

American Academy of Pediatrics Project ECHO Implementation Profile

“ECHO is good at that, not just the teaching and learning, but acting as a support system, too.”

The American Academy of Pediatrics (AAP) Project ECHO and two of its programs—the Trauma & Resilience ECHO and the Screening, Brief Intervention, and Referral to Treatment (SBIRT) ECHO, 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.

Trisha Calabrese was senior director of Pediatric Population Health for American Academy of Pediatrics and operational director of the AAP ECHO Superhub team joined the study team as an implementation fellow in 2020, along with nine other fellows. This profile is based on interviews conducted in January 2021 by James W. Dearing, PhD, professor at Michigan State University, and Lauren Junge-Maughan with the ECHO-Care Transitions at Beth Israel Deaconess Medical Center, Boston, and a 2020 ECHO implementation fellow.

We begin this profile by sharing unique implementation insights from the American Academy of Pediatrics Project ECHO.

ECHO Implementation Insights

Membership-Based Professional Associations

Project ECHO may be especially well suited for membership-based professional associations. The nature of a medical society such as the American Academy of Pediatrics can make ready use of a telementoring platform like Project ECHO to achieve multiple objectives.

Pairing ECHO with Quality Improvement

The AAP has led the way in demonstrating how ECHO can tie together pediatric teams that select a clinical process or practice to improve, identify how it will be measured over time, implement it, collect data, and report on results all as a part of ECHO participation.

Practice-Based Teams as Spokes

Spokes can be practice-based teams. The AAP operated several ECHO programs in this way, which had the advantage of exposing more practitioners to ECHO-communicated content and guarding against losing participation and knowledge due to employee turnover in clinical settings.

Organizational Champions

In organizations where high-level leaders champion the use of an intervention, robust and creative implementation can occur. The AAP had strong top-level advocates for Project ECHO. While ECHO was just one of many approaches that the organization used to achieve its objectives for members, the buy-

in and belief of senior leaders has almost certainly contributed to the growth and innovative uses of the ECHO Model within the AAP.

ECHO Model Adoption

The American Academy of Pediatrics Project ECHO operation was large. The Academy ran ECHO programs for pediatricians, pediatric clinic teams, and AAP chapters across the nation. The AAP also used ECHO to facilitate telementoring and training internationally in partnership with foreign governments and professional associations in Africa and in other areas of the world. Because the AAP had 67,000 pediatrician members, some ECHO programs had hundreds of participants. Topics included Zika virus, lead screening, managing students with seizures, neurodevelopmental screening, obesity, traumatic brain injury, opioids, and substance use. The Academy hosted ECHOs about COVID-19 in 2020 with more than 1,000 participants. ECHOs in the planning stages focused on anxiety and depression, disaster preparedness, Duchenne muscular dystrophy, food insecurity, spina bifida, and other topics.

AAP had full-time and part-time staff working on ECHO. Grants from the federal government, especially the Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA) and private foundations accounted for a majority of the Academy's ECHO programming. Facilitators and experts were drawn from the AAP and its 10 districts and 61 North American chapters. The Academy typically got involved in ECHO programs and found funding by collaborating with pediatric departments at academic medical centers on grant proposals to state and federal agencies. Many of the funded projects had a research basis or evaluative component to them. When a proposal was funded, AAP staff ran the program because of their in-house expertise with ECHO.

Vera Tait, MD, served as chief medical officer at the AAP until her retirement in December 2021. She first learned of ECHO at a conference in Washington, DC. She approached Sanjeev Arora, MD, founder and director of Project ECHO, after he had delivered a talk. "This was 10, 12 years ago," Tait said. "I walked right up to Sanjeev and said 'What is it you are doing? Why aren't you doing it for kids? Shouldn't we be looking at that?'" Within a couple of years, AAP sent a team to Albuquerque for immersion training at the ECHO Institute and began their first grant-funded ECHO program. The AAP then became a pediatric ECHO Superhub, training other teams so that those teams could begin their own ECHO hub operations and programs. They also expanded their own offerings as a pediatric ECHO hub. The Superhub offered Continuing Medical Education (CME) credits and Maintenance of Certification (MOC) Parts II and IV.

A professional medical society like the AAP reached medical providers of a common type across a wide geographic area for information dissemination, networking among the membership, and continuing education. The special nature of the ECHO Model was its design as two-way mutual learning. Funders recognized this. "Federal agencies are key partners of ours," said Debra Waldron, MD, senior vice president for Healthy Resilient Children, Youth & Families, at AAP. "Both the CDC and HRSA have asked us to utilize the ECHO Model in some of our programs. And when we go to other organizations to talk about our programs and to talk about what priorities the Academy has, we talk about the ECHO Model as an opportunity. Now we're training AAP chapters so that they can use ECHO for a specific project related to infection, prevention, and control."

