mobilized to River Gee County in October 2010. One well was drilled at Fish Town Health Center and one at Gbeapo. Three more were planned but not completed due to the road conditions in the rainy season. The Gbeapo well is working and fully functional. The Fish Town well was installed and functioned briefly. It has since stopped working and neither the hand pump nor the submersible electric pump works. The contractor was informed to go back and repair the well at Fish Town. He stopped while passing through and looked at the well but did not fix it. RBHS terminated the contract with Henriao for poor performance.

A second borehole RFP was issued resulting in issuing a contract to Andalucía to complete the three bore holes in River Gee, one in Bensonville at the comprehensive EmONC, and two at EBSNM/Curran Hospital related to the water system rehabilitation. The Bensonville and EBSNM boreholes was completed in September and testing and pump installation started. They drilled two wells in Jimmyville River Gee but both were dry. Road access to the other two River Gee locations is poor. Andalucía will return to River Gee after the rainy season to complete the well at Jimmyville and repair the well at Fish Town. It is dubious if a drilling rig can reach either Jayproken or River Gbey in River Gee.

Cooperative Housing Foundation (CHF) also contracted to drill boreholes at RBHS facilities. Three were needed and drilled in Nimba; three were needed and drilled in Bong, and two of four in Lofa County. The wells are not yet fully operational as of the end of the September 2011. The CHSWT's from all counties have been trained and equipped to test water quality by UNICEF and by CHF.

At the Sinje EmONC center an existing submersible electric pump could not be repaired and a new replacement pump was installed.

#### **Waste Management**

Twenty latrines and septic systems were either newly constructed or repaired during the year. RBHS directly completed five and the remaining fifteen were done by the partners. RBHS and its partners rehabilitated or constructed 23 waste pits, 22 placenta pits, 22 sharp pits, and 19 Incinerators.

### **Sanitation education**

Hygiene sanitation education is an integral part of the CHEST kit and downstream training is in progress. Education of the community and health workers on clean water use and sanitation messages was transferred from RBHS to CHF by USAID in the beginning of Year 3. The BCC team continued to provide technical assistance to MOHSW for its annual WASH campaign.

### **Environmental Mitigation and Monitoring Plan (EMMP)**

RBHS conducted training for all contractors prior to the beginning of work on new sites. During the year training was conducted at Bensonville with AAA Construction, in River Gee with West Construction, with Behold and JPA Construction at EBSNM in Lofa, and Space Design and Construction at EBSNM. RBHS conducts environmental inspections and reviews the contractor's environmental practices at each site during each supervisory inspection.

See Annex 4 for EMMP Training Activities.

## CHALLENGES AND CONSTRAINTS: IR2

### Pre-service Training

It has proven to be a major challenge to offer training to all instructors and clinical preceptors who need it, especially the technical updates. As there are really no substitute teachers, instructors cannot be away from classes and/or clinical training activities for two weeks, two or three times a year.

*RBHS response:* We are working with the institutions on a mechanism for training to occur 3-5 days a month for the four months each semester.

### Clinical site strengthening

Clinical site strengthening has been a major challenge. Only three (Curran Lutheran Hospital, Fessibu and Sucromu Clinics) of the six clinical sites are RBHS supported facilities. Strengthening JFKMC, the major clinical site for TNIMA, needs a lot of resources that are not available. Duport Road & Hydro Clinics are not supported by RBHS, which makes it very difficult when materials and equipment that students need to practice are not available.

*RBHS response:* Colleagues at Jhpiego are developing a concept paper for site strengthening at these facilities and there is indication that USAID may be able to assist with minimal funds.

### Capacity building at central level

Much of the support to the central MOHSW is provided by RBHS through STTA and consultants, resulting in short periods of intense support followed by longer periods with limited on-going assistance. In addition, the assistance provided by RBHS in-country staff is often intermittent (with the exception of the Mental Health Advisor), because of their other responsibilities in support of project implementation. Finally, it has been difficult to build the capacity of some MOHSW staff because of competing priorities, lack of ability, or limited cooperation.

*RBHS response:* RBHS staff, in developing the 4<sup>th</sup> year work plan, worked with the counterpart programs at MOHSW to ensure joint implementation of activities. Also, RBHS is planning to second and co-locate additional technical staff within MOHSW. Already, RBHS has seconded our Mental Health Advisor and an M&E Officer. Over the coming 12 months, other technical staff will be transitioned to the Ministry, to build capacity of their colleagues. Prior to secondments, a joint capacity needs assessment will be conducted and a joint capacity-building strategy developed, with clear objectives, activities, targets, and monitoring plan.

### Capacity building at county level

Relatively little progress has been made on the capacity building of the CHSWTs. This has been due to a combination of factors: a lack of definition of what capacity building means for the CHSWTs (various stakeholders have different perspectives on what capacity building entails), the competing demands of the implementing partners, the limited capacity of implementing partners, and some lack of cooperation by the CHSWTs themselves.

*RBHS response:* During the third year of PBC implementation, RBHS will directly assume the responsibility of capacity building of the CHSWTs. RBHS will recruit a Capacity Building Officer who will be co-located within each CHSWT. County-level activities will be included within the overall joint MOHSW-RBHS Capacity Building Strategy and Plan. Clear objectives, activities, and a monitoring plan will be developed.



## INTERMEDIATE RESULT 3

Youth informed and networked on reproductive health

Activities relevant to this IR are already covered under sub-objectives 1.2, 1.5, and 1.6.

## PROJECT MANAGEMENT, FINANCE AND ADMINISTRATION

Project management and administration focused on the support to all technical staff for the implementation of the year 3 work plan. This includes contracting for infrastructure projects, logistics and financing for all trainings and printing procurements for trainings and BCC. Additional high-level activities this period included:

### Pharmaceutical and medical equipment procurement

Two pharmaceutical orders have been received during this reporting period:

- (1) Four 40-foot containers and one 20-foot container of essential medicines: These drugs were purchased for MOHSW as part of a supplemental funding that USAID gave to RBHS. In this order RBHS also received essential medicines to cover two facilities that were added to RBHS after the original procurement was done (Saclepea and Senje Health Centers).
- (2) RBHS received four 40-foot containers and is waiting for one 40-foot container and one 20-foot container of essential medicines.

### Medical equipment procurement

RBHS has issued 15 purchase orders for the procurement of medical equipment for four comprehensive and 12 basic EmONC centers and is currently waiting for the arrival of the medical equipment that is being packaged in the US by facility. It should be received by end of November or early December. RBHS also received an order of locally purchased EmONC equipment and distributed it to partners.

