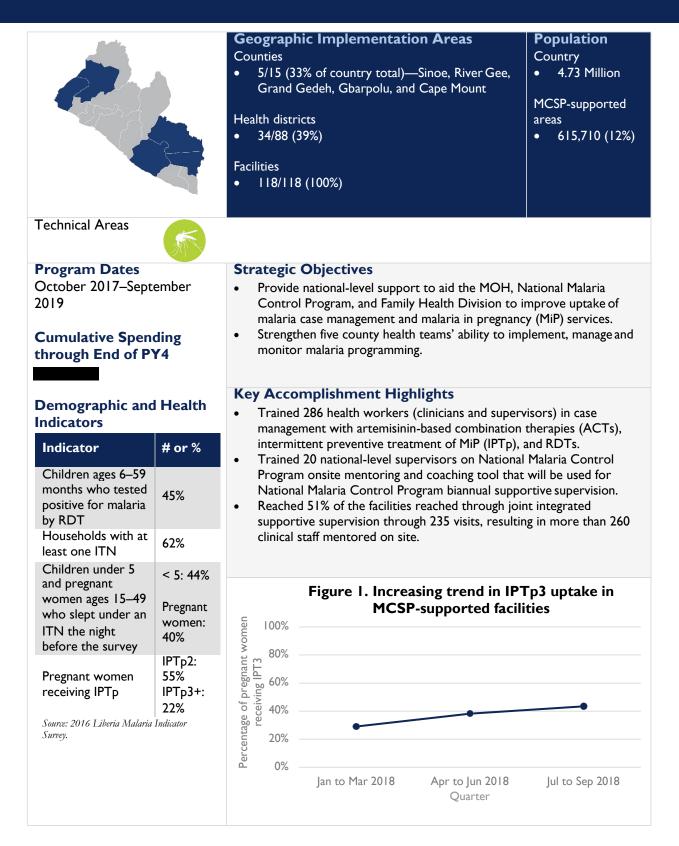
Liberia EMS PY4 Summary & Results



Liberia Expansion of Malaria Services

Key Accomplishments

During PY4, with a focus on malaria case management and MiP, MCSP has worked alongside the National Malaria Control Program to fill in existing gaps and strengthen national-level planning and activity implementation in counties through effective and timely supportive supervision, onsite mentoring and coaching, trainings for facility staff and county and district supervisor trainings, regular updates to protocols, provision of job aids, and technical assistance to county health teams to effectively manage malaria interventions in the counties. MCSP has focused on county-level activities in three southeastern counties (Grand Gedeh, River Gee, and Sinoe), areas with the highest malaria burden, and in two northwestern counties (Gbarpolu and Grand Cape Mount).

Supportive Supervision, Mentoring, and Coaching

In Liberia, the MOH, county and district health teams, and implementing partners continue to utilize the joint integrated supportive supervision tool. The tool is used by supervisors during supportive supervision visits to review quality of care provided by health workers, including skills they learned in the trainings. During this year, in collaboration with the county and district health teams, MCSP has strengthened joint integrated supportive supervision visits across the supported counties, with each facility receiving one visit per quarter. Using the MOH-revised joint integrated supportive supervision tool,

"Since the history of supervision in our county, this quarter we can boast of 85% (of facilities [13 of 15 facilities]) received rigorous supportive supervision and thorough mentoring and coaching were done through MCSP support."

> – County Health Team Gbarpolu County

MCSP, in collaboration with county and district health team staff, conducted 235 regular, 1-day mentoring and monthly supportive supervision visits in 118 facilities. During these visits, MCSP and the county/district health teams conducted on-the-job mentoring and coaching on MiP and case management skills, and mentored facility and county/district health team staff on data validation to strengthen data quality and timely reporting. At the end of each visit, staff held feedback sessions to discuss the key findings, improvements made, action items, and recommendations. The involvement of the county and district health teams during supportive supervision and mentoring visits encourages ownership and skills transfer from MCSP staff to the local stakeholders, thereby increasing institutionalization of skills and practices at the facilities.

