

LIBERIA

REBUILDING BASIC HEALTH SERVICES (RBHS)



YEAR 4 ANNUAL REPORT

1 OCTOBER 2011–
30 SEPTEMBER 2012



BCC work through sports



The Rebuilding Basic Health Services (RBHS) Project is funded by the United States Agency for International Development through Cooperative Agreement No: 669-A-00-09-00001-00 and is implemented by JSI Research & 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 the United States Agency for International Development (USAID). The contents are the responsibility of JSI Research & Training Institute, Inc., and do not necessarily reflect the views of USAID or the United States Government.

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 plan -- the Essential Package of Health Services (EPHS), human resources, infrastructure, and support systems – as well as through 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.

TABLE OF CONTENTS

RBHS Mission Statement	2
Acronyms and abbreviations	4
Executive Summary	7
Background and Introduction	10
Intermediate Result 1: Increased access to basic health services through improved provision of quality health services and adoption of positive health behaviors	13
Intervention 1.1: Increase number of health facilities providing full range of EPHS, supported by performance-based financing	14
Intervention 1.2: Expanded service delivery to communities	24
Intervention 1.3: Increase access to comprehensive MNCH services	28
Intervention 1.4: Increase uptake of three critical malaria interventions: treatment with ACT, preventive treatment of pregnant women, and sleeping under ITNs	32
Intervention 1.5: Increase access to quality HIV/AIDS and TB services, with an emphasis on prevention	37
Intervention 1.6: Increase access to comprehensive family planning and reproductive health (RH) services	40
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	46
Intervention 2.1: Enhance TNIMA and EBSNM learning environments and resources	46
Intervention 2.2: Improve capacity of training institution staff to utilize modern teaching methods and manage health training institutions	49
Intervention 2.3: Update and strengthen PA, RN, EHT, and CM curricula	55
Intervention 2.4: Strengthen MOHSW systems and human capacity at central level	57
Intervention 2.5: Strengthen MOHSW systems and human capacity at county level	63
Intervention 2.6: Strengthen and assist in roll-out of the National In-Service Training Program	71
Intervention 2.7: Improve environmental health at facilities and hygiene practice in communities	72
Monitoring and Evaluation	75
Project Management, Finance, and Administration	79
Future Directions	83
Annex 1: RBHS Indicator Status Report – June 30, 2012	85
Annex 2: RBHS participation in National Committees, Working Groups, and Task Forces	92
Annex 3: RBHS Contributions to National Policies, Strategies, Plans, and Technical Documents	94
Annex 4a: Trainings Sponsored or Facilitated by RBHS	96
Annex 4b: Trainings undertaken by RBHS Partners	99
Annex 4c: FORECAST Participants	103
Annex 5: RBHS Staffing Structure, Project Year 4	105
Annex 6: Budget vs. Expenditures	106
Annex 7: Workplan Status Report	107

Acronyms and abbreviations

ACT	Artemisinin-based combination therapy
AIDS	Acquired immune deficiency syndrome
ANC	Ante-natal care
ART	Anti-retroviral therapy
ASRH	Adolescent Sexual and reproductive Health
BCC	Behavior change communication
BLSS	Basic life-saving skills
BPHS	Basic Package of Health Services
CHSD	Community Health Services Division
CHDC	Community Health Development Committee
CHEST	Community Health Education Skill Tools
CHO	County Health Officer
CHT	County Health Team
CHV	Community health volunteer
CHAI	Clinton Health Access Initiative
CM	Certified midwife
CYV	Community youth volunteer
DHIS	District Health Information System
DOTS	Directly observed therapy – short course
DSS	Decision Support Systems
DWG	Decentralization Working Group
EBSNM	Esther Bacon School of Nursing and Midwifery
EHT	Environmental health technician
EML	Essential medicines list
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
FGD	Focus group discussion
FHD	Family Health Division
FP	Family planning
GBV	Gender-based violence
gCHV	(General) community health volunteer
HBLSS	Home-based life saving skills
HIS	Health information system
HIV	Human immunodeficiency virus
HMIS	Health management information system
HPD	Health Promotion Division
IEC	Information, Education and Communication
IMAD	Improved Malaria Diagnostic
IMAT	Inventory Management Assessment Tool
IMNCI	Integrated management of neonatal and childhood illness

IPC	Interpersonal communication
IPT	Intermittent preventive treatment of malaria (in pregnancy)
IPT2	Intermittent preventive treatment of malaria (in pregnancy), 2 nd dose
IR	Intermediate result
IRC	International Rescue Committee
IRS	Indoor residual spraying (of anti-malarial insecticide)
ITN	Insecticide-treated net
IUD	Intrauterine device
JHU/CCP	Johns Hopkins University Center for Communication Programs
JSI	John Snow Research & Training, Inc.
LAPHT	Liberia Association of Public Health Technicians
LBNM	Liberia Board of Nursing and Midwifery
LISGIS	Liberia Institute of Statistics & Geo-Information Services
MCHIP	Maternal and Child Health Integrated Program
MDR	Multi-drug resistant
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
MPCHS	Mother Pattern College of Health Sciences
MSH	Management Sciences for Health
MTI	Medical Teams International
MTP/SER	Midwifery Training Program/South Eastern Region
NACP	National AIDS Control Program
NDS	National Drug Service
NGO	Non-governmental organization
NHPP	National Health Policy and Plan 2007-2011
NHSWPP	National Health and Social Welfare Policy and Plan 2011-2021
NLTCP	National Leprosy and Tuberculosis Control Program
NMCP	National Malaria Control Program
NTCL	National Traditional Council of Liberia
OIC	Officer in charge
OPD	Outpatient department
OR	Odds ratio
ORS	Oral rehydration salts/solution
PA	Physician's assistant
PBC	Performance-based contract
PBF	Performance-based financing
PLAL	Positive Living Association of Liberia
PLWHA	Persons living with HIV/AIDS
PMI	President's Malaria Initiative
PMTCT	Prevention of mother-to-child transmission
PPAL	Planned Parenthood Association of Liberia
PSA	Public Service Announcement
PSI	Population Services International
QA	Quality assurance
RBHS	Rebuilding Basic Health Services
REP	Reaching Every Pregnant woman
RFP	Request for proposal

RH	Reproductive health
RN	Registered nurse
RUD	Rational use of drugs
SBA	Skilled Birth Attendant
SBMR	Standards-based management and recognition
SOPs	Standard operating procedures
SP	Sulfadoxine-pyrimethamine (Fansidar)
STTA	Short-term Technical Assistance
TB	Tuberculosis
TFR	Total fertility rate
TNIMA	Tubman National Institute for Medical Arts
TOT	Training of trainers
TTM	Trained traditional midwife
TU	Training Unit
USAID	United States Agency for International Development
WASH	Water, sanitation, and hygiene promotion

Executive Summary

The Rebuilding Basic Health Services (RBHS) Project is the United States Government's key project in support of the Liberian Ministry of Health and Social Welfare's (MOHSW) National Health Plan and Policy. RBHS is a five-year project which began in November 2008. JSI Research and Training Institute, Inc. is implementing the project in partnership with three US-based organizations¹. As part of the project implementation, RBHS employed a three-pronged strategic approach including: (1) strengthening and extending service delivery, (2) strengthening the health system in the areas of human resources, infrastructure, policy development, and monitoring & evaluation and (3) preventing disease and promoting more healthful behaviors through behavior change communication and community mobilization.

The RBHS Project supports the MOHSW in the areas of maternal and child health, family planning/reproductive health, malaria, HIV, tuberculosis (TB), and water and sanitation (WASH). All RBHS activities are designed to harmonize with and support the implementation of the MOHSW's policies and plans. Close partnership with the MOHSW and stakeholders is among the most important principles guiding RBHS strategy and activities.

In response to USAID's new Global Health Initiative, USAID FORWARD, the RBHS's project was reconfigured by USAID in the summer of 2011. The changes in RBHS project design included:

- Finalization of 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; and
- Expansion of RBHS activities to include responsibility for four additional areas.

During this reporting period, consistent with the changes to USAID's in-country strategy, RBHS worked more closely with the MOHSW, gradually shifting away from service delivery and placing greater emphasis on capacity building and health systems strengthening. To strengthen the project's ability to adequately support and meet the MOHSW's needs, RBHS hired a Capacity Building Advisor and a Performance-based Financing (PBF) Advisor in January 2012.

In its new role, RBHS has supports the MOHSW to develop a capacity building framework and has conducted the first comprehensive capacity assessment of the Liberian health system. The assessment was conducted successfully at the MOHSW and the three focus counties – Lofa, Nimba, and Bong.

To ensure ownership and sustainability of the capacity building process, RBHS facilitated the creation of a Capacity Building Core Group (CBCG) at the central MOHSW. The CBCG is

¹ 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).

led by the Assistant Minister for Curative Services in the Department of Health Services and includes representatives from three of the four departments of the MOHSW, including: Health Services, Planning, and Administration. The CBCG is responsible for coordinating capacity building activities at both central and county levels and for conducting capacity assessments in the remaining 12 counties.

Management of the Performance Based Contracts (PBCs) was handed over to the MOHSW in July 2012, and a National Dissemination Meeting was organized on October 9th to share best practices and lessons learned. Some notable achievements over the last year (July 2011 – June 2012) in the RBHS facilities include:

- A continued high utilization rate of around 0.9 consultations per capita per year;
- No stock-outs for tracer drugs in 97% of RBHS facilities;
- High coverage of supervisory visits: health facility clinical supervision of 99%, gCHV supervision coverage of 97%;
- 63% of expected pregnant women delivered assisted by skilled birth attendants;
- 81% of pregnant women received 2 doses of IPT to prevent malaria;
- 95% (128,074) of children diagnosed with malaria were treated with ACT, drug of choice;
- 18,177 Couple Years Protection for family planning; and
- 30,970 men and women were tested for HIV and post test counseled, of which 11,192 were pregnant women.

RBHS significantly contributed to building the capacity of the MOHSW's Performance-based Financing (PBF) unit through on the job mentoring, training on key components of PBF implementation, and joint field visits. RBHS supported training on data validation for MOHSW staff and CHSWT. A PBF operational manual and implementation tools (including a bonus calculation tool) were developed with substantial participation from the MOHSW PBF unit to facilitate harmonization of the PBF scheme.

One of the main achievements in Project Year 4 was the printing and distribution of curricula for mid-level health workers' training institutions around the country. The five curricula included: Environmental Health Technicians (EHT), Medical Lab Technicians (MLT), Physician Assistant (PA), Registered Midwives (RM), and Registered Nurses (RN). The pre-service team also worked very closely the regulatory bodies (the Liberia Medical and Dental Council and the Liberia Nursing and Midwifery Board) to build their capacity to be able to perform their functions.

In spite of the many successes recorded by the RBHS Project, several challenges and constraints were faced in project year 4. Some of the key constraints were: (1) election period of October – November 2011 which slowed down project implementation; (2) under-performance of infrastructure contractors and extremely poor road conditions; (3) competing priorities in the health sector; and (4) funding challenges.

As noted above, for the remainder of the project, greater emphasis will be placed on capacity building of MOHSW colleagues and strengthening of health systems. Year 5 will be crucial in

launching a massive capacity building effort, based on the initial baseline needs assessment conducted in year 4 and the strategic and operational capacity building plans. These plans will inform the work to be carried in the next year. It will be very important to further clarify roles and responsibilities of the central MOHSW versus the CHSWTs within the context of the de-concentration of the health system. While the central Ministry will continue to set policies and regulate, most of the planning and implementation will be gradually delegated to the county level.

This annual report reviews the successes, challenges, and lessons learned from the fourth year RBHS implementation, from October 2011 to September 2012. A summary is presented for each of the 13 project interventions, while annexes provide additional details on specific topics as well as a detailed status of the work plan implementation (Annex 7).

Background and Introduction

Rebuilding Basic Health Services (RBHS) is currently the United States Government's largest project in support of the Liberian Ministry of Health and Social Welfare (MOHSW). The project is being implemented over a 5-year period, ending in October 2013. A partnership among four US-based agencies, RBHS employs a three-pronged strategic approach:

- Strengthening and extending **service delivery** through performance-based contracts with four international non-governmental organizations (NGO) and a grant to a local NGO partners² to support 112 health facilities in seven counties (Intermediate Result - IR 1);
- Strengthening Liberia's **health system** in the areas of human resources, infrastructure, policy development, and monitoring and evaluation (IR 2); and
- Preventing disease and promoting more healthful behaviors through **behavior change communication** and community mobilization (IRs 1 and 2).

The RBHS project has specific responsibilities in the areas of maternal and child health, family planning/reproductive health, malaria, HIV, tuberculosis (TB), and water and sanitation (WASH). All RBHS activities are designed to harmonize with and support the implementation of the MOHSW's priority policies and plans. Close partnership with the MOHSW and stakeholders is among the most important principles guiding RBHS strategy and activities.

In recent years the Liberian health sector has evolved through several discernible phases – a humanitarian phase that characterized the war years and early post-conflict period; a transition phase that has coincided with implementation of the National Health Policy and Plan 2007-2011 (NHPP); and a new development phase that was inaugurated last year with the release of the new National Health and Social Welfare Policy and Plan 2011-2021 (NHSWPP) in July 2011. RBHS has proven itself to be an effective partner of the MOHSW during the transition phase from emergency to development and was the most active collaborator in the development of the new 10-year policy and plan.

Largely due to the leadership, vision, and effective planning of the MOHSW, the health sector in Liberia is seen by many as perhaps the most effective sector in the country. 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.

In response to USAID/Washington's new global health initiative, USAID *FORWARD*, the RBHS Project was redesigned by USAID in the summer of 2011. The changes in project design included:

² RBHS implementing partners are: Africare, EQUIP, International Rescue Committee (IRC), Medical Teams International (MTI), and MERCI, the local NGO

- Finalization of 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; and
- Expansion of RBHS activities to include responsibility for four additional areas:
 1. 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;
 2. Coordination of technical assistance to MOHSW's Infrastructure Unit (IU);
 3. Provision of funding to support a research study by the Royal Tropical Institute of the Netherlands (KIT), on behalf of MOHSW;
 4. Assistance to the Liberian Board of Nursing and Midwifery (LBNM) and to the Liberian Medical and Dental Council (LMDC) to develop accreditation procedures for health training institutions.

Also, based on the principles of USAID's Global Health Initiative, in September 2011, the Government of Liberia and USAID signed the Fixed Amount Reimbursement Agreement (FARA), which provides direct funding from the United States to the Government of Liberia for the delivery of a specified set of health activities, in support of the priorities defined in the National Health and Social Welfare Policy and Plan 2011-2021 (NHSWPP). FARA is a four year agreement (September 2011 – June 2015) for a total amount of \$42,000,000. RBHS has been requested to provide technical assistance to the MOHSW for the implementation of these activities and assist with the validation of the deliverables under the FARA.

During this reporting period, consistent with the changes to USAID's in-country strategy, RBHS has been working more closely with the MOHSW, gradually shifting from service delivery and placing greater emphasis on capacity building and health systems strengthening. For that purpose, RBHS hired a Capacity Building Advisor and a Performance-based Financing (PBF) Advisor, who both started work in January 2012. The results of these efforts are mostly listed under IR 2.

RBHS also began a series of activities to address the four additional areas listed above. These activities have been integrated in the Year 4 work plan under the following project interventions:

1. Forecast Project activities under IR 2 Intervention 2.4.12
2. TA to MOHSW's Infrastructure Unit IR 2 Interventions 2.4 and 2.5
3. Funding of the KIT research study under IR 2 Intervention 2.4.3.7
4. TA to LBNM and LMDC under IR 2 Intervention 2.2.14

At the same time, RBHS continued to manage the performance-based contracts (PBCs) with our NGO partners until the end of their contracts in Dec 2011. In June 2012, RBHS then supported the transition of the PBCs to the MOHSW. At the time of the writing of this report, the transition of the PBCs to MOHSW has been completed. The transition started with the end of the IRC PBC in Lofa and the MERCI grant in River Gee. The IRC and Equip PBCs in Nimba, the Africare PBC in Bong, and

the MTI PBC in Grand Cape Mount ended in June 2012. Final reports on the contracts were submitted by each NGO partner and a dissemination meeting was organized by RBHS in October 2012. For more details we refer the reader to the interventions under IR1 and more specifically Intervention 1.1.

Some notable achievements in the last Performance Based Contract year (July 2011 – June 2012) in the RBHS facilities include:

- A continued high utilization rate of around 0.9 consultations per capita per year;
- No stock-outs for tracer drugs in 97% of RBHS facilities;
- High coverage of supervisory visits: health facility clinical supervision of 99%, gCHV supervision coverage of 97%;
- 63% of expected pregnant women delivered assisted by skilled birth attendants;
- 81% of pregnant women received 2 doses of IPT to prevent malaria;
- 95% (128,074) of children diagnosed with malaria were treated with ACT, drug of choice;
- 18,177 Couple Years Protection for family planning; and
- 30,970 men and women were tested for HIV and post test counseled of which 11,192 were pregnant women.

In spite of these successes, the project faced several challenges and constraints. The period of elections from October to November 2011 has slowed project implementation in general. Additionally, some infrastructure and WASH activities were delayed due to under-performance of contractors, logistical problems related to servicing remote locations, and limited human resource capacity in the Ministry of Health. Some community-level BCC activities were also delayed, due to hold-ups in production of key materials and job aids. RBHS has continued to work with the MOHSW and partners on these issues and progress has made in addressing each of them.

The most challenging issue faced by RBHS is the absorptive capacity of counterparts within the MOHSW and county health teams (CHTs). As noted above, for the remainder of the project, greater emphasis will be placed on capacity building in the MOHSW and strengthening of health systems. During this project year, RBHS together with the MOHSW and the focus counties, Bong, Lofa and Nimba, undertook a baseline capacity needs assessment and developed strategic and operational capacity building plans. For more details we refer the reader to interventions 2.4 and 2.5 under Intermediate Result 2.

This annual report reviews the results, successes, challenges, and lessons learned from the fourth year of RBHS implementation, from October 2011 to September 2012. A summary is presented for each of the 6 project interventions (formerly called sub-objectives) under IR 1 and of the 7 project interventions under IR 2, while annexes provide additional details on specific topic areas of work as well as a detailed status of the work plan activities implementation (see annex 7). The report includes a chapter on project management and a summary report on expenditures to date.

Intermediate Result 1: Increased access to basic health services through improved provision of quality health services and adoption of positive health behaviors

In the last 3 years RBHS has been working with NGO partners, through performance-based contracts (PBC) or grants, to increase access and improve the quality of the health service delivery at 112 facilities in Bomi, Bong, Lofa, Montserrado, Nimba, Grand Cape Mount and River Gee. RBHS has continued to work to increase the range and quality of services available at facility and community levels in the seven counties. RBHS also worked on promoting healthy behaviors and mobilizing communities around priority public health issues through an integrated behavior change communication (BCC) strategy.

During Year 4, all PBCs with RBHS came to an end and contracting as well as management was transferred to the MOHSW. For the first quarter of the period, the number of RBHS facilities decreased from 112 to 110 because two RBHS supported facilities in Bomi were handed over to Bomi CHSWT. Two RBHS contracts, IRC for Lofa county and MERCI for River Gee county, ended and were transitioned over to MOHSW starting January 1, 2012. Between January and June 2012, RBHS managed the remaining 4 PBC contracts covering 77 health facilities. In January, IRC in Nimba County added 4 health facilities with USAID approval. Table 1 shows the changes in health facilities.

Table 1. RBHS Performance-Based Partners

Partner	Oct-Dec 2011		Jan-June 2012		Counties
	# Facilities	Catchment popn.	# Facilities	Catchment popn.	
Africare	16	144,585	16	145,346	Bong
EQUIP-Nimba	23	239,600	23	240,861	Nimba
IRC-Lofa	20	83,742	-	-	Lofa
IRC-Nimba	13	111,700	16	154,347	Nimba, Monteserrado
MERCI	15	70,601	-	-	River Gee
MTI	23	118,555	22	109,301	Grand Cape Mount, Montserrado, Bomi
RBHS Total	110	768,784	77	649,855	

Intervention 1.1: Increase number of health facilities providing full range of EPHS, supported by performance-based financing

During Year 4, RBHS worked on the following interventions to increase the number of health facilities providing a full range of EPHS:

- RBHS managed performance based contracts;
- Supportive Supervision and Quality Assurance;
- Provision of essential medicines;
- Provision of mental health services; and
- Renovation of health facilities.

RBHS Managed Performance-Based Contracts (PBCs)

The RBHS Performance Based Contracts (PBCs) entered the last year of operation in July 2011. For this reporting period, RBHS received the reports and data from six NGO partners for Quarters 9 and 10 and for four NGO partners for Quarters 11 and 12. As planned, both the PBC of IRC Lofa as well as the grant agreement with MERCI came to an end in December 2011. For all PBC quarters, RBHS conducted data validation. The data validation was carried out by the RBHS county coordinators, who compared a sample of health facilities data from the source registers with the reported data. Through a process of feedback, clarification and resubmission of data if needed, the validation was completed.

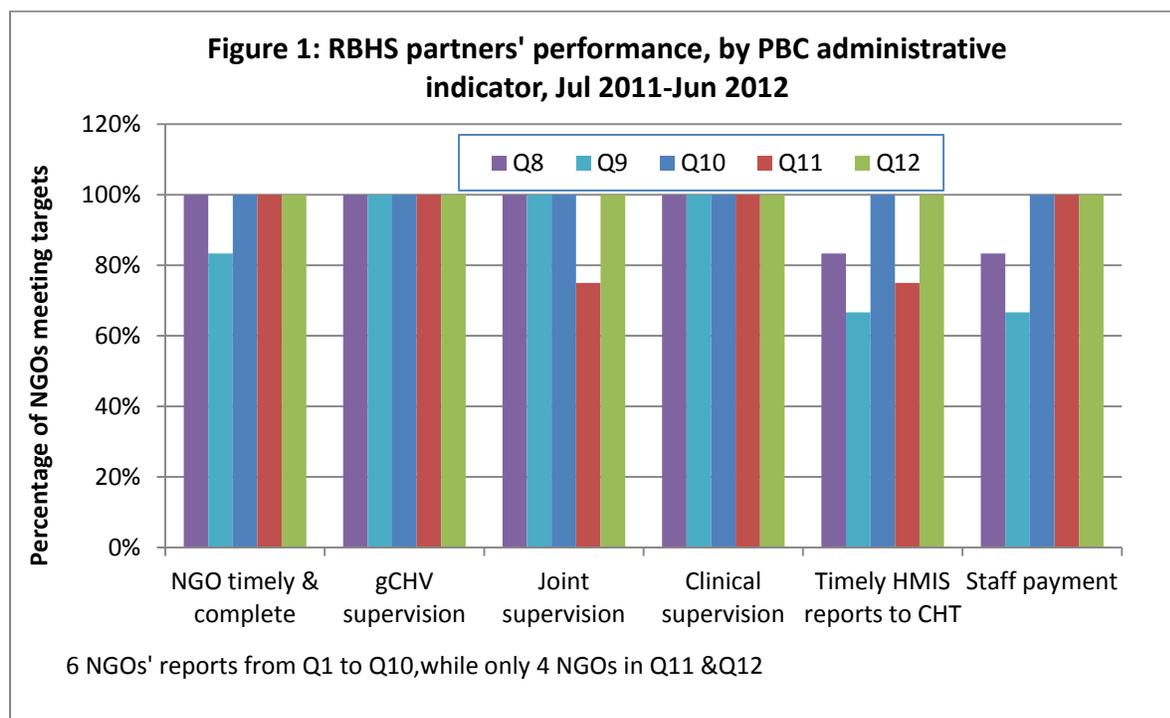
RBHS reviewed partners' quarterly reports and provided feedback to each partner. In each quarter, RBHS conducted quarterly data review meetings with all RBHS and MOHSW partners. In the meetings, preliminary coverage data were presented and partners shared best practices that helped improve performance and overcome challenges that hindered performance.

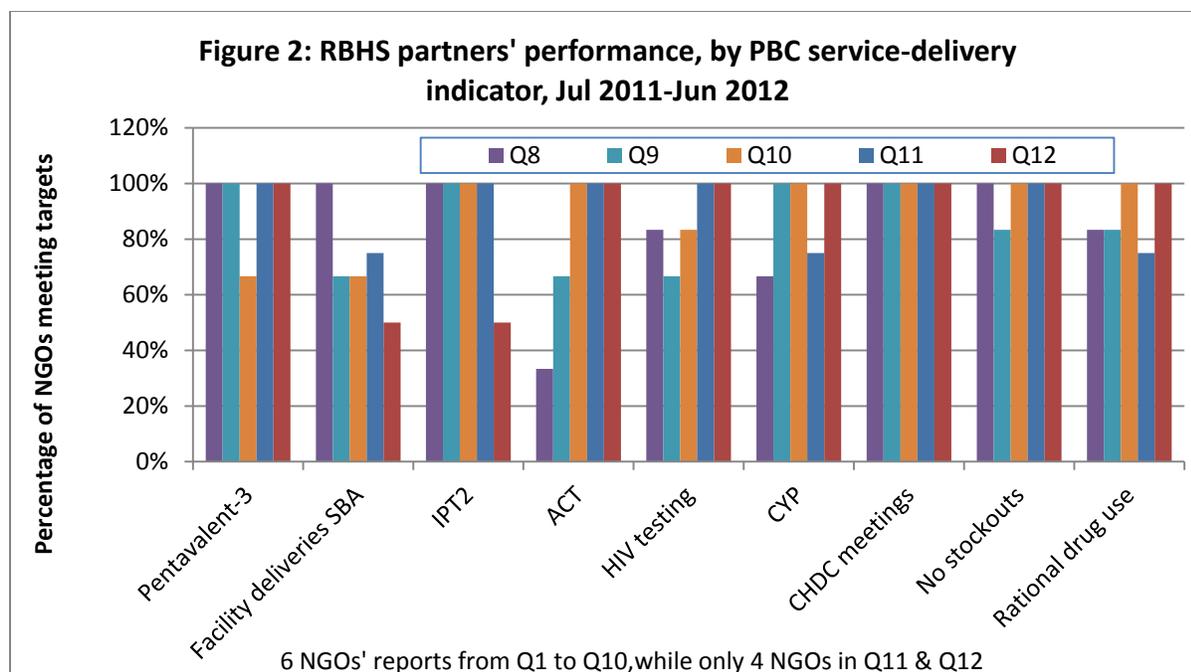
RBHS further developed its bonus strategy and allocation tools in consultation with NGO and CHT partners. The strategy was developed based on reports of past bonus distribution by partners. The strategy and tools helped in identifying bonus recipients and proportion of bonus allocated to various groups, including health facility staff, CHDC members, gCHVs and TTMs, NGO staff and CHT staff. Portions of the bonuses are also used to improve the health facility. Meanwhile, the PBF Unit at the MOHSW has developed a new strategy for bonus distribution that assimilated the RBHS strategy and tools. Consultations were also held with the MOHSW's PBF Unit and USAID. By incorporating all inputs and feedback, RBHS developed an MS Excel spreadsheet program, which served as a management tool for PBF implementing partners. An orientation was given to RBHS partners on how to use the new tools.