### PBCs

*RBHS* provided management and support to the implementing partners including making timely payment on a quarterly basis. RBHS has requested and reviewed proposals for year 3 of the PBCs and extensions for all partners were completed.

### Contracting out

RBHS has continued to work with NTCL through the Liberia Crusaders for Peace, Planned Parenthood Association of Liberia and London School of Hygiene and Tropical Medicine to contract their services to support RBHS.

### Human Resources

RBHS recruited four new staff members: EmONC advisor, HIV/TB Advisor, Infrastructure Assistant and DCOP. Currently RBHS is recruiting a Performance Based Advisor and Capacity Building Advisor. See Annex 6 for the RBHS organizational chart for Year 3 of the project.

### Program Subcontracts

Annex 8 provides a cumulative summary of all active program subcontracts.

### Visitors and Consultants

The Project hosted 33 visits from RBHS partners during the reporting period, as shown in Annex 7.

### Budget vs. Expenditures

Please see Annex 10.

## CHALLENGES AND CONSTRAINTS: Finance and Administration

### Budgetary challenges

RBHS still experiences some budget challenges when it comes to the funds used for project implementation activities, such as training and printing costs for the different technical areas.

*RBHS response:* As RBHS works on its year 4 work plan, we will look at prioritizing activities that have the highest impact and align with the MOHSW policies and strategies.

### Obligation

RBHS has been facing a number of challenges when it comes to USAID increases in obligation.

*RBHS response:* RBHS has had to postpone and delay activities because of the need for an increase in obligation. RBHS will meet with USAID to access the funding plans for RBHS for PY4. This will allow RBHS to better plan for the project year.

### Pharmaceutical procurement

RBHS has had challenges with MissionPharma communication and delivery of pharmaceuticals. In two of the most recent shipments, one to NDS and one to RBHS, there were missing boxes of pharmaceuticals.

*RBHS response.* We are working hard with MissionPharma to address the procedures being followed to ensure this does not happen again. It has been challenging to identify where the drugs have gone missing.

### Vehicle management

Since an accident last year, RBHS has been down one vehicle. RBHS has realized that due to so many field trips by the technical staff, RBHS needs to replace the additional vehicle.

*RBHS response:* In the next few month RBHS will be looking to procure an additional vehicle.

## CONCLUSION

As one of the MOHSW's largest partners, RBHS has made important contributions to many of the successes and is a key collaborator in addressing the major gaps. During the reporting period, RBHS effectively rolled out a new quality assurance approach that is being adopted as a national model; successfully piloted integrated community case management of childhood infections; strengthened supervisory systems and feedback to facilities; and substantially expanded coverage of several key interventions (see below). In terms of health systems strengthening, RBHS upgraded curricula and improved teaching skills at Liberian nursing schools; made major contributions to the 10-year NHSWPP and the Essential Package of Health Services; built capacity of MOHSW staff at central level; and made good progress on the physical rehabilitation of nursing schools and health facilities. RBHS' national BCC campaign to promote ITNs has been effective in reaching its target audience, with high rates of positive behavior.

Among the most important successes over the past year has been the implementation of the PBCs and grants. Although RBHS has contracts with implementers that include agreed upon deliverables and targets, we consider our relationship to be a collaborative partnership. RBHS therefore places great emphasis on regular communication, feedback, sharing of lessons learned, and joint problem solving. The project continues to prioritize scaling up access to evidence-based interventions and developing a "data-driven culture". RBHS has further strengthened its monitoring and evaluation system during the reporting period, to better track project progress; identify problems, and document successes, failures, and challenges. County coordinators and technical staff make frequent visits to the field sites to monitor progress, to provide constructive feedback, and to further develop a culture of partnership.

Through this collaborative approach, RBHS has been able to record some notable achievements over the past year:

- 88% average score in the MOHSW's 2011 accreditation surveys. RBHS partners: MTI and Africare ranked first and equal second respectively at national level;
- 68% increase in facility-based deliveries;
- 115% (10,845 CYP) increase in couple-years of family planning protection;
- 25% increase in pregnant women receiving a second dose of intermittent preventive treatment of malaria (IPT2);
- Treated 151,524 children for malaria, averting an estimated 3,030 deaths;
- Reached 84% of the target population with messages on ITNs and documented a utilization rate of 78% among respondents and 80% of their children in households that owned an ITN;
- Tested 22,797 individuals for HIV, increasing by 69% from July 2010 through June 2011.
- Improved already high administrative performance, so that by the latest quarter 95% of facility staff were paid on time and 93% of facilities experienced no stock-outs;
- Participated actively in 32 national working groups, task forces, and steering committees;
- Developed and updated 5 curricula that is being used for training mid-level health workers
- Made substantial contributions to the development of the Country Situational Analysis Report for the Health Sector, and drafts of the National Health and Social Welfare Policy, National Health and Social Welfare Plan, county health plans, and Essential Package of Health Services.

In spite of these successes, several challenges were faced. Some infrastructure and WASH activities were delayed or sub-standard. Delays in obtaining a USAID drug waiver and problems with implementation of national supply SOPs contributed to stock-outs. Some community-level BCC activities were slow to start and EmONC services have not progressed as far as planned, RBHS continues to work with MOHSW and partners on these issues and progress is being made in addressing each of them.

Among the most challenging issues faced by RBHS is the absorptive capacity of counterparts within MOHSW and CHSWTs. RBHS takes seriously its role in building capacity of MOHSW staff. Consistent with the new USAID-Liberia strategic shift, RBHS too has undergone major project redesign. For the remainder of the project, greater emphasis will be placed on capacity building of MOHSW colleagues and strengthening of health systems. Developing this important strategy will be a major activity during the next reporting period.

## ANNEXES

### Annex 1: RBHS Indicators for Year 3 (July 2010- June 2011)

The previous annual report covered data through June 2010; this annual report covers data from July 2010 through June 2011. The accomplishments to date are shown against 2011 targets. RBHS must make its annual report to USAID before data through September are obtained, therefore 2011 targets cannot be compared with data from October 2010 through September 2011. Nevertheless, the indicators reported in this annual report cover a full year and can be compared with those of the previous annual report.