Findings from the supportive supervision visits revealed that facilities were adhering to confirmatory diagnosis requirements before treating clients. Supervisors assessed the following: staff knowledge on malaria interventions, availability of standard protocols at the facilities, availability of antimalarial commodities, and adherence to national guidelines and protocols. Additionally, supervisors worked with facility staff to identify gaps, provide mentoring and coaching, and develop action points to mitigate the identified gaps. During the last two quarters of the year, facility staff were mentored, and great improvements were observed in the quality of malaria services at the facilities and in data quality at the facility, district, and county levels.

Human Capacity Development

During PY4, MCSP trained 286 health team staff from all 118 MCSP-supported sites on integrated MiP and case management, and all 119 county and district supervisors (working in malaria) in the revised joint integrated supportive supervision tool and process. Supported clinicians and supervisors are now empowered and feel confident in delivering quality malaria services. The training focused on key updates to the revised MOH MiP and case management guidelines, supervision, coaching, and team-based mentoring skills to enable supervisors to provide onsite team and individual mentoring and coaching during supportive supervision visits, and act on any gaps observed during these visits.

Support to County Health Teams and Coordination with Partners

MCSP supported the county health teams in the five project-supported counties to successfully conduct regular Health Sector Coordination Committee meetings. During these monthly meetings, MCSP provided

updates on project activities implemented in collaboration with county health teams, gaps in staff performance identified during supportive supervision, data quality and coordination issues with county health teams/district health team and partners. MCSP and the county health teams also reviewed action plans developed to mitigate or resolve the gaps. As a result of these meetings, plans for the following months were developed and reviewed by all stakeholders with defined responsible people and timeframes. This work ensures that duplication of effort is avoided by partners and resources, and time and resources are maximized.

MCSP worked with the MOH and county health teams to organize and reactivate quarterly performance review meetings in the five supported counties. MCSP, in collaboration with the county health teams, conducted these meetings to discuss activities in the previous quarter relating to MiP, case management, data use, IPC, and RMNCAH. As a result of these meetings, districts have a forum for open discussion where they can share best practices and work collaboratively to set realistic and achievable targets for the upcoming quarters. The participants included district health officers, district supervisors, county health officers, county M&E focal points, and county supervisors.

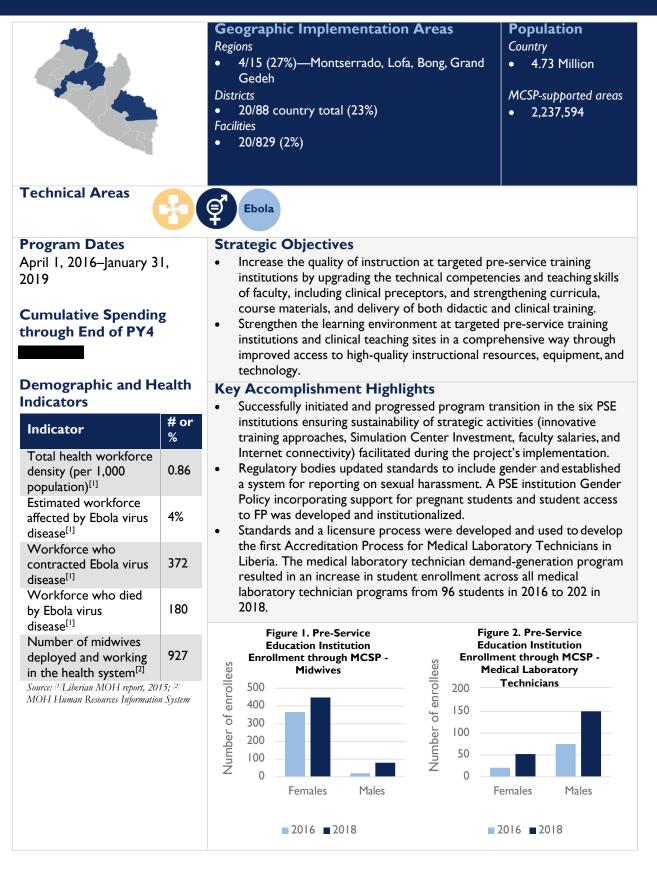
MCSP further provided quarterly needs-based support to all five county health teams to help with malaria services implementation, including logistic support, provision of basic stationary, and provision of generator fuel. MCSP provided MiP and case management treatment guides for all 118 intervention facilities. In addition, MCSP provided financial and technical support for the successful hosting of World Malaria Day celebrations in the five supported counties and participated in the national-level celebration. Finally, MCSP worked in collaboration with county health teams to strengthen the link among the county health teams, Chemonics/procurement supply management, and the National Drug Service (supply chain unit of the MOH) to ensure adequate quantification, procurement, distribution, and supply of necessary commodities, supplies, and essential drugs at the MCSP-supported health facilities in the five counties.

