

The Benefit of South to South Coordination on Specialized Clinical Service Use and Health Care Workforce Development in Post-Emergency Resource-Limited Settings

CONTEXT

The Liberia College of Physicians and Surgeons (LCPS) is a graduate medical residency program that was established by the government in 2013 in response to the shortage of physicians working in the country following the Civil War (1989–2003). The college supports advanced training in a number of medical specialties, including obstetrics and gynecology, general surgery, internal medicine, and pediatrics, with the goal of enabling specialists to independently manage increasingly complex surgical and medical cases in Liberia. LCPS recruits clinicians from the West Africa sub-region and beyond to train Liberian clinicians and medical students. In the five years since its establishment, LCPS staff have developed a mix of skills and gained experience leading health workforce development activities.

Liberia has a severe shortage of practicing clinical specialists across almost all areas, including three that affect Ebola virus disease (EVD) survivors disproportionately: ophthalmology, psychiatry, and rheumatology. In the period since the Ebola outbreak in 2014–15, survivors have continued to present with a range of EVD-related health conditions (sequelae), including uveitis, post-traumatic stress disorder, and arthralgia. In the early post-Ebola period in Liberia, the clinical needs of survivors were often unmet, as most general practitioners were unable to provide the specialized care that survivors needed.



Dr. Julius Muron, a psychiatrist and one of four clinicians in the LCPS clinical specialist program, trains Liberian health workers through the Mental Health Clinician Training Program. Photo: Eidolon









PLANNING PHASE

The USAID-funded Ebola Transmission Prevention & Survivor Services program (ETP&SS) selected LCPS to manage the recruitment and posting of four clinical specialists for an extended consultancy (approximately 10 months) to provide direct patient services and to train and mentor general physicians, mid-level health workers, interns, residents, and students in ophthalmology, rheumatology, and psychiatry/mental health. ETP&SS is funded through the Advancing Partners & Communities (APC) project and managed by JSI Research & Training Institute, Inc.

Beginning in August 2017, these specialists provided medical care to EVD survivors and other patients at ETP&SS focus hospitals in Montserrado, Bong, and Lofa counties, specifically Foya-Boma, Tellewoyan, Phebe, JFK, Redemption, St. Joseph's Catholic, and Eternal Love Winning Africa Hospital (ELWA).

Three of the four specialists worked in Montserrado County three-fourths of the time, while conducting rotations in the other two program focus counties that serve rural populations. The fourth, a psychiatrist, was fully embedded at Phebe Hospital and led the six-month post-degree Phebe Post-Basic Mental Health Clinician Training Program.

PROGRAM HIGHLIGHTS

The LCPS clinical specialist program has contributed to the development of the Liberian health workforce by conducting tailored, facility-based instruction for medical students, residents, interns, and general clinicians on peri-operative ophthalmic surgical procedures; post-traumatic stress and phobic anxiety disorders; soft tissue rheumatism; and spondyloarthropathy. Figure I illustrates the cumulative number of health workers trained between August I, 2017 and June 30, 2018 in the targeted specialty areas: ophthalmology (n=102), mental health/psychiatry (n=290), and rheumatology (n=330), (N=722).

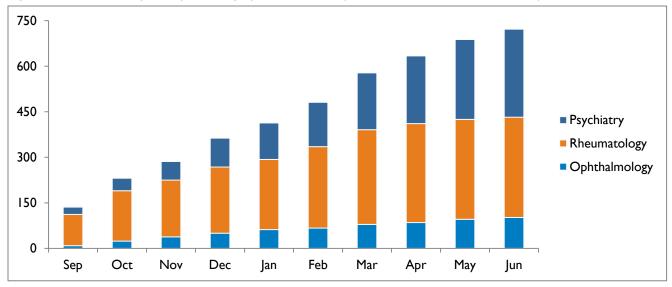


Figure 1. Clinical Sub-specialty Training by Practice Area (Number of Trainees, Cumulative)

In addition to the health workforce development efforts described above, the ETP&SS clinical specialist program through LCPS has contributed to increased specialty service-use rates for the EVD survivor community as well as the general population. These increased rates reflect an improved level of people's confidence in the health system's ability to provide needed services, a critical benefit of this post-Ebola recovery program. The combined EVD survivor and general population visits to these clinical specialists are highlighted in Figure 2; with inpatient and outpatient visits for EVD survivors shown in Figures 3. As of June 30, 2018, there have been 176 survivor patient visits, and 3,936 general population patient visits.

¹ Joint diseases of the vertebral column.