Annex 1 portrays the 51 RBHS key performance indicators including 37 indicators reportable to USAID. Out of 37 USAID reportable indicators, 23 (62%) indicator met or exceeded the targets. Of the 14 not met, most relate to training targets. Failures to meet those targets are due to MOHSW delays in rolling out in-service training. Of the other indicators:

- Vitamin A: It is not clear why Vitamin A treatments are well behind target, although the current accomplishments are improvements over last year, suggesting that the target was set too high.
- Diarrhea: It is always difficult to set targets for treatment of a disease whose incidence the project is trying to reduce. It is impossible to tell if fewer cases are being treated than targeted because of lack of effort in community mobilization or because incidence is being reduced.
- Data for the 24-hour malaria indicator continues to be only partially reported, but even with full reporting the target could not be met without full implementation of CCM.
- The TB treatment success rate indicator suffers from confusion among facility staff about cohort reporting. Until that problem is resolved, values reported for this indicator will remain unreliable.
- CYP: RBHS has made significant progress in FP and CYP in particular, with the March 2011 CYP far more than double the July 2010 CYP. However, meeting the target requires doubling the entire CYP from a year ago, a massive task. The project has expanded the family planning choices by introducing long term contraceptive methods. While demand for family planning is still low, inadequate supplies of long acting contraceptive methods have also been an impediment.

The RBHS performance indicators include indicators on service utilization, on quality of services and on supervision. RBHS has made gradual progress in improving the quality of health care, as substantiated by the dramatic improvement of the availability of tracer drugs and by the decreased number of OPD patients with poly pharmacy prescriptions. The numbers of both clinical and administrative supervisory visits have substantially increased which should have contributed to improved health service quality and coverage.

Recently, L-MEP on behalf of USAID Liberia conducted a data quality audit of RBHS performance. The report found good levels of accuracy and quality of data on most of indicators audited. However, the report has pointed out lack of clarity on definition of some indicators. RBHS has taken notes of these observations and will make efforts to resolve these issues.

Where appropriate, the results have been disaggregated by sex.

Indicator	Targets	Achievements	Male	Female
<b>Sub-Objective 1.1: Increased number of health facilities providing full range of BPHS, supported by performance-based financing</b>				
Number/% of facilities reaching one-star level in accreditation survey	86 (78%)	86 (78%)		
Number/% of facilities meeting 70% or more clinical standards in assessment	45%	11%		
% of facilities with no stock-out of tracer drugs during the quarter	75%	93%		
% of all OPD patients for whom no more than 3 drugs are prescribed (random sample)	63%	82%		
% of NGOs submitting timely and complete quarterly report to RBHS project	100%	71%		
Utilization rate (new curative consultations per year per capita)	1.14	1.03		
<b>Sub-Objective 1.2: Expanded service delivery to communities</b>				
% of facilities whose CHDCs held at least 3 meetings in last quarter	66%	86%		
% of gCHVs who received at least 1 supervision visit in last quarter	63%	62%		
<b>Sub-Objective 1.3: Increased access to comprehensive Maternal, Neonatal, and Child Health (MNCH) services</b>				
Number/ % of children under 1 year who received DPT3/pentavalent-3 vaccination	22500 (89%)	27,056 (108%)		
Number of children under 5 years who received vitamin A	35,000	33,761		
Number of children under 5 years with diarrhea who are treated with ORS	23,000	13,734		
Number of child pneumonia cases treated with antibiotics	28,000	34,760		
Number/ % of deliveries in facility with a skilled birth attendant	12,585(50%)	13,949 (51%)		
% of pregnant women receiving second or greater dose of tetanus toxoid	91%	101%		

Indicator	Targets	Achievements	Male	Female
Number of women receiving AMTSL	9,500	13,857		
Number of newborns receiving essential newborn care	10,500	13,788		
% of pregnant women having at least 4 antenatal care (ANC) visits with skilled providers	85%	89%		
Number of ANC visits	91,000	112,619		
<b>Sub-Objective 1.4: Increased uptake of three critical malaria interventions: treatment with ACT, preventive treatment of</b>				
Number/ % of pregnant women provided with 2nd dose of IPT for malaria	17,000 (62%)	20,586 (75%)		
Number children under 5 years treated for malaria with ACT	120,000	138,178 (91%)		
Number of children under 5 years treated for malaria within 24 hours of onset of fever	80,000	17,702 (12%)		
Number/% people over 5 years treated for malaria with ACT		148,524 (88%)		
<b>Sub-Objective 1.5. Increased access to quality HIV/AIDS services, with an emphasis on prevention</b>				
Number of people who received HCT and received their test results (HCT and PMTCT)	14,000	22,797		
Number of individuals reached through community outreach promoting HIV/AIDS prevention through abstinence and/or being faithful	50,000	84,080	27,894	56,186
Number of individuals reached through community outreach that promotes HIV/AIDS prevention through abstinence	40,000	78,716	25,734	52,982
Number of individuals trained to promote HIV/AIDS prevention programs through abstinence and/or being faithful	700	235	142	93
Number of individuals reached through community outreach that promotes HIV/AIDS prevention through other behavior change beyond abstinence and/or being faithful	50,000	75,865	24,937	50,928
Number of individuals trained to promote HIV/AIDS prevention through other behavior change beyond abstinence and/or being faithful	700	256	143	113
Number of service outlets providing counseling and testing according to national and international standards	55	59		
Number of service outlets providing the minimum package PMTCT services according to national and international standards	70	150		

Indicator	Targets	Achievements	Male	Female
Percent of registered new smear-positive pulmonary TB cases that were cured and completed treatment under DOTS (i.e. Treatment Success Rate)	82%	93%		
Percent of the estimated number of new smear-positive pulmonary TB cases that were detected under DOTS (i.e., Case Detection Rate)	70%	57%		
<b>Sub-Objective 1.6: Increased access to comprehensive family planning and reproductive health (FP/RH) services</b>				
Number of service delivery points providing FP counseling or services (pills, IUD, implants, voluntary sterilization), by type of service	112	109		
Number of counseling visits for FP/RH	30,000	69,406	22,471	47,105
Couple-years of contraceptive protection provided by RBHS-supported facilities	12,000	10,845		
Number of people that have seen or heard a specific USG-supported FP/RH message	200,000	223,652	110,833	112,819
<b>Sub-Objective 2.5: Strengthened capacity of CHSWTs to manage decentralized health system</b>				
% of facilities that received at least 2 joint supportive supervision visits in last quarter	83%	94%		
% of facilities that received at least 3 supportive clinical supervision visits in last quarter	81%	90%		
% of timely, accurate and complete HIS reports submitted to the CHSWT during the quarter	95%	96%		
Number of institutions that have used USG-assisted MIS information to inform administrative/management decisions	7	7		
Number of people trained in monitoring and evaluation	150	126	94	32
Number of people trained in other strategic information management	50	83	57	32
<b>Sub-Objective 2.6: Improved capacity of health facility staff to provide BPHS</b>				
% of staff funded by NGOs paid on time in the quarter	97%	97%		
Number of health workers trained in the provision of PMTCT services according to national and international standards	70	89	25	64
Number of individuals trained in counseling and testing according to national and international standards	50	97	48	51
Number of people trained in malaria treatment or prevention	600	404	178	226