Way Forward

At the beginning of PY5, MCSP will transition two of the supported counties (Sinoe and Gbarpolu) to the World Bank, followed by the other three supported counties (Grand Cape Mount, Grand Gedeh, and River Gee) to the Fixed Amount Reimbursement Agreement program at the beginning of 2019. MCSP will continue to provide quality technical assistance in malaria case management, MiP, planning, implementation, and monitoring of interventions, including quality and complete data reporting to the Fixed Amount Reimbursement Agreement counties. MCSP will also support county and district health teams to ensure that facility staff and supervisors are trained in the revised joint integrated supportive supervision tool and integrated MiP and case management guidelines, and adhere to all standards, including supervision visit frequency for effective case management and MiP implementation. During the next year, MCSP will also implement its program activities in the new supported counties of Margibi, Grand Bassa, Bomi, Montserrado, Grand Kru, and Maryland. Through this work, MCSP will build county health teams' capacity to implement, manage, and monitor malaria programming, which will support their move to self-reliance.

Selected Performance Indicators for PY4				
MCSP Global or Country PMP Indicators	Achievement			
Number of county health team supervision visits conducted using malaria joint integrated supportive supervision	235 (target: 338, 70% achieved)			
Number of health care workers who successfully completed an in-service training program within the reporting period	405 (target: 250, >100% achieved)			
Percentage of persons presenting with fever tested for malaria with RDT or microscopy at supported health facilities	< 5 years: 85% (target: 87%, 98% achieved) ≥ 5 years: 89% (target: 85%, >100% achieved)			
ITN coverage for pregnant women	87% (target: 80%, <100% achieved)			
IPTp 1–3 dropout rate	44% (target: 40%)			

Liberia HRH PY4 Summary & Results



Liberia Human Resources for Health

Key Accomplishments

Post–Ebola epidemic, MCSP's Human Resources for Health project worked with midwifery and medical laboratory technician regulatory bodies to build the capacity of PSE instructors and clinical preceptors and to strengthen the PSE learning environment to prepare a stronger, more qualified health workforce to prevent and tackle future epidemics. In PY4, MCSP continued to support regulatory bodies and PSE institution staff to institutionalize innovative training approaches that will improve the quality of instruction in the classroom and clinical settings. Teaching hospitals supported by MCSP showed an average improvement of 40% in meeting MOH QI RMNCH clinical standards, and subsequently doubled the number of facility deliveries in one year.

Systems Strengthening

To address gaps in the administration and management at supported PSE institutions, MCSP developed a leadership and management development program intended to address skills that follow the LEADER acronym: Learning environment management, Effective communication, Assertive negotiation, Data utilization and management, Engaged problem-solving, and Resource mobilization and management. After participation in the program, PSE institution deans and directors demonstrated improved budgeting and human resource management—two areas school leadership, coming from a clinical background, had struggled with.

MCSP further created an academic management information system database and web interface called Pre-SIS, which enables schools to manage all students' personal, academic, enrollment, admission, and graduation records, thereby enabling accurate reporting for decision-making that promotes improved education quality. This aligns with the MOH HMIS goals and priorities, and allows dean and directors to easily access data and use it for planning and budgeting purposes.

MCSP also established sustainable improvements in linkages between educational institutions and clinical practice sites that can also be used by the other programs to support facilitybased, on-the-job training. In one example of this, MCSP established small simulation centers, called preceptor corners, in health facilities to provide a safe and appropriate space for

"The midwives can now manage preterm labor and the premature baby, and with the doctors together, they are now having great success."

- MCSP-trained preceptor

preceptors to practice key skills before demonstrating them for students and for students to train on models before performing procedures on patients. MCSP developed mobile preceptor corner kits, which included simulation equipment that was easy to move when limited space was an issue or equipment could not be securely stored in a facility. Preceptor corners and repeated practice opportunities during the low-dose activities of the LDHF training approach are credited for meaningful improvements in services. Facilities

"Before [the preceptor corners], we would have been fumbling and doing all sorts of unnecessary things, and the mother would have lost this baby, but when the doctor handed us the baby, we just followed the skill as we had practice here, in the preceptor corner, and the baby is now with the mother doing well, including breastfeeding."