The performance of PBC indicators over the past four quarters is shown in Figures 1 and 2. RBHS PBC has two sets of performance indicators. One set for administrative indicators and the other set for service delivery indicators. The administrative indicators are related to support functions and responsibilities of the NGO. For every administrative indicator

missed, there is a penalty of 1% of total budget (up to 5% maximum). The service delivery indicators measure the health care services provided by facilities, and an extra bonus is given when they are met (up to 6% maximum).

During this reporting period, RBHS PBCs were implemented by 6 NGOs (IRC twice) until December 2011 and by 4 NGOs in quarters 11 and 12. As can be seen, all NGOs met the targets of indicators around gCHV and clinical supervision. Most of the targets on indicators such as on NGO timely reporting and on joint supervision were also met. One of the other NGO failed to meet the targets of timely HMIS report indicators. All NGOs met the targets on staff payment in past three consecutive quarters.





Service delivery indicators' performance was sustained and improved over the reporting period on most of the indicators such as Penta 3, HIV testing, Couple of Year Protection (CYP), Community Health Development Committees (CHDC) meetings, and the no stock out indicator. Meeting the targets on skilled facility delivery has been difficult as one or more NGO failed to achieve the targets. All NGOs met the ACT targets partly because the target for this indicator was corrected downward to 90% as maximum, based on the assumption that a certain percentage of child malaria would need drugs other than ACT (as foreseen in the standard treatment protocol of the MOHSW). CYP is on the rise primarily due to the introduction of long-term methods (e.g. implants and IUDs), which have been widely accepted by women in most communities and are more readily available. All NGOs failed on IPT2 indicators in quarters 9 and 10 due to a nationwide stock out of Sulfadoxine/Pyrimethamine. The NGOs were given "pass" on IPT2 for these two quarters as the problem was beyond their control.

RBHS organized a PBC dissemination meeting on October 9, 2012 which aimed to share best practices, challenges and lessons learned during the past three years as well as to discuss the way forward as the MOHSW takes on the leading role in managing PBCs. The meeting was attended by more than 100 participants from the MOHSW, the counties (11 CHOs), the donor community, RBHS and other USAID funded projects. Following are some of the conclusions for the meeting:

Results:

In the three year span of implementation, the PBCs yielded significant improvements for service delivery indicators in RBHS managed facilities: the percentage of pregnant women receiving IPT2 doubled from 43 to 81%; facility based delivery by skilled birth attendant (SBA) increased from 18 to 68%; the couple-years of contraceptive protection increased

from slightly over 1,000 to over 5,000; and among children treated with anti-malaria, the percentage of children receiving ACT increased from 29 to 90%.

As for the administrative indicators, the percentage of staff paid on time improved from 64 to 99%; the number of facilities submitting HMIS report on time evolved from 50 to 99%; and the number of RBHS managed facilities with no stock-out witnessed a drastic change from 1 to 99%. Finally, the quality assessment conducted in 2012 revealed that RBHS facilities scored higher than non-RBHS facilities in infrastructure and health service quality respectively by 7% and 14% points; both categories together scored 11% points more (see also Figure 19 later in this report).

Lessons learned / Best Practices:

Investments in recruitment and capacity building of certified midwives (CM) and registered nurses (RN) at the facility level was identified as critical to advancing mother and child care interventions. Indeed, CM and RN were instrumental in maintaining effective community health volunteers (CHVs) and traditional trained midwives (TTMs) networks, and ensuring effectiveness of community outreach activities. This ultimately affects the vaccination rate, community case management of childhood illnesses and the referrals from community to health facility for institutional deliveries. HBLSS training of TTMs was a great incentive and recognition for them: it raised the status of TTMs in their community and built relationships with the CM.

Other best practices by implementing partners that contributed to an increase in SBA included: baby-mama kits, a demand-side incentive scheme that rewarded women for delivering at the health facility; construction of maternity waiting homes; TTM kits, that reward TTMs who bring women to deliver at the health facility; and train and supply TTMs with cell phones so that they can send messages on pregnant women in the community. In general, community involvement, regular meeting with CHVs, TTMs and CHDCs improved the health seeking behavior in the catchment area.

Integrated supervision improved the quality of supervision and promoted integrated service delivery, it also improved the capacity of the entire supervision team to identify problems and recognize good practices.

The monthly meetings with implementing partners to discuss arising issues were identified as one of the best practices as well as the quarterly review on progress for PBC and non-PBC indicators and the provision of feedback to implementing partners. This allowed a data driven culture and focus on achieving targets, thereby advancing the objectives of the RBHS project. Similarly, linking achievement of performance targets to rewards (penalty or bonus) not only attracted much needed attention to selected PBC indicators, but also caused a positive spillover effect on non-PBC indicators. It was noted that, in order to achieve desired outcome, the bonuses must be regularly and timely disbursed.

The joint validation exercise comprising of RBHS staff, implementing partners and the county health and social welfare team (CHSWT) allowed for a reduction in data errors and the speeding up processes for validation of the data before the allocation of bonuses, as all

stakeholders took part in the exercise and agreed on the findings on site. Implementing partners credited technical and operational support provided by RBHS in the improved quality of reporting and overall performance. The good practices trickled down, as implementing partners conducted regular communication of results to facilities in catchment area, and this led to immediate improvement by health facilities in the ensuing quarter.

Challenges:

Some challenges were linked to systemic issues beyond the reach of RBHS project: (1) supply chain management issues, resulting in stock-outs of vertical program commodities including anti-malaria drugs, STI, ITNs, HIV test kits and Family Planning commodities; (2) salaries not paid on time for health workers on government payroll; (3) high attrition among health workers; (4) high gCHV attrition due to lack of motivation; and (5) road conditions that affected scheduled activities and supply of commodities. The noticeable improvements of RBHS facilities were due to direct funding of the necessary essential medicines and logistics support, but county-level supply chain management still needs significant strengthening to ensure that the standard operating procedures (SOPs) are known and adhered to.

Though TTMs and gCHVs are key to successful community interventions, there is no well-organized scheme to motivate and supervise them. This engendered a high attrition rate, lack of consistency in managing community interventions, and the need to constantly train new gCHVs. With regard to community case management, supervision and supply chain were the biggest challenges. For example, facilities experienced stock-outs of RDTs and ACT, which discouraged health workers and community members, and undermines local gains.

Challenges noted for EPI included conducting outreach regularly, while ensuring continuous facility-based services. Some implementing partners recruited a second vaccinator to ensure availability of EPI services at all time.

Way forward / capacity building:

As RBHS transitioned the PBCs to MOHSW, starting July 2012, the new focus has been to support strengthening the capacity of the MOHSW in a comprehensive manner for all six health system building blocks as defined by WHO. RBHS supported the MOHSW to establish a Performance Based Financing (PBF) unit. The PBF unit was established in July 2011 and fully staffed in November 2011. The objectives of the unit are: (1) to develop a national PBF scheme adapted for the Liberian context, based on lessons learned from RBHS project and other best practices in similar contexts around the world; (2) to strengthen the PBF unit capacity to successfully integrate PBF in the health system and to strengthen the capacity of counties and/or implementing partners for a decentralized implementation of PBF at county and health facility level(s).

In addition to supporting individual capacity building of the PBF unit staff, RBHS provides technical assistance to the development of key documents (i.e., operational manual, processes for verification and counter-verification of performance indicators, bonus

calculation tools) and to the harmonized implementation of PBF across the different counties. MOHSW PBF unit is now effectively managing PBF implementation in 11 counties, covering 234 health centers and clinics, in partnership with six NGOs.

Supportive Supervision and Quality Assurance

During project year 2011-2012, RBHS continued to work with implementing partners (IP) to improve quality of care at the 110 health facilities in six counties. RBHS introduced performance against clinical standards as a performance indicator and measured performance quarterly. RBHS provided oversight to implementing partners and county health teams through supervision and technical support. Implementing partners also worked with the county health teams to strengthen supervision using a quality improvement checklist. Although there was high staff turnover, IPs worked with CHTs to immediately replace staff if possible.

RBHS's efforts over the past years in promoting and standardizing quality assurance in service delivery are bearing fruit. County Health Team (CHT) members and RBHS implementing NGO partners conducted regular joint supervision and monitoring visits at RBHS supported health facilities. In Bong County in particular, the team conducted refresher training on the dissemination of quality assurance (QA) assessment results, monitored quality improvement activities and prepared action plans for quality improvement. In the mean time, the central MOHSW) has adopted the quality assurance process and, with the assistance of RBHS, has integrated quality assurance tools into the national supportive supervision checklist as well as in the accreditation tools.

Figures 4 and 5 show the performance of supervision activities. RBHS has maintained the required number of supervisory visits to each facility in past quarters. In quarter 12, overall 99% and 97% of health facilities received two or more joint supervision by CHT and 3 clinical supervision respectively while individual NGO's performance have been over 94%. The graph also shows the performance trend in past eight quarters. RBHS supervision is supportive and clinical in nature, giving both supervisor and supervisee a chance to review the work process and quality of work. The opportunity of a supervisory visit is used for on the job training and mentoring

Figure 4: RBHS facilities, joint supervision, Jul 2010-Jun 2012

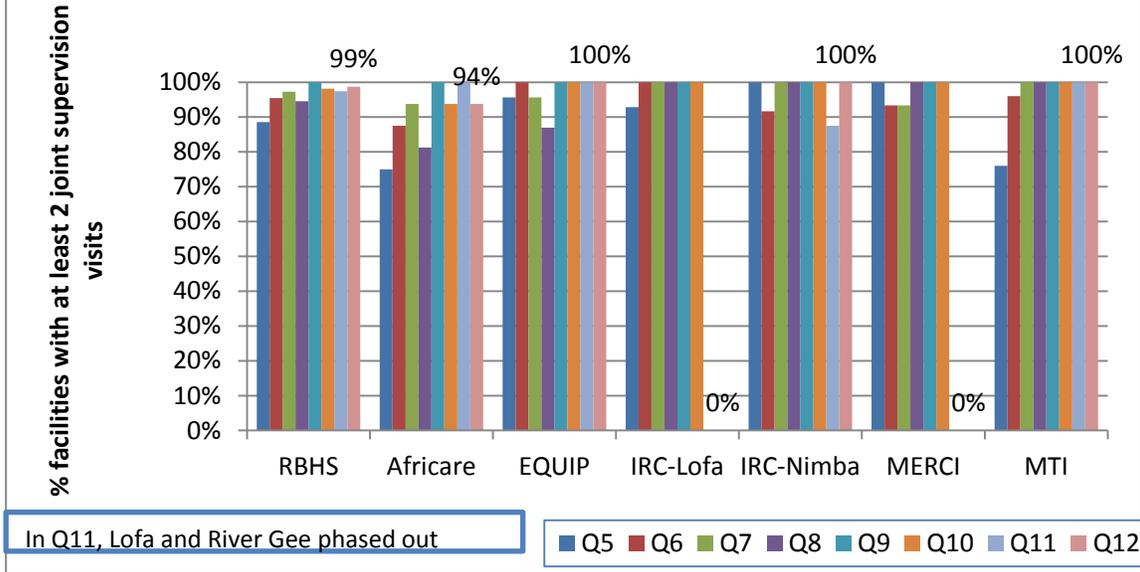
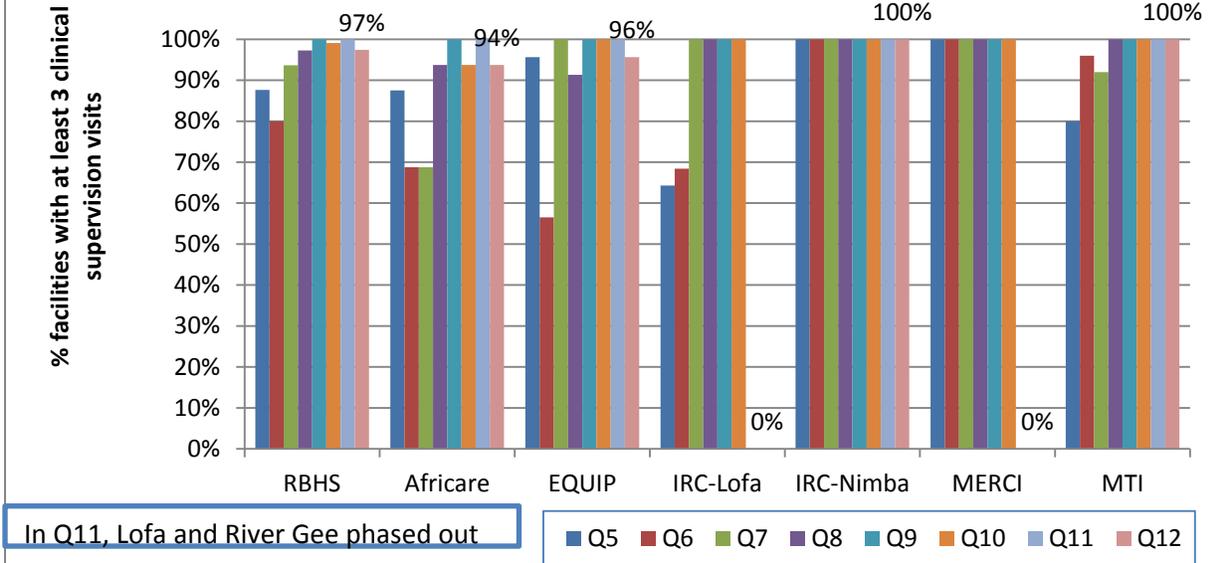


Figure 5: RBHS facilities, clinical supervision, Jul 2010-Jun 2012



Independent of any CHSWT and NGO supervision, RBHS county coordinators – and occasionally other RBHS staff – made unannounced visits to facilities and spend several hours observing consultations and talking with staff and patients. Between July 2011 and June 2012, RBHS staff have documented a total of 248 monitoring visits to 114 health facilities, as shown in Table 2. The RBHS county coordinators monitoring findings were shared with implementing partners, CHSWT and RBHS program managers. This has helped both RBHS and Partner’s management keep abreast of program improvements and address challenges.

The integrated quality assessment checklist is now used by the MOHSW to conduct monthly supportive supervision to health facilities in the 15 counties of Liberia. As a result of this constant follow up and the use of national treatment protocols, the quality of health care has improved as RBHS facilities, on average, met 48% of standards on quality of care in 2012 accreditation survey (compared to 34% for non-RBHS facilities – see Figure 19 later in this report). Additionally, health care providers were observed practicing hand washing, and client provider relationship have improved.

County	Number of visits	Number of facilities
Bong	44	16
Nimba	68	35
Lofa	33	26
River Gee	30	15
Grand Cape Mount	73	22
Total	248	114

Provision of Essential Medicines

- *Procure and distribute essential medicines to partners*

During this reporting period, RBHS has prepared the drug quantification for the Year 4 drug order and issued an RFP in March 2012 for 134 health facilities (the original 112 FARA facilities and an additional 22 facilities for Grand Cape Mount). The contract was awarded to Mission Pharma A/S in April. At the time of the writing of this report the first drugs have arrived in Monrovia.

- *Improve drug management*

RBHS has further worked on improving drug management in RBHS facilities. NGO partners coach pharmacists and dispensers on effective drug management using IMAT (Inventory management assessment tools), which verifies the stocks physically, as well as in the ledger. In year 4, IMAT was undertaken in 65% (75) of the facilities supported by RBHS. IMAT provides a list of drug management indicators that help the facility staff to act upon and follow up the improvements. RBHS has continued to monitor stock positions of essential drugs at health facilities. This activity is done in two steps. First, the NGO partners monitor stock levels of drugs in their facilities during their supervisory visit and report the finding to RBHS. Secondly, RBHS assesses the stock situation of tracer drugs in the quarter during the performance data validation. The tracer drugs include amoxicillin, cotrimoxazole, paracetamol, ORS, iron foliate.

RBHS' sustained efforts in drug management have shown amazing results. As shown in Figure 6 when the project began almost all facilities had stock out problems. With the RBHS intervention, drug management improved rapidly. Now over 90% of health facilities do not face stock outs for tracer drugs. Part of RBHS's effort in drug management is to discourage poly-pharmacy, and over the project period, the rate of poly-pharmacy has decreased. 94% of OPD cases are not prescribed more than 3 drugs with some valid exceptions.

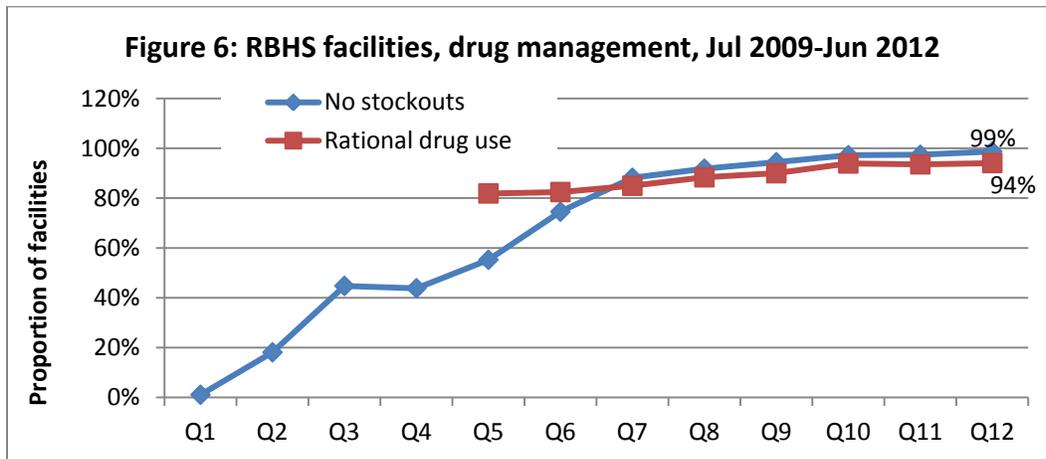
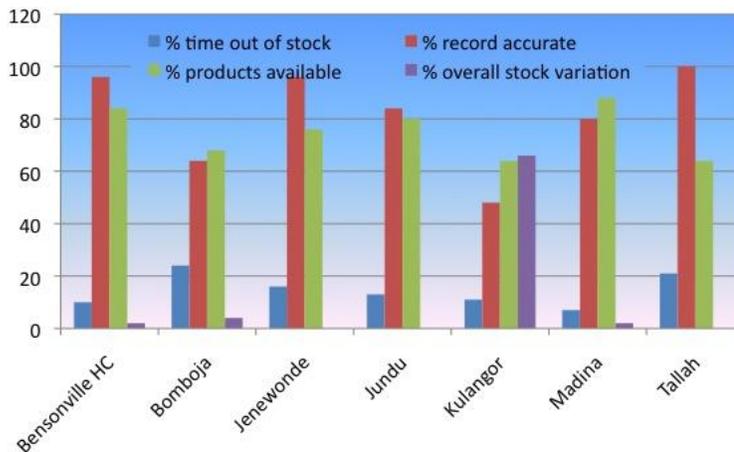


Figure 7 shows for example findings of IMAT from some facilities in Grand Cape Mount counties. In most of the facilities drug management is satisfactory as discrepancy between amounts in the ledger and physical count is minimized and stocks are available most of the time.

Figure 4: I Figure 7: Iken in selected facilities in Grand Cape Mount



Provision of Mental health Services

RBHS in collaboration with the Carter Center assisted the ministry to train sixty-two (62) RNs and PAs as Mental Health Clinicians who later were appointed in fourteen of Liberia's fifteen counties to foster the integration of mental health services in the primary care system.

RBHS provided technical support in drafting the first mental health legislation that is soon expected to be passed into law and contributed to adapting the WHO mental Health GAP Treatment Guidelines to fit the Liberian context. RBHS also contributed to the establishment of the first Wellness Unit (intended to provide psychiatric services) at the Phebe Hospital and School of Nursing and also organized and supported monitoring/supervisory visits in six counties.

Renovation of health facilities

The renovation of health facilities in River Gee, including Gbeapo (a basic EmONC), River Gbey, and Fishtown, a comprehensive EmONC, were completed by the end of October 2011 and were dedicated by RBHS and MOHSW on January 24, 2012. Bensonville, a comprehensive EmONC, in Montserrado County was completed in January 2012.

The renovation of 7 facilities in Lofa County began in November 2011 with West Construction as the contractor. By the end of July 2012 six of the seven renovations were completed: including Bakapalazu, Bazegizia, Balaguwalazu, Fissebu, and Gbanway, and the basic EmONC center Konia. It has to be noted that Balaguwalazu is only reachable by walking for three hours and therefore the community played an important role in ensuring that materials were delivered to the facility. The renovation of Barkedu, the only facility not done in Lofa to date, required a USAID special approval due the work being considered to be construction and not just renovation. It was determined that this facility, due to large catchment population of over 13,000, needed to be expanded to support the needs of the sizeable community.

The renovations of six Nimba facilities have been postponed until October 2012 due to delays in funding.

RBHS had plans to purchase solar powered electrical systems and refrigerators. After discussion between RBHS, the Infrastructural Unit (IU) of the MOHSW, USAID, the European Commission (EC) and UNICEF, it was decided that the EU, through Merlin, would purchase 205 solar power systems, and UNICEF would purchase the solar power refrigerators that would be installed at MOHSW facilities including all RBHS facilities that needed them.

A report received from EPI in August 2012 indicated that all RBHS facilities now had a solar refrigerator installed. The solar power systems have been purchased and installations are expected to start in November. RBHS worked with Merlin to prepare a design and mockup

model for a solar panel support that would allow panels not to be mounted on the roof, which is a major cause of roof leaks and damage due to the heavy rains and types of roofing used in Liberia. The MOHSW Infrastructure Unit (IU) approved this design and plans to implement it at the facilities.

Plans for Year 5

- Continue technical assistance to the MOHSW to ensure smooth transition of PBC management from RBHS to the MOHSW
- Assist MOHSW to establish a mechanism for supportive supervision
- Renovate six Nimba facilities
- Renovate Barkedu clinic in Lofa after obtaining USAID approval.
- Coordinate with Merlin and the IU to ensure RBHS facilities lacking solar lighting receive a solar power system

Intervention 1.2: Expanded service delivery to communities

Community participation is an important component in achieving sustainable health impact. Therefore, RBHS has continued to work with communities to solidify community support systems and via the CHVs to scale up integrated case management at the community level as well as to promote behavioral change.

The project provided technical support to the Ministry to finalize and disseminate the community health policy and strategy. A dissemination workshop was held in Bong County in July 2012 and was attended by 47 participants. Participants included county health and social welfare teams (CHSWTs) of Bong, Nimba, Grand Cape Mount and Lofa, RBHS staff and partners, and non-RBHS supported NGOs [i.e. Medicine Du Monde (MDM), Save the Children (SCUK), and Pentecostal Mission Unlimited (PMU)]. Each county team prepared a plan to roll out the policy and strategy to their respective counties.

RBHS printed 500 copies of the community health policy and strategy, and 500 copies of the CHDC guidelines for the MOHSW for distribution. RBHS and partners assisted the MOHSW to revise the community HMIS tools, gCHV treatment register, iCCM training modules, and final draft of the National Integrated Community Case management strategy. RBHS also assisted the Community Health Service Division to draft community health supervision manual for the community health service supervisor at the health facility level.

RBHS assisted the community health division to disseminate the community health and development committees (CHDCs) guidelines in which four CHTSWs and their implementing partners participated. The guidelines provide information on the roles and responsibilities of CHDC who play an active role in improving quality of care at facilities by building strong links between communities and facilities.

General Community Health Volunteer



Partners continue to engage and support CHDCs to organize monthly meetings in their catchment communities to discuss issues around access to quality health care services (including facility utilization rate, quality of care, staff retention and facility rehabilitation work, the building of maternal waiting

homes). RBHS partners also engaged CHDCs to conduct exit interviews with patients in the facilities in order to better understand the community's perceptions of current service delivery. Partners like MTI and Merci trained CHDC members in water and sanitation whereas Africare and Equip used the revised CHDC guideline to orient members on their roles and responsibilities. In IRC-Lofa catchment areas, several CHDCs have initiated cost recovery systems for facility maintenance and community health financing, primarily through agriculture projects. These farms are headed by the CHDC leadership who mobilize their communities to support farming activities. A number of the communities are already harvesting and selling crops from these farms.

In project year 4, RBHS trained 50 trainers to scale up iCCM. This iCCM Training of Trainers (TOT) aimed at equipping trainers with knowledge and skills to facilitate training of illiterate and semi-literate community health volunteers to manage malaria, ARI and diarrhea and to mobilize and work with communities. The trainers prepared a roll out training plan at the end of the workshop. As the result of the iCCM TOT, the partners and the CHTs trained more than 150 gCHVs in Bong, Nimba, Lofa, and Grand Cape Mount in malaria, ARI, and diarrhea case management. Currently, iCCM has scaled up to include an additional 51 health facilities, more than eight districts, and a total of 1,056 gCHVs are trained in iCCM. Of the total, 371 are trained in malaria case management. In nutrition, partners supported the training of CMs as trainers for CHVs. As a result of the TOT, a total of 353 CHVs are trained to counsel mothers of under five on ENA.

