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Endline Capacity Assessment of MOHSW and FARA Counties
May 12 – June 27, 2014

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Acronyms and Abbreviations

AIDS	Acquired immune deficiency syndrome
ANC	Ante-natal care
BB	Building block
CHSD	Community Health Services Division
CHDC	Community Health Development Committee
CHO	County Health Officer
CHMIS	Community Health Management Information System
CHSWB	County Health and Social Welfare Board
CHSWT	County Health & Social Welfare Team
CMW	Certified midwives
DHIS2	District Health Information System
DHSWT	District Health and Social Welfare Team
EBSNM	Esther Bacon School of Nursing and Midwifery
EHT	Environmental health technician
EPI	Expanded Program on Immunization
EPHS	Essential Package of Health Services
ETNWG	Education and Training National Working Group
FARA	Fixed Amount Reimbursement Agreement
FHD	Family Health Division
FP	Family planning
gCHV	(General) community health volunteer
HIV	Human immunodeficiency virus
HMER	HMIS, Monitoring and Evaluation, and Research Unit
HMIS	Health management information system
HPD	Health Promotion Division
HSCC	Health Sector Coordination Committee
IA	Interim Approach
iCCM	Integrated Community Case Management
iHRIS	Integrated Human Resource Information System
JHU/CCP	Johns Hopkins University Center for Communication Programs
JSI	JSI Research & Training Institute, Inc.
LBNM	Liberian Board of Nursing and Midwifery
LMDC	Liberia Medical and Dental Council
LMIS	Logistics Management Information System
M&E	Monitoring and evaluation
MIS	Malaria Indicator Survey
MMR	Maternal mortality ratio
MNCH	Maternal, neonatal, and child health
MOF	Ministry of Finance
MOHSW	Ministry of Health and Social Welfare

MSH	Management Sciences for Health
NACP	National AIDS Control Program
NCD	Non-communicable disease
NDS	National Drug Service
NECP	National Eye Care Program
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
NTD	Neglected Tropical Diseases
OIC	Officer in charge
PA	Physician's assistant
PBC	Performance-based contract
PBF	Performance-based financing
PCT	Program Coordination Team
RBHS	Rebuilding Basic Health Services
RH	Reproductive health
RMW	Registered midwives
RST	Regional Support Team
SCMP	Supply Chain Master Plan
TB	Tuberculosis
TNIMA	Tubman National Institute of Medical Arts
TTM	Trained traditional midwife
USAID	United States Agency for International Development
WHO	World Health Organization

Executive Summary

The RBHS project, funded by the United States Agency for International Development (USAID), is the United States Government's major initiative in support of Liberia's Ministry of Health and Social Welfare (MOHSW). RBHS is a partnership including JSI Research & Training Institute, Inc. (JSI), Jhpiego, the Johns Hopkins University Center for Communication Programs (JHU-CCP), and Management Sciences for Health (MSH). The six-year project runs through October 2014.

By simultaneously addressing each of the six World Health Organization (WHO) health system Building Blocks (see Figure 1), RBHS works to strengthen leadership and governance, promote an evidence-based information culture, enhance management systems supporting sustainable, equitably distributed quality services and programs, and ultimately improved health outcomes. The RBHS project philosophy has been to implement a fully inclusive and integrated approach where all proposed interventions and activities are conducted in collaboration with the MOHSW and are in alignment with the Liberian National Health and Social Welfare Policy and Plan 2011-2021 (NHSWPP). RBHS project interventions have provided extensive training and mentorship of MOHSW staff at national and county levels, and builds both systems and processes to ensure sustainability is not personnel dependent.

This assessment of the MOHSW and FARA counties was conducted from May 12th through June 27th, 2014 and fieldwork from May 19th through June 1st, 2014. The purpose of the assessment was to: (1) document achievements and capacity changes by each Building Block; (2) identify gaps; and (3) recommend approaches to inform implementation of future projects.

All assessments were led by JSI consultants and included RBHS staff. The assessment teams that interviewed the three County Health and Social Welfare Teams (CHSWTs) also included MOHSW staff. The team utilized a mix of methods including review of RBHS Project, MOHSW and USAID documents and key informant and group interviews at the national and county levels with the MOHSW, CHSWTs, pre-service training institutions, and professional boards. The RBHS Capacity Assessment Tool, originally used in 2012 to assess baseline capacity, was re-administered as part of this assessment in each of the three counties and at the central MOHSW level. The complete list of: team members; persons interviewed by organization, CHSWT, and MOHSW unit; and a copy of the quantitative Capacity Assessment Tool are attached in Appendices I-III, respectively. A list of documents reviewed is included as Appendix IV.

This report provides a snapshot of the capacity changes among interviewed entities in each of the six WHO Building Blocks of a health system. Highlights of the findings, accomplishments, gaps and recommendations are summarized below:

1) Overall Findings

- Decentralization is resulting in greater accountability
- Common understanding exists between counties and central level on accomplishments and gaps
- Donor funded programs have demonstrated significant capacity improvement; others lagging (National Eye Care Program (NECP), mental health, non-communicable disease)
- Capacity has improved across the board, but uneven across the three counties and six building blocks; reflected in quantitative self-assessment scores
- Health outcome improvements have been achieved over life of RBHS project
- RBHS is credited for supporting improvements by central and county staff
- Sustainable capacity built in "mature" areas; "developing and new" activities require continued support

2) Building Block 1: Delivering Essential Health Services

<u>Key accomplishments:</u>

- Health outcomes/behavior improved (maternal mortality ratio (MMR), infant mortality rate (IMR), contraceptive prevalence rate (CPR), antenatal care (ANC), facility deliveries, vaccination coverage, HIV knowledge) over life of RBHS
- Supervision improved
    - Tools exist and are used, staff trained, supervision occurs on monthly schedule, findings improve performance from counties to facilities
    - Quarterly monitoring by central to counties, including communities (expanded program on immunization (EPI) only)
- Number of functional facilities has increased
- Tools for accreditation of health facilities have been expanded to include quality improvement standards
- Increased collaboration with partners
    - Planning cycles synchronized, activities conducted jointly
- Community health structures reactivated (community health development committee (CHDC), county health and social welfare board (CHSWB))
- School health programs introduced (de-worming, eye care)
- Performance-based financing (PBF) has had many positive outcomes:
    - rewarded quality of performance, demonstrated impact on health outcomes
    - increased autonomy to facilities (bonus use, sharing with communities)
    - promoted data culture; PBF-supported client satisfaction studies starting to address county management and facility-based decisions

<u>Key gaps</u>:

- Overall supervision uneven
    - Central to CHSWT and facilities on a schedule, but quality inconsistent
    - Process and objectives of facility visits by MOHSW not firmly established
    - CHSWT to facilities visits uneven and quality is inconsistent
    - Absence of a community supervision system
- Implementation of waste treatment and disposal policies lagging
- Non donor-funded essential package of health services (EPHS) components lagging
- Perceived over-emphasis on facilities; support to communities is under-supported
- Lack of community level data hinders ability to attribute community contribution to improvements in health outcomes

Key recommendations:

- Incentivize effective supportive supervision practices; use indicators that look at closing "gaps"
- Engage donors in fully implementing and funding EPHS
- Pool incentives and leverage support to general community health volunteers (gCHVs) and trained traditional midwives (TTMs) more holistically
- Utilize Regional Support Team (RST) to clarify process and objectives of supportive supervision by MOHSW

3) Building Block 2: Health Workforce

Key accomplishments:

- Committed workforce in spite of constraints
- Staffing increased at counties (new positions); roles clarified
- Job descriptions finalized
- iHRIS training completed (implementation will fast-track payroll, induction, transfers, reduce "ghost" employees)
- Pre-service curricula updated and standardized; teaching quality improved; links between pre-service training and clinical sites improved
    - increased credentialing for midwives; career ladder established for midwives/physician assistants (PAs)
    - bridging programs developed to enable certified midwives (CMWs) to become registered midwives (RMWs)
    - scholarships available for higher education
- Collaboration between medical professional boards/regulatory bodies and training institutions improved partly resulting from Education and Training National Working Group (ETNWG)

Key gaps:

- Human resources management not efficient
    - Bloated central level structure; insufficient staffing at county level
    - Frequent rotation of competent staff
    - Recruitment and retention are issues
    - Performance reviews irregular; staff not held accountable
    - Officers in Charge (OICs) not trained as managers
- Updated job descriptions not disseminated uniformly
- Limited communication on mechanism for recruitment and internal transfers
- In-service trainings inadequately coordinated
- Process for re-licensure of health providers still under development

Key recommendations:

- Implement the full performance management cycle at all levels to increase accountability
- Ensure Training Unit is functional; advocate that ISE is tied to re-licensure in collaboration with regulatory bodies
- Hold key staff responsible for demonstrating results before next promotion
- Determine if ETNWG has value and should be continued

4) Building Block 3: Health Management Information Systems

Key accomplishments:

- Monitoring and evaluation (M&E) policy in place; strategy implemented
- Health management information system (HMIS) staff at county level expanded
- Relevant county staff trained on district health information system (DHIS 2) software
- Information culture increased; stronger when donor-supported
- Increased capacity to collect and report data; review meetings held regularly
- Increased data use for programmatic decision making at county level
- Plans to integrate HMIS across finance, M&E, human resource, logistics management information systems (LMIS)