Indicator	Targets	Achievements	Male	Female
Number of people trained in maternal/newborn health	450	189	18	171
Number of people trained in child health and nutrition	600	177	94	83
Number of people trained in FP/RH	500	875	207	668
Number of people trained in DOTS, HIV-TB, and MDR-TB	150	99	64	35
<b>Sub-Objective 2.7. Improved environmental health at facilities and hygiene practices in communities</b>				
% of facilities adhering to proper medical waste disposal (solid waste, sharps, infectious waste, latrines)		94%		
% of facilities with adequate infection control standards (water and soap, gloves, high level disinfection and/or sterilization of equipment)		100%		
% of facilities with operating hand pump or an equivalent safe water source		94%		
Number of improved water supply systems		53		
Number of liters of water disinfected with USG-supported point-of-use treatment		295,488		

## Annex 2: RBHS participation in national committees, working groups, and task forces

Committee / Working Group	RBHS Representative
10-year National Health Policy and Plan Steering Committee	Richard Brennan
Child Health Task Force	Rose Macauley
Community Case Management (of Malaria) Technical Working Group	Catherine Gbozee
Core Team for the EmONC Needs Assessment	Rose Macauley
County Consultation and Planning Committee (for 10-year planning)	Chip Barnett
Decentralization Working Group	Yilaa Wloti Se
Education and Training National Working Group	Marion Subah
Health Financing Task Force	Richard Brennan
Health Promotion Working Group	JK Ofori
Health Sector Coordinating Committee	Richard Brennan
Human Resource Technical Committee	Marion Subah
Laboratory Technical Working Group	Marion Subah, Catherine Gbozee, Richard Brennan
Malaria Indoor Residual Spraying Task Force	JK Ofori
Malaria Partners (composed of USAID/PMI Partners)	JK Ofori
Malaria Steering Committee	JK Ofori
Maternal Neonatal Mortality Reduction Task Force/Technical Committee	Marion Subah, Sarah Hodge
Mental Health Technical Coordinating Committee	David Franklin
Monitoring and Evaluation Coordination Committee	Mike Mulbah
Monitoring, Evaluation, and Research Technical Working Group	Chip Barnett, Bal Ram Bhui
National Nutrition Coordination Committee	Catherine Gbozee
National Task Force on Health Infrastructure	Zaira Alonso, Joe Moyer
Program Coordinating Team	Rose Macauley
Reproductive Health Technical Committee	Maima Zazay, Sarah Hodge, Marion Subah
Supply Chain Technical Working Group	Yilaa Wloti Se, Richard Brennan
2011 World AIDS Day Planning Committee	Lauretta W. Nagbe
Community Case Management (of Malaria) Technical Working Group	Catherine Gbozee
National Laboratory Technical working Group- Equipment	Lauretta W. Nagbe
PMTCT Technical working Group	Lauretta W. Nagbe
Reproductive Health Technical Sub-Committee for Service Delivery and Education(RHTC) FHD/MOHSW	Sarah Hodge, Nowai Johnson & Maima Zazay
PBF Technical Team	Bal Ram Bhui

## Annex 3: RBHS contributions to national policies, strategies, plans, and technical documents during year 3

\*During this reporting period

Policy/document	RBHS contributor(s)
Adolescent Sexual and Reproductive Health Strategy and Standards	Maima Zazay
Basic Package of Mental Health Services	David Franklin
Booklet on ENA Messages	Agnes Guyon
*Community Health Policy (draft)	Rose Macauley, Marion Subah, Catherine Gbozee
*Country Situational Analysis Report	Jacob Hughes (consultant), Richard Brennan
ENA training course for community health workers	Agnes Guyon
ENA training course for health workers	Agnes Guyon
*Essential Package of Health Services: Primary Care (draft)	Richard Brennan, Rose Macauley, Chip Barnett
*Essential Package of Health Services: Secondary and Tertiary Care (draft)	Richard Brennan, Rose Macauley, Chip Barnett
Family Planning and Reproductive Health Strategy	Maima Zazay, Rose Macauley, Marion Subah
Health Management Information System tools (registers, forms)	Chet Chaulagai, Luke Bawo, Chip Barnett
Integrated BPHS In-service Training modules	Margaret Korkpor
*Maternal and Neonatal Protocols	Marion Subah, Sarah Hodge
National Guidelines for Initiating and Implementing Community Based FP Programs	Maima Zazay
*National Health and Social Welfare Financing Policy (draft)	Richard Brennan
*National Health and Social Welfare Plan (draft)	Jacob Hughes, Frank Baer, Richard Brennan
*National Health and Social Welfare Policy (draft)	Jacob Hughes, Frank Baer, Richard Brennan
National Malaria Strategic Plan for 2010-2015	Ruth Goehle, Margaret Korkpor
National Mental Health Strategic Plan	David Franklin
National Task Shifting Policy	Marion Subah
Nurse Practice Act (update)	Marion Subah
Operational Guidelines for Community Health Development Committees (draft)	Rose McCauley, Chip Barnett
Pre-service Education Standards (development led by RBHS; adopted by MOHSW)	Marion Subah
*Road Map for Accelerating the Reduction of Maternal and Newborn Morbidity and Mortality in Liberia (2011-2015)	Maima Zazay, Marion Subah, Sarah Hodge
*Roadmap to Develop the National Health and Social Welfare Policy and Plan	Jacob Hughes
Sexual and Reproductive Health Policy for the Republic of Liberia	Claudette Bailey, Marion Subah
Training manual for TTMs: malaria prevention and treatment for pregnant women	Maima Zazay
Training module for community-based management of malaria in under fives	Margaret Korkpor
Community Health Policy and Strategy	Catherine K.Z. Gbozee, Dr. Rose Macauley, Mrs. Marion Subah & Mrs. Mariette Yeekeh
Liberia Reproductive Health Road Map	Sarah Hodge, Marion Subah & Maima ZayZay
Maternal and Newborn Care Procedures and Protocols	Claudette Bailey & Marion Subah
Maternal and Newborn Care Procedures and Protocols	Sarah Hodge, Marion Subah & Maima ZayZay
National Health Communication Strategy	Joshua Ofori
National Human Resource Policy and Strategy	Marion Subah
National In-service Education Strategy	Claudette Bailey & Marion Subah
National Laboratory Policy for Liberia	Richard Brennan & Lauretta W. Nagbe
National Laboratory Technical working Group Term of Reference	Lauretta W. Nagbe & Richard Brennan
National Mental Health Strategic Plan	David Franklin
National Nutrition Policy	Catherine K.Z. Gbozee