RBHS continued to work with the CHSWTs on behavioral change in the community, mostly through the use of the Community Health Education Skills Toolkit (CHEST kits). The CHEST Kit is a package of health information and education materials for community health volunteers to facilitate one-on-one and group education sessions. To date, a total of 668 gCHVs have been trained in the use of the CHEST Kit in five counties; Grand Cape Mount, Lofa, Nimba, Bong and River Gee.

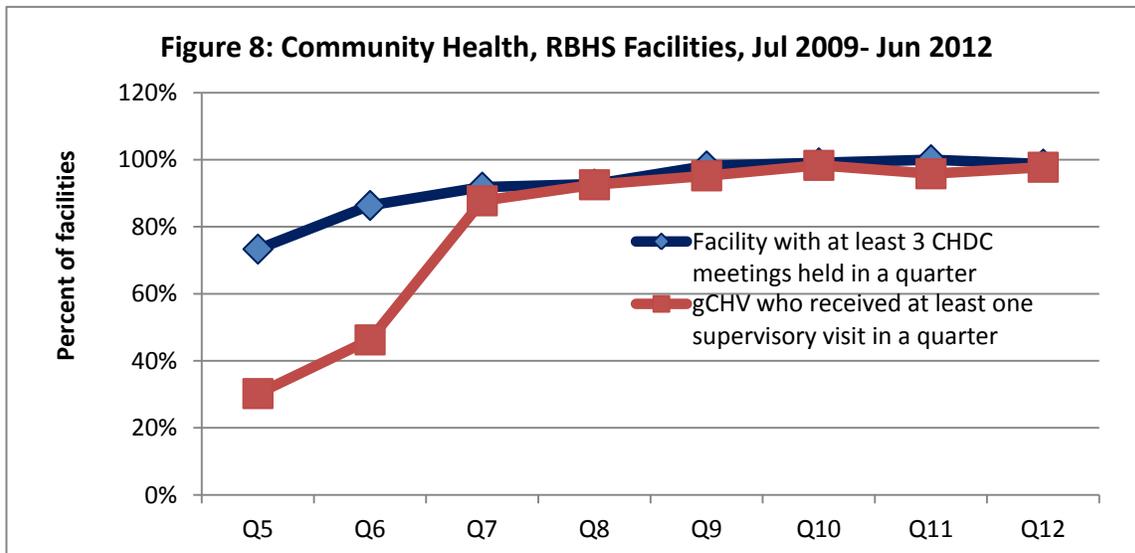
Pump Maintenance Training for CHDC



RBHS, working through the implementing partners, has increased community participation in health care delivery as evidenced in Figure 8 below showing an increase in CHDC meeting attendance. In the reporting period covering Q9 – Q12, as shown in Figure 8, the project target of 100% for CHDC meetings was achieved by all

partners. CHDCs have played exemplary roles in health facilities by raising community awareness, mobilizing local resources to improve and expand facility infrastructure and generating resources for the health facility.

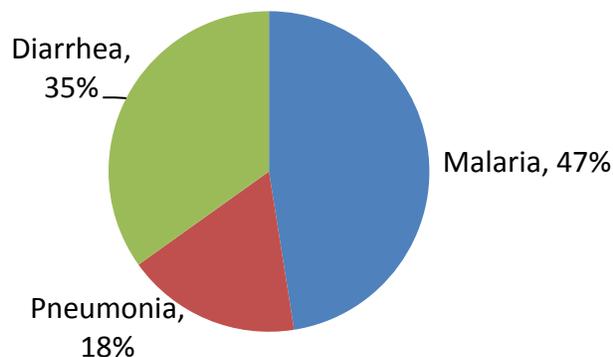
gCHVs are front line household promoters in the community. Supervision is one of the means to improve gCHVs’ knowledge, skills and motivation. RBHS has put high emphasis in regular supervisory visits to gCHVs and has set a high target of 90%. Figure 8 shows that during the last few quarters, RBHS has been able to pay a supervisory visit to almost all gCHVs at least once in every quarter



Results

In project year 4, a total of 14,831 children were treated at the community level by gCHVs under the iCCM program exceeding the 11,000 target. 47% of the children were treated for malaria, 18% for pneumonia and 35% for diarrhea (Figure 9). Most of these cases came from catchment areas more than 5km of a health facility.

Figure 9: Children less than 5 years treated by gCHV under iCCM program



As for results from the behavioral change interventions, we do not have good data because no dipstick survey was conducted in Year 4. However, findings from the LQAS study, undertaken by MEASURE Evaluation in the first half of 2012, show that the percentage of children under five treated with ACT within twenty-four hours after the onset of fever is substantially higher in the RBHS counties, where gCHVs have trained in using the CHEST kit and in community case management of malaria.

Challenges and constraints

Major challenges continue to exist in the implementation of community health interventions. There are frequent stock out of drugs and supplies to the community level, mainly because no system for community supply chain management has been designed. There is lack of supervision and follow up by the health facility staff, as well as lack of motivation from the CHSWT and the community itself. Moreover, poor data collection and reporting was identified due to the lack of a consistent community HMIS. As a result, many gCHVs are reluctant to continue the implementation of iCCM, and other community health interventions, and the attrition rate is high

Plans for Year 5

- Assist the Community Health Service Division to define its role and responsibilities in the context of a county managed systems and set performance indicators;
- Work with CHSWTs in focus counties to roll out iCCM in targeted communities;
- Assist the MOHSW to set up a community supply chain management system;
- Quarterly monitoring and supervision of community level interventions;
- Assist MOHSW to develop and disseminate integrated supervision manual for community level services;
- Provide TA to conduct community needs assessment; and

- Provide TA to MOHSW and CHSWT to develop and manage database for gCHVs and TTMs.

Intervention 1.3: Increase access to comprehensive MNCH services

In Year 4, RBHS continued to work with the Family Health Division (FHD) of the MOHSW to improve access to quality maternal, newborn and child health (MNCH) services. Various approaches have been used; (1) technical support to the central MOHSW; (2) training of managers and facility staff; (3) improving supervisory systems; (4) working with NGO partners on MNCH outreach activities; and (5) improving EmONC infrastructure.

Technical support to MOHSW

RBHS gave technical support to the FHD/MOHSW in drafting various policy documents and participated in a number of technical committees and workshops:

- Validation and dissemination of the Reproductive Health Road Map for Liberia across the country: this document serves as a guiding tool for the MOHSW in its efforts to reduce maternal and newborn mortality in Liberia;
- Pre-testing of the home-based basic life-saving skills (HBLSS) training modules thus moving these important skills to the household level, and development of a roll out plan in collaboration with MOHSW/FHD and key partners: it is expected that CHVs will assist household members to identify danger signs and emphasizing the benefits of MNCH services and referrals;
- Development of referrals and job aids for maternal and newborn complications: ongoing activity with final draft to be out by Nov. 2012;
- Participation in a meeting organized by West African Health Organization (WAHO) College of Nursing and MOHSW/FHD to review the status of EmONC in Liberia following the needs assessment that was done 2010;
- Printing of relevant MNCH protocols and distribution to all RBHS facilities has been completed; and
- Adaptation of IMNCI training module from 11 days to 6 days.

Training and supervision of MNCH services

RBHS has conducted in-service trainings for health facility staff in various MNCH areas during the reporting period under review (see Annex 4a) RBHS also worked with the Family Health Division, the CHTs, and NGO partners to organize joint integrated supervisory visits. RBHS continued to support the 14 emergency obstetrical and neonatal care (EmONC) centers (5 comprehensive and 9 basic EmONC centers). Medical staff from these centers have been trained in all the signal functions including active management of third stage of labor (AMTSL) thus giving them the skills necessary to provide better quality care.

Support to MNCH outreach activities

RBHS' NGO partners worked in facilities and communities to increase access to MNCH services. To measure the effect of the support to EPI, RBHS regularly tracks coverage of the third (final) dose of the pentavalent vaccine.

Participant doing demonstration at BLSS training



Another key intervention is the routine outreach carried out by midwives in two of RBHS supported counties. During community outreach, ANC and postnatal care are provided. The establishment of TTM network meetings in every county also contributed to the increase in ANC coverage over the years. TTMs have been trained on referral criteria for MNCH patients during the home base life-saving skills training (HBLSS).

MNCH Infrastructure

During the reporting period, RBHS completed the renovation of three comprehensive and two basic EmONC centers. In order to increase facility deliveries, RBHS partners assisted communities to building *maternal waiting homes* next to the health facility to provide lodging for pregnant women coming from far away communities to access the services of a facility delivery. To date, Africare has built 4 maternal waiting homes.

RBHS procured and supplied equipment to its EmONC facilities, making quality of care a reality. In collaboration with the technical and system management unit of MOHSW, RBHS conducted hands on training on the use and maintenance of EmONC equipment for health professionals and support staff in all the RBHS EmONC facilities with the exception of Sinje, where renovations are currently ongoing. These trainings will continue in the rest of the counties during the next two quarters. An additional 20 persons have trained at Bensonville Hospital following the completion of the renovation and supply of all necessary EmONC equipment by RBHS.

The RBHS infrastructure team provided technical assistance to the JDJ Hospital EmONC in Monrovia, which was not part of the work plan. At the request of RBHS clinical staff, RBHS infrastructure staff conducted an assessment to install a ceiling mounted overhead surgical light in the existing operating room. This light was procured and provided by RBHS, but the site inspection found it would be very difficult and very expensive to install the light, due to the low height of the existing reinforced concrete ceiling. It was later decided that the light would be given to another health facility.

Results

RBHS continued to increase coverage for maternal and child health services. Figure 10 shows progress in facility-based deliveries and of women taking 2 doses of IPT. Two-thirds of expected births now occur in health facilities assisted by skilled birth attendants. On

average, 63% of deliveries occurred in a health facility assisted by trained staff. The RBHS Year 4 target was 65%. Almost all pregnant women received 2 doses of IPT to prevent malaria in pregnancy. After severe stock outs of Sulfadoxine/Pyrimethamine in the previous two quarters, supply normalized in quarter 11 and many women took their doses.

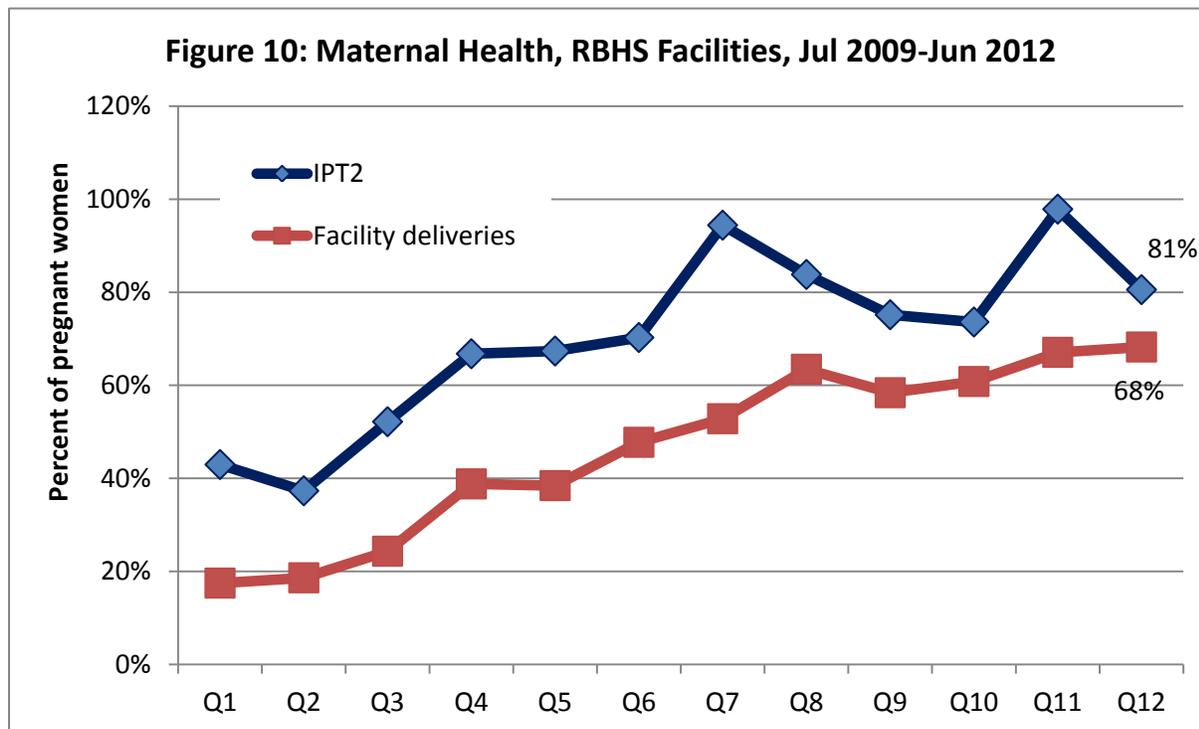
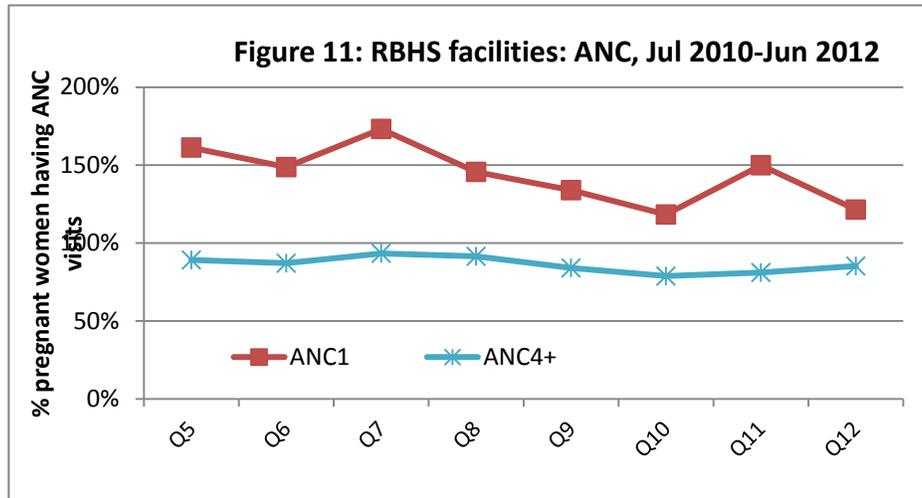
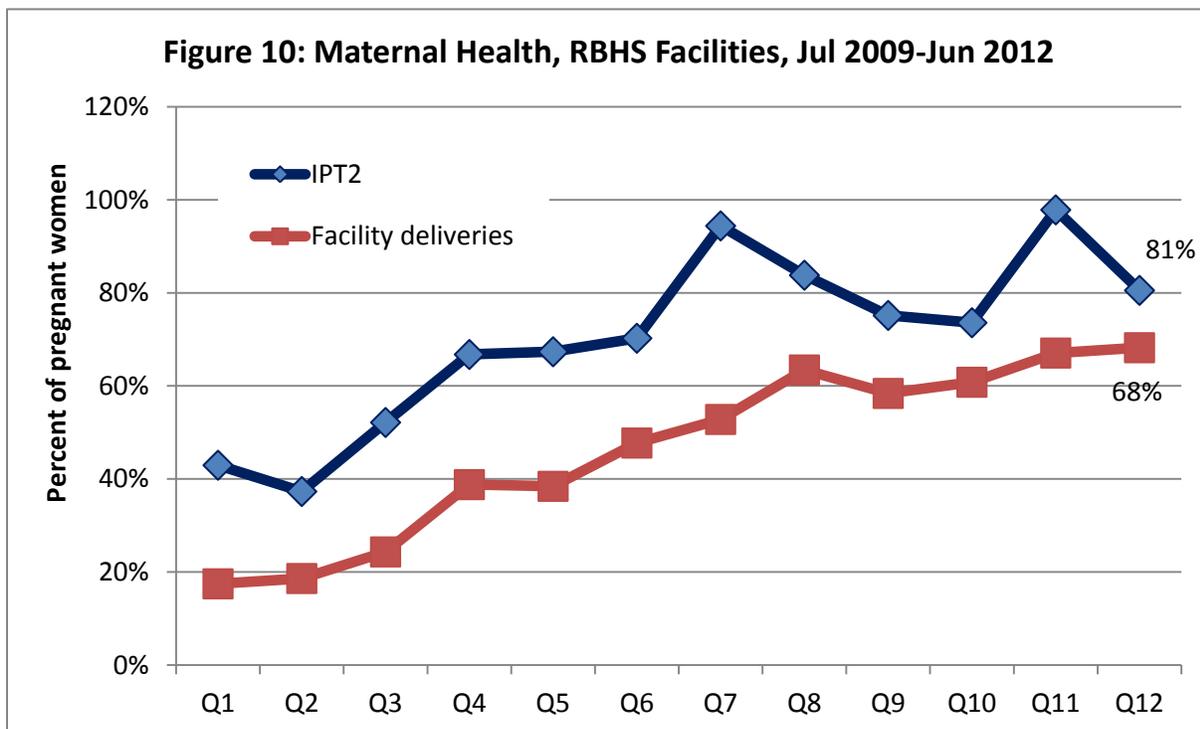


Figure 11 shows trends in access to prenatal care. Currently, four out of five women receive at least 4 prenatal care visits from a health facility. ANC 1 coverage of over 100% could partly be attributed to serving women from outside catchment areas. In some areas, it could be attributed to the transient refugee population. 108 (93%) of 115 facilities have a skilled birth attendant (83% are certified midwife, 10% nurse) in RBHS-supported facilities. A number of program interventions have boosted skilled birth coverage. RBHS has a functioning network of trained traditional midwives (TTMs) who refer and/or accompany the women for delivery in a health facility by CM. Non-monetary incentives for TTMs such as lappas and for women such as Mama and Baby kits promote facility delivery. RBHS has provided training on basic life-saving skills (BLSS) to CMs and home based life-saving skills for TTMs (HBLSS). In addition, certain communities among the RBHS-supported facilities have ruled that every woman must get prenatal care and deliver in the health facility. Local radio has been airing public service announcements (PSAs) in support of facility delivery.



EPI is one of the priority programs for MOHSW and RBHS. RBHS facilities have achieved high levels of immunization coverage as illustrated by the penta 3 coverage in Figure 12. RBHS partners recently have increased their outreach immunization activities that could explain the rise in coverage during quarter 11. Coverage over hundred percent could be due to the inclusion of children over one year who were captured through the immunization outreach program, due to underestimating the denominators, or simply due to poor quality of the data.



Successes, challenges and constraints, and lessons learned

During this reporting period, RBHS was particularly successful in improving maternal and neonatal health services. A substantial number of EmONC service providers were trained on initiating all the EmONC signals functions. EmONC equipment was procured, provided, and staff trained in its operation and maintenance at all supported EmONC facilities in five counties. Facility deliveries increased substantially due to the building of maternal waiting homes and the provision of mama and baby kits including incentive provision for TTMs. Finally, increased numbers of skilled providers are using active management of third stage of labor (AMTSL) during deliveries as a result of the basic life-saving skills (BLSS) training.

The definition of realistic target populations for maternal and child health interventions remains a challenge. Coverage indicators often exceed 100%, mainly because of denominator problems.

One of the lessons learned in renovating health facilities is to ensure that CHSWT staff and facility staff review construction/renovation plans prior to the start of the work. This will generally result in a better product (sufficient funding permitting) and consequently better health service delivery.

Plans for Year 5

- IMNCI training by the NGO partners;
- Continue to conduct MNCH training, especially in post abortion care (PAC) for those who are not yet trained;
- Work with MOHSW and partners to increase coverage in TT2 in the next period; and
- Finalize the referral protocols/guidelines.

Intervention 1.4: Increase uptake of three critical malaria interventions: treatment with ACT, preventive treatment of pregnant women, and sleeping under ITNs

Activities

In Liberia, malaria continues to be the major cause of morbidity and mortality accounting for approximately a third of all in-patient deaths nationally. Activities for malaria prevention for this period under review were designed and implemented in close consultation with the National Malaria Control Program (NMCP) and closely aligned with priorities outlined in the Malaria Operational Plan (MOP) of the President's Malaria Initiative (PMI). They include (1) institutional capacity building of the NMCP; (2) pre-service training; (3) improved capacity for early diagnosis and treatment; and (4) behavioral change and communication (BCC) activities.

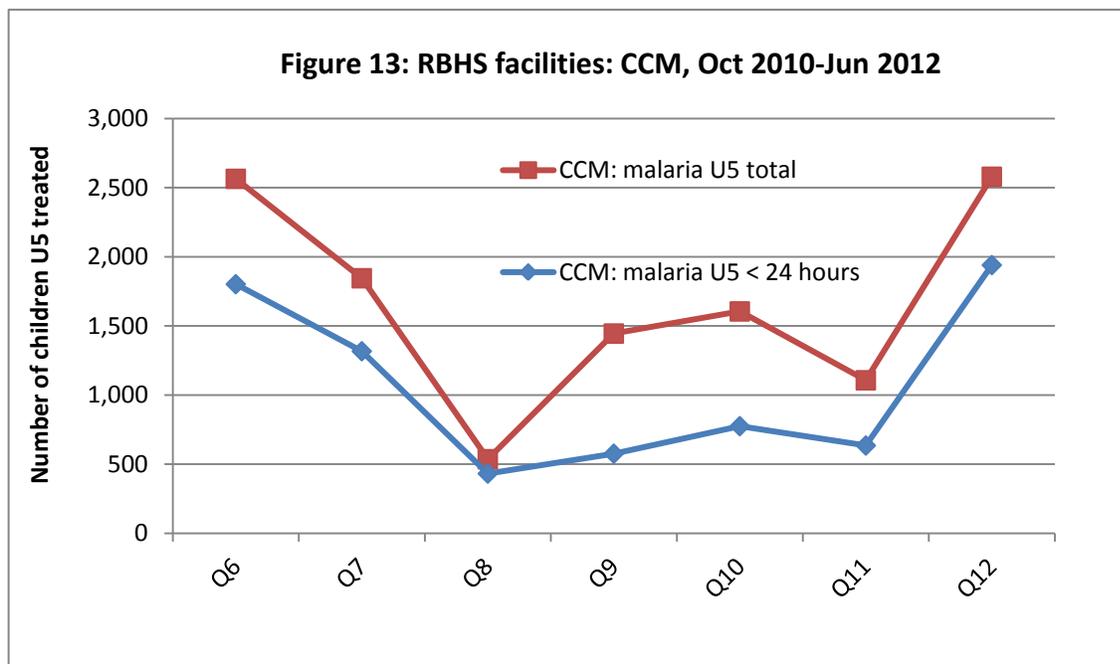
In continuing with capacity building and support efforts to the NMCP, RBHS in collaboration with the National Health Promotion Division assisted NMCP to review and revise the national malaria communication strategy, and participated in the joint PMI and MOHSW development of the Malaria Operational Plan for FY 2013.

RBHS supported the printing and distribution of 150 pre-service curricula to various training institutions. Malaria is a full part of the integrated service delivery modules. Instructors and preceptors (26) were oriented to the content of the curricula before distribution.

In order to increase the Intermittent Preventive Treatment (IPT) coverage rate among pregnant women, partners developed a number of strategies such as using the “Reach Every Pregnant Woman” (REP) approach to reach pregnant women with IPT and provided ongoing in-service skills training for service providers at the facility level. Another strategy was the TTM/TM networking meetings which included messages on the importance of the 2nd dose of IPT in pregnant women. The program suffered setbacks due to the constant stock out of Sulfadoxine/Pyrimethamine at health facilities.

RBHS, through its implementing partners and the county coordinators, conducted regular monitoring visits to ensure adherence of the use of Rapid Diagnostic Tests (RDTs).

6,736 U5 children with malaria were treated with iCCM in year 4 .Mainly in communities more than 5km away from health facility, 58% within 24 hours of onset of fever.



Behavioral Change and Communication (BCC) activities

The Integrated IEC/BCC Campaign continued to promote four key malaria interventions: treatment with ACT; preventive treatment of pregnant women (MIP); sleeping under ITNs; and indoor residual spraying (IRS). These campaigns will be scaled-down in the coming year after two years of engaging the Liberian population almost two years through various activities that utilized multiple channels and approaches.

RBHS arranged partnership with five community radio stations within Gbarpolu, Margibi, Cape Mount and rural Montserrado (two stations) for the airing of pre-recorded ITN use radio spot messages (Take Cover under the net). The total of 3150 airings (630 per radio station) corresponding to 52.5 hours of airing time for the period of three months (May to August) at the request of USAID, although these are not traditionally RBHS counties.

As part of the mass media and social mobilization campaign strategy, RBHS, in collaboration with NMCP and the National Health Promotion Division (NHPD), as well as other health partners, undertook the development of early malaria case management materials (1 poster, 1 brochure) and audio messages. The four audio messages produced addressed early treatment, home management, prompt referral, and full compliance. Airing of these messages has been ongoing since early June 2011. RBHS also participated in a material and message development workshop held from March 28-30, 2012 in support of efforts to increase access of the population to ACT through the private sectors. The workshop produced “zero” drafts of three (3) spot messages and two posters.

To increase the capacity of gCHVs and TTMs to educate and engage communities on malaria, 668 gCHVs/Community Health Promoters have been trained in using CHEST kits, which include information on the four priority interventions (MIP, ACT treatment, ITN use and IRS).

RBHS collaborated with the Ministry of Education to introduce malaria messaging in schools. Sample brochures targeting primary and secondary students have been developed and pretested and are being disseminated through various educational institutions as part of the early case management campaign.

Results

Malaria constitutes 54% of childhood diseases consultation. During the reporting period, 128,499 children under 5 were diagnosed with malaria.

Figure 14 shows the progress to date on treatment of child malaria in RBHS project areas. The graph shows on the left scale the number of children treated for malaria and of those children that were treated with ACT, the drug of choice for treatment. On the right scale is the percentage of children treated with ACT. As can be seen, RBHS has met its target by attaining over 90% during the past few quarters.