Key gaps:

- Quality of data collected is uneven, undermining use of data; data is unevenly used for decision-making
- Reliance on RBHS M&E Officers for routine county M&E activities

- Infrastructural barriers to information sharing and use (e.g., electricity, internet connectivity)
- Community HMIS (CHMIS) has been printed without pre-testing
- HMIS, M&E and research (HMER) unit contribution to fostering data culture limited

Key recommendations:

- Provide closer mentoring and support to improve data quality and use at facility and county levels
- Improve coordination of M&E training to limit time away from post
- Fast-track Community HMIS
- Hire data managers with programmatic experience
    - increase understanding of data relevance
    - foster data-use culture at central level

5) Building Block 4: Access to Essential Commodities

Key accomplishments:

- Supply chain master plan exists
- Training on quantification, forecasting, planning for 1,000 staff completed
- Availability of drug treatment guidelines is improving service delivery
- "Interim Approach" (IA) contributed to decreased stock outs in selected drugs; hybrid approach expected to be incorporated into supply chain master plan (SCMP)
- Support for community-facility linkages improving: gCHVs distribute family planning (FP) commodities and malaria drugs in donor-supported counties; TTMs trained in misoprostol
- Health infrastructure improved, central team trained on using design software, key documents developed (infrastructure policy and building standards)

Key gaps:

- No central warehouse results in seepage
- Insufficient storage space (except in Nimba), resulting in lack of proper management of commodities
- Over-stocking resulting from multiple rented warehouses
- Reporting not timely from certain counties or facilities
- Central and county level perspective varies on response time for requisitions
- Challenges in identifying sustainable 'hybrid' approach going forward based on resource-intensive IA monitoring
- Staff not available at counties (except in Bong) to oversee infrastructure projects

Key recommendations:

- Importance of supply chain in achieving health outcomes requires continuous communication
- Fast-track National Drug Stores (NDS) construction
- Work with Health Infrastructure Unit to address county depot improvements
- Strengthen Health Infrastructure Unit's capacity in project management of subcontractors
- Explore potential partnership with county level "trade teams" to manage routine infrastructure needs
- Assign regional-level engineers to RST for advocating and prioritizing health infrastructure needs at county level

6) Building Block 5: Health Systems Financing

Key accomplishments:

- County capacity to plan and budget has improved
- E-accounting system implementation in progress at all levels
- Monthly reviews and regular audits conducted at counties
- PBF successfully transferred from RBHS to MOHSW
- Work initiated by MOHSW to develop the Liberian Health Equity Fund (on the road to universal health care)

Key gaps:

- Budget allocation to health decreasing, not needs-based
- MOHSW not budget holder of FARA funding
- Allocation to CHSWT not needs-based though solutions exist (Resource Allocation Formula)
- Counties receive allocations late and below budget
- Counties not supported in re-prioritizing budget allotment; full line item flexibility but no oversight on spending
- Partner-managed facilities performing better due to financing issues
- Inadequate financial management staffing in most counties

Key recommendations:

- Uncertainty around future of PBF needs resolution
- Consider funding *entire* geographic area to implement *all* components of EPHS
- Provide prioritization support from MOHSW to CHSWTs after budget allotment received

- Ensure adequate staffing for managing finances in counties to ensure compliance, separation of duties

7) Building Block 6: Governance and Leadership

Key accomplishments:

- Decentralization resulting in greater autonomy and ownership at all levels (counties, facilities, communities)
- Regional Support Teams initiated to support management of capacity building and accountability of counties
- Donors demonstrating confidence in MOHSW's ability to manage health services and funds
- Significant capacity built to perform tasks not previously possible:
    - MOHSW now leads health sector coordination committee (HSCC) meeting; writes own proposals and solicitations; supports counties to write proposals
        - Counties independently monitor activities against work plans; hold monthly coordinating meetings with implementing partners; hold regular meetings with districts
- Counties are better able to identify own capacity needs based on initial capacity self-assessment and strategy, as well as contracting-in readiness assessment process

Key gaps:

- Decentralization from central to counties not fully realized
    - Communication between central and county levels on strategic priorities and budget allocations needs strengthening
    - Allocation of tasks between central and counties documented in Functional Review report, but still not implemented
- Full health sector decentralization dependent on full national decentralization, including implementation of Civil Service Agency Reforms

Key recommendations:

- Utilize existing mechanisms to improve collaboration and communication between MOHSW and counties, and engage political leadership
- Consolidate some central MOHSW units (e.g., personnel and HR units; community health services and health promotion division (HPD)); consider incorporating County Health Services structure as a model for Community Health
- Further develop leadership capacity to manage the decentralization process

- Conduct further assessment to clarify roles and responsibilities across the Ministry

Although the team was in country for a short time, the range and scope of the secondary data review as well as primary data collection through group and individual interviews was extensive. This enabled the team to cross-check information and to gain a broad perspective on the project and related capacity changes over the life of the project in each WHO health system strengthening building block area. Findings show that over a relatively short period of time, marked capacity improvements have been made at the ministry at all levels. Decentralization has been progressing, though still faces structural bottlenecks in particular related to health financing, and more work remains to be done, in particular in linking communities and community-level data into health facilities and CHSWTs. Staff at all levels, however, are largely aware of the specific gaps, and notably more accountable and eager to further strengthen the health system at all levels.

Purpose

In 2012, the Rebuilding Basic Health Services (RBHS) project scope of work changed to become largely focused on capacity building, moving away from managing direct service provision. A baseline capacity assessment was undertaken at that time. The purpose of this end of project assessment was to document achievements and capacity changes by WHO Building Blocks, on which the Liberian NHSWPP is built, and to review the progress of implementation of the RBHS project capacity building activities since the project scope change in 2012. This assessment is a significant component of the overall end of project evaluation activities. It is intended to complement other project evaluation activities including: Health Management Information System data analysis, PRISM assessment, and other analyses (e.g., Malaria Indicator Survey (MIS) comparative analysis (2009 vs. 2011), project reports and records, behavior change communication 'dipstick surveys', MEASURE Lot Quality Assurance Sampling surveys).

The capacity assessment was intended to document factors that have enabled or impeded effective implementation of different capacity building components of the project, identify remaining gaps and suggest strategies or priorities for the anticipated health system strengthening follow-on project. The assessment team used qualitative and quantitative methods to assess changes in health system capacity at all levels since 2012, and thus the contribution of the RBHS project towards achieving *USAID's Strategic Objective: Increased Use of Essential Health Services*, and the associated Intermediate Results: *IR1: Increased access to essential health services through improved provision of quality health services and adoption of positive health behaviors*; and *IR2: Increased quality of health services through improving infrastructure, health workforce and systems performance by enhancing capacity to plan, manage and monitor a decentralized system.*

Specifically, the assessment collected evidence to determine progress on the following:

Figure 1

Intended IR 1 Results	**Intended IR 2 Results**
• Increased availability of facility-based and community based-services • Improved quality of services provided • Improved equity and cultural acceptability of services • Improved health seeking behaviors • Improved health infrastructure and resources	• Strengthened institutional capacity of central MOHSW and CHSWTs • Strengthened individual capacity of central MOHSW and CHSWT staff • Improved performance based financing management • Improved data for decision making

The qualitative assessment included individual and group interviews in which tailored questions were used to determine the extent to which RBHS project activities (in Figure

2 below) have contributed to changes in capacity for the central MOHSW and County Health and Social Welfare Teams (CHSWTs), professional training institutions and medical professional and regulatory boards, and, consequently, whether the above results were achieved.

Figure 2

IR 1 RBHS Project Interventions	**IR2 RBHS Project Interventions**
1. Increase access to comprehensive MNCH services 2. Increase uptake of four critical malaria interventions 3. Increase access to quality HIV/AIDS and tuberculosis (TB) services with emphasis on prevention 4. Increase access to comprehensive family planning (FP) and reproductive health (RH) services with special focus on youth 5. Finalize infrastructure work including environmental and drug supply interventions	1. Build capacity of the central MOHSW through the six building blocks (BBs) of a health system *BB 1: Delivering essential health services* *BB2: Health Workforce* *BB3: Health Information System* *BB4: Access to essential commodities* *BB5: Health System Financing* *BB6: Governance and Leadership* 2. Build capacity at county level in Bong, Lofa and Nimba through the six building blocks of a health system 3. Strengthen professional health institutions, including TNIMA, Esther Bacon School of Nursing and Midwifery (EBSNM), Liberian Board of Nursing and Midwifery (LBNM), and Liberia Medical and Dental Council (LMDC)

Furthermore, implementation of the quantitative capacity assessment tool allowed the team to identify capacity changes in each of the CHSWTs and at the central MOHSW level in each of the health system building blocks noted below.

