

**Presentation Type:**

Poster Presentation - Oral Presentation

**Subject Category:** Surveillance/Public Health**Lessons from an evaluation of an antimicrobial resistance laboratory capacity telementoring program in Ethiopia and Kenya**

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**Background:** Antimicrobial resistance (AMR) presents a global health threat. Training laboratory technicians to accurately identify and report AMR is critical in low- and middle-income countries (LMICs) to control the spread of AMR. Ethiopia and Kenya implemented a telementoring program, ECHO AMR, via the Project ECHO learning platform to improve laboratory technician capacity to isolate, identify, and report AMR organisms; to perform antimicrobial susceptibility testing (AST); and to develop a community of learning. Between January 2018 and January 2022, biweekly 1-hour sessions were held for 8 and 22 laboratories averaging 19 or 43 participants per session in Ethiopia and Kenya, respectively. Each session included a lecture, a laboratory challenge case presentation, and discussion. An evaluation was conducted to assess perceived strengths and weaknesses of the program and its usefulness in improving bacteriology capacity. **Methods:** In July–August 2022, semistructured key informant interviews of purposively and randomly selected laboratorians were conducted to understand participant perspectives of ECHO AMR, including session structure and content, changes in laboratory performance, and the virtual learning platform. Eligible participants attended at least one-third of available sessions in Ethiopia (8 of 26 sessions) or Kenya (5 of 16 sessions) during 2021. Key informant interviews were transcribed and systematically reviewed to identify key themes. **Results:** In total, 22 laboratory technicians participated in the key informant interviews: 12 in Ethiopia and 10 in Kenya. Participants reported that the ECHO AMR session structure was well organized but recommended increasing session duration to allow more time for discussion. Technical content was presented at an appropriate level and was highly rated. However, participants suggested including more subject-matter experts to provide the lectures. All participants reported positive change in laboratory practice, including implementation of international standards for AST, better quality control, improved confidence and critical thinking, and increased AMR awareness and reporting. Participants learned well in the virtual environment, with the platform providing wide-ranging geographic interactions to share skills and knowledge among sites without travel. However, there were connectivity issues, competing work priorities during sessions, and a lack of dedicated space for team participation. **Conclusions:** Laboratory technicians reported that virtual laboratory training was well-received, efficient, and impactful. Participants benefited both individually and collectively, as a laboratory. Suggested improvements included increasing session duration, connectivity support, and including more subject-matter experts to broaden technical content. Further assessment is needed to evaluate the ECHO AMR's impact on laboratory practices through observation and laboratory data. Virtual programs, requiring less time and resources than traditional in-country trainings, can be optimized and used to share and increase bacteriology knowledge in LMICs.

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**Subject Category:** Surveillance/Public Health**Lessons from leadership transition of an AMR telementoring program to sustain laboratory capacity building in Ethiopia**

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**Background:** Considering the threat of antimicrobial resistance (AMR), Ethiopia implemented strategies to combat AMR, including partnering with the American Society for Microbiology (ASM) to conduct an AMR training program using the Project ECHO learning platform. ECHO AMR was used to virtually connect subject-matter experts with participating sentinel laboratories in remote locations to provide ongoing education, telementoring, and foster peer-to-peer learning and problem-solving in microbiology. In phase 1, the ASM had primary leadership in conducting sessions and project administration. In phase 2, roles and responsibilities transitioned from the ASM to the Ethiopian Public Health Laboratory (EPHI) with support from ECHO India. Here we describe the transition process and lessons learned. **Methods:** From December 2020–2021, biweekly 1-hour sessions were conducted for 8 sentinel laboratories. Each virtual session included a lecture led by a subject-matter expert, a case presentation by a participating laboratory, open discussion, and feedback via an end-of-session online survey. Following a transition plan, initial ASM-EPHI transition activities included formal administrative and logistical training, including participation in a 3-day Project ECHO-immersion program provided by ECHO India. Selected administrative and technical roles and responsibilities, including further developing their own SMEs, were transitioned from ASM to EPHI every 4 sessions. ASM conducted postsession reviews with EPHI and ECHO India to discuss successes and suggested improvements. **Results:** Leadership of ECHO AMR was fully transitioned to EPHI over 12 months. End-of-session surveys and postsession reviews indicated the transition process was successful, with EPHI staff leading the lectures, session coordination, and facilitation, and positive feedback from session participants. Challenges included variable sentinel site participation due to competing priorities such as COVID-19 testing and poor internet connectivity during the rainy season. Lessons learned included the need to use a gradual transition strategy with close monitoring, training facilitators to maintain implementation fidelity (level of reproducibility to conduct ECHO AMR as in phase 1) and improve participation, and assessing individual learning, using pretests and posttests. Recommendations included that ASM should remain as an external technical advisor to ensure program technical depth and session facilitators be trained to improve participation in the discussions. Implementation fidelity compared to phase 1 was considered moderate, with the gap primarily due to the need for dedicated release time from laboratory duties to ensure session leadership, coordination, and facilitation. **Conclusions:** Leadership and laboratory workforce capacity-building responsibility for AMR training was successfully transitioned from ASM to EPHI, promoting self-sufficiency in training and with far-reaching benefits in the global fight against AMR.

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**Subject Category:** VAE**Assessment of changes in the national surveillance data for adult and pediatric VAE during the COVID-19 pandemic in hospitals**

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**Background:** Among US acute-care hospitals (ACHs) reporting to the NHSN, significant increases in the incidence of Ventilator-Associated Events (VAEs) were observed during the COVID-19 pandemic years in comparison with 2019. We assessed changes in the national event-level VAE data, including the incidence of specific event-types: Ventilator-Associated Condition (VAC), Infection-related Ventilator-Associated Complication (IVAC) and Possible Ventilator-Associated Pneumonia (PVAP). We also examined changes in associated pathogens, and we evaluated incidence density rates (IDRs) of pediatric VAE (PedVAE) before and