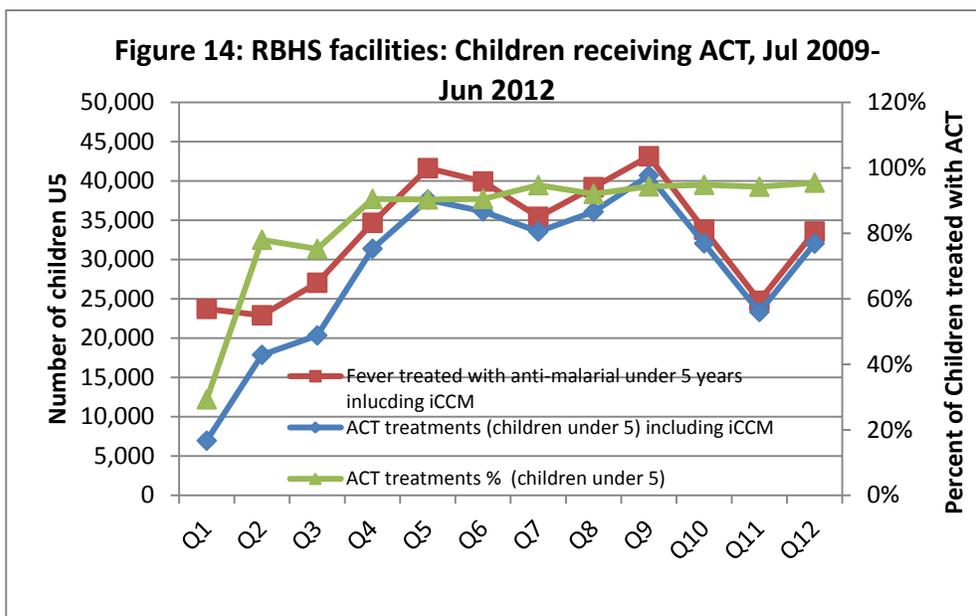
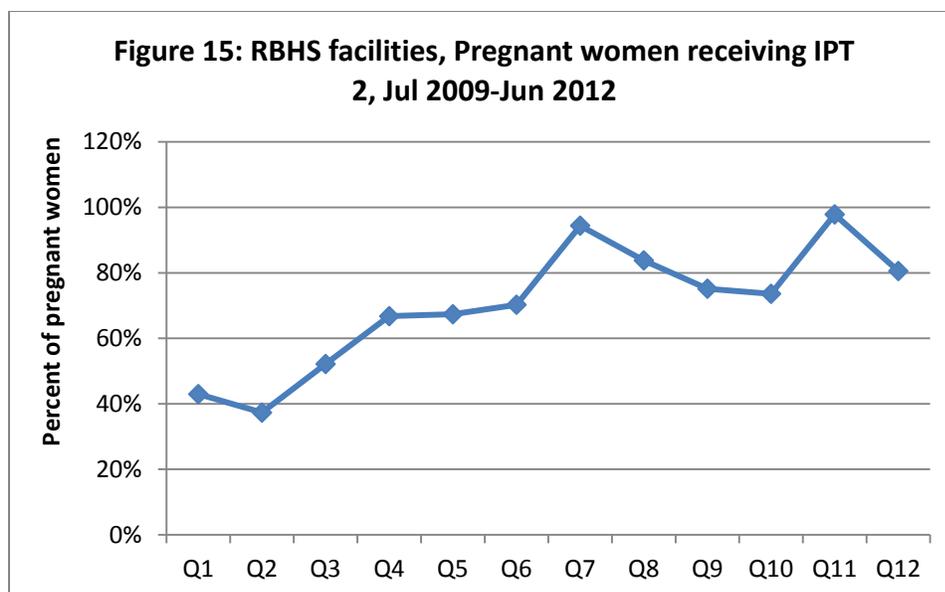


Figure 14 also shows the declining number of malaria cases for the past two quarters. This is most likely due to the dry season in Liberia as it was also observed in the corresponding period last year. However, a notable finding is that the rate of decline this year is higher than last year. This could indicate that there is a real decline in malaria incidence, which could be attributed to malaria program efforts including providing appropriate treatment.

The coverage for IPT2 in RBHS facilities was 81% (target 90%) as shown in Figure 15. The “Reaching Every Pregnant” woman (REP) approach has helped to reach a larger number of pregnant women for IPT. There have been 289 health staff and volunteers were trained in malaria. Continuing SP stock-out problems resulted in decrease in coverage.



Successes, challenges and constraints, and lessons learned

During the year, RBHS contributed substantially to bringing malaria treatment closer to the communities in the focus counties. Various BCC materials on community case management (1 poster, 1 brochure and four audios) were produced. 40 CHT managers and 10 NGO partner staff were trained as trainers of gCHVs to implement community case management activities. In order to expand malaria services to the community level, iCCM was scaled up to additional 51 health facilities, in more than 8 districts, with a total of 1,056 gCHVs trained in iCCM. Of the total, 371 were train in malaria case management. Also, 547gCHVs and Community Health Promoters were trained in the use of CHEST kit which includes the four priority malaria interventions (MIP, ACT treatment, ITN use and IRS).

Unfortunately, the frequent stock outs of ACT and RDT at facility and community levels impacted our ability to achieve the indicators. There is still some confusion with CHSWT and county depots on the quantification of ACT between health facility and community case management. The CHEST Kit training and distribution has been delayed due to limited local capacity of printing contractors.

Lessons learned

- There are indications that malaria case management at community level is contributing to the reduction of child morbidity and mortality this was seen at facilities who catchment communities implemented the malaria community case management project
- Availability and ownership of ITNs plays an important role in the percentage of people who sleep under ITNs

Plans for Year 5

- Implement IPTp campaign through mass media and malaria case management;
- Continue national radio ITN campaign, with phased intensity and with revision of messages and materials as needed, based on findings of assessment;
- Continue working with the Community Health Department to build capacity of gCHVs and TTMs to effectively deliver key malaria message using the CHEST kit;
- Increase capacity of CHVs to educate and engage communities on malaria;
- Continue working with the NMCP to implement the “United Against Malaria” campaign; and
- Monitor the use of the CHEST tool kits.

Intervention 1.5: Increase access to quality HIV/AIDS and TB services, with an emphasis on prevention

Activities

RBHS continued to support the MOHSW in ensuring the delivery of quality HIV/AIDS & TB services. In Project Year 4, RBHS was involved in advocacy, provision of technical assistances, massive scaling up of services through trainings and provision of appropriate tools, joint supportive supervision, on-site coaching & mentoring, and coordination.

RBHS in close collaboration with the National AIDS & STI Control Program, seventeen additional PMTCT sites were established and refresher trainings were provided to the staff of nine other facilities, ten new HCT and two Antiretroviral Therapy (ART) centers were established, while refresher training for ten existing HCT facilities staff was provided. HIV testing of pregnant women and other patients has increased, as more facilities received trainings.

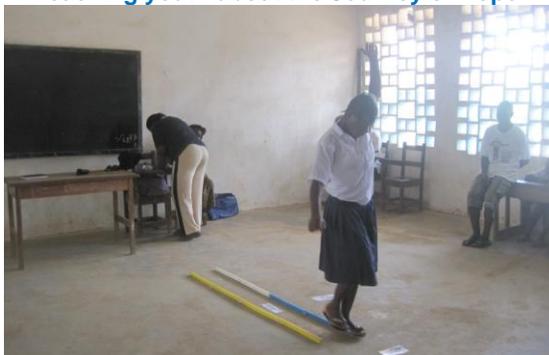
RBHS, MOHSW & partners organized and conducted joint supportive supervision visits to a total of Seventeen (17) facilities providing HIV and/or TB services in Montserrado, River Gee, Grand Cape Mount, Bong & Nimba counties. On-site coaching and mentoring was done with particular attention to HIV testing protocols, ARVs regimen administration, and effective counseling skills, while ten TB diagnostic sites received QA assessments, with mentoring done on site.

In support of RBHS’s work with private sector, an acquaintance meeting was organized with the Arcelor Mittal (AM) company and an HIV service assessment was conducted to determine how RBHS can assist to ensure HIV/AIDS services are provided in the AM facilities. Implementation plans on HIV integration are ongoing and to continue in year 5. RBHS provided financial assistance to the Positive Living Association of Liberia Inc (PLAL), which is an association of People Living with HIV that provides peer supports through

advocacy, psycho-social counseling and follow-up activities on other patients in the community, by paying rent for an office space for one-year and donating a start-up package of supplies. RBHS is still providing technical assistances as needed.

Also as part of providing updated information for quality service delivery, RBHS held a one week workshop that was conducted for instructors and preceptors of training institutions to provide technical updates on HIV & TB, the training was held in March and included 18 participants.

Teaching youth about the Journey of Hope



BCC activities continued in the counties through the Journey of Hope which is a tool for promoting participatory HIV prevention activities among youth and other targeted groups in the community. It is a behavior change methodology, which leans heavily on the principles of a psychosocially based methodology of learning and is applicable to youth as well as adults, while the CHEST kit deals with other health issues plus HIV & TB. All

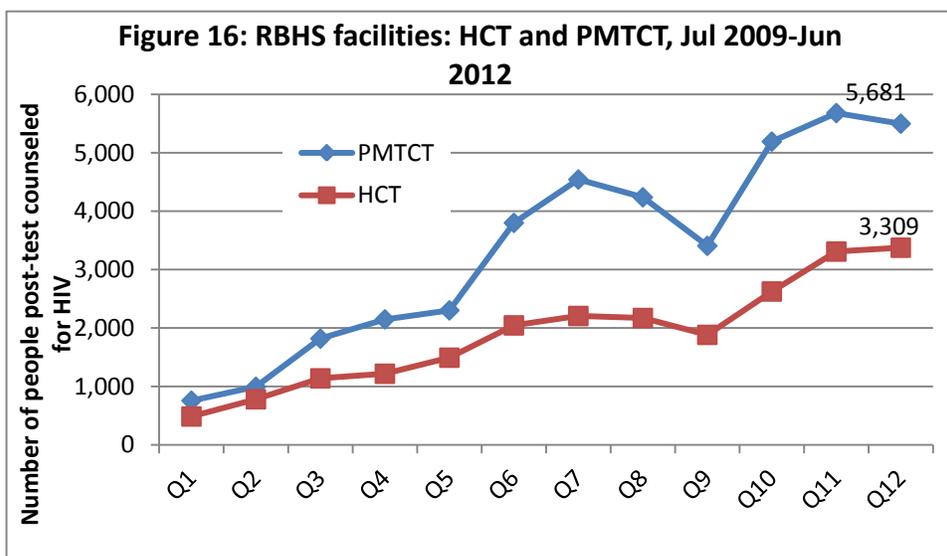
partners have conducted downstream training of their gCHVs. Regular sessions are being conducted with various target groups in the communities. A total of 668 gCHVs were trained in the use of the Journey of Hope (JOH) & CHEST kits. These gCHVs represented all five implementing partners (IPs) within the five operational counties.

To increase the TB case detection rate in the focus counties, 45 gCHVs from communities in Lofa County were trained in active case detection and TB DOTs program bringing the total number of community-based DOTs sites to 48. Thirty-two (32) TB treatment sites were established in Lofa, Bong & Nimba counties and more than 30 facilities receiving refresher training as a means of strengthening already existing sites.

As part of its commitment to MOHSW, RBHS assisted NACP in planning for World AIDS Day (December 1, 2011) as well as NLTCP in planning for World TB Day (March 24, 2012) and actively participated in formal celebrations. RBHS staff also took part in the meetings of the working group to update the HIV Counseling & Testing (HCT) and psychosocial counseling guidelines.

Results

With the many activities planned to meet annual targets, RBHS was successful in meeting most of the targets. The number of people receiving HIV test & getting results accumulated to 30,970 of which 19,778 were pregnant women; 117 pregnant women tested positive for HIV were initiated on ARV. At the end of the year, 232 persons are in ART and 534 PLWHA are in care and support program. 420,315 condoms were distributed and about 73,000 men and women were reached with a HIV prevention message.



TB control program has made a good progress. The treatment success has been 89%. The TB case notification rate has been 83 per 100,000 populations which is low in comparison with expected rate of 160. These TB program is scaling up of the TB program in RBHS program areas by increasing the number of facilities providing TB services and by expanding it to the community level. Currently there are 100 facilities with TB DOT treatment sites and 44 facilities with TB diagnostic services of 115 RBHS supported facilities. There are also 48 health facilities that implement community DOTs. RBHS trained 155 facility staff and community volunteers on the TB program during the reporting period. Case detection can be improved with better community level surveillance of TB cases; hence the program needs to be taken to all communities.

Successes, Challenges & constraints

For the first time, RBHS introduced and implemented “HIV prevention through sports” among youth in eight districts at which point a week long HIV awareness was carried out and culminated with soccer & kickball matches in selected communities respectively. RBHS was able to establish additional HIV/AIDS and TB service delivery sites, thus increasing access for patients’ care. RBHS, in collaboration with NLTCP and partners trained gCHVs from 45 communities in Lofa County in TB community based DOTs program which is expected to continue the increase of TB case detection & treatment success rates.

The major challenges in delivering services were: inconsistent uptake of testing and poor retention of patients in care after testing, constant stock out of HIV test kits and reagents at most facilities due to sub-optimal coordination of the supply chain management system at county level, high lost to follow up rate of HIV positive patients on ART especially pregnant women, and stigma & discrimination against positive clients from the public including health workers. There were also human resource and communication challenges, including a low staff attrition rate and untimely communication from partners regarding matters issues of concern, which related the implementation of solutions

Plans for year 5

- Establishment of “Condom Outlets” in collaboration with facility and community-level service providers to prevent STIs, HIV/AIDS and early pregnancy
- Support the MOHSW to institutionalize Journey of Hope & CHEST kits
- Work with school health program of Ministry of Education to strengthen in school health clubs to promote HIV prevention
- In collaboration with NACP & FHD work with Arcelor Mittal to strengthen facility based HIV services and establish community-based HIV services
- Plan and execute “HIV Prevention through Sports” activities jointly with MOH/SW, facility staff, community radio stations and local sport associations for youth in Bong, Lofa and Nimba counties
- Conduct quarterly supportive supervision along with MOH/SW counterparts
- Provide TA to MOHSW (NACP) to plan & implement World AIDS Day activities

Intervention 1.6: Increase access to comprehensive family planning and reproductive health (RH) services

Activities

RBHS is one of the MOHSW’s prime supporters for creating and strengthening an enabling environment for family planning service delivery. During this period under review, RBHS provided an orientation on FP Policy Compliance and community based family planning programming approaches for 5 counties (Bong, Lofa, Nimba, Grand Cape Mount and River Gee). Participants included: county health officers, county pharmacist, RH officers and CHDD and other counter parts within the NGOs supporting each county. At the national level, RBHS has been working with the FHD to develop training and supportive supervision materials.

In an effort to expand and strengthen FP/RH services at the facility level, RBHS conducted a training of trainers workshop for 15 county level reproductive health coordinators from the 5 RBHS supported counties. These trainers supported RBHS implementation partners to conduct county level trainings for service providers. These trainings have increased the number of trained service providers to a total of 109 staff. The providers were trained in a wide range of service delivery areas such as FP counseling, LAM, cycle beads, short term FP methods and long acting and reversible FP methods such as Jadelle and intrauterine devices (IUD). Training activities have been supported by supportive supervision.

Community-based FP services

RBHS implementing partners, Africare, Equip, IRC, and MTI, supported various community based efforts in Bong, Grand Cape Mount Lofa and Nimba Counties to provide

contraceptives to couples in 11 health districts including delivery of contraceptive services in market places. In addition, RBHS partners and CHSWT celebrated county contraceptive days.

RBHS continued the airing of Baby by Choice resumed at nine (9) Community-based radio stations in January 2012. Each radio station reported over 300 airing of messages. The Monrovia-based stations reported over 900 airing messages total.

Airing of the 26-part radio drama magazine serial continued in this reporting period and ended in March 2012. The serial was broadcast on ten radio stations; two (2) Monrovia and eight (8) community-based stations in Bong, Grand Cape Mount, Lofa, Nimba, and River Gee. Most radio stations allotted twice weekly slots during the 26-weeks of airing. The radio drama magazine serial, Baby by Choice not by Chance was intended to provide an enter-educate radio forum for community members, especially adolescents (between the ages of 13-24) to engage in discussions and dialogue concerning health issues covered in each of the 26-editions of the serial.

Gender Based Violence (GBV)

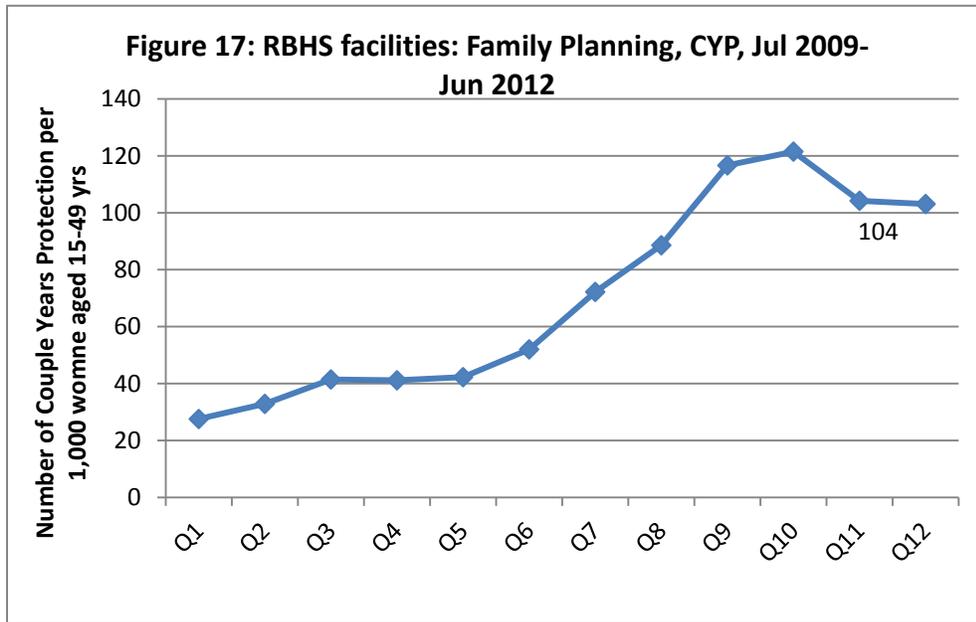
Services directed at meeting needs of GBV survivals are slowly but gradually taking root in the implementing counties. For instance IRC Lofa, and MTI in Grand Cape Mount focused more on identifying and referring GBV survivals after providing emergency contraception. RBHS through Equip managed 40 GBV referrals during the period under review.

FP infrastructure

RBHS assisted with minor renovations and facility upgrades of the Center of Excellence at the Phoebe family planning department in Bong County as designed and supervised under another USAID funded project. Under RBHS's supervision, contractors completed renovations of the FP center of excellence in Phoebe.

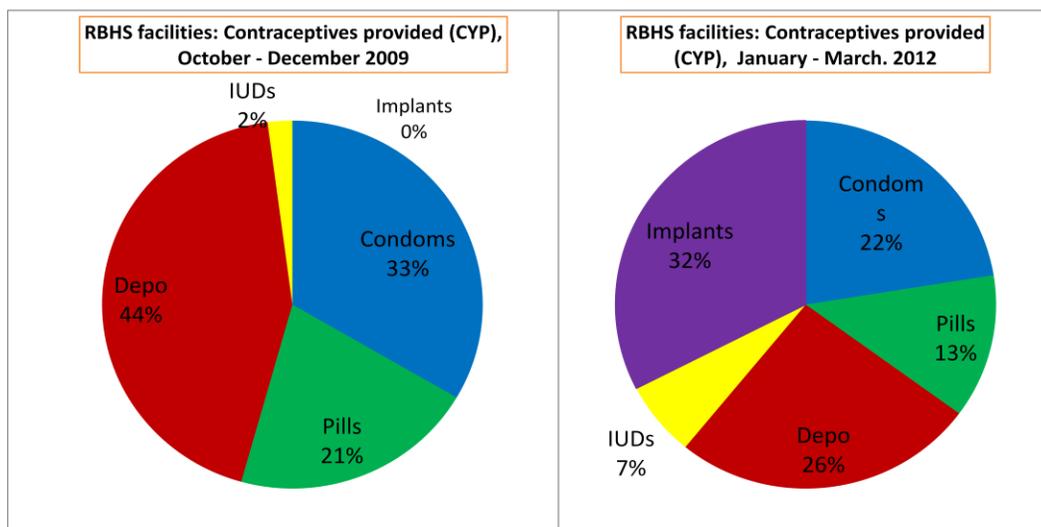
Results

RBHS and its partners have been an important part of increasing numbers of persons using contraception. RBHS facilities distributed various contraceptive methods resulting in 18,177 couple year of protection (CYP) in the reporting period against the target of 12,000. Figure 17 shows a rapidly increasing trend of CYP per 1,000 women over the past 12 quarters. A number of program efforts have contributed to the increase. RBHS introduced long acting family planning methods; community based distribution of family methods through CHVs; and a balanced counseling approach. All facilities in the RBHS project area provide short-term family planning services. Over 70% of facilities have the capability of providing long acting methods as well. 38 facilities (33%) organized community based distribution of family planning methods. The quarter 11-12 decline in CYP is due in part to a short supply of long acting family planning methods.



Expanding the family planning options and service delivery points have contributed to improving the reproductive health decision making of men and women and increasing the contraceptive prevalence rates. Figure 18 shows the change in use of family planning methods between PBC quarter 2 (Oct-Dec 2009) and PBC quarter 11 (Jan-March 2012). Throughout this period, clients using long-term method such as implants and IUD have increased as implant contributions to the CYP rose from 0% to 32% and that of IUD increased from 2% to 7%. While the utilization rate of short-term methods such as Depo, pills and condom has decreased. This shows a major shift in family planning method mix in Liberia. The increase in adoption of long-term methods has contributed to higher CYP.

Figure 18: Family Planning Method Popularity



Successes, challenges and constraints, lessons learned

A major success in Year 4 for expanding family planning use was the organization of the first ever County Contraceptive Days (CCDs). These events conducted in the period of March to June in the three focus counties of Bong, Lofa and Nimba brought together more than 2,000 adolescents from junior and senior high schools to enable young people access to information and make informed choices for family planning. During these events, several young people accepted various contraceptives after participating in group and individual counseling sessions.

Moreover, the guest speaker for the CCD in Bong, Mrs. Miatta Fambulleh, was later in October 2012, during the annual National Health Review Conference, appointed as Honorary Ambassador for reducing maternal mortality. Mrs. Fambulleh is an internationally celebrated Liberian performance artist.

County Contraceptive Day Education



While CCDs increased access to and utilization of contraceptive services, these events had not been planned for implementation during this year. As such, other activities were either postponed to next year or were started but not completed. Another challenge was rescheduling activities that were planned for the first quarter which were delayed due to post election tension. Finally, poor supply chain management led to regular stock-outs of FP commodities in the counties, at a moment when demand for FP services was being created.

A lesson learned for implementation is that the contraceptive days are also an ideal opportunity to bring contraceptive methods to market places, and therefore increase family planning uptake among all age groups.

Plans for Year 5

- Support MOHSW in its effort to advocacy for increased access to FP/RH services in accordance with Family Planning protocols and standards;
- Provide TA to MOH and CHTs to ensure that each facility has at least one trained staff to provide the following services: family planning, youth friendly services and clinical management of rape;
- Support MOHSW and CHTs to ensure integrated FP RH services including clinical management of rape, FP and HIV integration and youth friendly service delivery;

- Support quarterly joint monitoring of the implementation of the supply chain process for FP/RH commodities and supplies to ensure prevention of stock outs;
- Support CHSWTs to extend family planning, integration of HIV and FP, youth friendly services and clinical management of rape to the community;
- Support MOHSW and CHSWT to strengthen data collection, analysis, interpretation and feedback at all levels especially for high impact FP interventions; and
- Assist AM to establish FP/RH SDPs at facilities and community services in the company population.

Success Story

No “Belly Business” with Contraceptives: A young woman achieves birth spacing through family plan

Jebbeh Zokai is a young woman who lives in her birthplace of Karnga, a rural village 103 kilometers from the capital city of Liberia. There, it is taboo to use the modern contraceptive methods. The general belief is that family planning promotes promiscuity among women. If it is discovered that a woman is using contraception, she can be mercilessly flogged and denied normal social activities by her male partner. Because women are discouraged from using contraception, many women like Jebbeh do not reach the recommended time period between pregnancies and instead become pregnant when their last child is just 6-9 months old, which creates a very large responsibility for the mother and the family.

To help women space out their pregnancies, a USAID-funded project called Rebuilding Basic Health Services provides training to community health volunteers who travel from house to house to promote responsible family planning. When villagers receive family planning information from these trusted—and trained—peers, the stigma against modern contraception is lowered, and more women choose to use family planning services.

As part of the project, community health volunteers use their newfound knowledge to inform villagers of family planning options, distribute and refill family planning products and condoms, and refer people to the health clinic for professional care and additional information. Through the work of these volunteers, including their regular referrals to the health clinics, the uptake of family planning services has increased more than fivefold, from 2,668 in 2009 to 14,251 in 2011. It’s all part of the larger goal of the Rebuilding Basic Health Services project, which is to strengthen and extend health service delivery, strengthen Liberia’s health system, and promote healthy behavior.



Jebbeh is a beneficiary of these community activities. Now, whenever she speaks with her friends, they can tell that she is excited by her new way of life: she is able to have more time between pregnancies, so that she’s not both pregnant and caring for a very young child simultaneously. Jebbeh declared to her mates, “I am happy now. I have no baby and belly business because of the family planning services I receive here.”

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

Health system strengthening represents one of the main pillars of the 2011-2021 National Health Policy. The on-going building of strong 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.