- MCSP-trained preceptor

involved in site strengthening report improvements in treating postpartum hemorrhage, pre-eclampsia/eclampsia (PE/E), and preterm labor management, with higher rates of preemies surviving and going home with mothers. Use of a partograph before the LDHF training at baseline was 34%, but increased to 65% following the LDHF training at endline. At the end of the program, there was a reduction in stillbirths, from 400 stillbirths (baseline November 2016–January 2017) to 100 stillbirths (endline November 2017–January 2018), which was, in part, attributed to the increase in correct use of partographs.

MCSP, in collaboration with the Liberia Association of Medical Laboratory Technologists, completed the development of the Medical Laboratory Technician Accreditation Process, building upon recommendations prepared for health professions regulation in Liberia under the Rebuilding Basic Health Services project in 2014. Following this, 24 medical laboratory technicians were trained as assessors from April 3 to 5, 2018. This

training was conducted to build the capacity of the Board of Accreditation and Licensure for Medical Laboratory Technologists to conduct accreditation of PSE institutions using the PSE Standards for Medical Laboratory Technician Programs. An internal assessment is expected to be done by the three medical laboratory technician PSE institutions using the new accreditation standards to prepare for accreditation.

Finally, MCSP has continued to strengthen educational accreditation processes. MCSP supported the Board of Accreditation and Licensure for Medical Laboratory Technologists to conduct a comprehensive assessment for accreditation at the Tubman National Institute of Medical Arts in Monrovia. MCSP provided both technical and financial assistance for the board to implement this important and long awaited initiative for all PSE institutions offering medical laboratory technician programs. In addition, MCSP's evaluations used Liberian Board for Nursing and Midwifery accreditation standards to assess midwifery PSE school performance in the area of academic management. The assessment showed steady improvements: schools met an average of 68% of the academic management standards at baseline (March–April 2017) and 78% at endline (March 2018).

Human Capacity-Building

MCSP developed a blended-learning faculty development program that provides comprehensive training for faculty and preceptors who are well trained as health workers but have not received any training on effective teaching or facilitation skills. The first cohort of 18 faculty development program participants graduated in March 2018. MCSP supported one PSE institution, Mother Patern, to complete a pilot faculty development program, including documentation of various delivery options and estimated costs. MCSP engaged in discussions with another PSE institution, United Methodist University, to explore their interest in also offering the faculty development program. Mother Patern has the most relevant experience for managing certificate or special courses and has expressed interest in running the faculty development program for a fee. MCSP is still exploring this with both institutions. The Liberia Board of Nursing and Midwifery has approved the faculty development program as a certificate course for continuing education credits. The faculty developments.

MCSP also delivered clinical skills trainings to provide technical updates to faculty and preceptors in midwifery and medical laboratory technician programs. The project used a facility-based, in-service training approach that emphasized simulations for training on critical skills, such as normal and emergency obstetric and newborn care. This evidence-based training approach involved brief workshops; short, facility-based practice sessions that were repeated over time; and mobile mentoring through regular text message reminders. Immediate post-training skills testing showed that participants' skills were not only sustained but also continued to improve through the course of the high-frequency practice, theoretical learning sessions and mobile mentoring. The average post-test score for the midwifery skill testing was 90% immediately post-training (administered February 2018) and 98% at MCSP's reporting of endline (conducted July 2018).

Lastly, to support strengthening faculty and preceptors, in each school, MCSP embedded PSE mentors who supported participants in training their peers. These mentors supervised and mentored faculty and preceptors to help them use their new skills and continuously improve. All PSE institutions have successfully transitioned the MCSP mentor role to an identified staff member, contributing to a strong model within PSE institutions for program success sustainability.

Gender in Curricula and Policy

MCSP supported the implementation of a gender-responsive pedagogy by adding gender to the midwifery and medical laboratory technology curricula and advocating for school policy changes that would create a more gender-responsive environment. These policy changes include adding gender-responsive standards to the educational accreditation standards, establishing sexual harassment prevention policies, and reversing policies requiring schools to expel pregnant students. These changes respond directly to global evidence on causes of higher female student attrition and will have long-term impact on reducing this trend. MCSP also worked closely with professional associations to advocate for increasing recruitment efforts for new students. In medical laboratory technician institutions, the percentage of female students enrolled increased from 28%

Addendum: Country Summaries and Results

to 35% in 2 years, providing additional economic empowerment opportunities for women and promoting equity in the medical laboratory technician health cadre.

