Southern Illinois University School of Medicine ECHO
Implementation Profile

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for education, outreach, collaboration, and innovative work."

Southern Illinois University Project ECHO (SIU ECHO), and its Hypertension (HTN) ECHO and the Community Health Workers (CHW) ECHO, were included in a study led by Diffusion Associates and funded by the Robert Wood Johnson Foundation. The purpose of this study was to document and share how ECHO is adopted, implemented and sustained across ECHO hubs and programs in the United States and Canada. This study was separate from, but endorsed by, the ECHO Institute.

Karen Fraase, director of program development in the Office for External Affairs at the SIU School of Medicine (SOM), was a 2021 implementation fellow and worked with 14 other fellows alongside Diffusion Associates in conducting research for this study. Laura Lappe, program manager for clinical telemedicine and Project ECHO in the F. Marie Hall Institute for Rural and Community Health at Texas Tech University, was also a 2021 implementation fellow, and conducted interviews with SIU School of Medicine staff in August and September 2021, along with R. Sam Larson, PhD, director of Diffusion Associates, which are the basis of this profile.

We begin this profile by sharing unique implementation insights from Southern Illinois University (SIU) School of Medicine ECHO hub and the Hypertension (HTN) and Community Health Worker (CHW) ECHO programs.

ECHO Implementation Insights

Initial Investment

The Illinois Hospital Association made an initial investment in SIU ECHO that supported multiple programs. This investment made it possible to take a more intentional approach to growing ECHO work. The funds stretched over a period of time in part because the ECHO coordinator was being primarily funded by the Office of External Affairs; this means more funds were available to support clinical experts in the School of Medicine.

Flipped ECHOs

A flipped classroom aimed to increase engagement and learning by having participants complete work at home and work on live problem-solving during class time. This model was being piloted in the HTN ECHO. Lectures were pre-taped and sent to participants to watch in advance. The ECHO sessions included a brief overview of the taped lectures but focused primarily on discussions and case-based learning. While there were unknowns (i.e., Will participants review the recording in advance?), the physician leader commented, "If you do it right, you're better off."

EMRs and Social Determinants of Health

The CHW ECHO used an electronic medical record (EMR) page built out specifically for their work. When community health workers were with a client, they open the EMR and added what they were doing with that patient "on housing, on transportation, on pharmaceutical, any legal work that we're working on, and so." The EMR sent an alert to the physician treating the patient essentially saying, "This is your community health worker and your patient. You should be working with this worker to address the needs of the patient."

ECHO Model Adoption

In 2016, the Illinois Health and Hospital Association (IHA) reached out to Lori Williams, associate provost for external affairs at SIU SOM, and said, "There's this innovative program we want to include in our grant for innovation and quality improvement. Would you partner with us to be the hub?" Williams was familiar with IHA, having previously been IHA's director of membership. The innovative program they referenced was Project ECHO. Williams and John Flack, MD, chair of the Department of Internal Medicine, researched Project ECHO and attended immersion training at the University of New Mexico. Williams and Flack were impressed and said, "We would love to do this. It's focused on rural health and that is what we do." IHA provided three years of startup funding for ECHO at SIU, part of which was used to hire Karen Fraase, director of program development in the Office for External Affairs. Williams shared that the startup funding was very important "because it allowed us to send a team to immersion training and spend time to create, and design, and form collaborative teams that can work together. The startup funding is really incredibly helpful in setting up ECHO correctly."

ECHO was described as a tool that extends the mission of SIU. Fraase stated that the SIU School of Medicine was "designed for doing rural care and building partnerships, to take care to communities, and to have a curriculum where medical students have hands-on learning. ECHO is a match for what we have here at the university." The decision to adopt and implement the ECHO Model was supported by a dean of the School of Medicine who was "quite proud of it, and spends time talking with the SIU Board of Trustees about ECHO and he highlights it as an innovation with all employees." Flack recognized ECHO as an activity of value for tenure and promotion. Other department chairs also talked about ECHO with the faculty and staff, and at conferences they promoted it as an innovative tool that helped them to connect with rural providers.