Methods

The team utilized a mix of methods including review of RBHS Project, MOHSW and USAID documents and key informant and group discussions with the MOHSW, County Health and Social Welfare Teams (CHSWTs), pre-service training institutions, and regulatory and professional boards. The RBHS Capacity Assessment Tool, originally used in 2012 to assess baseline capacity, was re-administered as part of this assessment in each of the three counties and at the central MOHSW level. The Capacity Assessment Tool is a self-assessment process that ensures stakeholder buy-in, and facilitates introspection and a genuine desire to improve. The self-assessment process is somewhat more time intensive than simple group interviews, and the resulting quantitative scores are inherently subjective and cannot be viewed as reliable point estimates, but rather as reflective of group consensus on current status across areas being assessed (in this case, the six WHO HSS Building Blocks). On the other hand, the group and individual discussions themselves were productive in allowing staff to have an opportunity to reflect on the system and come to a mutual understanding of key accomplishments and remaining gaps. The assessment process promotes an expanded understanding of what can be achieved.

The assessment team was comprised of four external team members: three from JSI/Boston with varying degrees of familiarity with the project, and one independent consultant who participated in dissemination of the baseline capacity assessment results in 2012. The team was accompanied by key RBHS technical staff for the capacity assessments with the Bong, Lofa and Nimba CHSWTs, and during some of the key informant interviews at the Central MOHSW and professional health institutions.

Key informant or group interviews were conducted with:

- RBHS technical staff;
- Liberian professional training institutions (Esther Bacon School of Nursing and Midwifery, Tubman National Institute of Medical Arts);
- Liberian professional boards (Liberian Medical and Dental Council, Liberian Board of Nursing and Midwifery);
- Central MOHSW divisions, units and individuals, including: County Health Services, Community Health Services, Fixed Amount Reimbursement Agreement (FARA), Family Health Division, HMIS/M&E/Research, Infrastructure Unit, Mental Health, National Health Promotion, National Malaria Control Program, Performance Based Financing, Personnel, Training; and
- Bong, Nimba, and Lofa CHSWT staff.

Capacity Assessments in the counties were conducted by:

- Two external consultants from JSI/Boston;
- RBHS technical staff member;

- MOHSW representative;
- RBHS County Capacity Building Officer; and
- RBHS County M&E Officer.

The assessment was conducted from May 12th through June 27th, 2014, with in-country fieldwork executed from May 19th through June 1st, 2014. At the Central level, interviews were conducted by two external consultants who were at times accompanied by RBHS technical staff. Interview questions were tailored to specific stakeholders depending on their involvement with the project and following briefing meetings with RBHS technical staff.

RBHS Project Description and the WHO Building Blocks

RBHS project interventions have provided extensive training and mentorship, as well as aimed to strengthen both systems and processes to ensure sustainability is not personnel dependent. The RBHS project philosophy has been to implement a fully inclusive and integrated approach where all proposed interventions and activities are made in collaboration with MOHSW and specifically in alignment with the Liberian health system and the Liberian National Health and Social Welfare Policy and Plan 2011-2021 (NHSWPP).

By simultaneously addressing each of the six WHO health system building blocks, RBHS aims to strengthen leadership and governance, promote an evidence-based information culture, and enhance management systems supporting sustainable, equitably distributed quality services and programs, and ultimately improved health outcomes. This is done through tailored activities aimed at: *Increased access to essential health services through improved provision of quality health services and adoption of positive health behaviours (IR1)*; and *Increased quality of health services through improving infrastructure, health workforce and systems performance by enhancing capacity to plan, manage and monitor a decentralized system (IR2).*

Overall Findings

This assessment has reinforced the understanding that strengthening capacity is an iterative process, and measurement of capacity gains is inherently imprecise. Similarly, the organizational learning process is not linear, nor at the same pace for all stakeholders. There are numerous factors that can promote or hinder the process at all levels. This assessment has found that sustainable capacity has been built in "mature" areas, yet many "new" activities require continued support to maintain momentum.

General Findings

Decentralization at the MOHSW over the RBHS project period has resulted in greater accountability at all levels. Throughout this process, both the CHSWTs and the MOHSW have demonstrated a common understanding of accomplishments and gaps in capacity building during this time. Capacity has improved across the board, but gains are uneven between the three counties and across the six building blocks, as reflected in the quantitative scores. Donor-funded programs have demonstrated significant capacity improvement, whereas other non-donor funded programs are lagging (e.g., National Eye Care Program, Mental Health, Non-communicable Disease).

There have been many health outcome improvements achieved over the life of the RBHS project, and the Project is credited for supporting improvements by both central and county MOHSW staff. Sustainable capacity has been strengthened, especially for mature activities, including pre-service, Performance Based Financing (PBF), Health Management Information Systems (HMIS) and governance. However, concerns remain that the transition from RBHS to a future health systems strengthening project[1] may result in the loss of momentum on newly-initiated activities.

Results from the quantitative self-assessment at the central and county levels are shown in Figures 3, 4, and 5 below. Though it should be noted that though the self-assessment process allows staff the opportunity to reflect on the system and come to a mutual understanding of key accomplishments and remaining gaps, the resulting quantitative scores are inherently imprecise and are only reflective of group consensus on current capacity in each of the six WHO HSS Building Blocks areas being assessed. Nonetheless, quantitative self-scoring levels are largely validated through complementary qualitative findings gathered in both the 2012 baseline and during this endline assessment.

[1] The RBHS Project ends October 2014. USAID has accepted proposals for a new health system strengthening project, but no decision has yet been made as to who will implement it nor when it will begin.

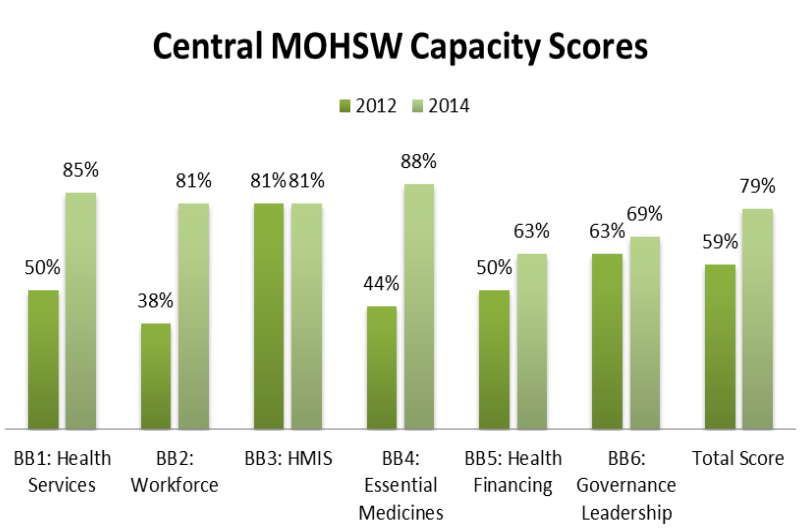
Figure 3. Central MOHSW Self-Assessment Capacity Scores Summary

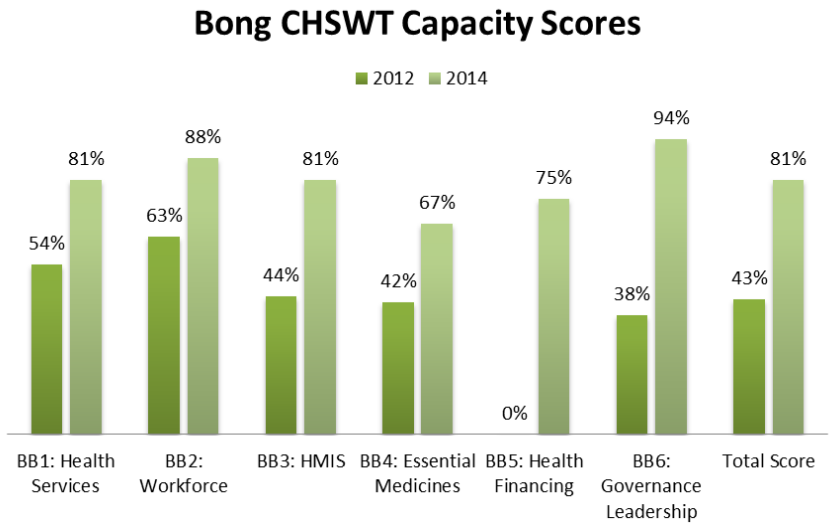
		2012		2014	
Building Block	Total Points Available	Score	Percentage Score	Score	Percentage Score
1: Delivering Essential Health Services	20	10	50%	17	85%
2: Health Workforce	16	6	38%	13	81%
3: Health Information Systems	16	13	81%	13	81%
4: Access to Essential Medicines	16	7	44%	14	88%
5: Health Systems Financing	16	8	50%	10	63%
6: Governance and Leadership	16	10	63%	11	69%
Total Score	**100**	**59**	**59%**	**79**	**79%**

