West Virginia Clinical and Translational Science Institute Project ECHO
Implementation Profile

"Sometimes hub members don't really say anything during a case presentation. The spokes are sharing ideas and practices, saying 'I had this patient come in two weeks ago. This is what I did.' And the other spokes then observe that and comment, 'Oh, we can do that too. That's in our realm of capabilities.'"

The West Virginia Clinical and Translational Science Institute (WVCTSI) Project ECHO hub, the HCV/HIV ECHO program, and the Substance Use Disorder (SUD) ECHO program were part of 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.

Jay Mason, MPA, Director of WVCTSI Project ECHO, was a 2020 implementation fellow and joined nine other fellows alongside Diffusion Associates to conduct this study. This profile is based on interviews conducted in September-October 2020 by R. Sam Larson, director of Diffusion Associates and Kayla Cole, who had facilitated ECHO work with the Northern New England ECHO Network and who was also a 2020 implementation fellow.

We begin this profile by sharing unique implementation insights from the West Virginia Clinical and Translational Science Institute (WVCTSI) Project ECHO hub and its HCV/HIV and Substance Use Disorder (SUD) ECHO programs.

ECHO Implementation Insights

On-Demand Case Review

The HCV/HIV programs had an "on-demand case review system." This was developed after HCV/HIV hub members worked with WV Medicaid to lower the requirements for prescribing HCV treatments. Specifically, presenting an ECHO case fulfilled the specialist consultation requirement. With these changes, they needed another way to review cases. The HCV/HIV expert hub members and the ECHO staff created an on-demand case review system where spokes could submit cases and request an on-demand review.

Leveraging Mission Alignment

WVCTSI ECHO's successful launch was largely due to finding the right home—the WVCTSI. To build a research infrastructure to improve health outcomes in a rural state like West Virginia requires working effectively with multiple stakeholders, including community health providers. ECHO was a means by which the WVCTSI could pursue its mission.

Building on Existing Relationships and Partnerships

A large staff wasn't necessary to offer high-quality, sustained ECHO program. Mason shared that, at first, it was "overwhelming" to see the level of staffing and support at the immersion training and he wondered how this work could get off the ground with a staff of less than one FTE. By building on existing relationships and partnerships, WVCTSI ECHO did not have to go-it alone. Partners helped with

recruitment and promotion of the work across the state. Within the WVCTSI, ECHO had resources to draw from—researchers, evaluators, community coordinators, and communication specialists. And all of this was further enhanced by a leader who championed this work. WV ECHO launched from a strong starting point.

Deliberate Decisions

WVCTSI ECHO was deliberate in its decisions. They sought hub experts who "fit" the ECHO model and took on new programs only as staffing and resources allowed. New programs were grassroots driven, ensuring that there was a demand for the program and that cases would be available. The buy-in from spokes and hub members was there from the beginning. Spokes were getting their needs met and also found WVCTSI ECHO responsive to their needs. Hub members were learning more about primary care in West Virginia.

Stable Funding Matters

ECHO staff were not focused on finding funds to support their own salaries and could therefore focus on listening to the community, building partnerships, conducting evaluations, and training. ECHO was such a good fit with WVCTSI that a decision to fund this work just made sense. One wonders why we don't see all CTSI centers funded by NIH doing the same.

ECHO Model Adoption

The WVCTSI Project ECHO hub was initiated by an external request from a community partner—Cabin Creek Health Systems, a Federally Qualified Health Center in West Virginia. Leaders at Cabin Creek had heard about Project ECHO while trying to find ways to treat their HCV patients in primary care settings. Cabin Creek received a grant from the Claude Worthington Benedum Foundation to support a HepC ECHO program. A respondent shared that Cabin Creek Health Systems came to WVCTSI and said, "Would you do this? You need to do this! We think this is important, but we don't have the manpower." Cabin Creek had partnered on previous projects with WVCTSI and were comfortable making the request. The WVCTSI saw an opportunity to engage community clinics around an unmet need and took on oversight of the program.