ECHO was expanding at the SIU School of Medicine. Williams commented, "Almost every grant we write now includes an ECHO because this is the tool that we use for education, outreach, collaboration, and innovative work." The current ECHO staff consisted of Fraase, who manages the implementation and Williams "who serves as the visionary and advocate for the program." Williams says of Fraase, "She runs the show and has been incredibly successful. She's the perfect person to have in this position to create this new thing called an ECHO hub, and to oversee it, manage it, and nurture it as it grows." Fraase was an "office of one," though expanding the staff was a longer-term plan.

Hypertension ECHO

The Hypertension (HTN) ECHO was the first ECHO program at SIU. When Williams reached out to Flack to discuss ECHO, he "jumped on it" and said, "We'll do it, because hypertension is the most common reason people go the doctor in the ambulatory setting." Flack attended immersion training at the University of New Mexico and drew on a history of CME teaching and events, as well as teaching medical

students and other physicians to develop and facilitate the HTN ECHO program. The program's eight sessions focused on "bread and butter clinical problems that practitioners face every single time they go to clinic and are taking care of patients." In the sessions, Flack and others on the panel developed options and placed these options in a hierarchy to guide practice. The HTN ECHO was initially funded by the IHA grant and Fraase said they were looking for additional funding for the program.

SIU Community Health Worker ECHO

The SIU Community Health Worker (CHW) ECHO was part of the on-boarding process for community health workers employed by the SIU School of Medicine. The CHW ECHO was based on a pilot program started by Tracy Smith, DNP, executive director of the Office of Community and Complex Care. Smith modified the training program after attending immersion training in New Mexico. The CHW program included one full day of training followed by a set of ECHO sessions that focused on general issues that address "what you need to know as a CHW, the who, what and how" and a set of sessions that focus ed on specific conditions (e.g., diabetes, asthma). Tyra Jones was among the very first participants in the pilot CHW program and later became the lead trainer on the ECHO program as the education coordinator for the Office of Community Care in the SIU School of Medicine. Although initially designed as on-boarding for SIU community health workers, the ECHO was open to community health workers affiliated with other organizations. Funding to launch the program and offer it for the first several years came primarily from the Illinois Department of Public Health, though a couple of the specialty ECHOs were funded through other sources.

ECHO Model Implementation

The ECHO Model seeks to build a learning community where "all teach, all learn." This was done by leveraging technology, by sharing best practices, through case-based learning, and using data. We asked respondents to tell us what "all teach, all learn" (ATAL) meant to them. Respondents described ATAL as sharing experiences and knowledge so that everyone learns and benefits from the experience. Williams described it as "everyone comes to share their experience and knowledge and to learn from the experience and knowledge of others. It becomes a collaborative, a discussion platform." Fraase shared, "ECHO is about listening with a genuine heart" and a "bridge of communication among participants; a phenomenal connection of discussions, conversations, and sharing of valuable science-based information." The importance of connecting at an interpersonal level was mentioned by leaders in both ECHO programs. Flack described ECHOs as reducing the isolation experienced by rural primary care physicians. Jones said, "We dive down into the issues and obstacles to better understand where they [clients] may be coming from." She added that ECHO sessions were "an opportunity for all of us to learn about the stigmas and obstacles in other cultures."

Connections were encouraged and fostered by creating a space where people were comfortable learning and not having all the answers. Flack shared that the HTN ECHO program "sets a climate where questions are encouraged. We're really upfront. We basically say, 'There's no such thing as a bad question. We learn from you guys; you learn from us.' It's two-way learning." Williams described ECHO sessions as "a safe space for people to share. It's hard for us to admit that we don't know things, but this is a place where you can do that and you can learn from others." Creating a safe place for the CHW ECHO was important as they confronted difficult issues such as when to call in call in public health or other agencies and have confidential conversations that involve families.