## Annex 4: Trainings sponsored or facilitated by RBHS

County	Topic	Days	Start	Persons
<b>BCC</b>				
Bong	Use of Research for Communication Program and Evaluation	6	28-Feb-11	32
Bong	Journey of Hope	18	11-Jun-11	113
Bong/Lofa	CHEST Kit	18	11-Jul-11	252
Lofa	Journey of Hope	5	14-Feb-11	2
Lofa	Behavior Change Communication	7	28-Feb-11	2
Lofa	CHEST Kit TOT	5	9-May-11	1
Lofa	Journey of Hope TOT for gCHV supervisors	3	13-Jun-11	21
Montserrado	Journey of Hope TOT	5	14-Feb-11	22
Nimba	Community Health Skills	5	9-May-11	2
Nimba	Journey of Hope	3	9-Jun-11	12
River Gee	HIV Abstinence and Being Faithful	3	21-Jun-11	15
<b>Environmental Health</b>				
Grand Cape Mount	Participatory Hygiene and Sanitation for Transformation	5	30-Nov-10	35
Montserrado	EMMP	1	17-Mar-11	15
River Gee	EMMP	1	17-Mar-11	4
<b>FP/RH</b>				
Bong	Post-Abortion Case Management	11	29-Nov-10	1
Bong	Family Planning Counseling	5	16-Jul-11	15
Cape Mount	Community Based Distribution of FP (CBD)	4	25-Oct-10	33
Cape Mount	Community SGBV	3	16-Dec-10	285
Cape Mount	SGBV Prevention and Management	3	20-Mar-11	172
Cape Mount	LARC	8	21-Mar-11	15
Grand Cape Mount	Definition of Peer Education, Puberty, Family Planning, Gender Issues, HIV/AIDS, HIV Services, STI & Condom Use	2	8-Jun-11	30
Cape Mount	Home Based Life Saving Skills	14	20-Jun-11	10
Lofa	IUD Insertion	5	19-Jan-11	1
Lofa	STI Prevention	3	6-Mar-11	36
Lofa	Family Planning and Reproductive Health Counseling & Techniques in Insertion of IUD and Implant	13	14-Mar-11	8
Lofa		10	20-Jun-11	25
Nimba	ARH	6	20-Oct-10	2
Nimba	Clinical Management of Rape	3	15-Feb-11	16
Nimba	FP	7	7-Mar-11	10
Nimba	LARC	8	7-Mar-11	20
Nimba	LARC	7	7-Mar-11	20
Nimba	FP	7	11-Mar-11	10
River Gee	Overview of CBD, CBD outlets, Social Marketing, Contraceptive Methods	5	21-Mar-11	25
River Gee	Insertion of IUD and Jadell	10	7-Jun-11	14

County	Topic	Days	Start	Persons
<b>HIV/TB</b>				
Bong	HCT	2	8-Nov-10	2
Bong	HCT	7	10-Nov-10	2
Bong	HCT	12	4-Dec-10	12
Bong	TB DOTS	3	21-Dec-10	88
Bong	TB DOTS	3	21-Dec-10	88
Bong	HCT	10	4-Jan-11	37
Bong	PMTCT	5	28-Aug-11	43
Cape Mount	Community Based DOTS	3	23-Feb-11	122
Lofa	DOTS, HIV-TB and MDR TB	12	4-Oct-10	6
Lofa	HCT and TB	12	4-Oct-10	6
Lofa	PMTCT	4	23-Nov-10	3
Lofa	HIV/AIDS, PMTCT	1	26-Feb-11	13
Lofa	STI/HIV Prevention	3	4-Mar-11	76
Lofa	HIV Prevention	3	11-Mar-11	40
Lofa	HIV Scale Up	3	16-Mar-11	3
Lofa	PMTCT, HCT	3	27-May-11	14
Nimba	PMTCT Treatment Protocol	1	16-Oct-10	8
Nimba	HIV/TB Supervisor Training	10	8-Nov-10	42
Nimba	Prevention of HIV & AIDS	7	21-Feb-11	4
Nimba	Prevention of HIV & AIDS	3	30-Mar-11	50
Nimba	PMTCT	5	13-Jun-11	6
River Gee	HIV/TB	10	8-Nov-10	5
River Gee	TB Case Management	5	28-Jun-11	33
<b>Infrastructure</b>				
Cape Mount	EMMP	1	1-Oct-10	2
Lofa	EMMP	1	1-Oct-10	5
Lofa	EMMP	1	1-Oct-10	4
Lofa	EMMP	1	1-Sep-11	4
Lofa	EMMP	1	1-Sep-11	4
Montserrado	EMMP	1	1-Feb-11	4
River Gee	EMMP	1	1-Feb-11	3
<b>M&amp;E</b>				
Lofa	HMIS	11	4-Mar-11	10
Bong	IMAT	3	10-Sep-11	1
Lofa	New HMIS forms (at facility level)	3	5-Apr-11	78
Nimba	HMIS	3	22-Apr-11	22
<b>Malaria</b>				
Bong	Malaria CCM	5	20-Sep-11	18
Bong	Malaria CCM	5	11-Oct-10	19
Nimba	Malaria Prevention and Treatment	3	14-May-11	20
<b>MCH</b>				
Bong	ARI	3	16-Oct-10	19
Bong	Newborn Resuscitation	2	13-Nov-10	15
Bong	BLSS	13	28-Mar-11	15
Bong	Nutrition	6	16-May-11	17
Cape Mount	HBLSS TOT	14	12-Aug-11	10
Cape Mount	CCM Diarrhea	1	26-Oct-10	33
Cape Mount	BLSS	12	15-Nov-10	14