Way Forward

To maintain progress after the program closes, MCSP prioritized sustainability and activity transition planning. During PY4, MCSP worked closely with PSE institutions and regulatory bodies to promote program sustainability for continued success. To build on the gains made, and eventually have more students entering and graduating from the midwifery and medical laboratory technology programs—producing a stronger and more qualified workforce to address the health needs of the Liberian population—MCSP will continue working in PY5 Q1 with PSE institutions, regulatory bodies, and the MOH, as the program approaches final closeout. Key priorities for PY5 Q1 include:

- MCSP will engage PSE stakeholders at the MOH to encourage the development of clear policies to support and monitor PSE institutions to ensure that interventions now in place are maintained and continuously updated.
- Equipped with more robust accreditation standards and processes developed in conjunction with MCSP, regulatory bodies will clearly assert their authority over PSE institutions and use the newly established systems to ensure that the quality of staff employed by training intuitions and of students graduating from these institutions continues to improve.
- MCSP will continue scaled-down support to PSE institutions to monitor progress on the transition plans for activities at each school that will ensure schools continue activities, including conducting faculty and preceptor trainings each semester, performing supportive supervision and mentoring using checklists, and continuing to use Pre-SIS to support better use of data for decision-making and advocacy.
- MCSP will ensure that PSE institutions are building on the investments made in equipping skills labs and preceptor corners to prioritize clinical practice strengthening to ensure competence of graduating students.

Selected Performance Indicators for PY4			
MCSP Global or Country PMP Indicators	Achievement		
Number of clinical/lab preceptors that complete the preceptor orientation package	54 (target: 40, >100% achieved)		
Number of persons trained in priority technical areas with MCSP support	604 (target: 250, >100% achieved)		
Number of clinical practice/lab practicum sites established or strengthened	24 (target: 24, 100% achieved)		
Proportion of clinical standards for ANC, labor and delivery care achieved in primary teaching hospitals	95%, (target: 50%, >100% achieved)		
Number of pre-service institutions and clinical practice sites that received equipment procured by MCSP	32 (target: 32, 100% achieved)		
Percentage of MCSP-supported pre-service institutions with skills labs that are equipped and staffed full time with at least one clinical instructor trained in skills lab management	100% (target: 100%, 100% achieved)		

Liberia RHS PY4 Summary & Results

Technical Areas		Geographic Implementation Areas Counties • 3/15 (20%)—Grand Bassa, Nimba, and Lofa Health districts • 18/88 (20%) Facilities • 77/161 (48%)	Population Country • 4.732 Million MCSP-supported areas • 1,229,164
Program Dates August 1, 2015–August Cumulative Spendi through End of PY Demographic and I Indicators	ing 4	 Strategic Objectives IPC practices at 77 health facilities are strengther intensive supportive supervision, triage, improver management, and planning and management of escommodities and supplies. Demand is generated and delivery of quality prim services is restored through the implementation the Essential Package of Health Services in 77 faction Key Accomplishment Highlights 	nent of waste sential IPC ary health care of RMNCH as part o ilities.
Indicator MMR (per 100,000 live births) ^[1] NMR (per 1,000 live births) ^[1]	# or % 1,072 26	 The median IPC score among the supported courses 82%, meeting the national minimum standard of 8 All the 77 supported health facilities showed impostandards scores by at least 50% from the baseline. Successfully concluded and transitioned project scounty health team in the three supported counter the support of the support	80%. roved clinical le score. upport to MOH and
U5MR (per 1,000 live births) ^[1] ANC 4+ ^[2]	94 79%	Figure I. Skilled deliveries and mater in MCSP-supported health fac	
SBA[2]	76%		400
CPR ^[2]	31%		350 300 c
IPTp2+ ^[2]	55%		250
Antimalarial treatments given to children under 5 which were ACT- based ^[2]	81%	0 Number of deliveries with SBA 0 0000 0 00000 0 0000 0 00	200 - 150 100
Penta3 ^[2]	68%		50 0
Fully immunized coverage ^[2] Sources: ^[1] Liberia DHS 2013, ^[4] Malaria Indicator Survey (LMIS)		Number of deliveries with SBA	