When describing learning in ECHO sessions, respondents talked about the importance of focusing on content that was practical. Williams described ECHO sessions as providing knowledge that participants could "turn around within the hour and start using. Techniques, information, tools that changed what they did that day." This was certainly the case in the CHW ECHO where Jones described the content as "basic knowledge of what you need to know to help." Flack also stressed that the knowledge shared was practical, "Our topics are unambiguously, unequivocally, things that practitioners face every single time they go to clinic and are taking care of patients."

Patient cases were a core component of the HTN and CHW ECHO sessions. The HTN ECHO had one to three cases per session and at least one case came from a participating site. Cases were also drawn from previous cohort presentations and Flack shared his own cases. The CHW ECHO participants were encouraged to complete a case template which was then discussed "line by line, question by question." Jones discussed cases in the first full-day session and took time "to walk them through it so it's not as intimidating." During participant led cases, Jones would ask prompting questions that kept the discussion focused on the CHW procedures. Presenters would sometimes use a case in their didactic. The CHW ECHO sometimes placed participants in small groups or dyads where they would share a case.

Feedback and assessment can also facilitate implementation. The HTN ECHO kept the same basic set of topics but they reviewed the program and made changes to ensure that they were getting information across and updating the curriculum with new data and information. Flack was looking for "cleaner, clearer, better" presentations and that was an "ongoing process." The CHW ECHO was working toward becoming a certification training center for community health workers which could influence their nascent quality improvement/evaluation work.

Factors Influencing Implementation

Studies of program implementation identify contextual factors that can shape how a program was implemented. These factors include leaders and champions, state and federal policies, funding, partnerships, and internal organizational structures and processes, monitoring for quality and fidelity, and staffing—including how people were trained and the characteristics of the people leading and supporting the program.

Not all of these factors play a role in how EHCO was implemented here or elsewhere, and some factors were more important than others. Below, we identify factors that emerged during interviews that influenced how the Southern Illinois University ECHO hub, the Hypertension ECHO, and the Community Health Worker ECHO were implemented.

Organizational Fit & Leadership

The ECHO hub at SIU was located within the School of Medicine's Office of External Relations, which focused on community relations, regional programs, clinical outreach, and advocacy. ECHO work drew from and worked with other units in this office including marketing and communications, government relations, and telehealth programs. ECHO also aligned with the Center for Rural Health and Social Service Development on the SIU Carbondale campus that was also part of the Office of External Relations. ECHO also benefited from the relationships that Williams had across the state, many of which were developed before she came to SIU. As mentioned earlier, the dean, faculty, and staff in the School of Medicine were supportive of ECHO and talked about ECHO and how it links their work with rural providers.

The Office of External Relations was a good home for ECHO. ECHO was consistent with the mission of the office and the ECHO hub works with other units within the office. In addition, the Office of External Relations had close working relationships with the medical departments in the School of Medicine.

Staff & Training

The SIU ECHO team consisted of Fraase, who developed and implemented programs; and leadership support from Williams. In time, the team could grow with adequate external funding. Fraase was funded through SIU and worked only on ECHO programs. Fraase shared that she could support multiple programs because SIU sent teams to immersion training at the ECHO Institute. She commented, "What's really valuable is they get to develop as a team, and develop ideas and concepts in a quiet place away from other distractions." ECHO teams often returned with an implementation plan. In addition to the value added by immersion training, Fraase and Williams brought project management skills from their work in government which helped with the "upfront work to stand up a new ECHO."

The CHW ECHO was a training program for SIU community health workers. These staff were paid to attend the ECHO program, which was considered part of their on-boarding process. The CHW ECHO was not limited to SIU and community health workers from other organizations did attend.