Staff from Cabin Creek and Sally Hodder, MD, associate vice president of Clinical and Translational Science and the director of the WVCTSI, went to the ECHO Institute in Albuquerque, New Mexico, and completed immersion training. Mason then attended immersion training, as he was identified by Hodder as the lead ECHO staff member for the WVCTSI. Mason was part of the community engagement and outreach core of the WVCTSI and supported the Practice-Based Research Network (PBRN) and a variety of community projects. His duties shifted to support the WVCTSI's responsibilities to the Benedum Foundation grant. Based on recommendations from the ECHO Institute, Mason reached out to other hubs for assistance. On reflecting on his interactions with ECHO Colorado, he said, "I remember getting on the call and there were about 15 other people, and I was like, 'Oh, man, they have a huge team.' But I quickly learned that that they had only one or two full-time staff members at the time devoted to what they do for ECHO. And I remember getting on, seeing all those people, learning that information, and then having them tell me that this is what you want it to look like when it gets down the road. 'You can do it. Don't worry.' It was a nice thing to hear from them. That you don't need to have all these people to do ECHO effectively." Early on, the WVCTSI Project ECHO frequently accessed the

Project ECHO Resource Library (PERL) and drew on these resources to develop project materials such as de-identified case forms and marketing materials.

Shortly after the HCV/HIV ECHO program was initiated, the WV Primary Care Association (WVPCA) provided an internal grant to develop an ECHO hub and to expand its focus. Nearly all of Mason's time was now devoted to ECHO work, and he hired a second staff member to help coordinate and support ECHO programs. Programs continued to grow from the "ground up." Mason described the process as "a community comes to us and says, 'We really need to do X.' We then use our contacts and partnerships to find specialists and resources that we need to do a project. Then we get with the community members to develop the curriculum. The best practices, the case forms, curriculum, all those things that go into those principles really come from the group. It doesn't come from on high or something like that."

The ECHO work fit well within the mission of the WVCTSI which was described as "building research infrastructure to improve health outcomes." In addition, the WVCTSI staff included experts in public health, community building, communications, and promotions, and these experts were available to support ECHO work. In addition, as part of West Virginia University, WVCTSI had access to and relationships with medical staff in the School of Medicine. ECHO also built upon relationships that the WVCTSI has established in the community. This latter point was emphasized by a respondent who said, "If you're going to improve health outcomes in a rural state like West Virginia, you have got to work effectively with multiple stakeholders in the community, including community health providers."

HCV/HIV ECHO Program

This ECHO program began as a partnership between Cabin Creek Health Systems and the WVCTSI. The program was started in May 2016 with the goal of treating HCV/HIV patients in the primary care setting. The two early champions for this work were infection diseases specialists with the West Virginia University School of Medicine— John Guilfoose, MD, and Kayleigh Burner, APRN. Both attended immersion training at the ECHO Institute. The program evolved to add a clinical pharmacist, Rachel Mitchell, PharmD, and a dedicated ECHO staff coordinator, Mithra Mohtasham. Neither attended immersion training prior to our interview, but indicated they were well prepared for their ECHO work. Mitchell said she started attending HCV/HIV ECHO meetings and "learned more and more about the meetings as they were ongoing." Her director asked her to attend the sessions and eventually he asked her to become a program leader. Mohtasham, the coordinator for WVCTSI Project ECHO, joined the WVCTSI ECHO hub after graduating from a master's program. She was "looking for a career in healthcare and engaging the community. Everything about ECHO lined up with what I wanted to do." She was mentored by Mason and planning to take an online superhub immersion training program as the WVCTSI ECHO hub has applied for superhub status. The HCV ECHO was funded internally through the WVCTSI, and two hub members had protected time through a SAMHSA State Opioid Response grant.

The HCV/HIV was a long running program and closely resembled the HepC ECHO program led by the ECHO Institute. Patient cases were fairly straightforward, with infectious disease and pharmacy specialists making up the expert panel.

Substance Use Disorder (SUD) ECHO Program

"This was a joint effort. We heard a lot from the spokes on our other projects about needing addiction services. We took this information back to the Chestnut Ridge Center where the addiction services for WVU are located on campus. They were really on board to get started. So, it was an easy marriage. And

West Virginia has so many problems around this area. So, it was just kind of a no brainer," said Mason of the SUD ECHO program. The Chestnut Ridge Center was a regional referral center for treatment of mental health illness and addiction for adults, adolescents, and children. The center and the WVCTSI were in adjacent buildings "and there were all kinds of shared back and forth research projects." The SUD ECHO program started in mid-2017 with the aim of expanding the availability of medication-assisted treatment (MAT) and addiction services to primary care organizations and providers. Katie Chiasson-Downs, a clinical therapist at the Chestnut Ridge Center, had been working on the Comprehensive Opioid Addiction Treatment (COAT) program for six or seven years and her colleague asked her to join the SUD ECHO program. Much like the HCV/HIV ECHO program, Chiasson-Downs joined a pre-existing program and learned about ECHO and how to lead it from other expert hub members. Mason, who provided support for the program, reached out to other ECHO hubs for advice about the SUD program. The SUD ECHO program was internally funded through the WVCTSI but was also funded through the SAMHSA State Opioid Response grant. The grant provided funds to protect time for the expert hub members and paid continuing medical education costs.