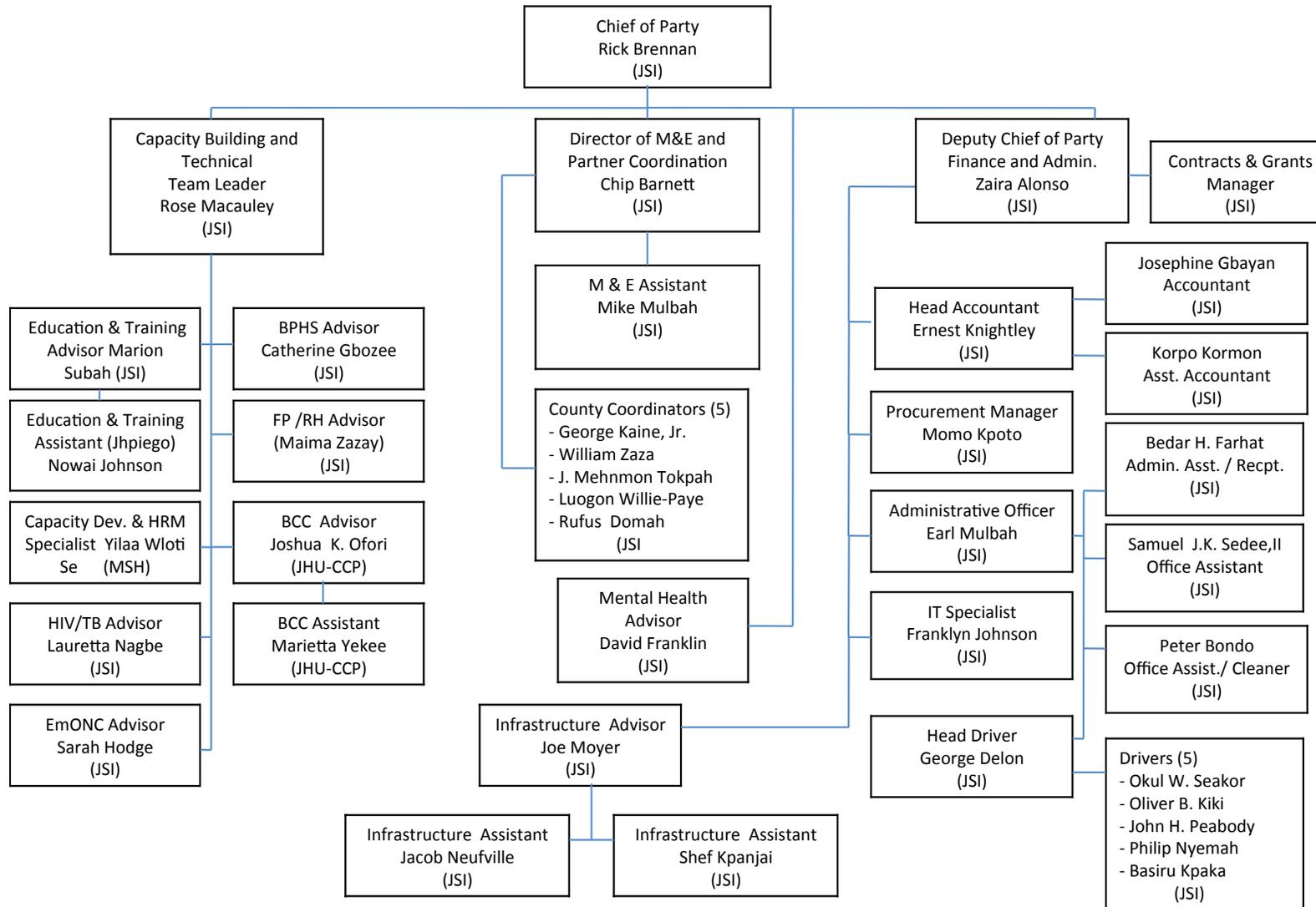
County	Topic	Days	Start	Persons
Cape Mount	BLSS	12	15-Nov-10	9
Cape Mount	gCHVs Training on ARI Module	3	10-Mar-11	120
Lofa	IMCI and Nutrition	5	22-Mar-11	2
Lofa	CCMt of Malaria, Diarrhea, and ARI	2	25-Mar-11	17
Lofa	Immunization	2	21-Jun-11	25
Montserrado	BLSS	13	14-Mar-11	21
Montserrado	Post Abortion Care	5	6-Jun-11	3
Montserrado	Post Abortion Care	5	6-Jun-11	17
Montserrado	EmONC Stakeholder Workshop	2	15-Sep-11	43
Nimba	CCM of Malaria, Diarrhea, and ARI	2	23-Oct-10	2
Nimba	EPI	3	12-Dec-10	18
Nimba	Disease Surveillance and Prevention	2	21-Dec-10	25
Nimba	Refresher CCM of Malaria, Diarrhea, and ARI	3	28-Jan-11	17
Nimba	Refresher HBLSS	5	21-Mar-11	60
Nimba	Integrated CCM TOT	7	29-Aug-11	28
<b>Other</b>				
Nimba	Rational Drug Use	2	19-Oct-10	12
Bong	Integrated BPHS Training			22
Cape Mount	Integrated BPHS Training	7	9-May-11	19
	Emergency Services, Traffic Rules, Daily Preventive Maintenance, Defensive Driving, Driving Conduct, Patient and Care, Communication and Feedback	2	6-Jun-11	4
Cape Mount				
Lofa	Drug Management	2	25-Feb-11	22
Lofa	Effective Lab Procedure	3	17-Mar-11	2
	Universal Precaution and Occupational Health Hazard	2	27-Nov-10	40
Nimba				
Nimba	Integrated BPHS Training	10	6-Dec-10	62
Nimba	Drug Management	3	25-Feb-11	22
Nimba	Integrated BPHS Training	3	25-Oct-10	23
<b>Pre-Service</b>				
Bong	Malaria Technical Update	5	9-May-11	19
	Emergency and Mental Health Skills Teaching skills Technical Update	6	15-Aug-11	25
Bong				
Lofa	HIV and TB, PSE Educational Standards Technical Update	3	13-Oct-10	62
Montserrado	SBM-R Module II	3	4-Oct-10	16
Montserrado	HIV and TB Effective Teaching Skills	5	18-Oct-10	26
Montserrado	Basic Computer Literacy	5	24-Jan-11	42
Montserrado	Revitalization of Monitoring of QA Services	3	27-Apr-11	13
	Learning Resource Package Procedure Manual Development	4	24-May-11	30
Montserrado				
Montserrado	Interdisciplinary Procedure Manual Development	3	5-Jul-11	30
Montserrado	FP ARSH	10	17-Apr-11	11
Montserrado	IMNCI	6	25-Mar-11	18
Montserrado	ENA TOT	9	24-Mar-11	27
Montserrado	EHT Update and Curriculum Implementation	3	7-Feb-11	18