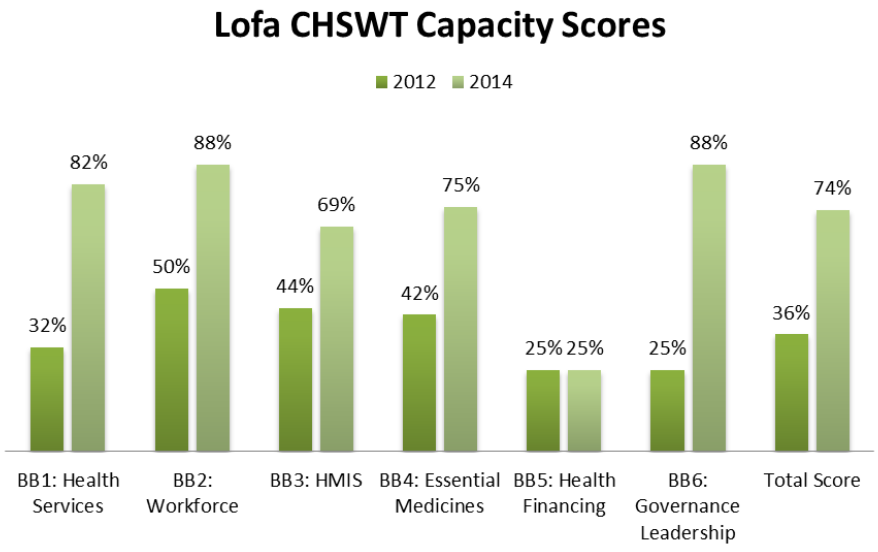
Figure 4. CHSWT Self-Assessment Capacity Score Summary

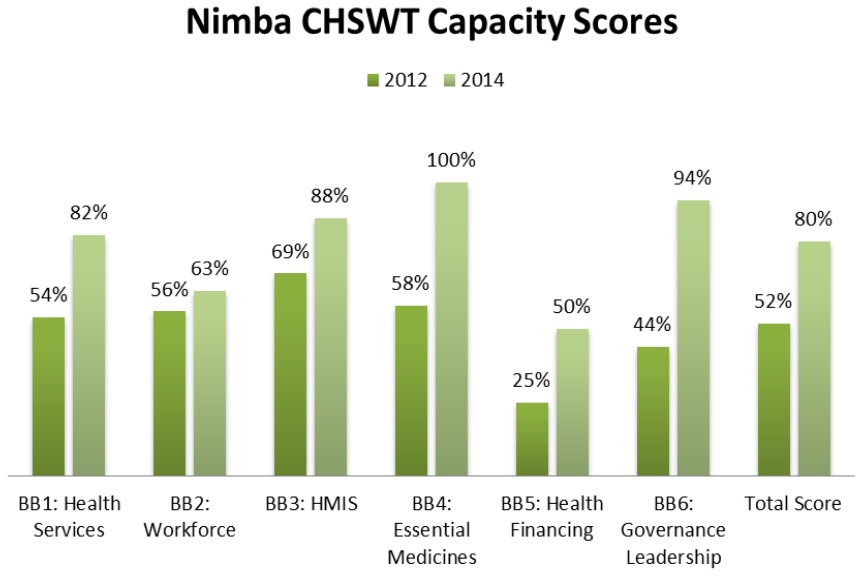
		Bong County				Lofa County				Nimba County			
		2012		2014		2012		2014		2012		2014	
Building Block	Total Points Available	Score	% score	Score	% score	Score	% score	Score	% score	Score	% score	Score	% score
1: Delivering Essential Health Services	28	15	54%	22	81%	9	32%	23	82%	15	54%	23	82%
2: Health Workforce	16	10	63%	14	88%	8	50%	14	88%	9	56%	10	63%
3: Health Information Systems	16	7	44%	13	81%	7	44%	11	69%	11	69%	14	88%
4: Access to Essential Medicines	12	5	42%	8	67%	5	42%	9	75%	7	58%	12	100%
5: Health Systems Financing	12	0	0%	9	75%	3	25%	3	25%	3	25%	6	50%
6: Governance and Leadership	16	6	38%	15	94%	4	25%	14	88%	7	44%	15	94%
Total Score	**100**	**43**	**43%**	**81**	**81%**	**36**	**36%**	**74**	**74%**	**52**	**52%**	**80**	**80%**

Figure 5. Comparative Self-Assessment Capacity Scores by Central and County Levels









Building Block 1: Delivering essential health services

Achievements

Over the life of the RBHS project, considerable gains have been made in the health status of Liberians across the country and especially in the three counties in which the project has focused intensive capacity building activities since 2012. For example, maternal and infant death rates have been greatly reduced, more women are delivering in health facilities, and HIV knowledge has increased (see Figure 6). These health improvements are attributable, at least in part, to increased capacity of the MOHSW to deliver essential health services.

Figure 6. Health Outcome Changes, 2007 vs. 2013 Liberia Demographic Health Surveys

	National Data 2007	National Data 2013	Bong, Lofa, Nimba 2007	Bong, Lofa, Nimba 2013
MMR [1]	994 Per 100,000 live births	770 Per 100,000 live births [2]	-	-
IMR	71 deaths per 1,000 live births	54 deaths per 1,000 live births	-	-
CPR	11.4% (1.2% modern)	20.2% (19.1% modern)	8.5% (0.7% modern)	13.6% (12.8% modern)
ANC from skilled provider	79.30%	95.90%	63.30%	95.80%
Skilled Deliveries	46%	61%	32.60%	51.40%
Facility Deliveries	37%	56%	30.80%	47.40%
Vaccination Coverage	34%	55%	40.30%	53.00%
EBF	67%	55%	78.20%	[3]
HIV Knowledge Among Women	89.2	97.30%	80.90%	95.20%
HIV Knowledge Among Men	92.50%	96.20%	85.80%	91.50%

[1] Calculated as maternal mortality rate divided by the general fertility rate
[2] Source: Trends in Maternal Mortality: 1990 to 2010. WHO, UNICEF, UNFPA and the World Bank. Geneva, World Health Organization, 2012 (http://whqlibdoc.who.int/publications/2012/9789241503631_eng.pdf).
[3] No data by region in preliminary 2013 DHS

Capacity to deliver essential health services has increased through an improved health infrastructure, including the development of maternal waiting homes, drug storage facilities, and upgraded or newly constructed facilities. The process for health facility accreditation by the Central MOHSW, with support from RBHS and the Liberian Medical

and Dental Council has also been improved, and accreditation tools now include quality standards. Facilities in Bong, Lofa and Nimba have been assessed providing a baseline for quality improvement accreditation.

Through our assessment, we found that overall supervision has improved and been "institutionalized." A standardized set of tools for supportive supervision exist, staff have been trained on them and they are used at all supervisory visits. Supportive supervision visits from the county level to the health facilities are conducted on a monthly schedule and the findings from these visits are used to improve performance. The Central MOHSW conducts quarterly supervision visits to all facilities and to communities on EPI activities.

Capacity building efforts have resulted in increased collaboration with partners. CHSWTs and partners have synchronized their planning cycles and all activities are now conducted jointly with the full knowledge of all, with the exception of budget planning. Community health structures, such as the CHDCs and the CHSWBs have been reactivated and meet regularly. School-based health programs, such as deworming and eye care have been introduced, though could be expanded and strengthened.

The implementation of performance based financing (PBF) has resulted in a significant number of positive outcomes. Facilities are rewarded for the quality of their performance, which has led to improved health outcomes. Facilities have increased autonomy through bonus use, which includes a sharing mechanism with facilities and communities. PBF has also reinforced a culture of information and use of data for decision-making. PBF-supported client satisfaction studies are starting to highlight the ways in which county management and facility-based decisions can be improved.

Gaps

While supervision overall has improved, gaps still remain. The quality and pace at which visits occur is uneven. Central-level supervision to the CHSWTs and facilities is inconsistent and the process and objectives of facility visits by the MOHSW is not firmly established or communicated. CHSWT supervision of facilities is not consistent across the three counties, with some counties performing better than others (e.g., Nimba). In all three project counties, hard-to-reach facilities receive fewer visits, especially when environmental conditions impede transportation routes. Though tools and protocols have been developed, an effective community supervision system has yet to be fully implemented.

Implementation of identified infrastructure needs and various components of the full package of EPHS interventions have been uneven. While waste treatment and disposal policies have been established, implementation is lagging. A number of facilities still do not have incinerators and/or placenta pits or are unable to separate and properly dispose of their waste. Components of the EPHS that are donor-funded (e.g., malaria)

are making great strides while non-donor-funded components, such as mental health, are lagging.

There is a perception that too much emphasis has been made on making improvements at the facility level and that community-level prevention activities need more support. The lack of community-level data hinders the health system's ability to attribute the community contribution to improvements in health outcomes.

Recommendations

A process for incentivizing effective supportive supervision practices is needed. Mechanisms should be introduced that focus efforts on providing technical assistance to remedy gaps identified during previous supportive supervision visits. Potential strategies could include the use of indicators that track the closing of identified 'gaps,' as opposed to just measuring "number of visits." Regional Support Teams should be utilized to clarify the process and objectives of supportive supervision by central MOHSW.

Donor interest should be engaged to fully implement and fund the EPHS. Rather than allowing individual donor agencies to fund single components of the EPHS (e.g., malaria or HIV), there needs to be an effort to encourage funds to be distributed across all of the components or additional support should be solicited for the components that are currently being given less attention (e.g., school health, eye care).