The SUD program had complex cases dealing with not only patients but programmatic and policy questions surrounding medication-assisted treatment (MAT). The SUD program spokes were diverse. A spoke could consist of a team that included a provider, nurse, and case manager. The same can be said for the expert panel, which was composed of care givers from multiple specialties.

The decision to adopt the ECHO model for both the HCV/HIV and SUD programs primarily was to meet the need for education and training in WV primary care. Although they were very different programs in terms of case complexity and expert team composition, both programs were sharing best practices across West Virginia.

ECHO Model Implementation

The ECHO Model seeks to build a learning community where "all teach, all learn." This is 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" meant to them. Multiple respondents described environments where participants had something to share and something to learn. Hub or program specialists learned about "solutions provided by members who practice in rural areas. This information is often not available to hub members who practice in an academic medical center." Respondents also described how spokes provided peer-to-peer learning, noting that "sometimes hub members don't really say anything during a case presentation. The spokes were sharing ideas and practices, saying 'I had this patient come in two weeks ago. This is what I did.' And the other spokes then observe that and comment, 'Oh, we can do that too. That's in our realm of capabilities.'"

In describing "all teach, all learn" in the SUD ECHO program, an interviewee noted, "If you were a fly on the wall and you had never been there before, you would not know who is from the hub and who are the spokes. Everybody talks the same. It's a safe learning collaborative. If you ask the spokes, they'd say it's a trusted source of information and they can talk freely." The HCV/HIV ECHO program was described in similar terms. For example, the HCV/HIV program was at a point where expert hub members providing recommendations and the spoke sites were speaking up and sharing their experiences.

The ECHO staff and leaders-maintained fidelity to the ECHO model and reinforced the "all teach, all learn" concept in multiple ways:

Project Development. Programs were started from the ground up; proposed by the spoke sites. Spokes were empowered to voice their opinions and needs. Thus, they were buying in from the very beginning of a project and were driving the conversation.

Recruiting and Training Hub Members. Hub experts were selected based on their "communication styles and personalities. They were collaborative and really facilitate an environment and atmosphere you want on an ECHO." WVCTSI Project ECHO screened potential hub members by reviewing past presentations or work on other projects. They also held practice sessions before a program launch. Practice sessions were particularly important as "Hub members get used to each other and understand how to play off each other's comments" and how to encourage spokes to foster the "all teach, all learn" concept.

Evolution of Case Presentations. The traditional ECHO case presentation was a de-identified patient case from a spoke site. WVCTSI Project ECHO expanded cases to include practice and policy questions from spokes sites. For example, the SUD program encouraged spokes to share their experiences in practice and policies with less reliance on the hub experts who were from an academic medical center, which had more resources and different rules to follow than primary care.

Electronic Case Forms. Using the resources available to the hub through the WVCTSI, the WV hub developed an electronic case form where spokes would copy and paste from their electronic medical record, submit multiple cases at once, and select a presentation date which made it easier for spokes to submit cases and hub members to review them.

Factors Influencing Implementation

Studies of program implementation identify context factors that can shape how a program was implemented. Such factors include leaders or champions, state and federal policies, funding, partnerships or collaborations, staffing, internal structures and processes, and monitoring for quality and fidelity. Not all of these factors play a role in how ECHO was implemented here or elsewhere. Below, we identify factors that emerged during interviews that appear to influence how ECHO is implemented in the WVCTSI Project ECHO hub, the HCV/HIV ECHO program, and the SUD ECHO program.

Organizational Characteristics

The WVCTSI Project ECHO benefited from being backed by, and situated within, the WV Clinical and Translational Science Institute. The ECHO work helped the WVCTSI to meet its mission, so there was benefit for WVCTSI to host and sponsor the ECHO work. The ECHO work had also "gotten people more aware of what the institute does, how they can participate with the institute." WVCTSI had expertise in data, evaluation, and communication—all of which the ECHO staff had access to. The WVCTSI reached into the university, especially to medical professionals, and their engagement in ECHO was seen as an extension of their role in the institution. In addition, the WVCTSI research mission extended to ECHO and there was interest and some support to develop a scholarly agenda around the ECHO work.