RBHS has successfully transitioned the project into a massive capacity building effort with the development of comprehensive capacity assessment tools. RBHS has been working with the MOHSW on the implementation of the Fixed Amount Reimbursement Agreement (FARA) activities. The role of RBHS is to provide technical support to the MOHSW and the counties in preparing the quarterly deliverables and to assist USAID with data validation and financial reporting. RBHS is part of the FARA Steering Committee that meets weekly to discuss the progress of implementation of the various activities.

Intervention 2.1: Enhance TNIMA and EBSNM learning environments and resources

Renovation at TNIMA

Activities and Results

The renovation of the TNIMA West wing ground floor and 1st floor was completed in December 2011. A dedication ceremony, attended by the Minister of Health and the USAID Deputy Chief of Mission was held on February 3, 2012 and the building was turned over to JFK and TNIMA.

TNIMA Dedication Ceremony



The last remaining phase of the TNIMA renovation, the JFK kitchen, was started in November 2011. After some delays in negotiations with JFK, the work was completed, the keys and kitchen turned over to JFK and a Certificate of Substantial Completion was issued on September 19, 2012.

Success Challenges Constraints

Design, decision making, and lack of funds were some of the challenges

faced by the infrastructure component of the project. In some instances, the design was incomplete, partly due to budget limitations, and also to lack of oversight of the designer. The design for the kitchen area lacked detail and thoroughness especially regarding the electrical system and plumbing. Costs for additional plumbing work were avoided due to a duplication of work between JFK's contract for the rehabilitation of all the water and sewer work in the East Wing where the kitchen was located, and the RBHS contract for the kitchen renovation under the TNIMA contract. The only electrical work in the TNIMA contract was the connection of the new kitchen equipment and rehabilitation of two walk-in coolers. However, the electrical system in the kitchen was unsafe after years of neglect, corrosion from the years of sea salt air, and vandalism. To address this issue, RBHS contracted an electrical engineer consultant to assess the existing electrical supply and to recommend needed changes to make it safe and able to handle the new added equipment.

Plan for Year 5

The activity is completed

Renovation of ESBNM and Curran Hospital, in Zorzor, Lofa County

Activities and results

Daily oversight and reporting were provided by RBHS's on site supervisor. RBHS Monrovia based infrastructure staff provided 2 site visits per month. Additional inspections were conducted by electrical and mechanical engineer consultants.

Dedication Ceremony of Girl's Dormitory at ESBNM



The Girls' Dormitory, contracted to JPA Construction, was completed in December 2011 and a dedication ceremony was held on February 27 2012 attended by the Deputy Minister of Health and USAID Mission Director. The keys to the building were turned over and the furniture provided by RBHS. The water and electrical components of the ESBNM renovation, which were under separate contracts, were

connected to the building and tested in September 2012 and July 2012 respectively. A Certificate of Final Completion was signed after the 6 month warranty period ended.

The contractor for the Classroom Building, BEHOLD Inc. was terminated in October 2011, after a long and involved process, when they were no longer able to fund the completion of the work. An RFP to bid the completion of the project was released in October and three contractors with past experience with RBHS, were invited to bid to complete the building. Proposals were received, analyzed and USAID approval sought to subcontract with Space Design and Construction to complete the classroom building. A contract was signed in January and work began in February and has progressed through September 2012 to about 85% complete. Progress has been slowed down due to extremely bad road conditions

during this year's rainy season which have slowed the contractor's ability to deliver materials to the site.

The procurement and delivery of all the classroom and dormitory furniture was completed in January 2012. The *EBSNM water supply system* rehabilitation work began October 2011, 6 weeks behind schedule, and was scheduled for completion in February 2012. The contract included elevated storage tanks, distribution piping, submersible pumps and chlorination systems. As of September the project was over 90 % complete. The only item incomplete at this time is the chlorination pumping system. A separate contract had previously been issued to do two boreholes at EBSNM/Curran Hospital. These two boreholes were completed in October 2011.

The *EBSNM Electrical System rehabilitation* subcontractor, Mega Construction, began work on site in November 2011. The initial work consisted of renovating the power house, building the transformer pads, making and setting of the new concrete transmission poles and refurbishing existing metal transmission poles. This work was largely completed prior to the arrival and delivery of the generators, transformers and wire conductors to the site in March 2012.

As the new generator arrived at Curran Hospital, the hospital's existing generator broke down and could not be repaired. This meant the contractor was immediately pushed to begin operating the new generators on an emergency basis. While the contractor rose to the occasion and began providing temporary power within a few days, it meant that they were now forced to run the generators and work around an operating electrical system to complete their work. This was not part of the design specifications or contract and added time and costs to the project. The electrical project was designed using transformers to step up and step down the voltages given the long distances between the hospital and the ESBMN dormitory, thereby reducing the cost of the project due to smaller cable size. The transformers have been installed. Various techniques are currently being considered to overcome installation issues with the high voltage electrical cable.

Other small EBSNM infrastructure work began in October 2011. The EmONC operating room was completed in January 2012 and the 2 small units of the staff house were completed in March. Improvements to the emergency entrance ramp for wheel chair and stretcher accessibility, a maternity ward access ramp and maternal bathroom were completed in June 2012.

All the EBSNM contractors received EMMP training and RBHS regularly monitors their status.

Success Challenges Constraints

The quality of work at the dormitory was very good by Liberia standards but progress could only move as fast as the contractor's cash flow allowed. The speed of work is, to some extent, a function of the standard monthly billing and progress payment approach which RBHS employs to ensure the contractors are not overpaid, exposing RBHS to losses if the

contractor does not complete the work, these payment terms were adapted based on lessons learned.

One of the major challenges to construction/renovation contracting in Liberia is the lack of managerial and financial capacity of the contractors. RBHS has experienced this first hand and resulted in the termination of the original contractor of the EBSNM classroom building. Contractors need to be experienced, trustworthy and have the financial capacity to fund the project for at least 60 days to be considered actual contractors. Since the design building RFP was issued, RBHS has chosen to follow this rule and only receive bids from, or issue contracts to, those who can meet this requirement. RBHS will also work with contractors to mitigate the constraints of cash flow. While this approach may extend the completion date of the work, the financial risk is too great to consider signing contracts with firms who cannot meet this minimum threshold.

Like most infrastructural projects, the electrical, water and classroom projects experienced delays due to the contractors' inability to manage, coordinate, schedule and finance the projects activities. Transportation to remote rural locations during the rainy season continues to be a problem which the contractor's have not been able to overcome through advanced scheduling of material delivery partly due to the financial constraints.

Plans for Year 5

Final completion of the water project is delayed pending installation of the chlorination system. The classroom building and electrical project are expected to be completed in the first quarter of Year 5.

Intervention 2.2: Improve capacity of training institution staff to utilize modern teaching methods and manage health training institutions

Activities

RBHS conducted joint quarterly meetings for facilities serving as clinical sites for TNIMA and EBSNM (JFKMC, Hydro Clinic & Duport Road Health Center, CLH, Sucromu & Fissebu Clinics). The goal of the meetings was to promote a data driven culture for improving quality of services at clinical sites. A total of 53 clinical staff participated in these meetings. During the meeting, progress and challenges of the monthly service statistics were discussed, graphs were reviewed for the past three months of data collected and the importance of data validation of indicators was also discussed. Additionally, next steps in improving quality of care and data were outlined by each facility.

RBHS also conducted quarterly joint monitoring and supervisory visits to the training institutions implementing the updated curricula and standards. The Liberian Board of Nurses and Midwives (LBNM) and RBHS conducted external assessments at MTP/SER, Grand Gedeh County and Department of Nursing, College of Health Science, WVST University in Maryland County, EBSNM in Lofa County, UMU in Nimba County, Phebe

Training Program and Cuttington University in Bong County and Tubman National Institute of Medical Arts in Monrovia. Each training institution was assessed using the pre-service education standards that have been adopted by the LBNM as national quality improvement standards for nursing and midwifery education in Liberia. The LBNM is looking at the possibility of conducting baseline assessments at clinical sites using the clinical standards to determine the capability of health facilities in providing quality care before accrediting each site.

RBHS organized a Curriculum Dissemination Workshop with MOHSW, LBNM, professional associations, preceptors and instructors of each cadre to review the new job descriptions, core competencies and curricula. 37 Education & Training National Workshop Group members participated in the workshop and reviewed the process used to update the five curricula (EHT, MLT, PA, RM, and RN) for pre-service education, disseminate the curricula and acknowledge all those who participated in completing these activities. Also, a meeting was held with twenty members of the Education and Training National Working Group (ETNWG) to discuss integration of HIV/ TB into ANC services in Liberia.

Pre service education in classroom



Effective Teaching Skills Training of Trainers workshop was conducted for instructors and clinical preceptors. The goal of the training was to reinforce instructors' abilities to utilize appropriate teaching methods in strengthening the ability of other instructors in the teaching of technical content, appropriate information and skills to students in clinical and classroom setting. 23 participants from TNIMA, MTP/SER, Phebe Training Program, United Methodist University, Smythe Institute, LBNM, Tubman University, Cuttington University, Mother Patern College of Health Science and EBSNM actively participated in the training.

RBHS organized a series of workshops on technical updates and effective teaching skills (ETS) for faculty and clinical preceptors that included:

- HIV & TB ETS Workshop for 18 participants from NLTCP/ MOHSW, Tubman University, UMU, Phebe Training Program, EBSNM, TNIMA, Smythe Institute, MPCHS, JFKMC, CLH, Duport Health Center, Hydro, Fissebu and Sucromu clinics.
- Technical Update on Family Planning Short and Long Acting Methods Workshop for 20 participants from LBNM, Training Unit, Redemption Hospital, Duport Road Health Center, Hydro Merci Clinic, PUCC Clinic, JFKMC, Fissebu clinic, Sucromu clinics, CLH, PTP, CU, UMU, Smythe Institute, MTPSER, TNIMA and EBSNM.
- In an effort to improve the teaching skills of instructors and clinical preceptors using modern technology, the Learning Technology Development (Multimedia) Workshop was conducted. A total of 20 institution staff from TNIMA and EBSNM participated in

the training. The goal of the workshop was to teach instructional staff to prepare competency - based electronic materials that will successfully bridge learning between the classroom, skills lab and clinical sites. RBHS provided 6 Nikon Coolpix L24 cameras, six headsets, six pairs of batteries and six solar chargers for the batteries to TNIMA and EBSNM.

- Training of Trainers Workshop for Professional Staff on how to Train Non-Professional Clinical Preceptors to Share Health Information, Provide Coaching and Giving Feedback to Students: 22 instructors and clinical preceptors from TNIMA and EBSNM, as well as, the clinical sites (Hydro clinic, Duport health center, People United Community Clinic, CLH, Fissebu clinic, Sucromu clinic) and the MOHSW (Training Unit, Community Health Division) participated in the training.
- Workshop for Non Professional Clinical Preceptors: How to Share Health Information & Provide Coaching and Feedback for Students: a total of 42 non-professional staff (registrar/nurse aids, dispenser and vaccinator) from the clinical sites (Redemption Hospital, JFKMC, Hydro Clinic, Duport Health Center, People United Community Clinic, CLH, Fissebu, Sucromu, Yeala and Gbanway Clinics) participated in the training.
- Pre Service collaborated with MNCH to conduct Technical update and Effective Teaching Skills, Training of Trainers on Post Abortion Care for 26 Instructors and clinical preceptors from TNIMA, Phebe Training Program Esther Bacon School of Nursing and Midwifery and South Eastern Midwifery Training Program in Zwedru along with health workers from MOHWS facilities. The goal of the training was to build instructors', clinical preceptors' and county-level MOHSW staff's skills for the purpose of providing effective Post abortion care, as part of maternal mortality reduction and trained others to provide high quality of post abortion care.

Results

A total of 171 pre-service educators were trained with RBHS support (see details in annex 4). From these trainings, pre-service educators and clinical preceptors learned about conducting:

- HIV testing, diagnosing and appropriately managing HIV and TB, implementing PMTCT activities;
- Providing FP counseling using Balance Counseling Strategy (BCS);
- Inserting implants;
- Administering Depo, serving Microgynon;
- Distributing male and female condoms and cycle beads;
- Developing multimedia materials (photography, audio and video recordings) to support teaching and learning;
- Conducting interactive health education sessions and providing feedback and training for students in these areas; and

- Facilitate a teaching session using session plan, various teaching and learning methods, questioning techniques, provided feedbacks and assessing student's knowledge, skills and attitudes.

The training capacity of all nine schools has been assessed including TNIMA and EBSNM, and plans have been developed for improvement.

Successes, challenges and constraints, and lessons learned

During this reporting period, RBHS has worked hand in hand with the LBNM on M&E and accreditation of training institutions. The challenge in the remaining part of Year 4 is to also start coordination with the Liberian Medical and Dental Council (LMDC), whose limited staff has been out of the country or has been very busy in the process of setting up the council.

As a result of the learning technology workshop, instructors at TNIMA and EBSNM are developing multimedia materials (photographs and audio and video recording & editing) to support teaching and learning in the classroom, skills lab and clinical sites.

Instructors and clinical preceptors made effective use of the Balance Counseling Strategy card to counsel clients between the ages of 15 – 40 years. Instructors and clinical preceptors are now able to conduct HIV testing, prepare lesson plans, and use visual aids effectively.

Instructors and clinical preceptors that attended the post abortion care workshop conducted in-service trainings to train staff and students how to use the manual vacuum aspirator to prevent maternal death.

The nine training institutions are very excited about the improvements that are taking place within their schools in eight key areas: (1) the revised curricula, (2) supplies of training materials, (3) technical updates, (4) regular monitoring visits feedback meetings and supervision at the clinical sites, (5) internal assessments using the quality assurance clinical standards and quarterly external assessments, (6) using the pre- service education standards to assess classroom instruction and clinical instruction practice, (7) infrastructure; and (8) institution management.

One of the constraints was the delay encountered in the provision of equipment and associated materials to TNIMA and EBSNM for skills labs, computer labs, and libraries. This was mainly due to procurement problems at Jhpiego, as well as shipment to Liberia and the slow process of clearing customs in country.

Plans for Year 5

- Assist LBNM, LMDC, and training institutions to monitor and evaluate adherence to effective teaching skills, educational standards, and clinical standards

- Provide TA to the LBNM and LMDC on accreditation process for health training institutions
- Sponsor quarterly National Education Working Group meetings
- Provide TA to training institutions and LBNM on data validation
- Provide equipment and associated materials to TNIMA and EBSNM for skills labs, and libraries
- Conduct SBMR Module 3 workshop and assessment
- Conduct Student Performance Assessment Workshop
- Conduct Student Performance Assessment Workshop
- Conduct workshop for faculty and preceptors on blended learning methodologies (involves integration of a range of training methodologies into instruction in classroom and at clinical training sites)

Success Story

Turning Teaching into a Joy:

Liberian Teachers Learn How to Engage Students and Themselves in Learning

It is 9:00 a.m. on a sunny day in May, and students are attentively listening to their teacher, Rebecca Scotland, who they recently voted “best teacher” at Liberia’s largest nursing, midwifery, and paramedical training institution. Rebecca is confidently teaching a group of newly admitted freshmen students one of their first courses. Rebecca is among nearly 100 faculty members who have participated in the Effective Teaching Skills Training Course, supported by USAID through the Rebuilding Basic Health Systems project in Liberia.

After graduating as a physician’s assistant and getting a bachelor’s degree in Biology, Rebecca began working as a full time instructor in the school’s Physician’s Assistant Training Program. However, like most of the teachers there, she had no teaching skills. She explained, “I did not know how to teach the students, so it was a very difficult time for me. I never prepared for class and the students were not really learning.”

Teachers’ lack of effective teaching skills was just one of the challenges faced by the school. In addition, teachers arrived at school at times that pleased them and did not adhere to the curriculum. Morale was very low and faculty indicated that there was nothing they could do to improve.



In the Effective Teaching Skills Course, experienced international training experts trained the teachers in effective teaching techniques and now RBHS staff are following up, mentoring, and monitoring the teachers, ensuring that they are putting to use the concepts they learned in the training.

Following the course, Rebecca and her fellow teachers recognize the importance of planning and preparing before a classroom lecture, presentation, or practical session in the simulation lab in making them more proficient teachers. Rebecca says, “During each teaching session, I manage my time effectively and meet my objectives.” She continues, and other faculty agree, “Because of this course, my teaching skills have improved tremendously. Teaching is now exciting and easier.”

Intervention 2.3: Update and strengthen PA, RN, EHT, and CM curricula

Activities

One of the main activities was the printing and distribution of curricula to TNIMA, EBSNM and the MOHSW. The five curricula for the Environmental Health Technician (EHT), Medical Lab Technicians (MLT), Physician Assistant (PA), Registered Midwives (RM), and Registered Nurses (RN) were first photocopied and circulated to all schools, LBMN, UNFPA and the MOHSW to generate comments for final revision regarding content, process and structure before the end of the project year. Also, 500 copies of the Handbook for Health Professionals in Liberia were printed and distributed to training institutions, health facilities, NGOs partners and the MOHSW.

RBHS conducted a Consensus Building and Endorsement Workshop with the Liberian Board of Nursing and Midwifery with special emphasis on reproductive health and safe motherhood/EmONC. Thirty-two stakeholders participated in the workshop. They represented the following institutions and agencies: Cuttington University, Phebe Training Program, TNIMA, Midwifery Training Program, Smythe Institute, United Methodist University, Esther Bacon School of Nursing, Mother Pattern College of Health Sciences, Liberia Midwifery Association, MCHIP, Family Health Division/MOHSW and UNFPA.

An Environmental Health Stakeholder workshop has been organized with 33 stakeholders from USAID, Environment Protections Agencies (EPA), Land, Mines and Energy (LME), Ministry of Public Works (MPW), JFKMC, TNIMA, Monrovia City Cooperation, Liberian Association of Public Health Inspectors (LAPHI) and the MOH/SW. The goal of the workshop was to define the role of each stakeholder so as, to increase the understanding of various stakeholders on their roles and responsibilities in the effective implementation of the new EH curriculum to enhance the education and utilization of environmental health technicians.

The Environmental Health technician (EHT) steering committee meetings were conducted for 29 participants from the Liberian Association of Public Health Inspectors (LAPHI), Environmental Protection Agency (EPA), Unicef, Monrovia city Cooperation (MCC), OXFAM WASH Consortium, CHF/ WASH , Ministry of Public Works, Liberia Dental & medical Council, Liberia Water & Sewer Cooperation (LWSC), Division of Environmental and Occupational Health (DEOH /MOH), Preventive service, MOHSW and TNIMA. The goal of the meetings was to constitute a steering committee to assist the school of Environmental Health to strengthen the implementation of the new EHT competency based curriculum.

Integrated effective teaching skills/technical updates for EHT faculty was conducted, with focus on new subjects developed for the 3-year curriculum. Instructors at the EHT School and staff from the Division of Environmental and Occupational Health (DEOH /MOH) attended the training. The goal of the training was to strengthen instructor's knowledge and skills in teaching the new courses. Topic cover during the workshop include: 1)The Dynamics of Indoor and Outdoor Pollutants and Exposures, 2) Principles of Environmental

Health, 3) Toxicology and Epidemiology of Exposures to Gases, 4) Metals and Particulate Matter 5) Toxicology and Pathophysiology of Air Pollutant Exposures, and 6) The Application of Genomics to Emerging Zoonotic Viral Diseases. The Manual of Course-Related Classroom, Laboratory and Field Activities for Environmental Health was finalized and instructors were taught how to use the manual. The activities Manual is meant to serve as a supplement to the newly-revised EH Program curriculum.

A 'Student Seminar and Conversation' was held for 36 seniors, juniors and freshmen EHT students at TNIMA. The focus of the seminar was to enhance student's knowledge concerning the Basic Concepts in the Field and Practice of Environmental Health. The presentation and discussion covered the five component areas of Public Health which include: 1) Environmental Health, 2) Epidemiology, 3) Biostatistics, 4) Health Policy and Management and 5) Social and Behavioral Sciences

RBHS facilitated a field visit to the white plain pipe boiled water source in collaboration with the Liberia Water & Sewer Cooperation (LWSC) and EHT instructors. The purpose of the visit was to assess the environment together with the students.

Results

The following Technical Curricula have been updated and approved by MOHSW:

- Physician Assistant
- Environmental Health Technician
- Registered Midwife
- Registered Nurse
- Medical Laboratory Assistant
- Assorted laboratory equipments, materials and textbooks to TNIMA.
- EHT Instructors are using the Manual of Course-Related Classroom, Laboratory and Field Activities for Environmental Health as a teaching guide to facilitate the newly-revised EH Program curriculum

Nine schools accredited by the Liberian Board of Nurses and Midwives (LBNM) are using the updated curricula, as well as several newly established health related training institutions that are awaiting accreditation by the LBNM.

Successes, challenges and constraints, and lessons learned

All nine accredited EHT, MLT, PA, RM & RN training institutions are using the new curricula and are implementing the 3-year direct entry training program for both the EHTs and RM programs. The Mental Health in-service training module was upgraded and a course was developed in interpersonal communication counseling skills that will be integrated into all in-service training modules.

Instructors, students and health workers are making reference to the Handbook for Health Professionals in Liberia.

EHT students at TNIMA are now given the opportunity to attend clinical practices at Monrovia City Cooperation, Freeport of Liberia, Environmental Protection Agency, Lands and Mines and MOH water Lab. EHT instructors at TNIMA have started teaching two new courses (Air pollution and Toxicology) as a result of the training.

Plans for Year 5

- Print and distribute curricula to TNIMA, EBSNM and MOHSW (100 copies each of RN and CM curricula; 50 copies each of PA, EHT and Lab tech)
- Develop interdisciplinary procedures manual (50 copies) and log books (250 copies) and distribute to TNIMA and EBSNM

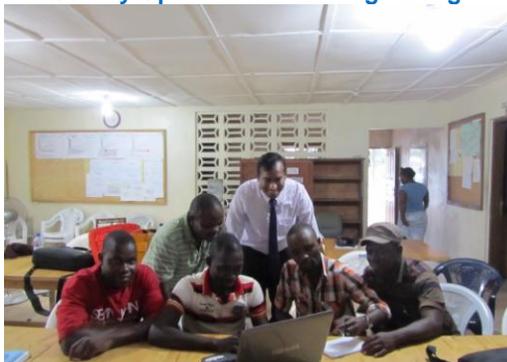
Intervention 2.4: Strengthen MOHSW systems and human capacity at central level

Activities

Most of the structured work on capacity building started in January 2012, with the arrival of the newly appointed RBHS Capacity Building Director, and the recruitment of capacity building officers for the Nimba and Bong counties. Recruitment for Lofa is still in process.

RBHS and MOHSW jointly developed the capacity building framework for the MOHSW, based on various existing international policies and frameworks, one of them being the Human and Institutional Capacity Development (HICD), set forth by USAID. They conducted the first comprehensive capacity assessment of the Liberian health system. The assessment framework, process, and instruments were developed by MOHSW with technical assistance from RBHS. The assessment was conducted successfully at the MOHSW and the three focus counties – Lofa, Nimba, and Bong. The capacity assessment results were disseminated across all three counties and at the Health Sector Coordination Committee (HSCC) meeting at the MOHSW. RBHS facilitated a capacity building strategic planning workshop for key stakeholders in June 2012. The workshop was attended by the MOHSW, key staff from Lofa, Nimba, and Bong CHSWTs, USAID, implementing partners, and donors.

County Operational Planning - Bong



The workshop was attended by the MOHSW, key staff from Lofa, Nimba, and Bong CHSWTs, USAID, implementing partners, and donors.

Following the strategic planning workshop, RBHS facilitated operational planning workshops to implement the strategic plan. RBHS provided technical assistance for MOHSW to conduct county operational planning exercises. The RBHS capacity building operational plan template was adapted to

be used as a template for the annual county operational plans. RBHS conducted an orientation for the MOHSW staff on using the operational planning template and developing the county operational plans using the capacity building framework.

RBHS facilitated the creation of a Capacity Building Core Group (CBCG) at the Central MOHSW to ensure sustainability of the capacity building process. The CBCG is led by the Assistant Minister for Curative Services in the Department of Health Services and includes representatives from the three branches of MOHSW – Health Services, Planning, and Administration. RBHS is providing technical support to the CBCG to coordinate capacity building planning and implementation at central level and in the three focus countries. The CBCG also is responsible for conducting capacity assessments in the remaining 12 counties.

RBHS significantly contributed to building the capacity of the MOHSW Performance Based Financing (PBF) unit through on the job mentoring, training on key components of PBF implementation, and joint field visits. RBHS hired a full-time PBF advisor in January 2012, who is based in the PBF unit at the MOHSW. RBHS supported training on data validation for about 40 MOHSW staff from the central and county levels. A PBF operational manual and implementation tools (including a bonus calculation tool) were developed with substantial participation from the MOHSW PBF unit to facilitate harmonization of the PBF scheme. RBHS, in collaboration with the World Bank, contributed to the production of these documents. Among the provisions, the MOHSW sought to strengthen the role played by counties in PBF implementation, increase awareness of responsibilities incumbent to key players (i.e., health facilities/clinics, implementers) toward achieving performance targets, and harmonize timely allocation of performance bonus to implementers and health workers. RBHS supported MOHSW PBF in setting performance targets, in conception of work plans, reporting and monitoring templates in line with EPHS. The leadership and key units within the Department of Health Service contributed to the development of the templates. The PBF unit, with support of RBHS conducted monthly meetings and quarterly feedback sessions with implementing partners. An orientation on the operational manual and tools for the central level and keys technical and financial partners was conducted in April 2012; Cascade trainings for counties were delayed due to unforeseen challenges in disbursement of funds by the MOHSW.