More coordination of community level efforts is needed. A more holistic approach that pools funds across donors and programs and leverages additional support for gCHVs and TTMs will lead to a more equitable distribution of incentives, thereby sustaining important gains made through the utilization of these health workers. In addition, implementation of the Community Health Management Information System (CHMIS) should be fast-tracked to further develop the MOHSW's and CHSWT's relationship with the community and to be able to better measure the contribution of activities at this level in improving health outcomes.

Building Block 2: Health Workforce

Achievements

Our assessment found that overall staff is highly motivated and committed in spite of challenges. There has been an increase in the number of staff at the county level and new positions have been created. Roles have been clarified through the process of revising job descriptions, which are being used more regularly.

The ability of the MOHSW to manage the health workforce will be improved though the implementation of the integrated Human Resources Information System (iHRIS), which is being rolled out nationally. The iHRIS allows health sector leaders to track, manage and plan the health workforce at all levels of the health system. Training in the iHRIS has been completed for key MOHSW and CHSWT staff and its implementation will fast-track payroll, induction, and transfer of employees, and will help to rectify the problem of "ghost" employees.

Through the myriad of RBHS activities on pre-service education, the quality of the learning environment for current and future health workers has been markedly enhanced. Pre-service curricula for all cadres of staff have been updated and standardized across training institutes. The environmental health technician (EHT) training is now on par with international standards and included as part of the EPHS, with EHTs newly designated as supervisors of community level activities. The quality of classroom instruction has been strengthened through training in effective teaching methods such that instructors say that previously they were not really effective teachers. Instructors interviewed at TNIMA said that previously students did not have direct access to their teachers but that this "gap" has now been closed and you can see the evidence of students' learning overall in the skills that they demonstrate during their practicum. In addition, a stronger link between pre-service training institutes and clinical sites has been forged through the placement of a clinical preceptor and instructor associated with the training institute at all clinical sites.

Increased professionalization of the midwifery specialty has been achieved through the increased credentialing of midwives and the phase-out of the certified midwife cadre. Training has been extended from two to three years and a bridging program was developed to allow certified midwives to scale-up their status to registered midwives. Scholarships for higher education have also been established. Increased collaboration between medical and nursing professional boards and training institutions have improved such that the boards are no longer perceived solely as "policing" the activities of the institutes. A more collaborative approach to board exam development and better matching of the exam to the actual content of the curricula was also described.

All pre-service and in-service training activities were informed through regular meetings of the Education and Training National Working Group, which included representation from the various training boards, the Liberia Medical and Dental Council, the pre-service training institutions and the Training Unit at the Central MOHSW. The ETNWG has ceased to meet as the RBHS project begins its closeout phase. No institution has yet indicated a desire to take over full coordination duties, though the LBNM now addresses coordination of nurses and midwives in their regular board meetings.

Gaps

While substantial improvements in the health workforce have been achieved, it is clear that human resource management is not efficient. At the central level, there are too many staff overall and a rational staff assignment plan is not evident. For example, the Mental Health and Training Units are significantly under-staffed (as opposed to Health Promotion) and assignment of the most appropriate person to head up a department is not always done. In contrast, more staff is needed at the county level. At TNIMA, more staff was needed to assist with coaching, mentoring and effective training evaluation.

There is frequent rotation of competent staff that results in lost momentum on initiated activities and a concern that the achievement of results is impeded. Furthermore, recruitment and retention do not always match staffing needs. The recruitment and internal transfer process is not well understood, thereby causing some to question and distrust the processes. While job descriptions for all cadres have been revised, they have not been uniformly disseminated throughout the health system. Performance reviews are not conducted regularly and staff members are not held responsible for addressing identified gaps, nor acknowledged for strong performance. Training is needed for clinical Officers in Charge (OICs) whose responsibilities increasingly include management duties for which they have had little or no preparation.

Improvements in the quality of teaching at the two pre-service institutes (EBSNM and TNIMA) were found, however, other institutional changes varied between them. For example, while computers and other materials were procured by the Project for both schools, only EBSNM adequately budgeted for and thus had an open and fully staffed, functioning lab at the time of the assessment.

Overall, the management of in-service training is in need of much improvement. There is no coordination at the central level around the number and types of trainings being conducted nationally as well as limited to no information about what skills and topics individual health workers have up-to-date knowledge on. Most training is developed and provided by donors who are not incorporating the Central MOHSW into the planning process. Most CHSWTs have begun to keep track of staff trainings, but all mentioned the lack of coordination that made it exceedingly challenging to work as a team to address key health issues locally. Finally, the process for re-licensure of health providers is still under development and needs additional attention to ensure that in-service training is formally linked.

Recommendations

Roll out of the iHRIS provides a great opportunity to coordinate training centrally with key input from the CHSWTs. This will make it easier to manage in-service training, thus allowing the inclusion of a continuous professional development process linked to the re-licensure of health providers.

The implementation of the full performance management cycle at all levels throughout the entire MOHSW will help to improve staff accountability and reduce inefficiencies. Similarly, this process can assist in holding key staff responsible for demonstrating results before being promoted or transferred.

The Training Unit at the MOHSW needs to be resurrected to coordinate in-service training at all levels to reduce critical inefficiencies. Re-licensure should be formally tied to professional development and in-service training with the assistance of the regulatory bodies.

The establishment of the Educational Training National Working Group by RBHS was cited by some, but not all, people interviewed as a helpful forum for better coordination of all MOHSW pre- and in-service training across the country. Attention needs to be given to whether the ETNWG has lasting value for all stakeholders and if it should be continued beyond the life of the RBHS project. Individuals or organizations who will carry the group forward when the project ends need to be identified. The LBNM has partially taken this on for nurses and midwives, however the LMDC, who works with all cadres of health professionals, should take the lead in these coordination efforts.

Building Block 3: Health Information System

Achievements

The 10 Year National Health Policy and Plan has given high priority to the development of a decentralized Health Management Information System (HMIS) as an integral part of the national health system. RBHS has continued its support to the MOHSW's HMIS, M&E, and Research (HMER) Unit strengthening both the collection and compilation of quality data and the use of HMIS data for decision-making. RBHS has deployed a variety of strategies to improve health information system capacity at all levels. All three RBHS counties have an RBHS M&E Officer who sits with the CHSWT to promote use of the DHIS 2.0. HMIS tools are currently being revised based on changes in data needs. The DHIS/iHRIS Interoperability Academy occurred in May 2014, which provided information about the human resources information system and its potential integration with the DHIS.

A notable data culture has been promoted at the Central MOHSW, CHSWT and district levels through the development and implementation of the MOHSW National Monitoring and Evaluation Policy and Strategic Plan 2012-2021, and with necessary trainings on DHIS 2.0 occurring at least once a year. In 2008, the Health Management Information System was paper-based and now it is fully electronic. Staffing capacity has improved at all levels, whether through training existing staff or the creation of new positions, especially at the county level. Some CHSWTs have hired district data clerks to assist with obtaining and entering DHIS 2.0 data. Most CHSWTs receive regular, timely and complete reports from facilities and share this information with the Central MOHSW on a consistent basis. Regular data review meetings occur quarterly at the county level, and national review meetings occur annually.

Across the RBHS-supported counties, the culture of information has improved, and is strongest in donor-supported programs. There is an increased, but uneven, use of data for programmatic decision-making and action at the county level. Most often data are used 'reactively'; a problem or challenge is identified and the data is used to confirm the problem and obtain additional information before developing a solution. 'Proactive' data use to identify areas for improvement is not routinely done.

Plans are currently being developed at the Central MOHSW to promote integration of health information systems, including financial, monitoring and evaluation, human resources, logistics management and physical assets data systems.

Gaps

While there is a marked increase in the capacity to collect and report data, the CHSWTs still rely heavily on the RBHS Monitoring & Evaluation Officers for routine CHSWT M&E activities. This may be due in part to remaining staffing challenges, including staffing plans that are not based on need. Counties with vastly more facilities or larger population sizes have the same number of M&E staff as smaller counties. In addition, there is still a lack of accountability for some CHSWT M&E staff, which may be exacerbated by their frequent and long absences from post to attend trainings. The result is often a backlog of data to be entered. In some counties, infrastructural barriers to information sharing and use (e.g., inconsistent electrical supply, and/or lack of Internet access) remain, and the quality of data collected is uneven. The regular use of data for decision-making at the CHSWT level needs to be improved.

There is also limited evidence of demand for and use of data for decision-making at the Central MOHSW, except for regular and required reporting (e.g., annual, budget performance) or with certain donor-funded programs including Performance Based Financing and the Pool Fund. Currently, the MOHSW HMER Unit's contribution to fostering this data use culture at the central level is limited.

Furthermore, there is still a mistrust of data at different levels. While many describe reported data to be timely and complete, there is a sense that the quality of it is lacking—both of routine data and of special studies (e.g., the recent iCCM study). This further undermines efforts to encourage data use for decision-making. One county also noted that they would have liked more input into developing the DHIS forms.

Finally, community information system development, implementation and information systems integration still need to be realized. The CHMIS tools were printed without pre-testing; iHRIS has been developed and shared but has not yet been implemented. Discussions on data integration have begun, but there is still much to do to integrate the financial, monitoring and evaluation, human resources, logistics management and physical assets data systems.