Funding

The initial three-year grant from the Illinois Health and Hospital Association (IHA) helped to lay the foundation for ECHO at SIU. Williams said that when looking for or responding to external funding options, they were moving away from funding for "six months or twelve months to longer term, sustainable program funding." They had internal resources to support ECHO if they came to a point where the grant funding was insufficient, but that hadn't yet been necessary. As mentioned earlier, Fraase was funded by the Office for External Affairs. If more staff were needed to support ECHO, those staff would need to be funded from external sources.

External funds supporting ECHO were primarily allocated to academic medical offices to support their commitment. The Office of External Affairs issued a memorandum of agreement about the award, but the department decided how to distribute the funds. Williams shared that "every team is going to be a little different and they need to develop their team and figure out how they're going to utilize these resources."

The HTN ECHO was funded via the initial IHA grant and was looking for new funds to support their work. A small portion of Flack's time was funded from the IHA grant. If they did not find additional funds, Flack said, "We adjust."

The Illinois Department of Public Health was the primary funder of the CHW ECHO. These funds supported the generalists and chronic care training. Specialty CHW ECHO sessions, such as asthma and oral care, were funded by specific divisions of the Illinois Department of Public Health and was also seeking ongoing external funding.

Partnerships and Networks

The SIU ECHO hubs and programs had many partners and networks. Williams brought a statewide network with her from her previous employment. Williams said that part of what impressed SIU school

of Medicine "was my relationship with government and with hospital partners around the state." Fraase also had experience with and relationships in rural communities from working for more than 30 years at the Department of Agriculture.

SIU's School of Medicine has many networks that ECHO drew from. They had connections with rural providers, hospital association, rural hospitals, rural health department, and federally qualified health care centers. ECHO also strengthened the network within the School of Medicine when multiple departments worked together as a panel. For example, Williams shared that an opioid prevention ECHO "brought together our Center for Rural Health in Carbondale, our department of Population Science, Karen from our office, and multiple other offices to form a team and work with rural providers. They are learning from each other."

SIU ECHO had partnered with Chicago ECHO on a pilot project. Although in the same state, they were not in competition. In fact, they wanted to advocate jointly for state funding from the legislature. Said Williams, "We've had some conversation with the University of Chicago to approach our state legislators and try to find appropriated annual funding for the two hubs in Illinois."

ECHO Vision and Sustainability

SIU was "getting a lot of new grants that include a lot of new ECHOs." Expansion was a goal but it had to be thoughtfully done. Williams shared, "We want to stand ECHO up and keeping the quality of the work intact. How do you grow and maintain quality?" With current and future programs, SIU ECHO staff wanted to manage expectations—to not overpromise and underdeliver. They also wanted to have "meaningful engagement. ECHO is very different from delivering a workshop. It's meaningful, ongoing engagement with rural providers." Expansion at SIU would be an intentional effort to reach the vision of "four or five full-time people working in every corner of our clinical departments." Existing programs would increase, most would continue, and new programs would be added. This would likely lead to a larger ECHO hub team.

The future might also include a stronger focus on research and publications. Williams said, "It is time to sit down and really look at the outcomes and some publications around this because I think there's some really powerful, meaningful information that should be shared about the program." Flack also talked about "more complete assessments" and noted that they need access to "different data than we currently have."

Flack wanted to engage with cohorts after they have completed the HTN ECHO. One way to do that was to "flip" the experience so that lectures were taped in advance and the ECHO sessions focused on questions, cases, and discussion. Combined, the strategies could "stretch out the experience over time." Flack also anticipated changes to the curriculum, perhaps expanding it, though staying true to the "bread and butter" issues that practitioners encountered.

The CHW ECHO program had several goals. They wanted more ECHOs focused on specialty areas such as mental health. Jones and Fraase also expected an increase in the number of community health workers in hospitals and health care facilities. They wanted to serve these new workers by offering more CHW ECHOs. The state may be moving toward a certification process and SIU SOM wanted to be recognized as a certified training center for community health workers.

Respondents

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