The RBHS M&E team held a skills building workshop for M&E officers and data managers from five RBHS supported counties as well as partners' M&E officers, and MOHSW staff. RBHS, in collaboration with MOHSW, conducted a Performance of Routine Information System Management (PRISM) assessment of HMIS from April 24 – May 4, 2012 covering Bong, Nimba, Lofa and Grand Bassa counties and using the PRISM tools. The PRISM tools were developed under the USAID funded MEASURE Evaluation project. A one day workshop was conducted in September to share the findings of PRISM assessment. The participants from MOHSW and CHSWT discussed on the various issues surrounding the weaker parts of HMIS and worked on a plan and targets to improve HMIS performance. Finally, in September 2012, MOHSW and RBHS organized a 5 day training of trainers for 20 staff from MOHSW HMIS, M & E and PBF units. Support was given to exploit the untapped functionality of DHIS 2.9 software. The database was further enhanced to facilitate better analysis and use of information. The training curriculum and materials for county level

training were also prepared. RBHS also coordinated a research study by the Royal Tropical Institute of Amsterdam to document progress on post-conflict health system reconstruction; the final report was produced in 2012.

The National Health Promotion Division (NHPD) in collaboration with partners and with technical support from RBHS finalized the Health Promotion Policy; the document is being disseminated by NHPD. Also, the RBHS BCC team contributed to the assessment of gaps in the current National Communication Strategy of the MOHSW. As part of this process, formative research was conducted in four counties, namely Gbarpolu, Margibi, Bong and River Cess in February 2012. The document will be disseminated in November 2012. RBHS further assisted the NHPD to conduct the needs assessment for the health promotion district focal persons, and to develop the district health promotion curriculum. In June 2012, RBHS, in collaboration with the Ministry of Health and Social Welfare, began the first in the series of capacity building workshops for selected health service providers to perform as District Health Promotion focal persons. It is anticipated that four trainings will be conducted over the next year.

The RBHS quality assurance team provided technical support in December 2011 to the MOHSW by training 38 assessors on the processes, concepts and data collection methods of quality of care using paper tools and PDAs to transport data. The MOHSW then conducted quality assurance assessments in 108 health facilities in six counties within one two-week period. RBHS monitored the data collection process in Bong County, assisted the MOHSW to analyze the data, and contributed to the writing of reports.

The RBHS quality assurance team assisted the MOHSW to constitute a central level quality improvement team. The terms of reference (TOR) were reviewed and updated; the central level team will establish a quality improvement committee as well as county level quality improvement teams.

RBHS supported the MOHSW to train 37 health professionals in the development of In-Patients clinical standards. As a result of the training, Standards for Infection Control and Prevention and Maternal & Newborn Health were drafted and pre-tested at two hospitals in Buchanan, Grand Bassa County (the Liberia Government Hospital and Arcelor Mittal hospital). The draft standards were validated by a core team comprising of team of specialists.

The central level quality improvement committee and RBHS quality assurance team made an inventory of all supervision checklists from the vertical programs of the MOHSW and the revised quality assurance tools. The exercise led to the development of a MOHSW integrated supportive supervision checklist. RBHS in collaboration with Medicine Du Monde assisted the Bong County health team to review all existing supervision checklists and supervision systems in the county.



As part of RBHS's role in capacity building, the project took on the support of 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. RBHS has supported the following participants: Nursing Education at the Mother Pattern College of Health Sciences (MPCHS) in Monrovia: 16 (Aug. 2010-Dec. 2011); Laboratory Technicians at MPCHS in Monrovia: 17 (Dec. 2010-June 2012); and 16 Individual scholarships (Aug. 2009-July 2013). Of the 16 individual participants supported by RBHS, 13 have completed their programs and have returned to Liberia. One participant has dropped out of the program and RBHS is trying to obtain a letter from the participant explaining the reasons for his dropping out and not communicating this to the FORECAST project. The two remaining participants will finish programs in 2013. A detailed listing of these participants can be found in Annex 4c.

The RBHS infrastructure team participated in the first Infrastructure Taskforce meeting held in the past year. At the request of the MOHSW, RBHS is providing financial and technical assistance to the MOHSW Infrastructure Unit (IU) to develop a set of design documents for the construction of a new Pediatric Ward at Redemption Hospital at New Kru Town in Monrovia. MASS Design Group, the design contractor, completed its initial assessment trip that included meetings with the Deputy Ministry to determine the initial scope of work and program, collecting information on construction conditions and conducting a site visit.

Also, the RBHS infrastructure team is providing technical assistance to the MOHSW and NDS to help identify, design, procure, and construct a Pharmaceutical Warehouse. IU and RBHS worked with the Ministry of Public Works (MPW) to review the site, road access and define the MPW's plans and ability to repair or replace the road leading to the site identified for the warehouse. An Environmental Mitigation and Monitoring Plan (EMMP) was prepared by IU/MOHSW with the assistance of RBHS and submitted to USAID for approval as required for any construction funded by USAID. The USAID mission approved the plan in April 2012 and began pursuing USAID Bureau and Regional approval at the same time. IU/MOHSW and RBHS submitted an environmental permit application to the Liberian Environmental Protection Agency (EPA) in May 2012 and received a permit on June 28, 2012.

RBHS is working with the MOHSW's Infrastructure Unit on infrastructure design standards, contract management, and priority projects. RBHS assisted the IU to prepare and release an RFP for design standards. The RFP was released in Liberia and the US in September and bids are due in October 2012.

Results

The capacity assessment yielded valuable information regarding the baseline capacity of the Liberian health system. RBHS provided technical assistance to the Central MOHSW to produce a capacity assessment report and made provisional recommendations. The strategic planning workshop resulted in the development of a capacity building strategic

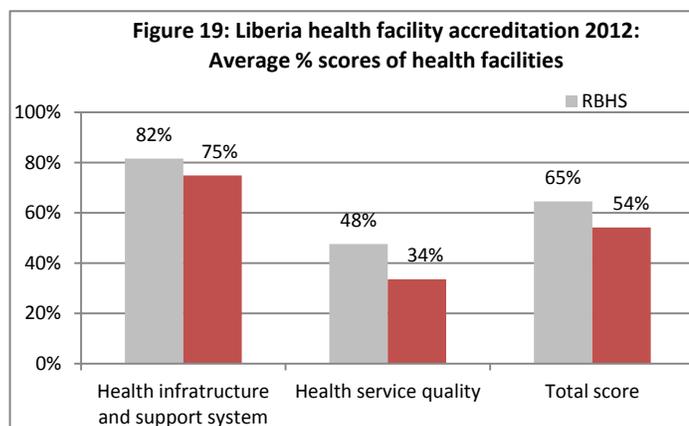
plan for MOHSW and CHSWTs and is awaiting approval from MOHSW. The capacity building operational plans are being integrated into the overall operational plans for the MOHSW and CHSWTs. RBHS provided technical assistance to the MOHSW to review the annual county operational plans for Lofa, Nimba, and Bong CHSWTs. All annual county operational plans are to be finalized by MOHSW in October.

Capacity building of the MOHSW PBF and M&E units is yielding results. The MOHSW, with support from RBHS, conducted four quarterly data validation exercises; three feedback sessions were held, the fourth session will be held in October 2012. The PBF unit, with support from RBHS, trained and guided the implementing partners at county level in the conception and budgeting of work plans following a harmonized template along line the EPHS outline, and in assessment of baseline and setting of target with regard to PBF indicators. Finally, the first MOHSW PBF dashboard highlighting performance indicators was produced.

The PRISM assessment showed strengths, weaknesses and gaps of the HMIS both at county health office and health facility levels. Major strengths of the HMIS in Liberia included availability of standardized ledgers and integrated reporting forms, established reporting channels and timelines, and District Health Information System (DHIS) software installed and in use at the county health offices. However, there is limited capacity to perform data quality assurance and data analysis in the county health offices and health facilities. Data accuracy ranges from 38% in August 2011 to 46% in February 2012. 91 percent of the health facilities submitted monthly reports to the county health offices, and 75 percent of them were timely submitted. Evidence of use of HMIS findings in routine meeting discussions and decision making processes were observed in less than 39% of the facilities.

The RBHS BCC team and the National Health Promotion staff along with other relevant programs of the MOHSW and health partners revised and upgraded an integrated communication strategy based on the situation analysis and on findings derived from the formative study. A first draft of the second national communication strategy is being circulated for comments. Following the development of district health promotion curriculum, selected service providers are being as District Health Promotion Focal Points.

In the assessment conducted in 2012, the MOHSW used the revisited accreditation tools and added the quality assessment tools developed by RBHS. As highlighted in Figure 19, RBHS facilities scored higher than non-RBHS facilities in infrastructure and health service quality respectively by 7% and 14%. However, both groups scored lower than 50% on health service quality.



Successes, challenges and constraints, and lessons learned

MOHSW sees RBHS as a leader in building capacity. For this reason RBHS was requested to present the capacity building framework to other international donors at the HSCC meeting. International organizations such as UNICEF have requested feedback from RBHS regarding their capacity building activities across multiple ministries. The capacity building framework developed by RBHS for MOHSW has been accepted for presentation at the prestigious American Public Health Association annual conference in San Francisco in November 2012. As it is, due to competing priorities, coordination and scheduling at MOHSW continues to be a challenge. For this reason, the Central MOHSW capacity building operational plan has been delayed. However, RBHS is intensifying efforts through constant follow-up so we can reach the target deadlines.

As for PBF, the big success thus far has been the ownership of the PBF scheme by the PBF, HMIS and M&E units at the MOHSW. While RBHS played a key role, the main credit goes to the strong leadership in those units, especially the PBF unit. Other units at the MOHSW (External Aid, Pool Fund Secretariat, Procurement and Vertical Program Units) show growing interest in understanding their contribution to the success of the PBF scheme as a national model. The biggest challenge is the urgent need for simultaneous implementation of the PBF scheme at a large scale when the PBF unit barely has been put in place and needs to build its own capacity. The MOHSW PBF dashboard for the last two quarters showed a flat performance on most PBF indicators, which is not surprising given the challenges of setting up the new scheme and building the capacity of the PBF unit. But the MOHSW is learning by doing and in the 3rd quarter the performance indicators started to improve.

RBHS met with the county quality improvement team (CQIT) in Bong County, which aided in strengthening and reactivating the team. In addition, a refresher training was conducted on the dissemination of quality assurance results to health facilities and the use of the QA tools into supervision and follow up on the action points.

Among challenges in institutionalizing quality improvement (QI), though the TOR provides guidance and direction to the central QI committee to perform as required, multiple competing priorities of the MOHSW have not allowed regular meetings. Also, the integrated supportive supervision checklist is lengthy, and is expensive to use because of the cost of printing large quantities and the involvement of central level supervision. Besides, if each facility is visited every quarter, there are not enough working days for the supervisor to interact fully with the facility staff. RBHS will further assist the MOHSW to better define the methodology for integrated supportive supervision at county, district, and facility level, and simplifying the tools.

With regards to development of additional clinical standards, some challenges foreseen include the time required and as well as staff availability. As for the latter, specialists will be needed for the development and validation of the standards. RBHS will assist the Ministry in identifying those.

There were some challenges in taking on the FORECAST project due to the lack of historical knowledge of the project including financial for each participant. As a result, the management burden in supporting this project was large than we anticipated in the beginning, especially without an AED FORECAST member on staff as originally planned. However, RBHS has developed good relationships with the participants and has found this to be the best way of getting information on past practices and ensuring continuity of the systems and procedures.

Finally, some Infrastructure Unit (IU) capacity building activities were postponed due to delays in increase in obligation. Progress has been made to identify and obtain a site for the warehouse, conducting an environmental assessment, obtaining a Liberian EPA permit, and review and develop the size, and needs of the building, but at a slower pace than expected partly due to the number of partners and donors that are involved in the development of this warehouse.

Plans for Year 5

- Finalize, implement, and monitor the Central MOHSW capacity building operational plans;
- Support MOHSW PBF implementation and monitoring at county level and use of PBF data at all levels for decision making;
- Support MOHSW counter-verification per PBF manual and producing report;
- Support MOHSW in the payment of PBF performance bonuses;
- Support in implementation of HMIS and M&E strengthening plan;
- Support MOHSW training on DHIS 2 software for counties;
- Support the MOHSW in preparing guidelines and tools for integrated supportive supervision;
- Initiate the Improvement collaborative Approach to improve quality of care;
- Provide TA to MOHSW to develop, validate and pilot test the in-patient clinical standards;
- Finalize the design of the NDS warehouse and support the MOHSW in acquisition of the warehouse; and
- Support development of Building Design Standards.

Intervention 2.5: Strengthen MOHSW systems and human capacity at county level

Activities

In February 2012, RBHS conducted the assessment of the Bomi contracting a pilot in collaboration with the MOHSW, UNICEF and CHAI. The purpose was to identify and

highlight best practices and potential areas for improvement that can be replicated in other counties where the MOHSW considers arranging contracts with the CHSWT starting July 2012. A report on the Bomi contracting-in evaluation was produced in May 2012.

RBHS and MOHSW then jointly conducted the first comprehensive capacity assessments in three counties – Lofa, Nimba, and Bong – and provided technical assistance to MOHSW to issue a capacity assessment report. RBHS held workshops in Monrovia for the key staff from three CHSWTs to develop county-specific capacity building strategic and operational plans. The RBHS Capacity Building Officers (CBOs) have been working jointly with the CHSWT staff to complete the operational plans. RBHS staff assisted Central MOHSW in conducting micro-planning exercises at the county level. The CBOs and MEOs built capacity of District Health Officers (DHOs) in developing facility-level micro-plans. Following facility-level micro-plans, RBHS built the capacity of the three CHSWTs in developing annual operational plans. Senior RBHS staff traveled to the three counties and built capacity of the CHSWTs toward developing the annual county operational plans using the facility micro-plans and capacity building operational plans.

In addition to the more general capacity building activities, county-specific capacity building activities were initiated in July 2012:

- *Bong CHSWT capacity building:* RBHS and MOHSW conducted an in-depth Finance & Administration Assessment in Bong to better understand the F&A component of the CHSWT and understand their capabilities in contracting in. Financial management and procurement were identified in the Capacity Building Assessment as one of main areas that needed improvement. Therefore RBHS worked with the Office of Financial Management (OFM) of the MOHSW toward developing a financial management capacity building plan for Bong CHSWT. The CBO of Bong County provided on-site monitoring for the financial capacity building activities and assisted Bong CHSWT with completing performance appraisals of all staff. Another area of weakness was governance. The position of County Health Officer (CHO) is combined with Medical Director of Phoebe Hospital, one of the biggest referral hospitals in the country. It is therefore difficult for the CHO to assume both responsibilities.
- *Nimba CHSWT capacity building:* RBHS is building capacity of Nimba CHSWT to manage transition of PBCs from previous implementing partners to Africare. The Nimba CBO is building the capacity of Nimba CHSWT staff in inventory management, clinical supervision, and recruiting additional workforce for health facilities.
- *Lofa CHSWT capacity building:* RBHS and MOHSW jointly conducted a capacity assessment of Tellowoyan Memorial Hospital (TMH) in Voinjama, Lofa County. The purpose of the assessment is to assess the baseline capacity of TMH as referral hospital for Lofa County and assist MOHSW with developing a capacity building plan to transition TMH from IRC to the Pool Fund.

RBHS supported training of MOHSW and CHSWT implementers on a standardized work plan aligned with EPHS service delivery areas. The work plan format includes a template for the costing of activities, as well as a reporting template. Participants were also trained on setting targets using baseline data. The PBF unit, with technical support from RHBS PBF Advisor, met with the Grand Bassa County and the district health team, representatives of the Superintendent's office and the County Health and Social Welfare Board to discuss provisions in the PBF manual; especially those pertinent to tasks and responsibilities at the county level. The PBF unit, with assistance from RBHS, developed and tested PBF training materials for county level and health facilities. These materials will be used for cascaded training on the PBF scheme. Unfortunately this activity was not conducted per anticipated timetable due to delay in MOHSW disbursement of funds.

As part of the discussion and testing of the PBF training materials in Grand Bassa, the idea of the County PBF Steering Committee was well received. This committee will be broad in composition, expanded to CHSWT, county administration and other financial and technical advisors. It will provide oversight at the county level and ensures transparency and accountability of the PBF scheme at county level and safeguard the county health interest.

The PBF and M&E units at the MOHSW, with the support of RBHS, held monthly and quarterly partner meetings in this fiscal year; other departments at the MOHSW contributed to the meetings (EPI, FP, MCH, Malaria and SCM). Implementers (CHSWTs and NGOs) at the county level participated in the quarterly feedback sessions and were engaged in data review meetings for PBC Q9 through Q12.

Roll out of the revised HMIS at the county level has been achieved. An assessment of HMIS was done in Bong, Nimba, Lofa and Grand Bassa using the PRISM framework and tools in April 24- May 4 2012. The Performance of Routine Information System Management (PRISM) framework and tools were developed under the MEASURE Evaluation project and has been widely used in a number of countries. PRISM helps understand the current level of performance of HMIS and uses the findings to lay out a plan to strengthen it future. Both the MOHSW HMIS unit, Monitoring & Evaluation and Research unit and as well as CHSWT staff from the 4 county health offices participated in the assessment.

RBHS continued to work with the County Health Services Coordinator on the process of strengthening the integrated supported supervision system. A stakeholder meeting was organized in September where the RBHS team presented models and tools for strengthening the integrated supervision system. RBHS continued to strengthen the supervisory capacity of the CHSWT staff through the organization of joint supervision at all RBHS-supported facilities. RBHS staff and implementing partners conducted joint visits with the CHSWT staff.

The roll out of supply chain SOPs is spearheaded by the USAID DELIVER program. RBHS is playing a supportive role by providing DELIVER with data regarding MOHSW's capacity to manage a Logistics Management Information System (LMIS). RBHS and DELIVER worked

together to identifying areas for building capacity at the county levels with regard to supply chain management.

The Behavior Change Communication (BCC) Advisor initiated first rounds of meetings with the Bong and Lofa Community Health Department Directors (CHDDs) to discuss a “demonstration site” for implementing health promotion activities at county level. The meetings were attended by RBHS implementing partners, staff from the National Health Promotion Department and the county BCC focal persons. However, not much progress has been made on this front because of a delay in funds obligated to RBHS. Preparatory meetings for the establishment of the site are expected to resume within the first quarter of year five.

Technical assistance to CHSWTs to produce quarterly reports and use the information for planning and management of the health services is ongoing. The PRISM assessment showed that analysis and use of information is almost nonexistent at county level. One of the reasons reported was lack of adequate knowledge and skill of county HMIS staff on new DHIS 2 software. MOHSW and RBHS, hence, worked on a plan that includes a Training of Trainers (ToT) and a step down training on new DHIS 2.9 software.

In the last week of September the training curriculum and materials for county level training of DHIS 2.9 software were prepared. MOHSW and RBHS will jointly conduct step down DHIS 2.9 software training for counties in year 5.

Results

One of the main results of RBHS in Year 4 is the launch of comprehensive effort in close collaboration with the central MOHSW to build capacity of both central and county levels to assume appropriate roles and responsibilities in the context of a decentralized health system, where health services are managed by the CHSWTs.

As a first step RBHS and MOHSW jointly completed the first comprehensive capacity assessment of the three focus CHSWTs – Lofa, Nimba, and Bong. The assessments provide valuable information regarding the current capacity of CHSWTs across the six building blocks of the health system. The assessments showed that all three CHSWTs have common capacity gaps in the areas of financial management, supply chain management, and leadership and governance. The assessments also served as a capacity building exercise where RBHS trained key MOHSW staff on conducting a system-wide assessment. This allowed the MOHSW team to independently conduct a capacity assessment of Grand Bassa County after receiving training and tools from RBHS.

RBHS and MOHSW jointly prepared a comprehensive capacity assessment report which provided the baseline information for the planning workshops. These workshops resulted in the development of strategic and operational plans to build capacity across three CHSWTs.

County-specific operational plans have been developed by each CHSWT with technical assistance from RBHS, and were integrated in the annual county operational plans. Examples of county specific capacity building activities are:

- *Bong CHSWT*: RBHS assisted with building financial management capacity of Bong CHSWT, in order to prepare them for contracting in . Following an intense two month initiative, Bong CHSWT had fulfilled 6 of the 8 criteria identified as essential to be able to manage PBCs. Besides building capacity in financial management, RBHS provided technical assistance to MOHSW to revise the organizational structure of Bong CHSWT to reflect integrated supervision; and
- *Nimba CHSWT*: As a result of the support provided by the RBHS, Nimba CHSWT has been able to complete the inventory check and hire additional staff for the health facilities.

The PRISM HMIS assessment showed strengths, weaknesses and gaps of the HMIS both at county health office and health facility levels. Major strengths of the HMIS in Liberia included availability of standardized ledgers and integrated reporting forms, established reporting channels and timelines, and District Health Information System (DHIS) software installed and in use at the county health offices. However, there is limited capacity to perform data quality assurance and data analysis in the county health offices and health facilities.

DHIS Training



Even if DHIS2 can provide data analysis options, the monitoring and evaluation staff is not able to access all aspects of it. Though performance targets have been set and monitoring plans were developed, they are not actively used for monitoring facility performance.

Regarding county reporting, data accuracy ranges from 38% in August 2011 to 46% in February 2012. 91% of the health facilities submitted monthly report to the county health offices, and 75% of them were submitted within the reporting period. Evidence of use of HMIS findings in routine meeting discussions and decision making process were observed in less than 39% of the facilities (See Table 3 below)

Table 3:

Data elements	Weighted Average		# of health facilities with matched data items between register/ledgers and report Decision Rule = 12 (75%), Sample Size =19							
			Bong		Nimba		Lofa		Grand Bassa	
	August 2011	February 2012	Aug. 2011	Feb. 2012	Aug. 2011	Feb. 2012	Aug. 2011	Feb. 2012	Aug. 2011	Feb. 2012
ANC4	41%	61%	7	8	7	13	10	15	6	6
Penta3	36%	50%	7	10	11	9	4	11	4	7
PHC head count	67%	54%	13	11	14	14	13	9	9	4
Normal deliveries conducted at health facilities	63%	80%	17	17	9	14	14	16	9	14
Children under 5 treated with ACT	50%	59%	10	12	11	12	8	12	9	7
Number of family planning pills (all types) dispensed	38%	58%	7	11	6	13	11	12	3	5
All 6 data elements	38%	46%	7	7	9	12	7	9	4	4

The capacity assessment has enabled RBHS to engage the Infrastructure Unit (IU) in discussing and planning activities to support and building its capacity for RBHS project year 5. Working with the IU, RBHS developed a Maintenance Inventory Instrument to assess the current conditions of existing MOHSW facilities. This was presented to the Deputy Minister of Administration and awaiting approval.

Successes, challenges and constraints, and lessons learned

RBHS is now seen as the leader in capacity building at the county level. We have been requested by MOHSW to conduct capacity assessment exercises in non-RBHS counties. Besides the MOHSW, partners and NGOs regard RBHS as a leader in capacity building. International organizations such as Merlin and IRC have requested feedback from RBHS regarding their capacity building activities at the County level.

But huge challenges and constraints lie ahead for RBHS. As mentioned earlier, roles and responsibilities within a decentralized county managed health services system for both central and county levels need to be fine tuned and acknowledged by all stakeholders. Most county health teams have limited financial management and procurement capacity

Implementation of the PBF scheme on a large scale in the counties has to occur at a time when the PBF unit at central level is barely put in place and still needs to build its own

capacity before it can efficiently support the counties. Additionally, the implementation of tools for a harmonized scaling up at county level has not been finalized. Though PBF orientation sessions were conducted in 7 counties in the summer of 2011, most health workers at health facilities/clinics have limited knowledge of PBF components relevant to their work, such as the baseline and targets of performance indicators for their facility.

Deplorable road conditions make it a challenge to travel to the counties during the months of June – October, taking toll on staff and vehicles. However, MOHSW and RBHS staff have braved the tough road conditions and carried out most of the planned activities.

Plans for year 5

- Finalize capacity building operational plans for Central MOHSW and CHSWTs;
- Finalize the recruitment process for a RBHS capacity building officer (CBO) in Lofa;
- Develop performance indicators for capacity building interventions and monitor indicators throughout the implementation process;
- Support MOHSW in the implementation of integrated supervision;
- Support USAID-DELIVER in rolling out LMIS and building capacity of CHSWTs in reporting using LMIS;
- In depth orientation and training of CHSWTs by the MOHSW PBF unit, with support from RBHS on the implementation arrangements and the use of tools conceived to facilitate management of PBF scheme;
- Re-energize county health board and assist in effective operationalization of county PBF steering committee;
- The PBF and M&E units at the MOHSW, in collaboration with RBHS, plan to strengthen CHTs ability to use collected data to achieve performance targets at the county level;
- Pilot test the Maintenance Inventory Instrument in Lofa the first quarter of Year 5. After the pilot test adjustments will be made to improve the inventories' usefulness.
- Conduct maintenance inventories in Nimba and Bong Counties;
- Build capacity of MOHSW to apply the Maintenance Inventory Instrument and record the status of MOHSW facilities country wide; and
- Provide technical assistance to the IU to develop long term and annual plans and budgets to prioritize maintenance and repair needs beginning in the MOHSW's next fiscal year and continuing into the future.

Success Story

Local Registrar Tames the Medical Record Filing System

Jerry Yakpawolo works as the only registrar at Botota community clinic in a rural area of Bong County. This hardly spacious clinic is over-crowded on a daily basis as it cares for an average of 60-72 patients per day. Jerry spends most of his time unsuccessfully searching for patients' medical records within a disorganized filing system. Often, Jerry can't locate the record, which means the patient loses all of his or her medical history and must re-register as a new patient. All of this leads to hours of waiting time, lost medical records containing important information, and lots of frustration. Jerry explains, "The number of missing records is becoming overwhelming. The resulting wait time really limits the number of patients we can see per day."

The County Health Officer heard about the problem and recognized it as a challenge for not just one single facility but the entire county. In response to this problem, the USAID-funded Rebuilding Basic Health Services project built special cupboards for each health facility in the county that can organize files in many small compartments. In addition, each cupboard has a secure door, padlock, and key, so patients' personal records can be locked safely inside to ensure privacy. All 39 health facilities in Bong County, as well as the county's three hospitals, now have a secure place for storing records and other important data. This is just one of the ways that the Rebuilding Basic Health Services project is working to improve the quality of health services in Liberia, strengthen the country's health system, and promote healthy behavior.