## Annex 5: RBHS Environmental Mitigation and Monitoring Plan (EMMP) Updates

Potential Major Impacts/Issues	Mitigation Measure(s)	Status (Narrative)	Status (Facility Monitoring)
Wastes containing PVC and DEHP cannot be recycled or safely disposed of in Liberia.	PVC-free and DEHP-free alternatives supplies shall be mandated for intravenous and blood bags, tubes, catheters, and gloves.	Ongoing. RBHS and NGO staff are aware of the need for supporting Environmentally Preferred Purchasing (EPP) and nothing has been purchased that is not PVC- and DEHP-free.	Of 108 facilities monitored in Oct 2010-Sep 2011, 100% had no sign of supplies that were not PVC- and DEHP-free.
Healthcare facility waste products (general, hazardous, and highly hazardous) can be a major hazard to the health of humans and their environment.	USAID supported healthcare facilities shall have adequate procedures and capacities in place to properly handle, label, treat, store, transport, and properly dispose of tested blood, syringes, needles, sharps, and other medical waste.  Procedures shall be followed as per Appendix C. in Chapter 8 of EGSSA.	Ongoing. All NGO implanting partners are aware of Ch. 8 – they have a hardcopy from RBHS workshops and an electronic copy. Procedures are known but implementation started only in late 2009.	Of 108 facilities monitored in Oct 2010-Sep 2011, 67% had written procedures for handling of medical waste; 67% had proper solid waste pits, with construction of others continuing; 55% had proper incinerators.
Construction and rehabilitation of healthcare facilities may cause environmental damage.  Adverse impact can include damage to ecosystems, sedimentation of streams and surface waters, contamination of water supplies, social impacts, spread of disease, and damage to aesthetics of area.	Issues can be complex, and include site selection, planning and design, construction/rehabilitation.  Suggestions/procedures shall be followed as per Chapter 3 of EGSSA. Note Table 1 displays eleven environmental and monitoring issues. Also ENCAP guidance on ESMD shall be taken into consideration.	Ongoing and under the auspices of the Infrastructure Advisor. Training agenda and certification of contractors ready for pre-construction meeting.	Construction workers at all sites were trained on the EMMP and provided relevant documentation. On-going monitoring of adherence to the EMMP has been implemented. Contractors at all sites are adhering well to the requirements of the EMMP.
When nets have outlived their primary usefulness, there is a likelihood that they will find secondary uses on local markets, or be improperly disposed of.	a) Recipients will be informed not to use nets in secondary applications once they have outlived their primary usefulness. b) Mechanisms will be set up at health facilities to accept them back for final disposal (encapsulation or incineration). c) Indoor Residual Spraying (IRS) will not be undertaken by this program	Ongoing coordination efforts are led by the JSI DELIVER program in Monrovia. However, RBHS is not distributing nets, so this is not a critical element of the RBHS EMMP.	Of markets and dump sites near 108 facilities monitored, in only three sited (Jimmyville Clinic and Gbeapo in River Gee and Balakpalasu, Lofa) were ITNs ever found discarded or for sale; However, in Gbeapo, it was last seen in September.

Potential Major Impacts/Issues	Mitigation Measure(s)	Status (Narrative)	Status (Facility Monitoring)
If untreated or improperly treated, human waste will facilitate the spread of disease.	Provide a protocol for both safe and environmentally sound on site management of human waste and off-site disposal area. Shall follow USAID approved ESDM procedures as per Ch. 16. of EGSSA.	Ongoing. Protocol will vary with site because there is not a national system established for disposal of human waste. NGOs are aware of the environmental hazards of untreated human waste.	20 New latrines were built in health facilities
Ensure potential issues related to hand pump design and operation and relationship to latrine sanitation and used water production are addressed.	Shall follow USAID approved ESDM procedures as per Ch. 16. Of EGSSA.	To be addressed by CHF	To be addressed by CHF
Long term care of constructed or rehabilitated mechanical systems.	Prior to initiating hand pump or other water system design and construction/rehab, RBHS shall ensure functional system management. This may include the assignment of management responsibility, provision of spare parts, equipment maintenance, training or tech. support, and fees.	Monitored by RBHS staff . Collaborating with CHF to ensure appropriate management systems in place. Working with CHT's to carry out water quality testing for new RBHS water sources.	Collaborating with CHF to ensure appropriate management systems in place, and coordinating with CHT and MOHSW environmental health department.
Clean water source	The source of good/clean water shall be established, rainwater or storage systems to be considered where appropriate.	Water testing is to be done in coordination with CHTs, with technical support from CHF.	10 Boreholes have been constructed by RBHS (2 in River Gee, 2 in Lofa and 1 in Cape Mount)
Older refrigerators are often not CFC-free or GHG neutral, which contribute to global warming.	a) Cold chain equipment refrigerants procured under this program will be CFC- free and GHG-neutral. b) Refrigerant gases used to rehabilitate existing equipment will be CFC free and GHG Neutral.	Note: New refrigerators come with stickers on them stating CFC-free and GHG-neutral. NGOs are aware of replacement gas requirements.	Two new refrigerators have been purchased by RBHS partners. One is CFC-free; the other has not yet been confirmed.
Disposable vaccine carriers are not biodegradable and contribute significantly to the waste stream.	Vaccine carriers provided by the program will not be of the polystyrene disposable type.	Status: ongoing.	Of 108 facilities monitored in Oct 2010-Sep 2011, none had any polystyrene carriers.

**Rebuilding Basic Health Services in Liberia  
Staffing Plan ( Project Year 3)**



## Annex 7: International Visitors October 2010 – September 2011

Name	Dates	Days	Title
Endris Mekonnen	29 Sep-9 Oct 2010	11	Laboratory Education Advisor (Jhpiego)
Elaine Rossi	3-16 Oct 2010	14	FP/RH Advisor (JSI)
Stacie Stender	11-16 Oct 2010	7	HIV/AIDS Advisor (Jhpiego)
Azum Ciluglo	16-23 Oct 2010	8	Program Officer for RBHS program, JHU/CCP
Zina Jarrah	28 Nov-10 Dec 2010	13	Technical Officer (MSH)
Jean Kagubare	6-17 Dec 2010	12	Principle Technical Advisor (MSH)
Prof. Bill Spannhake	Jan 31 - Feb 20	21	EHT Consultant (Jhpiego)
Olga Jerard	9-19 Jan 2011	11	Finance and Administration Manager (JSI)
Jacob Hughes	19 Jan-21 Feb 2011	34	Policy Consultant (JSI)
Ben Stephens	30 Jan-20 Feb 2011	22	Project Coordinator (JSI)
Bill Spannhake	30 Jan-16 Feb 2011	18	EHT Consultant (Jhpiego)
Frank Baer	2 Feb-2 Mar 2011	29	Planning Consultant (JSI)
Stella Babalola	27 Feb-4 Mar 2011	6	Associate Professor (JHU/CCP)
Abdul Selam Girga	March 23 - 30	8	Nutrition Consultant (JSI)
Simrun Grewal	14-27 March 2011	14	LiST Consultant (MSH)
Agnes Guyon	20-30 Mar 2011	11	Senior Child Health & Nutrition Advisor (JSI)
Diana Silimperi	21-30 Mar 2011	10	QA Consultant (MSH)
Abdul Selam Girga	23-30 Mar 2011	8	Nutrition Consultant (JSI)
Amha Mekasha	23-30 Mar 2011	8	IMCI Consultant (Jhpiego)
Mary Drake	April 18 - 29	12	M & E Advisor (Jhpiego)
Jean Kagubare	1-14 May 2011	15	Principle Technical Advisor (MSH)
Marian Amisah	7-21 May, 2011	15	BCC Consultant (JSI)
Sabrina Eagan	June 5-29,2011	24	HIV/TB Consultant (JSI)
Udaya Thomas	July 4 - 8, 2011	5	Project Director (Jhpiego)
Deirdre Rogers	May 16-June1, 2011	17	Performance Based Contracting
Beth Grath	May 16-June1, 2011	17	Capacity Building
Mary Carnell	May 16-June1, 2011	17	Community Health
Kumkum Amin	May 16-June1, 2011	17	Assessment Coordinator
Carol Hooks	May 16-June1, 2011	17	Behavior Change Communications
Bal Ram Bhui	May 16-June1, 2011	17	Performance Based Contracting
Floride Niyuhire	Sep 1 - 21, 2011	21	Performance Based Financing Advisor
Theo Lippeveld	September 21-October 28, 2011	38	Project Management Consultant (JSI)
Andrea Dixon	September 26 – 30, 2011		Strategic Communication and Documentation (JSI)