Partnerships and Collaborations

From the start, the ECHO work at this site was grassroots driven with the nudge coming from an external health system—Cabin Creek Health Systems—for the WVCTSI to facilitate and implement ECHO

programs. The WVCTSI Project ECHO hub partnered with other organizations within and outside of the WVCTSI. For example, the West Virginia Practice-Based Research Network included 107 primary care sites and they were a recruitment partner with WVCTSI Project ECHO. In addition, the West Virginia Primary Care Association was a recruitment partner and provided funds for the hub to expand. Area Health Education Centers were also recruitment partners. Within the university, the ECHO WVCTSI hub partnered with the medical school, drawing on faculty expertise and providing an opportunity to connect the academic world with primary care in rural West Virginia.

Funding Stability

The WVCTSI Project ECHO hub was sustained mainly by NIH funds provided to the WVCTSI. As long as these NIH funds remained stable, funding was likely to continue for core ECHO staff and work as ECHO aligned with the mission of WVCTSI and met needs identified by rural providers. External grant funding was also available from organizations including the Robert Wood Johnson Foundation and SAMHSA grants. These funds were typically used to support experts. Funds were limited and there was a wait list for ECHO programs, but staff did not feel pressured to generate their own salaries.

Staffing

Hub and program staff were trained in the ECHO Model. Most attended immersion training, and those who did not were immersed locally through guided observation and participation in ECHO programs. The two key staff were not working full-time on ECHO and had other duties within the Community Engagement and Outreach Core of the WVCTSI. These included community based participatory research projects as well as focus groups and community trainings. These duties complemented their ECHO roles. Staff also made use of all available resources from the ECHO Institute, thereby adding to model fidelity.

ECHO Vision and Sustainability

When asked about the vision for the hub, a common theme was “expansion.” Interviewees talked about the WVCTSI Project ECHO hub becoming a superhub that could train other sites in the ECHO Model. WVCTSI Project ECHO has been accepted and planned to complete superhub training in early 2021. Leaders discussed expanding into other medical and non-medical fields and talked about finding the resources for “keeping up with what is needed in West Virginia. You just hate to say, ‘It’s in the queue, but we’ve got to get through these other things first.’”

Interviewees talked about finding additional funding so they could respond to the needs of the spoke sites. The HCV/HIV team hoped to grow the number of spoke sites and needed support recruiting new spokes. The SUD team planned to expand its reach by recruiting more sites and cases. This required battling the stigma around MAT and addiction in general. The SUD challenge to growth also included the complexity of cases and providers knowing where to start. There was also the challenge of the number of patients and having the resources needed to keep up as both hub members and spokes were running thin on resources.

Increasing spoke participation was a goal of the HCV/HIV ECHO program. Respondents planned to do this by continuing to innovate, such as what was done with the on-demand case reviews. All said, engagement was a concern in that time was a potential barrier. Spokes and hub members need time to attend sessions. Coordination such as scheduling and protecting time was a big hurdle in West Virginia given a limited number of primary care providers.

Several respondents talked about an interest in more evaluation, research, and writing. The WVCTSI laid the groundwork for evaluation of ECHO programs and was identifying the health outcomes that can be determined by current data and how, or if, what was collected will change moving forward. Hodder, director of the WVCTSI, said, "We really need to write about the outcomes, and digging deeply into that is important." Specifically, Hodder talked about a link between outcomes and increasing trust in rural areas.

Respondents

Sally Hodder, MD
Director
WV Clinical and Translational Science Institute

Jay Mason, MPA
Director
WV Project ECHO

Mithra Mohtasham, MPA
Manager
WV Project ECHO

Rachel Mitchell, PharmD, BCPS, CSP
Clinical Pharmacy Specialist
Allied Health Solutions

Katie Chiasson-Downs, MA, LPC
Clinical Therapist
Department of Behavioral Medicine and Psychiatry
West Virginia University

Suggested Citation

Mason, J. & Larson, R.S. (2022). *West Virginia Clinical and Translational Science Institute Project ECHO Implementation Profile*. Diffusion Associates. http://www.diffusionassociates.com/echo.