Recommendations

M&E trainings need to be coordinated to limit time M&E staff spend away from their posts. This will also enable the RBHS M&E Officers to ensure that the necessary transition of duties occurs before the end of the project period. At the county and facility levels, closer mentoring and support should be provided to improve data quality and the 'proactive' use of data for decision-making. This should in turn increase confidence in regularly collected data to tell an accurate story of what is happening within the health system and identify where problems are that need to be addressed.

This capacity assessment also identified the need to hire data managers who also possess programmatic experience so that they can link the data being collected to programmatic objectives. This will promote a better understanding of the relevance of the data and can help engender an improved data use culture at the Central MOHSW.

The absence of a Community HMIS undermines crucial community contributions to the achievement of health outcomes. The CHMIS rollout should be fast-tracked to realize this potential and strengthen partnerships between the health system and community. Similarly, an operational plan to begin integrating the various information systems should be prioritized.

Building Block 4: Access to Essential Commodities

Achievements

A Supply Chain Master Plan (SCMP) was developed in 2010 with support from JSI, and is the guiding document for supply chain improvements in Liberia. To address significant transparency issues, USAID | DELIVER, with USAID funding, implemented the "interim approach" (IA) in 2014. This is a system to deliver health commodities and conduct data

verification, while simultaneously strengthening the National Drug Service's (NDS) capacity. The IA contributed to decreased stock outs for specified drugs included in it (i.e., family planning, malaria). An evaluation of the IA system and updating of the SCMP will take place in the second half of 2014. A logistics system review and design activity is also planned in 2014/2015 to identify improved processes for requisitioning and reporting—including those implemented via the IA—as well as other supply chain activities. It is expected that a hybrid approach (utilizing many of the positive features of the IA, while focusing on sustainability) will be incorporated into the SCMP.

Training on quantification, forecasting and planning has been completed for about 1,000 staff, though it was noted that standardized methods and tools for how they do quantification are not fully in use across CHSWTs. The availability of drug treatment guidelines was also noted as having positively impacted service delivery and outcomes.

Community-facility linkages have shown improvement: gCHVs distribute family planning commodities and malaria drugs in donor-supported counties; TTMs have been trained in misoprostol use; and there is a standardized process for training drug dispensers.

Infrastructure improvements are notable (e.g., the new Nimba drug depot), but uneven across counties (e.g. Bong County currently rents space to store its commodities). At the central MOHSW, the Infrastructure Unit's ability to plan, build, and maintain buildings to store drugs and provide health services across all levels of the health system has grown. Key national-level documents have been developed and revised, including building standards, maintenance guidelines, and project management guidelines. The central team has participated in trainings on AutoCAD and structural engineering software, thus improving their ability to effectively implement building standards.

Gaps

There is large variation in how the supply, distribution and storage of essential medicines are handled in each county. Through the IA, malaria and FP commodities are being handled from NDS to the county depots and out to the facilities in a top-up model, but the rest of the essential medicines are handled by different NGO programs in each county (e.g., Africare), who have their own reporting, quantification and storage processes.

Issues that continue to hinder supply chain performance (i.e., resulting in inadequate availability of commodities) include: (1) infrastructure needs; (2) supply chain staff capacity; (3) the transparency of supply chain data and products; (4) need for aligned supply chain processes and procedures; and (5) need for improved coordination, including between donors funding various supply chain activities.

Infrastructure improvements across the counties are uneven. There are critical warehouse and drug storage issues at county and health facility levels; Lofa and Bong in particular have significant infrastructure improvement needs. Insufficient storage space results in lack of proper management of commodities; over-stocking results from multiple rented warehouses. At the central level, the lack of a central warehouse results in drug seepage. Appropriate, trained staff are not available at the county level (except in Bong) to oversee infrastructure projects.

The central and county level perspective varies on response time for requisitions, though it was generally accepted that there is a need to increase supply chain staffing levels and capacity.

The IA has been successful, but is not sustainable. Stock outs of drugs not included in the IA remain, which affects ability to reach health targets. Further, there are challenges in identifying a sustainable 'hybrid' approach going forward. It is believed that the role that supply chain management plays in the achievement of health outcomes is not well accepted or understood. Finally, there was concern expressed about the sustainability of free drugs and the need to introduce user fees on a sliding scale.

Recommendations

The fundamental importance of the supply chain in being able to achieve health outcomes requires continuous communication at all levels. Similarly, the importance of infrastructure to facilitate proper drug forecasting, storage and distribution needs to be understood and prioritized with the Health Infrastructure Unit to address county depot improvements, and to fast-track the NDS warehouse.

The Health Infrastructure Unit's capacity in project management of subcontractors needs continued strengthening. Partnerships with county level "trade teams" to manage routine infrastructure needs should be explored (e.g., lead contractor in each county who can oversee subcontractors, such as plumbing or electrical, on county construction projects). At the regional level, engineers can be assigned to the Regional Support Team (RST) in order to advocate for and help prioritize health infrastructure needs at the county level.

Building Block 5: Health System Financing

Achievements

The CHSWT's capacity to plan and budget has improved. Financial staffing levels have increased and with the assistance of RBHS, implementation of an electronic accounting

system is in progress in all three counties. Two of the three counties reported conducting monthly review of revenues and expenditures, and annual audits.

At the Central level, the oversight of the Performance-Based Financing (PBF) Division has been successfully transferred from RBHS to the MOHSW. PBF has made an impact on several health outcomes, including MMR, child survival and FP. The identification of PBF indicators and targets allows salient needs to be identified and action to be taken. PBF has given increased autonomy to health facilities by enabling bonuses to be used at the facility and community level. Other donor-funded programs have similarly solid budget management and oversight (e.g., FARA, Pool Fund, GAVI).

RBHS has been working actively for some months to reorient the conversation on health financing away from a desire merely to increase the amount of funding into the health sector. In addition, RBHS has been working with the MOHSW health financing team to look at a more rational resource allocation across Liberia's fifteen counties, a process which will promote transparency. The MOHSW has recently proposed a new Resource Allocation Formula that includes criteria on how to more appropriately allocate funds to counties based on a variety of factors, including population size, terrain, number of health facilities and disease burden. The Program Coordination Team (PCT) has approved this strategy, and the next step is to obtain legislature approval during the next budget period. Work has also been initiated by the MOHSW to develop universal health coverage through the Liberian Health Equity Fund.

Gaps

The total allocation to health from the Government of Liberia (in terms of total amount and % of total GOL budget) has been decreasing. The MOHSW allocation goes through the Ministry of Finance (MOF) and is not based on a standing agreement or projected need. Thus the allocation process is not transparent as the MOHSW submits a budget request and the MOF delivers a vastly different budget than what was requested. The MOHSW also has no control to reallocate CHSWT-funding based on plans or needs once the final budget is received from the MOF. This may change if the Resource Allocation Formula developed and approved by PCT is approved by the legislature.

The strong donor presence within the Central MOHSW further complicates financial systems. The MOHSW is not the budget holder of FARA funding and has limited influence on its strategic direction. In addition, the sustainability of PBF is questionable, as the Central MOHSW does not have the funding stream to continue after the donors exit. Finally, funding from other sources (i.e., donors) results in the government further reducing their allocation to the MOHSW.

There is an understanding of what is required at the county level to continue the decentralization process, including further decentralizing activities and financial management to the district level. However, this next step is exceedingly challenging due

to the inconsistencies related to the budgetary allotment process. While counties have been given complete budgetary ownership and the capacity to monitor the budget, they do not have true oversight, as they have no real input into the allocation process. The MOHSW does not allocate funds to the CHSWTs based on need. This is exacerbated by confirmed agreements with health service delivery partners who are guaranteed a certain budget, leading to vast differences in allocations. An example of disproportionate funding is illustrated by a situation in which one partner received US$120K to spend on one facility, whereas the entire health budget for the rest of the county was only US$75K.

In addition, once the CHSWTs receive the budgetary allotment there is very little support from Central to re-prioritize based on the amount received. The CHSWTs have full line item flexibility but very little oversight on spending is taking place at any level, and financial management staffing levels and capacity are mostly inadequate. Similarly, there is a need for increased transparency and a more participatory budgeting process at the CHSWT-level.

Furthermore, often the CHSWT budget allocation comes very late, leaving the CHSWTs drastically behind in paying bills. Partner-run facilities often perform better since they can use financial reserves and get reimbursed once the allocation comes through. Another payment challenge a CHSWT shared was related to procurement; a new regulation requires any business that provides goods and services over $500 to provide evidence that they have paid their taxes during the most recent quarter. In many rural areas there are few large companies that are able to comply, requiring the CHSWT to travel to Monrovia to procure goods and services. In addition, some counties provide services to people from bordering countries. How services for these people should be paid for has never been discussed. One suggestion was to develop a bi-directional reimbursement agreement with neighbors.