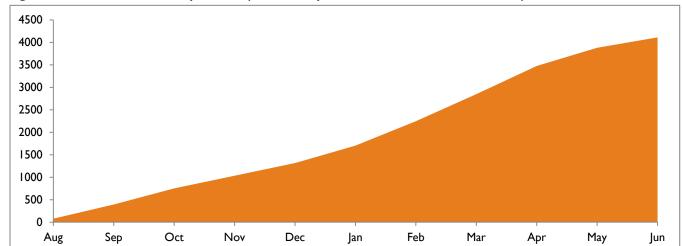
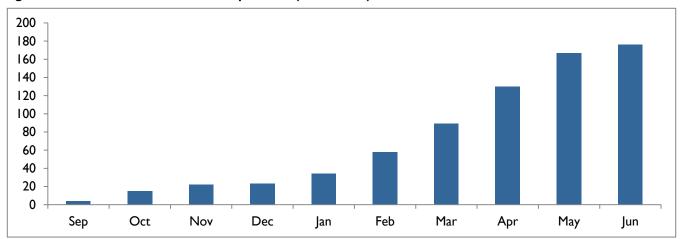


Figure 2. Patient Visits to Sub-specialists (General Population and Survivors, Cumulative)

Figure 3. Survivor Patient Visits to Sub-Specialists (Cumulative)



The patient visit data indicate that the speciality services were disproportionately underutilized by the EVD survivor population relative to the general population, at a rate of I EVD survivor visit for every 22 general population visits. Although the availability of the specialty services was broadly disseminated through meetings with the National Ebola Survivors Network of Liberia (NESNL) leadership, tailored radio announcements in English and local dialects on national and regional radio stations, and messaging from LCPS, use of these specialists by EVD survivors remained low.

• In addition to clinical instruction for health workers and direct services for EVD survivors and the general population, the LCPS ophthalmologist assisted with an ETP&SS regional program activity: a large-scale cataract surgery intervention for EVD survivors at ELWA Hospital. The ophthalmologist participated in the initial cataract screening program and worked closely with ETP&SS program partners from the National Institutes of Health, Samaritan's Purse, and Emory University, among others. The cataract surgery results enhanced the previously limited body of evidence on Ebola virus in the eye, and is now informing ophthalmic service-delivery practices and increasing the safety of eye surgery for Ebola survivors.

- The medical specialist program set important precedents for health workforce development and patient care in Liberia:
 - Training activities engaged a wide range of medical students and practitioners. As these specialists trained, practiced, and taught in similar limited resource settings, they adapted to the various workplace settings and have been able to develop a strong rapport with the trainees.
 - The specialists' rotation schedule brought advanced care to rural areas and enabled some patients to access specialty care for the first time.
- While the specialists have been used primarily by the non-survivor population, the
 uptake in patient visits has demonstrated an increased level of confidence in the
 public health system (a key goal of the ETP&SS program).
- The cataract activity was a complex collaboration between academic and research institutions, faith-based organizations, health facilities, and US Government agencies. The LCPS ophthalmologist provided pre- and post-op care that local partners could not.

In February 2018, LCPS conducted focus group discussions with NESNL members to ask about factors contributing to the low service-use rates by survivors. Factors identified included:

- Initial lack of confidence in public health facilities
- Failure of NESNL leadership to inform or remind the survivor community about the availability of the specialists and specialty services
- Stockouts of essential medicines at public health facilities
- Perceived stigma and/or discrimination by health workers at public health facilities.

CHALLENGES

The limited availability of medications and commodities has been a persistent challenge, as there is a direct relationship between access to medications and service utilization, particularly among survivors. Survivors have associated the limited availability of medicines with their community's low use of the specialty physicians. This qualitative feedback was captured by LCPS and ETP&SS staff during focus group discussions and coordination meetings with the NESNL.

CONCLUSIONS, POLICY IMPLICATIONS, AND LESSONS

The presence of medical specialists tasked with training medical students, residents, and clinicians, and providing care in clinical areas that disproportionately affected the EVD survivor community improved patient access to valuable services, decentralized access to advanced services, and increased health service-utilization rates.

Recruiting clinical specialists who are familiar with the medical training and service delivery systems in limited-resource settings facilitated connection to the local health workforce, increased perceptions and acceptance among medical students and local practitioners, strengthened local capacity, and provided vulnerable populations and other public-sector patients with services that were otherwise unavailable. This program fostered the buy-in of government and EVD survivors by strengthening technical skill sets across the health workforce, decentralizing service delivery, and strengthening referral pathways.

The clinical specialist intervention with LCPS permeated complex layers of the Liberian health system, including health workforce development, service delivery, and decentralization. The overall approach was an example of south to south collaboration that strengthened the Liberian health system by leveraging skilled human resources from the West Africa subregion. The ETP&SS program recommends replication of this approach in post-emergency/post-epidemic settings, as it has been an effective investment in survivor and health systems recovery.

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