As a result, Jerry happily reports that patients' wait time has decreased, and the clinic is able to see significantly more patients. "Our clinic can now serve patients better and quicker, which makes staff and patients happy! Also, the patients now have greater peace of mind knowing that their personal medical information is secure in the cupboard."

Intervention 2.6: Strengthen and assist in roll-out of the National In-Service Training Program

Activities

RBHS assisted the Training Unit to conduct a stakeholder meeting to establish an operational interdepartmental Training Working Group in the MOHSW. In continuation of this strengthening process, an open consultation with MOHSW programs and its partners was held to clearly define the roles and responsibilities of the Training Unit and its relationship to the Planning Department and Health Services Department. Thirty one stakeholders and partners from MOHSW, Africare, ICRC and MELIN, including Dr. Bernice Dahn, Deputy Minister /Chief Medical Officer participated in the workshop. The goal of the workshop was to strengthen the Training Unit to effectively implement its activities. At the workshop, the stakeholders developed an outline of the roles and responsibilities for the Training Unit.

Results and challenges

Stakeholders and MOHSW agreed at the Stakeholder's meeting that the Training Unit needs technical, budgetary, logistical, and cooperative support from MOHSW departments and partners.

Several planned activities with the Training Unit were not implemented due to a number of reasons including: no clear roles and responsibilities for the unit; no budget to implement its activities; no training director, no office, and no training materials and equipment; need for coordination and commitment from MOHSW programs and finally there are no regional training sites.

Plans for Year 5

- Assist TU to develop training information management system (TIMS) and training data base;
- Work with TU to roll out TIMS and training data base;
- Assist TU to develop a module on interpersonal communication (IPC) that can be integrated into other trainings;
- Assist TU to identify and upgrade skills of county-level trainers in RBHS supported counties; and
- Assist TU to conduct training on integrated in-service module in RBHS-supported counties.

Intervention 2.7: Improve environmental health at facilities and hygiene practice in communities

Activities and Results

Water sources at RBHS supported health facilities

Three new boreholes were successfully completed 2 at EBSNM/Curran in Lofa, and one in Bensonville, Montserrado. Two of the three were re-drilled by the contractor at no added cost to RBHS to meet the contracts specifications.

RBHS has been doing a lot of coordination work with CHF on water supply. Three boreholes were drilled by CHF in coordination with RBHS at Gbalatua, Yila, and Tokpaipolu in Bong County. Two are working with hand pumps and CHF is working to repair the surface water runoff into the third borehole. RBHS also coordinated with CHF in Nimba County the drilling of 3 boreholes at RBHS facilities in Bania, Kaptuo, and Zorgowee. All three have hand pumps installed. Kaptuo needs repacking to eliminate turbidity. At Zorgowee CHF is working to install a submersible pump. A fourth borehole for K.L. clinic has been postponed pending a decision on relocating the clinic to another site.

RBHS worked with CHF to repair or develop water sources at seven facilities in Lofa County. See Table 4 for the overall water results at all RBHS facilities.

Sanitation facilities at RBHS supported health facilities

Indoor bathrooms with piped water from new bore holes and septic systems were completed at the EBSNM Dormitory, Maternity ward, and the Staff house. The same system is currently being installed in the EBSNM classroom building.

RBHS also provided indoor bathrooms in all basic and comprehensive EmONC facilities in Fishtown, River Gee; Bensonville, Montserrado, and Konia in Lofa. PIV Latrines were also repaired or built at renovations at Bensonville, Konia, Gbanway, Fissebu, Balakpalazu, Bazigizia, and Balaguwalazu in Lofa.

RBHS partners repaired or constructed VIP Latrines at RBHS supported facilities. To date 109 out of 115 facilities (95%) have functioning VIP latrines.

Upgrade medical waste management

RBHS's medical waste management includes incinerators, waste pits, placenta pits, and sharp pits. RBHS provided these facilities at those health facilities being renovated directly by RBHS contractors. RBHS renovated waste facilities at nine clinics during the year. At the remaining RBHS health facilities the construction or rehabilitation of waste facilities was undertaken by the partners. Please see Table 4 below for the current status of water, waste, sanitation at all RBHS Facilities.

RBHS attended two waste management meetings organized Environmental Health Department of MOHSW. Like the IU task force meetings attendance at these is low and attributed to the lack of goals and purpose of the meetings.

Table 4: RBHS FACILITIES - Water Sanitation, Waste Management and Solar Refrigerators								
September 30, 2012								
County/Partner	# of Facilities	Water Source On Site	Incinerator	VIP Latrine	General Waste Pit	Sharp Pit	Placenta Pit	Solar Refrigerator
Nimba Equip	23	23	23 of 23	23 of 23	23 of 23	23 of 23	23 of 23	22 of 23
Nimba IRC	16	16	16 of 16	14 of 16	16 of 16	16 of 16	16 of 16	14 of 16
Lofa IRC	20	17	17 of 20	20 of 20	20 of 20	20 of 20	20 of 20	20 of 20
River Gee Merci	15	7	13 of 15	12 of 15	15 of 15	2 of 15	14 of 15	11 of 15
Cape Mount /Bomi MTI	25	25	25 of 25	24 of 25	25 of 25	23 of 23	25 of 25	18 of 25
Bong Africare	16	16	16 of 16	16 of 16	16 of 16	16 of 16	16 of 16	16 of 16
Total	115	104	110	109	115	100	114	101
Percent Complete		90%	96%	95%	100%	87%	99%	88%

Environmental impacts caused by RBHS activities, e.g. renovation of health facilities

EMMP training was undertaken with contractors at the beginning of all new renovation activities including Mega Construction and Space Design at the EBSNM Electric and Water rehabilitations respectively, and West Construction at clinics in Lofa County. RBHS conducted environmental inspections and reviewed the contractor’s environmental practices during each supervisory site visits.

RBHS worked with the IU/MOHSW to submit an Environmental Review Report, Environmental Review Form, and Environmental Mitigation and Monitoring Plan to USAID for the proposed NDS Warehouse. RBHS and MOHSW worked jointly to obtain an EPA Environmental Permit for the warehouse. The Liberian EPA issued an Environmental Permit for the warehouse at the NIC site on June 29, 2012.

Successes Challenges and Constraints

RBHS success in water, waste, and sanitation facilities can be seen in Table 4, as all targets have been achieved. The MOHSW CHSWT’s have been trained and equipped to test water quality by UNICEF and CHF. Their ability to perform water quality tests is limited by

availability of parts and supplies only available from the MOHSW Environmental Health Department (EHD). RBHS was finally successful in coordinating between River Gee and Lofa counties and the EHD after months of trying to facilitate the transfer of water quality testing supplies to the counties without success.

There is a lack of reliable, experienced drilling and water contractors with the capacity to successfully drill and complete water/borehole in Liberia. Careful research and reference checking is crucial to verify the facts and statements made by potential bidders. Geophysical surveys must also be prepared to help ensure a successful project is achievable. Monitoring, supervision and yield testing is important to ensure the borehole meets the standards defined by the contract.

Piping water into a building requires a system to dispose of the waste water, which adds operation and maintenance costs that need to be considered. Therefore this may not be the best option for small facilities which should only have a hand pump. Due to the operation costs (fuel/oil) and maintenance (spare parts) and technical capacity, we suggest that pumps requiring electricity only be installed when the need is very strong, such as for a basic or comprehensive EmONC or Hospital.

Medical waste disposal and sanitation standard were successfully upgraded by using and distributing standard designs to the partners. Supervising their installation is also important in the case of VIP latrines and incinerators. Once facilities have completed installation, proper operation, use and maintenance must be taught and followed up through supervisory visits by the clinical supervisors.

Plan for Year 5

- Work with CHF to complete the outstanding water source improves in Nimba, Lofa and Bong Counties;
- Work with borehole contractors to complete 2 – 4 bore holes in River Gee County River Gee County as road conditions allow. Some may not be accessible by road for the drilling equipment. If road conditions to River Gbey do not permit a drilling rig to reach the clinic, a hand dug well will be completed;
- Complete the sanitary facilities at EBSNM Classroom building, and Nimba renovations;
- Coordinate with CHF to complete VIP latrines in Gorlu and Balaguwalazu in Lofa;
- Complete renovation or installation of waste management facilities at six facilities in Nimba and one in Lofa County; and
- RBHS will continue to monitor adherence to EMMP by partners and contractors as part of RBHS's Monitoring and Supervision activities.

Monitoring and Evaluation

Revision of M&E plan

In year 4, RBHS revised the monitoring and evaluation plan based on the revised project description approved by USAID Liberia. As per the revised project description and special annex, RBHS project underwent substantial changes. RBHS' role changed from direct service delivery to a focus more on capacity building. These major changes required a review of the overall project indicators. In addition, it was also recommended by LMEP that RBHS draw up a performance monitoring plan. The changes in the project were taken into consideration in reviewing the project M&E plan.

RBHS developed a revised results framework with two intermediate results. As RBHS aimed to focus on capacity building, the revised M&E plan tried to expand the indicators on capacity building. In line with the scope for the revised M&E plan, some of the indicators were dropped and some new ones added.

At the same time, the USAID reportable indicators were also revised. Two tables were developed; one of those tables is the general M&E table that shows a list of indicators with numerator and denominator definitions, baseline values, current levels values, and end of project target values, as well as data sources; and the other is the performance monitoring plan table (PMP) that elaborates on the M&E plan by giving annual targets and providing space to update the achievements annually. There are 13 core indicators that are in line with USAID, GHI and MOHSW M&E indicators. These indicators represent service delivery and health system performance indicators. The rest of the indicators were organized by IR and intervention area.

Monitoring

RBHS continued monitoring the project performance by using PBC data submitted by partners quarterly. The data were compiled every quarter and analytical charts were prepared, shared and discussed with PBC partners and RBHS staff during quarterly data review meetings. A quarterly dashboard was also prepared with key results and distributed to stakeholders.

RBHS county coordinators continued to monitor field implementation of the various NGO PBC activities in the counties. They visited health facilities to verify infrastructure as well as quality of the services provided. Their observations and feedback were shared with CHSWTs and NGOs. County coordinators also conducted quarterly data validation visits at selected health facilities. RBHS staff, in coordination with NGO partners, provided technical support to the CHSWTs in the implementation of national priority health campaigns such as polio vaccination, measles vaccination, and vitamin A distribution.

RBHS worked with the MOHSW PBF unit and USAID on the baseline assessments of health facilities which was done prior to the award of the FARA PBF contracts in the counties. RBHS earlier provided support in the development and testing of the data collection tools.

Evaluation

The status of RBHS performance indicators against the targets for Year 4 is captured in Annex 1. Among the 13 core indicators, data for 10 indicators are available. Of the 10 indicators, five indicators met the targets: (1) Penta 3 coverage; (2) number of facilities with Certified Midwives; (3) facilities with no stock out of tracer drugs; (4) timeliness of HMIS reporting; and (5) average quality standards scores. Three other indicators were within 10% of the targets: (6) births assisted by skilled birth attendants; (7) pregnant women who had IPT2; and (8) per capita curative consultation. Two indicators namely the number HIV positive pregnant women who initiated on ARV prophylaxis, and the TB case notification rate failed short of target by more than 10%.

The achievements against the targets for the remaining other 58 indicators can also be found the annex 1. Of those, 36 indicators met the targets, 7 failed by small margin and 9 failed by bigger margin (more than 10%). Data was not available for 9 indicators because these indicators are population based, and the project could not do any survey in the reporting period. Overall, of the 62 indicators for which data was available, 41(66%) of indicators met the target and additional 10 (16%) indicators almost met the targets.

Research and Surveys

RBHS has done three analyses of the various health data to see if there are differences between health facilities that managed through the RBHS PBC and those facilities directly managed by the county health teams. The analyses were the following:

Comparative Analysis of 2012 accreditation survey of health facilities

In 2012, the MOHSW adopted new set of accreditation data collection tools to include quality assessment tools for health service. The quality assessment tools were pilot tested and were being used by RBHS. Findings from current MOHSW accreditation show that RBHS facilities scored on average 82% in health infrastructure and support systems which is 7% higher than non-RBHS facilities in the country. On the health service quality, RBHS facilities score on average 48%, which is 14% higher than non-RBHS facilities. On the overall score as well, RBHS scored 11% points higher than non-RBHS facilities. This is a good indication that the RBHS PBCs had a positive and perceptible impact on health service performance.

Comparative analysis of HMIS data

Data sets were obtained from MOHSW HMIS unit for the past three years containing information on all facilities in the county. In order to see the comparative coverage, facilities were coded as RBHS and non-RBHS. RBHS managed 110 RBHS facilities out of a total of 200 in the five counties where RBHS worked. Bomi and Montserrado were excluded from analysis because only four facilities were RBHS supported in those counties.

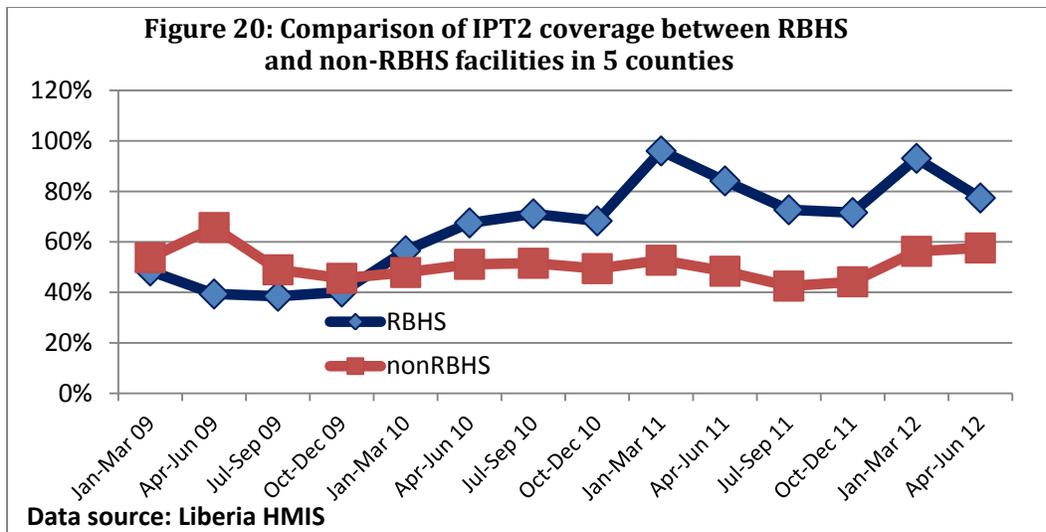
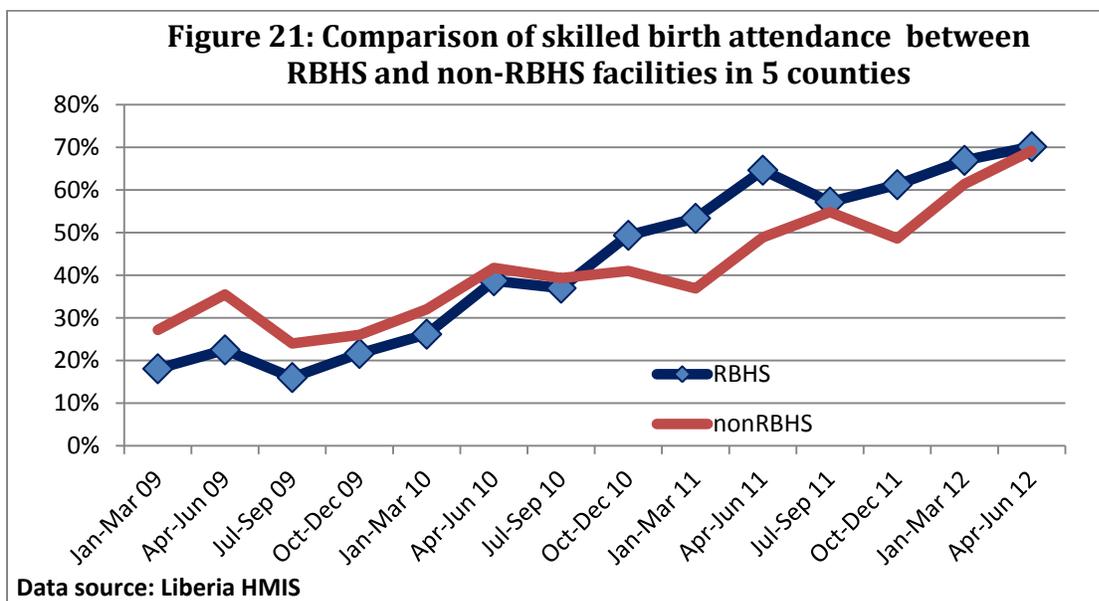


Figure 20 shows that IPT2 coverage in RBHS facilities was low in the beginning and gradually picked up and was consistently higher than in non-RBHS areas; while the IPT2 coverage in non-project areas has remained stagnant.

Figure 21 below compares skilled birth attendance coverage between RBHS and non-RBHS facilities. RBHS coverage was initially lower than in non-RBHS facilities, but by the end of 2010, RBHS facilities caught up and remained higher than non-RBHS facilities. However, in 2011, non-RBHS facilities also dramatically improved thereby catching up to the RBHS supported facilities. One of the reasons for the high rate at both RBHS and non RBHS facilities can be that since this indicator is a globally recognized MDG indicator, everybody is committed to improving it. Another explanation can be what is called a “spillover” effect which is caused because RBHS facilities are not isolated from non RBHS facilities.



Secondary analysis of LMIS data

The Liberia malaria indicator survey (LMIS) was completed in early 2012. RBHS, at the request of USAID, did a secondary analysis on the IPT2 data to disaggregate into RBHS and non-RBHS areas. Hence RBHS obtained the full dataset from MEASURE DHS. The survey covered 150 clusters, out of which 26 clusters were from RBHS project catchment areas.

According to the results, 73% of pregnant women from RBHS areas in comparison with 63% of pregnant women in non-RBHS areas received the first intermittent preventive treatment (IPTp), a minimum of 2 doses are recommended. The finding shows that 60% of women in RBHS areas took 2 doses while only 50% of women in non RBHS areas took the 2 doses. While the data shows that the RBHS coverage is higher than the non-RBHS, there is however, some conflicting figures from the survey and HMIS data. It is recommended that caution be taken to estimate the real level of coverage, because both survey and administrative data sources have limitations. One of the limitations is that the RBHS health facilities are not adequately represented in the 26 clusters. Another is that the HMIS data is likely to be over reported as well.

Quarterly M&E training

RBHS in collaboration with the MOHSW M&E Unit conducted an M&E training for a group of M&E officers and data managers from CHSWTs and 5 NGO partner. This skills building workshop focused on three topics: 1) using MS Excel spreadsheet to design facility tracking sheets; 2) using DHIS data in MS Excel for analysis; and 3) training on developing health facility monitoring plans.

Review meetings and reporting

RBHS held regular review meetings with county coordinators and NGO M&E Officers to better understand the reality in the field. These meetings provided opportunities for field staff and headquarter staff to discuss ongoing project activities and provided opportunities for communication and coordination.

Documentation and dissemination

Realizing that RBHS is close to the final year of implementation, RBHS developed a project documentation and dissemination strategy to guide the process.

The most important activity was the PBC dissemination workshop held on October 9 (see also under IR1.1). The meeting was attended by over 100 persons from the MOHSW, USAID, 11 CHOs, all RBHS partners, UN agencies, other donors and other USAID projects. The purpose of the workshop was to share lessons learned on PBC management with the MOHSW and other counterparts.

Future Directions

Consistent with wider reform of US government foreign assistance, the USAID in-country strategy for Liberia has evolved significantly. This strategic shift led to a closer alignment with the Liberian government priorities and policies. It also has the potential to channel more financial resources directly through the MOHSW. This new approach was captured in the Fixed Amount Reimbursement Agreement (FARA) which was signed in September 2011 between the United States Government and the Government of Liberia.

As a result, RBHS will be working closely with the MOHSW on the implementation of the FARA in USAID focus counties and health facilities. The main interventions to be undertaken by RBHS in the coming year related to these strategic changes will include:

RBHS' role in FARA implementation

RBHS will increasingly work with the MOHSW on the implementation of the FARA activities. RBHS is an active member of the FARA Steering Committee that meets weekly to discuss progress and assist with the preparation of the quarterly deliverables. The RBHS team will continue to provide technical assistance for the implementation of the FARA activities. RBHS will also assist USAID with the validation of the FARA deliverables. One of the main areas of focus for year 5 will be the support by RBHS to the MOHSW to effectively manage the new PBCs.

RBHS' role in Performance Based Contracting (PBCs)

By the end of June 2012, RBHS closed all PBCs with the NGO partners and worked with the MOHSW to transition the management of the PBCs. In Lofa county, the MOHSW awarded a new PBC to IRC, based on a competitive bidding process. In Nimba County, the MOHSW also awarded a new PBC to Africare based on a competitive process. In Bong and Grand Cape Mount counties, the MOHSW has granted a six-month extension until December 31, 2012 to the current NGO partners, Africare and MTI respectively.

As Bong County was being considered for contracting-in PBC, the MOHSW appointed a team to work with the Bong County Health and Social Welfare Team (BCHSWT) for three months and then determine if the BCHSWT would be ready for contracting-in PBC. While the BCHSWT made significant improvement in meeting the targets, there were some crucial areas that still needed improvement. Based on the team report, the FARA steering committee decided that BCHSWT need more time to bridge the gaps. RBHS will continue the support to strengthen the capacity of both the central MOHSW and the BCHSWTs for possible contracting-in.

Comprehensive capacity building

Project Year 5 will be crucial in implementing a massive capacity building effort, based on the initial baseline needs assessment conducted in year 4 and the strategic and operational capacity building plans. These plans will inform the work to be carried in the next year. It will be very important to further clarify roles and responsibilities of the central MOHSW versus the CHSWTs within the context of a de-concentration of the health system to the county level. While the central

Annex 1: RBHS Indicator Status Report – June 30, 2012

No.	Indicator	End of Project		RBHS Year 4 Achievement		Male	Female	Comments
		Target	Year	Year 4 Target	Achievement (July 2011-June 2012)			
				Number	Percent			
Strategic Objective: Increased Use of Basic Health Services								
1	% of deliveries in facility by a skilled birth attendant (SBA)	65%	2013	65%		63%		
2	% of women 15-49 currently using modern contraceptives	15%	2013		NA			Survey was not done in reporting period
3	% of children under 1 year who received pentavalent-3 vaccination	90%	2013	90%		112%		
4	Utilization rate (new curative consultations per year per capita)	1.0	2013	1		0.91		
5	% of pregnant women provided with 2 nd dose of IPT for malaria	90%	2013	90%		81%		
6	Number of HIV positive pregnant women who are initiated on ARV prophylaxis	300	2013	200	117	59%		
7	% of women and men age 15-24 reporting having sexual intercourse and using a condom during the last intercourse	10% (F) 20% (M)	2013		NA			Survey was not done in reporting period
8	Case notification rate (CNR) in new sputum smear positive pulmonary TB cases per 100,000 population	75	2013	160	83	52%		
9	Number of facilities with certified midwife	95%	2013	92%		93%		It includes CM and equivalent (RN)
10	% of facilities with no stock-out tracer drugs during the quarter (amoxicillin, cotrimoxazole, paracetamol, ORS, iron folate)	95%	2013	92%		97%		

11	[# and] % of timely, accurate and complete HIS reports submitted to the CHT during the quarter	95%		95%		96%			
12	% of facilities reaching two-star level in accreditation survey	25%	2013	18%		0%			
13	% average quality standard scores	50%	2013	45%		48%			MOHSW accreditation survey 2012
<i>IR 1: Increased access to basic health services through improved provision of quality health services and adoption of positive health behaviors</i>									
<i>Intervention 1.1: Increase number of health facilities providing full range of BPHS, supported by performance-based financing</i>									
14	% of facilities reaching one-star level in accreditation survey	80%	2013	80%		5%			Facilities scoring at least 80% score
15	% of all OPD patients for whom no more than 3 drugs are prescribed (random sample)	95%	2013	88%		93%			
16	% of NGOs submitting timely and complete quarterly report to RBHS project	100%	2013	100%		96%			
<i>Intervention 1.2: Expand service delivery to communities</i>									
17	% of facilities whose CHDCs held at least 3 meetings in last quarter	95%	2013	95%		99%			
18	% of gCHVs who received at least 1 supervision visit in last quarter	90%	2013	90%		97%			
19	Number of children treated through iCCM annually	12,000	2013	11,000	14,183	129%			
20	Amount of CYP distributed by gCHVs	318	2011	500	978	196%			
<i>Intervention 1.3: Increase access to comprehensive maternal, neonatal, and child health (MNCH) services</i>									
21	Number of child pneumonia cases treated with antibiotics during the quarter	36,000	2013	35,000	42,041	120%			
22	% of women receiving AMTSL who delivered in health facility by SBA	17,000	2013	16,000	16,321	102%			
23	% of newborns receiving essential newborn care who were born in health facility by SBA	17,000	2013	16,000	15,648	98%			

24	% of pregnant women having at least 4 antenatal care (ANC) visits with skilled providers	85%	2013	85%		82%			
<i>Intervention 1.4: Increase uptake of three critical malaria interventions: treatment with ACT, preventive treatment of pregnant women, and sleeping under ITNs</i>									
25	Number of children under 5 treated with Artemisinin-based Combination Treatments (ACTs)	155,000	2013	150,000	121,338	81%			
26	% of facilities with no stock outs of ACT drugs	85%	2013	75%		43%			Stock out of child doses in Q12
<i>Intervention 1.5. Increase access to quality HIV/AIDS and TB services, with an emphasis on prevention</i>									
27	Number of people who received HIV counseling and testing and received their test results	23,000	2013	22,000	30,970	141%			
28	Number of adults and children with advanced HIV infection receiving ART	350	2013	300	232	77%			
29	Number of eligible adults and children provided with a minimum of one care service	817	2013	700	534	76%			
30	Number of targeted population reached with individual and/or small group HIV prevention interventions that are based on evidence and/or meet minimum standards	100,000	2013	90,000	73,020	81%			
31	Percent of registered new simea-positive pulmonary TB cases that were cured and completed treatment under DOTS (i.e. Treatment Success Rate)	85%	2013	85%		89%			
32	Percent of the estimated number of new smear-positive pulmonary TB cases that were detected under DOTS(i.e. Case Detection Rate)	73%	2013	73%		52%			Case detection is low because community DOTs are being called up
33	% of men and women aged 15 to 24 in target areas who correctly identify 3 ways of prevention transmission of HIV	60% (F), 70% (M)	2013		NA				Survey was not done in reporting period