Recommendations

Many potential solutions to the preceding financial management challenges have already been identified, and what remains is how to create an enabling environment to make them happen. The Resource Allocation Formula would address critical issues in budget allocation by funding CHSWTs based on a variety of factors, including population size. Another option would be to fund entire geographical areas (e.g., an entire county and all facilities in it) to implement all components of the EPHS. As a result, counties would be able to plan according to population size and service utilization using census data and facility data. The Liberian Health Equity Fund should address issues about non-residents who receive county health services.

Adequate financial management staff should be hired and trained in all counties to promote compliance and a separation of potentially conflicting financial management responsibilities. In addition, financial documentation needs to be improved at all levels.

The MOHSW should provide prioritization support to the CHSWTs after the budget allotment has been received to reprioritize and develop a functioning line-item budget. This may in turn prompt a more participatory budget process—from MOHSW to CHSWTs—that includes all stakeholders.

The Central MOHSW should advocate for timely and transparent allocations from the MOF. The procurement issues related to tax submission status should also be discussed and potential resolutions should be developed.

At the Central MOHSW level, the uncertainty around future funding for PBF needs a prompt resolution. The impact of donor funding on individual programs like FARA and the future funding strategy of the MOHSW as a whole should be discussed. On a grander scale, MOHSW funding should be pulled out from under the MOF so that the MOHSW has a dedicated account, and national stakeholder engagement should occur to advocate for additional health sector funding. As one County Health Officer noted, "You can't run a decentralized system without a budget allotment at least roughly based on the activity plan."

Building Block 6: Governance and Leadership

Achievements

Governance and leadership drive the development of policies and ensure adequate oversight and regulation. The ultimate goal of effective governance is to ensure accountability, at both the central and county levels, which is intrinsic to the success of any health system. CHSWTs show marked gains in leadership and accountability over the health system and outcomes, evidenced both qualitatively and quantitatively through their self-assessment scores. Decentralization has clearly resulted in greater autonomy and ownership at all levels—counties, facilities, and communities.

The central MOHSW recognizes the need to work across departments and with partners to accomplish the following: strengthen county capacity; improve communication between the central level and the counties; and implement government-wide reforms in the public service including payroll reform, public financial management, procurement and asset management, and supply chain. RSTs have been initiated to support the management of capacity building and further increase accountability of counties.

At the same time, the MOHSW continues working toward the decentralization of service delivery to the counties, and more robust monitoring, evaluation, research, policy and regulatory functions at the central level. In turn, donors are demonstrating confidence in the MOHSW's ability to manage health services and funds.

Significant capacity has been built to perform tasks not previously possible. The MOHSW now leads Health Sector Coordination Committee meetings. Central MOHSW writes their own proposals and solicitations, and supports the counties to write proposals. Counties independently monitor activities against work plans, hold monthly coordinating meetings with implementing partners, and hold regular meetings with districts. Counties are better able to identify their own capacity needs based on the initial RBHS capacity self-assessment and strategy, as well as the recent contracting-in readiness assessment process. District Health and Social Welfare Teams (DHSWTs) have increased staffing numbers and capacities. An increased number of CHDCs attached to facilities are functioning. Some counties hold quarterly review meetings with OICs. The County Health and Social Welfare Board, which is the primary mechanism for involving local government and civil society in health issues, has been re-launched and meets quarterly, in two counties.

Gaps

The Ministry has committed itself to leading the change process centrally and in the counties to achieve its vision of "improved health and social protection for all Liberians" in a decentralized system. At the same time, they have been addressing crises such as the two recent health worker strikes and the recent Ebola outbreak. Leading change and ensuring effective decentralization while being embroiled in crises that demand immediate and intense attention, continue to challenge the MOHSW.

Full *health sector* decentralization is dependent on full *national* decentralization, which requires implementation of the Civil Service Agency Reforms, including pay reform and harmonization. As a result, decentralization from central to counties is not yet fully realized. Internal and external communication needs strengthening; in particular between the central and county levels on strategic priorities and budget allocations. A more appropriate allocation of tasks between central and counties has been documented in the Functional Review report, but still has not implemented.

As noted under Building Block 2: Health Workforce, there is limited transparency in how recruitment or internal transfer decisions are made. There is no system to encourage and promote people with demonstrated skills and ability (e.g., tiers, hierarchy). Thus, there is no incentive to become transparent.

Communication on financing is insufficient, particularly with regard to the central level sharing with the counties what the limitations are on control over reallocating the budget at the central level. Communication within the central MOH also needs strengthening and should be made more efficient, as evidenced by the counties receiving multiple requests from different units at the central MOHSW for the same information. It appears that units and divisions at the central level still remain siloed and do not share information easily and routinely amongst themselves.

A functional review was done two years ago to determine what tasks should be distributed to the county level and what should remain at central, though recommendations have yet to be implemented. There is an understanding that there is a need to consolidate units and increase efficiencies at central level, but challenges remain in developing mechanisms to implement this. There is also evidence of increased critical thinking and review/prioritization of advice from external consultants, though the myriad of donors and prescribed priorities results in challenges in meeting objectives.

Recommendations

Like in other building blocks, solutions to challenges have largely been identified. Existing mechanisms should be utilized to improve collaboration and communication between the MOHSW and counties, and to engage political leadership. Efficiencies could be gained by merging certain units at the central MOHSW (e.g., Personnel and Human Resources; Community Health and Health Promotion). This may serve to also increase the efficiency of communication and requests for information from the counties to the central level. A further assessment should be conducted to clarify roles and responsibilities across the central level.

The MOHSW Community Health Services Division should consider using the County Health Services structure as a model, where each of the staff has a core technical area (e.g., improvement collaborative, quality assurance, contracting-in), and they each serve as a desk officer for one of the regions, thus attending the RST meetings. This model helps promote communication across the Division on technical issues, and allows them to provide regular communication between the central MOHSW and the counties for which they are responsible.

At the Executive Level, there is a need to focus on leading, reinforcing and evaluating change efforts and delegation of authority and responsibility. Resource allocation and accountability need equitable and transparent processes that include counties, regulatory bodies, civil society and the legislature. At the director and assistant director levels (including County Health Officers and their senior team), there is a need for strengthened management skills, including planning, delegation, personnel management, resource allocation, M&E, and reporting. This is also true for clinicians who are promoted to management positions.

There is a need to further develop leadership capacity to manage the decentralization process. Internal communications within and between central office and counties and external communication with the regulatory bodies, other ministries and local government, civil society and the legislature also need to be strengthened. In the case of internal communications, there is a need for a formal communications infrastructure

and standard protocols; externally there is a need for attention to messaging and timing of public awareness and advocacy communications. Overall, there is a need to create a more complete “information culture” where sharing information is considered a good management practice.

Next Steps

While substantial achievements have been produced in the past six months, it is obvious that capacity building will need much more support than RBHS can offer in the remaining three months of activities. In this spirit, USAID and the MOHSW have jointly agreed to two new five year projects to be awarded later this year to bolster capacities at all levels of the health system, including communities, local organizations, CHSWTs and the Central MOHSW.

Annex I Core Team Composition

Deirdre Rogers: Team Leader, JSI/Boston

Kumkum Amin: JSI/Boston

Kate Beal: JSI/Boston

Heather Drummond: Independent Consultant

Neima Candy: RBHS Intern

In addition to the core team, MOHSW staff participated in assessments at the county level, and RBHS technical staff participated in some county- and central-level interviews. See Annex II for a complete list of interviews and participants.

Annex II List of Interviews

May 19-20, 2014:

RBHS staff briefing
Assessment Team: Deirdre, Heather

May 21, 2014:

RBHS Staff Interviews
Assessment Team: Kumkum, Kate
Attendees:
Theo Lippeveld (Financing)
Sarah Hodges, Maima Zazay (FHD)
Catherine Gbozee, Theo Lippeveld, Marietta Yekee, Teah Dogmah (Community Health)
Catherine Gbozee, Theo Lippeveld, Judith Oki (County Health Services)
Joe Moyer (Infrastructure)
Bal Ram Bhui, Theo Lippevel (HMER)
Zaira Alonso(HR Unit/Personnel Unit)
Marion Subah(Training Institutions & Boards)
Floride Niyuhire (PBF)
Marietta Yekee, Teah Dogmah (NHPD & NMCP)

Nimba CHSWT
Assessment Team: Deirdre, Heather, Rose, Adolphus (MOHSW), J. Mehmon Tokpa, Imenteelea Grimes
Attendees
Collins S Bowah(CHO),C. Paul Nyanzee (CHDD), Priscilla Mabia (RH Supervisor), Kou Yelabo (Mental Health), Jerry Mannah (Accountant), Wilson Dolo (Logistician), Rancy Leesala (CHSA),
Steven Wongbay (Nutritionist), Barnard Lakpor (EPI Supervisor), Nelson Kartee (EHT), Harris Nyankaryah (HR Officer), John G. Nenwah (Africare M&E), J. Gonleyen Dahn (M&E Officer CHT).