Liberia Restoration of Health Services

Key Accomplishments

During PY4, in Liberia, MCSP initiated a phased closeout of activities, and spent significant effort on transitioning to the MOH to ensure sustainability of gains made during the program. By program closeout in August 2018, great improvements were seen at MCSP-supported facilities in the key technical areas: availability of health workers, equipment and supplies, basic infrastructure (e.g., wells, incinerators, triage, isolation units, and latrines), service provision for essential RMNCAH interventions, and adherence to clinical standards to ensure quality of care. MCSP successfully restored access to, and utilization of, health services and rebuilt confidence in the health systems at the facility and county levels, thereby contributing to improvements in RMNCAH outcomes in Liberia.

IPC Infrastructure Upgrades and Their Use

MCSP successfully completed the planned renovation work at 48 facilities. This work included renovation and addition of various waste, water, and triage features at the 48 health facilities based on the needs determined at a baseline assessment. The features included triage facilities, hand dug wells, waste pits (for ash, placentas, and sharps) and incinerators. A total of 139 waste, water, and triage features were constructed by the project in the three supported counties: 18 triages, 25 incinerators 19 hand dug wells, 16 placental pits, 28 ash pits and 33 sharp pits. All facilities that received MCSP support were branded with the appropriate logos, naming the types of renovations made. The construction process, as well as the final inspection, was conducted collaboratively with relevant county and MOH representatives at all times.

To ensure continued and sustained use of these features, MCSP, in collaboration with MOH, organized a 1-day orientation for health facility staff, including cleaners, on the use of these features. Additionally, facilities were provided with startup kits for hand pump wells, shovels, tools, and standard operating procedure manuals on use and maintenance of these features.

Optimization of the Impact of Supportive Supervision

MCSP provided support in the development and finalization of the Joint Integrated Supportive Supervision tools as well actual implementation of monthly and quarterly supportive supervision visits in the three supported counties. Because facilities did not adhere to some quality components, MCSP organized a reflection workshop on supportive supervision. For the workshop, MCSP used relevant reference materials based on global and regional evidence on the effectiveness of supportive supervision. There were 43 participants at the 2-day workshop, which sought to explore the details of supervision in the expanded tool, the type of supervisors, approaches used, and outcomes and recommendations. The outcome of the workshop was shared with USAID and MOH for input to further optimize supportive supervision visits to each facility. During these visits, MCSP emphasized instrument processing, sterilization, and storage during routine supportive supervision and mentoring visits that were conducted with county health teams and district health teams. Additionally, MCSP provided sterilization pots (pressure cookers) for health facilities that did not have them. MCSP found that the consistency and comprehensive nature of supervision visits addressed negative impacts and disruption to providers' work that occurred before MCSP's intervention. These initiatives emphasized quality services and reinforced skills in IPC and other services.

Requisite Skills to Provide Care for Sexual and Gender-Based Violence Survivors

The sexual and gender-based violence (GBV) clinical standards assessments scores were 0% at baseline and 33% at midline. The main reason for low scores in this standard was the skills gap among health workers. To strengthen sexual and GBV service provision, MCSP worked with the MOH to finalize training materials on clinical care for survivors of sexual and GBV. MCSP, in collaboration with the county health team, organized training for health care workers among the 77 supported health facilities in December 2017 and January 2018. A total of 94 health workers were trained on clinical care for survivors of sexual and GBV.

Newborn Survival Improvement through Chlorhexidine Cord Care

In June 2017, MCSP supported the finalization of the national chlorhexidine (CHX) cord care scale-up plan for the period of 2017–2021. The first phase of scale-up plan implementation (2017–2018) calls for the use of CHX cord gel for all health facility live births starting in October 2017. MCSP provided training and orientation of supervisors from county health team/district health teams and health facilities to ensure proper use of CHX cord gel in the supported health facilities. This support improved the CHX cord gel use by over 80% among live health facility births within 6 months of startup. MCSP hosted and finalized the costing portion of the CHX scale-up plan, which is needed for key advocacy and resource mobilization for successful implementation of CHX cord care.