## Annex 9: International Conferences Attended or Sponsored by RBHS

Name	Title of conferences	Country	Period
<b>Marion Subah, Education and Training Advisor RBHS</b>			
Marion Subah	WACN 20th Scientific Session	Gambia	12- 19 of March 2011
Marion Subah	JHEPEIGO Country Directors Meeting	Tanzania	15-20 May, 2011
Marion Subah	Triennial Congress	South Africa	8-13 June, 2011
Marion Subah	The Global Health Council (GHC)	USA	13-17 June , 2013
Marion Subah	WHO Africa Regional Committee Meeting	Ivory Coast	29 August-2 September 2011
<b>Dr. Richard Brennan, Chief of Party RBHS</b>			
Dr. Richard Brennan	PBF/Conference	Senegal	18-19 March 2011
Dr Richard Brennan	The Global Health Council (GHC)	USA	13-17 June , 2011
<b>Dr. Rose Macauley, Technical Team Leader/Chief of Party RBHS</b>			
Dr Rose Macauley	Regional TOT for HBB: Prevention of Maternal Mortality	Ethiopia	January 28- February 7
Dr Rose Macauley	PBF/Conference	Senegal	18-19 March 2011
<b>Monitoring and Evaluation Director RBHS</b>			
Chip Barnett	The Global Health Council (GHC)	USA	13-17 June , 2012
Bal Ram Bhui	JSI Bilateral Project Global M&E Conference	Ghana	19-23 September 2011
J. Mike Mulbah	JSI Bilateral Project Global M&E Conference	Ghana	19-23 September 2011
<b>BCC RBHS</b>			
Mr Teah A. Doegma	Leadership in Strategic Health Communication	Nigeria	30 November - 10 December, 2010
Joshua K. Ofori	JHU CCP World Wide Meeting	USA	16 June-1 July 2011
<b>Training RBHS</b>			
Sarah Hodge	Regional TOT for HBB: Prevention of Maternal Mortality	Ethiopia	January 28- February 7
Nowai Q. Johnson	WACN 20th Scientific Session	Gambia	12- 19 of March 2012
<b>Health Promotion Division Director, MOHSW</b>			
Rev. John Sumo	Leadership in Strategic Health Communication	Nigeria	29 November - 10 December, 2010

## Annex 11: Forecast Project Individual Scholarships

Name	Training Event	Employer	Training Dates
<b>Participants that have completed program:</b>			
Cecelia Flomo	Royal Inst of Medicine (KIT)/Amsterdam - MPH-MCH; Ped Nursng	Nurse/MOHSW Phebe; Cuttington	Sept 2010-Sept 2011
Edith Tellewoyan	Royal Inst of Medicine (KIT)/Amsterdam - MPH-MCH; Ped Nursng	Nurse/MOHSW Phebe; Cuttington	Sept 2010-Sept 2011
George Jacobs	Jimma University/Ethiopia M&E applied to health	MOHSW	Nov 2009-June 22, 2011
Janjay Jones	Jimma University/Ethiopia M&E applied to health	MOHSW	Nov 2009-June 22, 2011
Oral Togbah	Royal Inst of Medicine (KIT)/Amsterdam - MPH-MCH; Ped Nursng	Nurse/MOHSW Phebe; Cuttington	Sept 2010-Sept 2011
<b>Participants that are waiting for graduation:</b>			
Duredoh George	KNUST/Kumasi Ghana-Pharmaceutical Microbiology	MOHSW	Aug 2009-Dec 2011
Karmo D. Ville	Henley Univ/Reading UK-Finance & Economic Development	MOF Analysts (resp for Ed Sector Pooled Funds)	Oct 2010-Sept 2011
Stephen Marvie	Univ of Manchester/UK-Dev Economics & Policy	MOP Asst Minister	Sept 2010-Aug 2011
Tarnue Jeke	Henley Univ/Reading UK-Finance & Economic Development	MOF Analysts (resp for Ed Sector Pooled Funds)	Oct 2010-Sept 2011
<b>Participants that are still active</b>			
Arthur Brown	Kenyayya University/Lab Tech	MPCHS	Sep 2011-Aug 2013
Arthur Mulbah	United Methodist Univ/Ganta-Dental Tech	Phebe Hospital, Nurse	Oct 2010-June 2012
Forkpah Flomo	TZ Trng Ctr for Ortho Tech/Moshi TZ-Orthopedic Tech	OrthoTech Suprvsr - Handicap Intl	Sept 2010-July 2013
James Beyan	Uganda Mgmt Inst/Kampala Uganda-Human Resources	Beyan Dir of Personnel MOHSW HR	Aug 2009-Aug 2011/Aug 2012
John T. Harris	Muhimbili Univ/Dar Es TZ-Pharmaceutical Supply Chain Management	MOHSW Dir of County Pharmacy	Nov 2010 - Oct 2012
Mawolo Kollie	Uganda Mgmt Inst/Kampala Uganda-Human Resources	MOHSW HR	Aug 2009-Aug 2011/Aug 2012
Peterson Greaves	Phase II & III Medical Equipment Technology/Accra Ghana	MOHSW	June/July 2011 & June/July 2012