May 22, 2014:

Esther Bacon School of Nursing and Midwifery (EBSNM)
Assessment Team: Deirdre, Heather, Judith, Adolphus (MOHSW), Caleb, Pauline
Attendees: Harriet Dolo, Esther Toloco, Rebecca Seleweyan, Anna Kybuku, Kebe Koroyon, (+ 2 recent graduates working in obstetrics ward)

Tubman National Institute of Medical Arts (TNIMA)

Assessment Team: Kumkum, Kate
Attendees: Sarah Kollie (Administrator), Ada Brown (Acting Director, School of Nursing and Midwifery), Kerkula Kollie (Director, School of Environmental Health Technicians), Vachel Harris (Instructor, School of Nursing and Midwifery), Edwin Beyan (Instructor, School of Nursing and Midwifery), Lassana Kelleh (Instructor, School of Nursing and Midwifery), Jestina Cole (Instructor, School of Nursing and Midwifery), Musu Kiawon (Instructor, School of Nursing and Midwifery), Dorothy Dagaboi (Instructor, School of Nursing and Midwifery), Cecelia Massaline (Instructor, School of Nursing and Midwifery), Fatu Kettor (Instructor, School of Nursing and Midwifery), Mr. Barclay (Instructor, School of EHT), Hector Weah (Instructor, School of Nursing and Midwifery), Abraham Zayzay (Instructor, School of Nursing and Midwifery), Augustus Reeves (Librarian), Rebecca Kiazer Timbo (Instructor, School of Nursing and Midwifery), James Dogba (Instructor, School of EHT), Rebecca Scotland (Instructor, School of Physician Assistant)

NMCP
Assessment Team: Kumkum, Kate
Attendees: Oliver Pratt (Program Manager, NMCP)

May 23, 2014:

Lofa CHSWT
Assessment Team: Deirdre, Heather, Judith, Adolphus Clark (MOHSW), Caleb, Pauline
Attendees: Aaron Kollie (CHO), Dorfelson Jayguhwoiyan (District Health Officer), Howard Yokie (EPI Supervisor), Wolobah Y. Moore (County Pharmacist), Abraham Flomo & John Akoi (Clinical Supervisors), Gunkanue Monwan, (HIV Focal Person), Edmund Eisah, (Director of Community Health), Prince Sesay (Director of County Health Services), John B. Arku (Logistician), Elizabeth Tamba & Esther Y. Argba (MCH Supervisors)

PBF Unit
Assessment Team: Kumkum, Kate
Attendees: Louise Marpleh (FARA Manager),
Dominic Togba (Acting Coordinator PBF), Tendra Tenwah-Gweh (PBF Officer), Mildred Harris (PBF Officer)

Mental Health
Assessment Team: Kate
Attendees: Meiko Dolo (Director Mental Health Unit)

HMER Unit
Assessment Team: Kumkum, Kate
Attendees: Luke Bawo (Coordinator M&E, HMIS & Research)

May 26, 2014:

Infrastructure Unit
Assessment Team: Deirdre, Kumkum
Attendees: David Jallah (Director), Edwina Robinson (Secretary), Solomon (Snr. Engineer), Sumo (Snr. Engineer)

National Health Promotion Division
Assessment Team: Deirdre, Kumkum
Attendees: Rev. JohnSumo (Director)

County Health Services
Assessment Team: Deirdre, Kumkum
Attendees: Vera Mussah (Director), Byron Zahnweah (Contracting-in Coordinator), Precellia Goanue (Quality Assurance Coordinator), John Kollie (Improvement Collaborative)

Personnel Unit
Assessment Team: Deirdre, Kumkum
Attendees: James Beyan (Personnel Director)

Community Health Services
Assessment Team: Deirdre, Kumkum
Attendees: Tamba Boima (Director), Olasiford Wiah (River Gee), Patience Sorsor (River Gee)

Family Health Division
Assessment Team: Deirdre, Kumkum
Attendees: Sarah Layweh (Acting for Director Caullau Jabbeh-Howe)
May 27, 2014:

Bong CHSWT
Assessment Team: Kate, Heather, Marion, Justin Korvayan (MOHSW), Luogon Willie-Paye, Mohammed Massaley
Attendees: Dr. Samson Arzoaquoi (CHO), Getrude Cole (RH Supervisor), (Jerries Walker (HRO), Fatuma Jusu (CHSA), Peter Tiah (Child Survival Focal Person), Saturday Kollie (County Diagnostics Officer), John Gleekiah (Clinical Supervisor), Peter Yarkpawolo (HIV/AIDS Coordinator), James Juman (EHT Supervisor), James Sibley (TB/Leprosy Focal Person), Prince Dolo (Logistics Officer), Melvin Fania (Data Clerk), William Gbelee (Nutrition Focal Person),Darkermue Kollie ((Mental Health Focal Person), Korwan Flomo (Accountant), Samuel Gayflor (Pharmacist/Supply Chain Chief)

Central MOHSW Building Block 2: Human Resources
Assessment Team: Deirdre, Kumkum

Attendees: Matthew Flomo (Deputy Minister for Administration), James Beyan (Personnel Director)

Central MOHSW Building Block 3: HMIS
Assessment Team: Deirdre, Kumkum
Attendees: Stanford Wesseh (Assistant Minister, Vital Statistics), Stephen Gbanyan (Acting Director, HMIS Unit)

May 28, 2014:

Central MOHSW Building Block 5: Health Care Financing
Assessment Team: Deirdre, Kumkum
Attendees: Benedict Harris (Assistant Minister, Planning), Momolu Sirleaf (External Aid Coordinator), Louise Marpleh (FARA Manager), Schiffer Sowandi (FARA Accountant-OFM)

May 29, 2014:

Central MOHSW Building Block 1: Delivering Essential Health Services
Assessment Team: Deirdre, Kumkum
Attendees: Dr. Bernice Dahn (Deputy Minister, Health Services/Chief Medical Officer), Cllrr. Tolbert Nyenswah (Assistant Minister, Preventive Services), Vera Mussah (Director, CHS Unit), Tamba Boima (Community Health), Sarah Layweh (FHD)

Central MOHSW Building Block 4: Access to Essential Medicines
Assessment Team: Deirdre, Kumkum
Attendees: Reverend Tijli Tarty Tyee, Logistics/Supply Chain Manager

Liberian Board of Nursing & Midwifery (LBNM)
Assessment Team: Heather, Kate, Nowai
Attendees: Cecelia A. Morris (Chairperson LBNM), Darboi G. Korkoyah (M&E Director), Cecelia C.K. Flomo (Registrar), Velma Okoro (Finance Officer), Elizabeth Bemah Slewion (Mental Health M&E Officer)

May 30, 2014:

Central MOHSW Building Block 6: Leadership and Governance
Assessment Team: Deirdre, Kumkum, Rose Macauley, Judith Oki
Attendees: Dr. Bernice Dahn (Deputy Minister, Health Sciences/Chief Medical Officer), Justin Korvayan (Director of Planning & Decentralization), Cllr. Tolbert Nyenswah (Assistant Minister, Preventive Services), Matthew Flomo (Deputy Minister for Administration), Cllr. Vivian Cherue (Deputy Minister, Social Welfare)

Liberian Medical Dental Council (LMDC)

Assessment Team: Heather, Kate Nowai Johnson (RBHS)

Attendees: Dr. Moses Pewu, Dr. Mark Kieh (Acting Registrar-General & Clinical Coordinator), Andrew Tulay (Field Clinical Coordinator)

Annex III Quantitative Capacity Assessment Tool

{UNDER SEPARATE COVER}

Note: qualitative questions were tailored to specific interviewees and no standard tool was developed beyond capturing key accomplishments, gaps and challenges in terms of capacity changes over the life of the RBHS project.

Annex IV Documents Reviewed

The team reviewed the following project, USAID and MOHSW materials:

- Cooperative Agreement/Technical approach, amendments and modifications
- Strategic Plan
- Annual work plans
- Quarterly, semi and annual reports
- M&E plan and indicators
- Government of Liberia key documents
- 2007 and 2013 Demographic and Health Survey
- 2009 and 2011 Malaria Indicator Survey Reports and RBHS Analysis
- Fours RBHS Dipstick surveys in 2010
- MEASURE's Health Outcome Monitoring Capacity Building Survey in 2011, 2012, and 2013
- Performance of Routine Health Information System Management (PRISM) baseline assessment
- Performance-Based Financing Contracting-in Guidelines Readiness Assessment Tool
- Baseline 2012 assessment tools
    - CHSWT Assessment Tool—Interview Guide
    - 2012 MOHSW Assessment Tool—Interview Guide
- RBHS Capacity Assessments of Central MOHSW Bong County, Lofa County and Nimba County—2012, updated (March 2013)
- MOHSW 2013 Facility Accreditation Report
- MOHSW National Monitoring and Evaluation Policy and Strategic Plan 2012-2021
- MOHSW Country Situational Analysis Report
- National Health and Social Welfare Policy and Plan 2011-2021
- EPHS Secondary and Tertiary Care – The District, County and National Health Systems
- EPHS Primary Care – The Community Health System
- National Human Resources Policy and Plan for Health and Social Welfare
- 2011-2021
- National Health and Social Welfare Financing Policy and Plan 2011-2021
- Supply Chain Master Plan
- Improving Commodity Security through Accountability and Controls – An Interim Approach
- Water, Sanitation and Hygiene Sector Strategic Plan
- SLICE Liberia Assessment Report