



SUCCESS STORY

Strengthening Capacity Among Medical Laboratory Scientists in Nigeria Through Continuing Professional Development



Medical laboratory science has been called “the hidden profession that saves lives.” Medical laboratory scientists (MLS) are scientific investigators, analyzing bodily fluids and specimens to aid in the detection, diagnosis, and treatment of disease. In Africa, MLS are champions in the fight to contain and eliminate infectious diseases like Ebola, HIV/AIDS, tuberculosis, and malaria, making it critical that they stay up-to-date on advances in the field. MLS working in Nigeria, however, had limited opportunities for their continuing professional development. Given that approximately 70% of the evidence in evidence-based medicine comes from a lab, this was a public health concern. Continuing professional development (CPD) is critical not only to retain skills, but also to keep pace with the latest research findings in order to provide quality services.

In 2011, USAID/Nigeria funded the Knowledge for Health (K4Health)/Nigeria Web-Based Continuing Medical Laboratory Education Program, locally referred to as the eLearning CPD project. Working closely with the Medical Laboratory Science Council of Nigeria (MLSCN), the governmental regulatory body for MLS, and the Association of Medical Laboratory Scientists of Nigeria (AMLSN), the professional body for registered MLS, K4Health helped lead the establishment and institutionalization of a comprehensive, compulsory CPD program for MLS in Nigeria.

Program activities worked toward two core outcomes: the revitalization, launch, and institutionalization of a CPD Policy, making CPD credits a requirement of annual re-licensing; and the development, management, hosting, and monitoring of Nigerian-authored and accredited eLearning courses. K4Health’s first step was to conduct a baseline needs assessment with MLS to examine their training and information needs, including preferred sources of information and issues of access, as well as gain a better understanding of their comfort level and use of Web-based resources.

We learned that while the majority of MLS respondents did not have any formal computer training, nearly 100% were comfortable or very comfortable using a computer. Approximately 80% reported access to computers at home. Most respondents had taken trainings offered by AMLSN and MLSCN in the past and often did not distinguish AMLSN’s and MLSCN’s training offering from one another, illustrating the need for both groups to work collaboratively in this effort. Importantly, the majority of MLS already felt required to do CPD activities, but that face-to-face trainings were costly and not always worth the time or the expense. This revealed a motivated audience for an eLearning approach.

Based on those findings, K4Health worked with a local IT firm in Nigeria to develop an open-source AMLSN website and eLearning platform. We trained local course authors, using a standardized eLearning instructional design training package that AMLSN has since modified to use in conducting its own trainings, and helped develop 12 accredited, peer-reviewed eLearning courses. K4Health, AMLSN, and MLSCN promoted the courses through a variety of in-person and online channels. In fact, an AMLSN eLearning Facebook Group initially created by K4Health as a vehicle to promote the courses and serve as a helpdesk has since evolved to an informal learning space for discussion with over 11,000 members. Group administration was successfully transferred to a select group of active members, who were nominated by group members and approved by AMLSN and MLSCN, so the group is self-sustaining.

Sustainability was considered from the project’s beginning. K4Health worked with MLSCN and AMLSN on a number of activities to build the institutional skills necessary to lead

and manage the project activities beyond the project-funded period. We trained AMLSN subject matter experts on the design and development of eLearning courses. K4Health worked with MLSCN to update its CPD Policy and establish processes and systems for implementing and monitoring the revised policy. We simplified re-licensing by creating a CPD module for MLSCN's iHRIS system, which captures all accredited activities, as well as enabling a self-service module for MLS to access MLSCN's iHRIS system directly. We also helped establish the AMLSN eLearning Advisory Board, a multi-stakeholder body that provides strategic oversight to the AMLSN Secretariat for the advancement of its eLearning services.

Survey findings report that most MLS are aware of the new CPD policy and can identify the correct number of credits needed to renew their licenses. Approximately 6,000 unique registered users have started an AMLSN-authored, MLSCN-accredited eLearning course since 2011. Of these, 94% earned 15,461 course certificates. More than 30,000 CPD credits were earned through the AMLSN-authored, MLSCN-accredited eLearning courses as a result. Almost 20% of registered users have successfully completed five or more courses. Overall course evaluation data reveals that:

- 87% agree or strongly agree that their knowledge on the topic increased as a result of taking the course
- 99% reported that they would recommend the course that to fellow MLS

Of note, in the baseline needs assessment, women MLS reported being unable to attend face-to-face workshops and trainings for CPD credits due to obligations at home. After the launch of the new policy and eLearning courses, K4Health found that female MLS earned 52% (8,020) of the 15,461 course certificates earned.

Supervisors indicated that they noticed improvements in staff job performance in two main areas as a result of the AMLSN-authored eLearning courses: improved understanding of laboratory procedures and improved competencies, motivation, and professional culture. One noted, "After going through the TB course...[staff] approached management, asked for the new equipment and reagents and have since adopted these methods."

Participation in the accredited eLearning courses has equipped MLS to challenge things that are not right for proper diagnosis and patient care. It has made MLS to be more composed.

MLS continue to be highly engaged in the eLearning CPD project as exemplified by the continued popularity of the accredited eLearning courses years after its launch. In addition, more and more MLS are becoming involved as either course authors or technical reviewers. More than 30 AMLSN members have been trained as course authors by their peers since K4Health's role in the project ended.

Contact Us

Peggy D'Adamo

Agreement Officer's Representative for K4Health and IT/Knowledge Management Advisor, USAID Global Health Bureau, Office of Population & Reproductive Health mdadamo@usaid.gov |+(571) 551-7071

Tara Sullivan

Project Director, K4Health Project, Johns Hopkins Bloomberg School of Public Health Center for Communication Programs tara.sullivan@jhu.edu |+(443) 956-4400