34	% of men and women aged 15 to 24 in target areas who report being able to negotiate condom use with their partner	25% (F), 30% (M)	2013		NA				Survey was not done in reporting period
<i>Intervention 1.6. Increase access to comprehensive family planning and reproductive health (FP/RH) services</i>									
35	% of service delivery points providing FP counseling or services (pills, IUD, implants, voluntary sterilization), by type of service	95%	2013	95%		99%			
36	Number of counseling visits for FP/RH	50,000	2013	50,000	58,014	116%			
37	Couple-years of contraceptive protection provided by RBHS-supported facilities	13,000	2013	12,000	18,177	151%			
38	Percent of audience who recall hearing or seeing a specific USG-supported Family Planning or Reproductive Health Message	75%	2013	70%	NA				Survey was not done in reporting period
39	% of men and women aged 15 to 24 in target areas who know a modern contraceptive that can prevent pregnancy	15% point from baseline	2013		NA				Survey was not done in reporting period
40	% of men and women aged 15 to 24 in target areas who know the sign and symptoms of STI	10% point from baseline	2013		NA				Survey was not done in reporting period
41	Percentage of health facilities with no stock out of family planning methods	85%	2013	75%		82%			Only adhoc monitoring done
IR2: Increased quality of health services through improving infrastructure, health workforce and system performance by enhancing capacity to plan, manage, and monitor a decentralized health system									
<i>Intervention 2.1: Enhance TNIMA and Zorzor learning environments and resources</i>									
42	Number of nursing schools renovated by RBHS	2	2012	1	1	100%			
<i>Intervention 2.2: Improve nursing school staff capacity to utilize modern teaching methods and manage health training institutions</i>									
43	Number of participants enrolled in pre-service training activities	970	2013	245	325	133%			
44	Number of schools whose capacity is assessed and plan developed for improvement	5	2013	3	5	167%			
<i>Intervention 2.3: Update and strengthen PA, RN, EH, and CM curricula</i>									

45	Number and type of updated curricula approved by MOHSW	4	2012		5			
46	Number of schools adopting improved curriculum	7	2012	7	9	129%		
47	Percentage passed on new curriculum by various schools	75%	2013	60%		NA		First graduation on approved course in 2014
<i>Intervention 2.4: Strengthen MOHSW systems and human capacity at central level</i>								
48	Number of policies or guidelines developed or changed to improve access to and use of Basic Health Services	40	2013	38	55	145%		
49	MOHSW supervision SOP reviewed, validated and implemented	2	2013	1	1	100%		
50	MHOSW Quality Improvement unit institutionalized	3	2013	1	1	100%		
51	MOHSW PBF operation guide developed and implementation supported	3	2013	1	1	100%		
52	MOHSW PBF M&E plan developed and implementation supported	3	2013	1	1	100%		
53	MOHSW PBF Bonus strategy developed and training provided	3	2013	1	1	100%		
54	Number of MOHSW and stakeholder trained on data validation	3	2013	1	1	100%		
55	MOHSW HMIS and M&E strengthened with training on use of information and institutionalization of feedback system	3	2013	1	0	0%		In complete transferred to Year 5
56	Number of people who completed the training/academic courses supported by FORECAST scholarship	46	2012	49	47	96%		
57	Design standards and project delivery guidelines for both new construction and for renovations developed and validated.	2	2012	1	0			Transferred to year 5
58	Capacity assessment undertaken and strategic plan and M&E plan developed for central MOHSW	1	2012	1	1	100%		

59	Updated MOHSW human resource policy and plan	1	2013		0				Transferred to year 5
<i>Intervention 2.5: Strengthen capacity of CHTs to manage decentralized health system</i>									
60	% of facilities that received at least 2 joint supportive supervision visits in last quarter	90%	2013	90%		99%			
61	% of facilities that received at least 3 supportive clinical supervision visits in last quarter	90%	2013	90%		99%			
62	[# and] % of timely, accurate and complete HIS reports submitted to the CHT during the quarter	95%		95%		96%			
63	Number of people trained in monitoring and evaluation	495	2013	150	70	47%			
64	Number of CHT staff trained in PBF data validation	185	2013	50	70	140%			
65	Number of county for which capacity assessment undertaken and capacity building operation plan and M&E plan are developed	3	2013	3	3	100%			
66	Number of counties with strengthened human resource management	3	2013		0				Transferred to year 5
<i>Intervention 2.6: Strengthen and assist in roll-out of National In-service Training Program</i>									
68	Number of health facility staff trained in programmatic areas (HCT, PMTCT, HIV prevention, Malaria, IPT, MNH, Child health and nutrition, FP/RH, TB)	255	2013	908	1,383	152%			Target revised considering partners training
	Maternal and newborn health					263	88	175	
	Child health and nutrition					422	304	118	
	Malaria					289	246	43	
	PMTCT					81	27	54	
	HIV counseling and testing					108	51	57	
	TB					220	166	54	
						1383			

<i>Intervention 2.7. Improve environmental health at facilities and hygiene practices in communities</i>									
71	% of facilities adhering to proper medical waste disposal (solid waste, sharps, infectious waste, latrines)	90%	2012	90%		100%			
72	% of facilities with adequate infection control standards (water and soap, gloves, high level disinfection and/or sterilization of equipment, etc)	90%	2012	90%		100%			
73	% of facilities with operating hand pump or an equivalent safe water source	90%	2012	90%		97%			
74	Number of liters of water disinfected with point-of-use treatment	1,750,000	2012	350,000	566,352	162%			

Annex 2: RBHS participation in National Committees, Working Groups, and Task Forces

Topics	RBHS contributor
Child Health Task force	Rose Macauley
Community Health Coordination committee	Catherine Gbozee
Decentralization Working group	Bal Ram & Vamsi Vasireddy
Education and Training National Working Group	Marion Subah & Nowai Johnson
FARA Steering Committee	Rose Macauley, Theo Lippeveld, Floride Niyuhire
Health Financing Task Force	Rose Macauley & Zaira Alonso
Health Promotion Working Group	Marietta Yekee, Teah Doegmah
Health Sector Coordinating Committee	Rose Macauley
Human Resource Technical Committee	Marion Subah
Laboratory Technical Working Group	Marion Subah, Lauretta Nagbe & Sarah Hodge
Malaria Indoor Residual Spraying Task Force	Marietta Yekee, Theo Lippeveld
Malaria Partners	Marietta Yekee, Theo Lippeveld
Malaria Steering Committee	Marietta Yekee, Theo Lippeveld
Maternal Neonatal Mortality Reduction Technical Committee	Marion Subah, Rose Macauley
Mental Health Technical Coordinating Committee	David Franklin
Monitoring and Evaluation Coordination Committee	Bal Ram
Monitoring, Evaluation, and Research Technical Working Group	Bal Ram Bhui

Topics	RBHS contributor
National Nutrition Coordination Committee	Rose Macauley, Catherine Gbozee & Sarah Hodge
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	Theo Lippeveld, Vamsi Vasireddy
World AIDS Day Planning Committee	Lauretta W. Nagbe
Community Case Management Technical Working Group	Catherine Gbozee
PMTCT Technical working Group	Lauretta W. Nagbe, Marion Subah
PBF Technical Team	Bal Ram Bhui, Floride Niyuhire
Environmental Health Waste Management Task Force	Joe Moyer
Reproductive Health Laws Drafting committee National HIV/TB technical working group	Marion Subah Lauretta W. Nagbe
Capacity Assessment Core Group	Vamsi Vasireddy
Bong CHSWT Capacity Building Roadmap Committee	Vamsi Vasireddy, Zaira Alonso
Stop TB technical committee	Lauretta W. Nagbe

Annex 3: RBHS Contributions to National Policies, Strategies, Plans, and Technical Documents

Policy Documents	RBHS contributions
Adolescent Sexual and Reproductive Health Strategy and Standards	Maima Zazay & Marion Subah
Family Planning and Reproductive Health Strategy	Maima Zazay, Rose Macauley, Marion Subah
Malaria Integrated Vector Control Policy Maternal and Neonatal Protocols	Theo Lippeveld, Marietta Yeekeh Marion Subah, Sarah Hodge
National Guidelines for Initiating and Implementing Community Based FP Programs	Maima Zazay, Marion Subah & Gillian Burkahardt
Road Map for Accelerating the Reduction of Maternal and Newborn Morbidity and Mortality in Liberia (2011-2015)	Maima Zazay, Marion Subah, Sarah Hodge
Community Health Policy and Strategy and CDHC guidelines	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	Sarah Hodge, Marion Subah & Maima Zazay
National Health Communication Strategy	Joshua Ofori, Marietta Yeekeh, Teah Doegmah
Adaptation of the Home base life saving skills training curriculum	Sarah Hodge
Drafting of referral job aid for obstetric emergencies	Sarah Hodge, Marion Subah & Gillian Burkahardt
Capacity Assessment Framework	Vamsi Vasireddy
Capacity assessment tools – central MOHSW	Vamsi Vasireddy
Capacity assessment tools – County level	Vamsi Vasireddy
Operational Plan for conducting capacity assessments at central and county level	Vamsi Vasireddy
Terms of reference for members of Capacity Assessment Team (CAT)	Vamsi Vasireddy

Policy Documents	RBHS contributions
Instructions for conducting capacity assessment interviews	Vamsi Vasireddy
Revise community health policy, strategy and CHDC guideline	Catherine Gbozee
Revised Malaria training Module	Catherine Gbozee
Revised gCHVs treatment register Community health information system tools	Catherine Gbozee
National Health Promotion Policy	Teah Doegmah
Reproductive Health Laws	Marion Subah, Sarah Hodge, & Maima Zazay

Annex 4a: Trainings Sponsored or Facilitated by RBHS

(Includes all trainings that began between 1 October 2011 and 31 September 2012.)

County	Sponsor	Facilitator names	Topic	Duration (days)	Start date	Participant
Montserrado	RBHS	Maima Zazay, Marie Padmore, Harriett Dolo, Lawrina Dunken	Family Planning TOT/Clinical Skills Training	10	2-Jan-12	13
Grand Cape Mount	RBHS	Maima Zazay, Tamba Boima	FP Statutory Regulation Compliance & Orientation for Community Based FP Programming	2	6-Jan-12	31
Montserrado	RBHS	Vamsi Vasireddy	Orientation to capacity assessment for RBHS staff	0.5	28-Mar-12	6
Montserrado	RBHS	Vamsi Vasireddy	Orientation to capacity assessment for CAT	0.5	30-Mar-12	8
Montserrado	RBHS	Vamsi Vasireddy	Orientation to capacity assessment for RBHS staff	0.5	2-Apr-12	6
Bong County	RBHS	Catherine Gbozee, Tamba Boima, Marion Subah, Roland Suomie, Abigail McDaniel, Audry	TOT community case management	10	21-Feb-12	50
Bong County	RBHS	Catherine Gbozee, Tamba Boima, Roland Suomie, & Marion Subah	CHS Policy dissemination workshop	4	2-Feb-12	47
River Gee	RBHS	Marietta Yekee & Teah Doegmah (RBHS) along with master trainers, Rufus Kelly (Nimba CHT) & Joe Smith (Bong CHT)	Community Health Education Skills Tool Kit (CHEST Kit) Training for gCHVs	3	6-Dec-11	Annex 4b
Nimba	RBHS	Marietta Yekee, Teah Doegmah & Luogon Willie Paye (RBHS). Kao Wahtoson (NHPD), Rufus Kelly NCHT and Florence Rogers (MTI)	Community Health Education Skills Tool Kit (CHEST Kit) Training for gCHVs	6	9-Jan-12	Annex 4b
Bong	Africare	Marietta Yekee & Teah Doegmah	BCC Concept and Interpersonal Communication Skills capacity building	4	24-Oct-11	Annex 4b
Montserrado	RBHS	Marion, Stacie, Laurretta & Nowai	HIV & TB ETS	4	27-Mar-12	Annex 4b

Montserrat	RBHS	Comfort, Nowai, Grace & Rebecca	Family Planning short & long acting methods	10	20-Feb-12	Annex 4b
Montserrat	RBHS	James, Bon Tempo, Mothusi Korwe & Marion Subah	Multimedia for learning/learning technology develop	5	6-Feb-12	Annex 4b
Montserrat & Lofa	RBHS	Marion & Nowai	TOT workshop for professional staff	4	1-Nov-11	Annex 4b
Montserrat & Lofa	RBHS	Marion & Nowai	Workshop for non professional clinical preceptors	4	12-Dec-11	Annex 4b
Nimba	IRC	Sarah RBHS family health Division/ MOH, Liberia prevention for maternal mortality (LPMM)	Basic Life saving skills (BLSS)	14	13-Feb-12	Annex 4b
Montserrat, Lofa	RBHS/IR C	Sarah Hodge (RBHS), LPMM	Basic Life saving skills (BLSS)	14	12-Apr-12	Annex 4b
Cape Mont	MTI	Sarah Hodge (RBHS) Family health Division, CHT	Home Base Life saving skills (HBLSS) TOT	14	16-Jan-12	Annex 4b
Cape Mount	MTI	Sarah Hodge (RBHS), family Health Division, CHT	Home Base Life saving skills (HBLSS)	14	5-Mar-12	Annex 4b
River Gee	RBHS	Gillian Burkhardt & Sarah (RBHS)	Maintenance and use of specialize EmONC Equipments	2	10-Jan-12	15
Nimba	Equip	CHT, Sarah (RBHS) FHD/MOH	(HBLSS) Home Base life saving skills TOT	14	12-Mar-12	Annex 4b
Bong	RBHS	Gillian & Sarah (RBHS)	Maintenance and use of specialize EmONC Equipments	2	25-Mar-12	10
Nimba	RBHS	Gillian & Sarah (RBHS)	Maintenance and use of specialize EmONC Equipments	4	27-Mar-12	15
Cape Mount	RBHS	Gillian & Sarah (RBHS)	Maintenance and use of specialize EmONC Equipments	2	16-Apr-12	10
Montserrat	RBHS	Romain Tahoure	HMIS (DHIS2 Training)	5	24-Sep-12	20
Montserrat	RBHS	RBHS	PRISM	3	23-Apr-12	33
Montserrat	RBHS	RBHS, FHD/MOH	TOT (PAC) POST ABORTION CARE	14	8-Jul-12	27
Montserrat	RBHS	RBHS, FHD/MOH	Development of referral protocol	1	27-Apr-12	11

Bong	RBHS	Rachel Chapin, Wilma Fassah & Murphy V. Kiazolu- NACP	Antiretroviral Therapy (ART) training	5	11-Jun-12	12
Bong	RBHS	Marietta Yekee, Teah Doegmah, and Garmetta T. Brown	BCC, Health Promotion, and IPCC	5	18-Jun-12	27
Nimba	RBHS	M. Yekee, T. Doegmah, Garmetta T. Brown, & Rufus Kelly	Community Health Education Skill Toolkit (CHEST Kit)	6	21-May-12	100
Grand Cape Mount	RBHS	Marietta Yekee, Teah Doegmah, and Garmetta T. Brown	Community Health Education Skill Toolkit (CHEST Kit)	7	13-Sep-12	110
Montserratado	RBHS	JSI head office Finance & Operations Managers	JSI West Africa Finance & Operations Workshop	3	June 11-12	6
Bong County	RBHS	Catherine K. Z. Gbozee, Tamba Broima(MOH), Audrey Waines(EQUIP), Mariaon K Subah, RBHS	Facilitator skills, Adult Learning Methodology, Working with Communities. Facilitation on Malaria and Diarrhea	10	27-Feb-12	50
Montserratado	RBHS	Marion Subah & Nowai Johnson	TOT , ETS for instructors and clinical preceptors	4	19-Jun-12	23
Montserratado	RBHS	Sarah Hodge, Nowai Johnson, Nancy Moses, Anna Gbe, others	TOT, ETS, Post Abortion Care	12	12-Jul-12	26
Grand Bassa County	RBHS	Salwa Bitu Fabio, Catherine Gbozee, Teta Lincoln	Inpatient Clinical Standard Development	4	19-Sep-12	34

Annex 4b: Trainings undertaken by RBHS Partners

County	Topic	Days	Start	Persons	Target	Male	Female
BCC							
Bong	Journey of Hope	3	30-Jun-11	14	gCHV Sup.	14	0
Bong	Behavior Change Communication/IPC	1	24-Oct-11	16	OICs	6	10
Bong	CHEST Kit Training	21	18-Jul-11	149	gCHVs/gCHV Sup.	133	16
Nimba	Community Health Skills	6	9-Jan-12	129	gCHVs	98	31
Nimba	Journey of Hope	3	22-Mar-12	264	gCHVs	56	208
River Gee	Community Health Education Skill Tool(CHEST) Kit	3	6-Dec-11	61	gCHV	50	11
FP/RH							
Cape Mount	Family Planning TOT	12	6-Feb-12	2	IRC RH Officers	0	2
Montserrado	Family Planning Compliance	2	17-Jan-12	1	Supervisors	0	1
Cape Mount	LARC	10	13-Feb-12	15	Facility Staff	0	15
Nimba	Balanced counseling strategy (BCS) (ASRH, SRH TEMPORARY METHOD)	5	26-Sep-11	23	Facility Staffs/supv.NCHT	10	13
Nimba	BCS LARC	8	1-Oct-11	35	Facility Staff/Supv./NCHT/DHOs	12	23
Nimba	Community based FP	3	22-Mar-12	25	gCHVs/CYVs	22	3
HIV/TB							
Bong	HCT/PICT	1	26-Sep-11	21	OICs/Screeners,	9	12
River Gee	HCT	5	5-Dec-11	5	Facility Staffs	2	3
Lofa	How to run comprehensive PMTCT services at the RBHS facilities in Lofa County	5	21-Nov-11	8	FACILITY STAFF	1	7
Lofa	HIV Counseling and Testing (HCT)	5	5-Dec-11	5	Facility Staffs/NGO Staffs	5	0
Nimba	HIV/AIDS	3	2-Feb-12	50	gCHVs	42	8
Bong	TB		1-Mar-12	16	OICs & Screener	7	9
Bong	TB DOTS	1	1-Feb-11	124	gCHVs/OICs/gCHVs Sup.	105	19
Nimba	TOT training of gCHVs DOTs	3	12-Dec-11	15	CHT/NGO STAFFS	12	3

Annex 4b: Trainings undertaken by RBHS Partners

County	Topic	Days	Start	Persons	Target	Male	Female
Lofa	Clinical Diagnosis and Management of TB	6	24-Oct-11	41	Facility Staff/NGO Staff/CHT	32	9
Lofa	Community-Based DOTS	3	27-Oct-11	45	CHV	42	3
Nimba	TB Identification and Treatment	2	14-Mar-12	1	Facility Staff	1	0
Nimba	Health Education, case finding and DOTS	3	27-Feb-12	48	gCHVs/OICs	43	5
Nimba	TB case management refresher	5	17-Oct-11	48	Facility Staffs/supv.NCHT/DHO	27	21
M&E							
Bong	HMIS	2	28-Oct-11	36	OICs/Registrar	23	13
Grand Cape Mount	HMIS	1	1-Oct-11	32	Facility Staffs	10	22
Nimba	HMIS	4	15-Jan-12	95	gCHVs/CHDCs	83	12
Nimba	Indicators Training	2	7-Feb-12	34	Facility Staff	23	11
Lofa	PBF Data Validation	10	21-Nov-11	1	NGO Staffs	1	0
Nimba	National Integrated Supportive Supervision Tool	5	23-Feb-12	1	Clinical Officer	1	0
Malaria							
Bong	Malaria		23-Mar-12	40	gCHVs	35	5
Bong	CCM	12	21-Feb-12	9	Officers& OICs	6	3
Nimba	Malaria	3	16-Feb-12	60	Facility Staff	52	8
Grand Cape Mount	Malaria CCM	10	20-Mar-12	34	CHV	28	6
Bong	Malaria CCM		23-Sep-12	40	gCHVs Malaria	35	5
MCH							
Bong	Home Based Life Saving Skills	13	26-Sep-11	20	TTM	0	20
Bong	Home Based Life Saving Skills	13	26-Sep-11	20	TTM	0	20

Annex 4b: Trainings undertaken by RBHS Partners

County	Topic	Days	Start	Persons	Target	Male	Female
Grand Cape Mount	Home Based Life Saving Skills	12	12-Dec-11	50	CHV	0	50
Nimba	Home Based Life Saving Skills	7	11-Mar-12	30	TTMs/TBAs	0	30
Nimba	Home Based Life Saving Skills	14	7-Mar-12	28	TTMs & TBAs	0	28
Nimba	Home Based Life Saving Skills	12	21-Feb-12	9	CM/RN/MCH Head	0	9
Nimba	Home Based Life Saving Skills	7	25-Mar-12	30	TTMs/TBAs	0	30
Lofa	Basic Life Saving Skill	13	28-Nov-11	12	Facility Staffs/NGO Staffs	0	12
River Gee	Basic Life Saving Skill	12	5-Dec-11	16	Facility Staffs	8	8
Bong	PAC	5	6-Jun-11	3	CM	0	3
River Gee	ARI	3	14-Jul-11	28	CHT/Facility Staffs/NGO Staffs	9	19
River Gee	ARI	3	17-Aug-11	18	CHV	15	3
Nimba	Diarrhea, ARI	10	12-Mar-12	80	gCHVs	67	13
Nimba	IMNCI assessment, classification and management refresher	2	26-Jan-12	29	Facility Staff	0	29
Nimba	ENA	3	19-Feb-12	60	gCHVs	52	8
Other							
Nimba	Rational Use of Drugs	3	19-Jan-12	41	Facility Staff	18	23
Lofa	Quality Assurance	19	12-Dec-11	3	NGO Staffs/CHT	3	0
Lofa	CHDC Leadership Training on Roles and Responsibilities	3	24-Oct-11	113	CHV/FACILITY STAFF	81	32
Nimba	Community Health Policy	5	6-Feb-12	6	Officers & OICs	5	1
Bong	Drug Management	9	29-Aug-11	32	OICS / Dispenser	22	10
Lofa	Drugs Management SOP	3	3-Oct-11	41	Facility Staffs	33	8
Nimba	Universal Health Precaution	2	29-Mar-12	99	Facility Staff	67	32

Annex 4b: Trainings undertaken by RBHS Partners

County	Topic	Days	Start	Persons	Target	Male	Female
Grand Cape Mount	BPHS Integrated In-service Training (Mental Health & Adolescent and Reproductive Health)			22	Facility Staff	8	14
Nimba	Standard Operating Procedure	5	23-Feb-12	28	Facility Staff	22	6
Nimba	Infection Control and waste management	2	24-Jan-12	29	Facility Staff	0	29
Total				2390		1436	954

Annex 4c: FORECAST Participants

1. Participants that have completed program:

Participant Name	Training Event	Employer	Training Dates
Cecelia Flomo	Royal Inst of Medicine (KIT)/Amsterdam - MPH-MCH; Ped Nursing	Nurse/MOH Phebe; Cuttington	Sept 2010-Sept 2011
Edith Tellewoyan	Royal Inst of Medicine (KIT)/Amsterdam - MPH-MCH; Ped Nursing	Nurse/MOH 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 Nursing	Nurse/MOH Phebe; Cuttington	Sept 2010-Sept 2011
Duredoh George	KNUST/Kumasi Ghana-Pharmaceutical Microbiology	MOHSW	Aug 2009-Dec 2011
Karmo D. Ville	Henley Univ/Reading UK-Finance & Economic Development	/Min of Finance Analysts (resp for Ed Sector Pooled Funds)	Oct 2010-Sept 2011
Stephen Marvie	Univ of Manchester/UK-Dev Economics & Policy	Min of Planning & Economic Affairs Asst Minister	Sept 2010-Aug 2011
Tarnue Jeke	Henley Univ/Reading UK-Finance & Economic Development	/Min of Finance Analysts (resp for Ed Sector Pooled Funds)	Oct 2010-Sept 2011
James Beyan	Uganda Mgmt Inst/Kampala Uganda-Human Resources	Beyan Dir of Personnel MOHSW HR	Aug 2009-Aug 2011/Feb 2012
Mawolo Kollie	Uganda Mgmt Inst/Kampala Uganda-Human Resources	Beyan Dir of Personnel & Marwolo Dir of Trng & Prof Devel/ MOHSW HR	Aug 2009-Aug 2011/Feb 2012
John T. Harris	Muhimbili Univ/Dar Es TZ-Pharmaceutical Supply Chain Management	/MOH-Dir of County Pharmacy	Nov 2010 - Oct 2012
Peterson Greaves	Phase II & III Medical Equipment Technology/Accra Ghana	MOHSW	June/July 2011 & June/July 2012

Annex 4c: FORECAST Participants

2. Participants that are still active

Participant Name	Training Event	Employer	Training Dates
Arthur Brown	Kenyatta University/Lab Tech	MPCHS	Sep 2011-Aug 2013
Arthur Mulbah	United Methodist Univ/Ganta-Dental Tech	Phebe Hospital, Nurse	Oct 2010-June 2012 (dropped out of program)
Forkpah Flomo	TZ Trng Ctr for Ortho Tech/Moshi TZ-Orthopedic Tech	OrthoTech Supervisor - Handicap Intl	Sept 2010-July 2013

Annex 5: RBHS Staffing Structure, Project Year 4