Endline Assessment

MCSP conducted an endline assessment in December 2017 to assess project achievements using the facility readiness assessment, clinical standards assessment tools, and key informant interviews, including reflections from the county health team and district health team. Results from the assessment showed that 95% of the supported health facilities have the minimum required staffing to provide essential health services. The median facility scores on clinical standards increased from 24% at baseline to 75% at endline (see graph below). It is worth noting that the IMNCI clinical standard assessment score improved from 0% to 85%. The median score for IPC at endline was 82%, above the national target of 80% showing that supported health facilities met the standards.

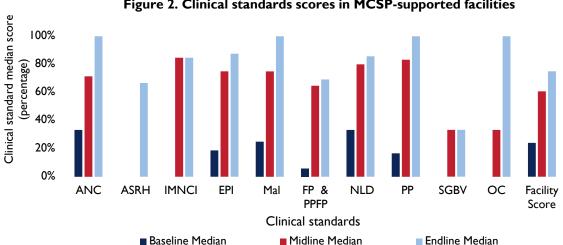


Figure 2. Clinical standards scores in MCSP-supported facilities

Abbreviations: ANC, antenatal care; ASRH, adolescent sexual and reproductive health; IMNCI, Integrated Management of Neonatal and Childhood Illnesses; EPI, Expanded Programme on Immunization; Mal, malaria; FP and PPFP, family planning and postpartum family planning; NLD, normal labor and delivery; PP, postpartum care; SGBV, sexual and gender-based violence; OC, obstetric complications.

It was noted that key informant interviews with the county health team/district health team described smooth and cordial coordination and collaboration with MCSP, emphasizing the importance of the project's broad range of support, including supply and distribution of IPC materials; essential drugs; delivery beds and other medical equipment; waste, water, and triage upgrades; and paying salary to staff. Informants also stated the improved county health team/district health team capacity to do supervision regularly, including data validation, and to conduct periodic quality performance reviews.

Transition and Sustainability

MCSP ended project support in the three supported counties in a phased approach in consultation with MOH and USAID, taking into consideration available funding, the status of the counties, and existence of other USAID-funded support mechanism (e.g., Fixed Amount Reimbursement Agreement). Activities ended in Nimba on December 31, 2017; in Lofa on January 31, 2018; and in Grand Bassa in August 31, 2018. To ensure a smooth transition and to sustain gains, MCSP developed a sustainability and transition strategy and organized national and county-level stakeholders to discuss the transition. Additionally, MCSP provided a transition binder to each county that included all training materials, tools and guides, estimated cost of the project support, sites of waste, water, and triage upgrades, and medical equipment and supplies distributed. The project handed over office supplies, computers, stationery, and project vehicles to the supported counties. The county health teams and MOH committed to sustain the gains made by the project.

MCSP hosted closeout events in each of the supported counties and one national closeout event that brought together participants from the Liberian Senate office, the Minister of Health and other MOH officials, USAID, MCSP Global, civil society organizations, county health teams, district health teams, health facility staff, and partners. MCSP used this opportunity to distribute project products and disseminate results.

Way Forward

During PY4, MCSP successfully concluded programmatic support to the three supported counties and handed over program activities to county health teams and collaborated with the MOH throughout the year to ensure that there was a successful transition and continued quality implementation. Following this year, MCSP will continue to share lessons learned and disseminate documents produced through the project to different stakeholders in Liberia and abroad. MCSP made recommendations to the MOH for sustainability, including that the MOH should prioritize and mobilize resources to make sure that all health facilities have triage, latrines, waste pits, and reliable water sources, as MCSP was only able to focus on select facilities; to maximize the efficient use of supportive supervision, county health teams should include individual and team-based mentoring; and that the MOH and partners must continue to prioritize effective and efficient methods of enhancing health worker competency and proficiency.

Selected Performance Indicators for PY4			
MCSP Global or Country PMP Indicators	Achievement		
Number of deliveries with a skilled birth attendant (SBA) in program- supported health facilities	8,960 (no target)		
Number of persons screened at MCSP-supported health facilities	268,303 (no target)		
Percentage of children under 5 receiving ACT for malaria	66% (target: 95%, 69% achieved)		
Percent of MCSP-supported facilities meeting annualized Penta3 coverage target	55% (target: 50%, >100% achieved)		