ECHO Model Implementation

In its increasing role as an ECHO Superhub, the AAP sent teams out to university departments of pediatrics, county health departments, and state health agencies for multi-day trainings so that those organizations would learn how to staff their own ECHO operations. The AAP itself implemented and trained others to implement ECHO with a high degree of fidelity to the original model as demonstrated by the ECHO Institute. They took considerable care in selecting facilitators for each ECHO program. “We know these people,” said Tait. “We’re pretty cautious about who’s facilitating because we don’t want someone to even appear to be condescending in answering a question. I know people who don’t mean to be that way, but they come across that way. That’s why you have to be really thoughtful about having the right people to make it work.”

The AAP ECHO team held meetings and trainings so that people who would be “the experts” on ECHO sessions understood the philosophy of listening, asking questions, drawing out practitioners’ own ideas and experiences, and being open to learning from the field. Some things AAP could control about an ECHO program, and some things it could not control. “Maybe a case is selected that doesn’t necessarily resonate with all of the participants,” said Waldron, “or sometimes you get a quiet group that isn’t comfortable sharing. Sometimes we have Zoom problems. But with selection and training of facilitators, we can control that.”

“We have to assure humility in the work we do,” said Waldron. “This is especially important in our global health work when we are called in to help another country. We are there to facilitate conversations, not to direct them. And this is the way that ECHO is designed to work.” Tait agreed. “What we do not want to do is to come across as ‘here’s the American Academy of Pediatrics telling you what you should be doing’ in Tanzania. Instead, we work with the Tanzanian Pediatric Society by asking ‘What do you need? What do you want?’ And if it’s a culture that we are not familiar with then we will find someone from that culture to facilitate the ECHO sessions. That’s true globally and true for us right here in the United States, too.”

AAP ECHO Trauma and Resilience Program

The Academy’s Trauma and Resilience ECHO worked in partnership with other organizations on grant-funded projects. This ECHO was a pediatric approach to trauma treatment and resilience funded in part by the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA). The University of California at Los Angeles (UCLA) was the grant recipient, with AAP as one of the subcontracting organizations to UCLA. The University of Massachusetts was also a subcontractor. The basis for the project was the ECHO program, which AAP manages, with UCLA and the University of Massachusetts contributing faculty experts. Evaluation of the program was done by UCLA, with AAP assuming responsibility for spoke recruitment, running the ECHO sessions, processing documentation, and providing CME and MOC accreditation.

Amy Shah had been program manager for the project. “We launched in 2018, but prior to that for a good year we planned out the curriculum and content in partnership with the universities. We designed it so that in the first level there were six ECHO sessions about childhood trauma, its presentation, impact and effects, etcetera. Then the pediatricians, nurse practitioners, physician assistants, and office managers would go through level two, the second set of six sessions, which have more of an advanced clinical skills emphasis so that participants can go on to teach trauma responsive care in their own practices. Over three years we run 12 cohorts of teams with 550 unique individuals through this program. Then when the grant ends the program is done.”

AAP ECHO SBIRT Program

A grant from the Hilton Foundation led to this program that trained primary care providers in the evidence-based Screening, Brief Intervention and Referral to Treatment (SBIRT) method of helping identify and support patients with substance use issues. The program quickly filled up its available slots partly because of an incentive. “The fact that we’re able to offer free MOC Part IV to folks is quite compelling,” said Shannon Limjuco, director of Telehealth and ECHO Initiatives at AAP.

The hub staff tied achievement of MOC Part IV credit to submission by spoke teams of a case for presentation during a session. “That’s allowed us to solve some of the issues that sometimes plague ECHOs in terms of recruiting cases,” said Limjuco. “In order to participate and get your MOC Part IV, you have to submit a case. You’ve got to attend every session. So those requirements ensure consistent participation.” AAP ECHO staff recruited intact practice teams as spokes, which helped with clinical implementation and sustained use of knowledge and tools at the clinical sites by guarding against learning loss due to clinical staffing turnover. In addition, the team implemented and measured improvement. “We help them with all kinds of things,” added Jessica Leffelman, an AAP ECHO program manager, “because especially with the smaller clinical teams, they may not know where to start. We have them all use the same standard measures, for example, so it’s easier on them. For our SBIRT ECHO, the nine QI measures we chose had been used in a previous project that the AAP did. So, they’d been vetted by a team of pediatricians and tested before.”

Both Limjuco and Leffelman went to the ECHO Institute in Albuquerque, New Mexico to learn ECHO. Leffelman was first trained in-house, then followed that with immersion training in New Mexico. Limjuco was also trained in-house, and then went to New Mexico for a week-long Superhub training. Limjuco and Leffelman were in very regular communication with staff at the ECHO Institute and with staff at other ECHO hubs and Superhubs.

As with other communication platforms, Project ECHO allowed people to share experiences and commiserate during the pandemic. “There were a lot of emotions,” said Leffelman. “It felt like therapy sessions sometimes, honestly,” said Limjuco. “People crying and sharing. ECHO is good at that, not just the teaching and learning, but acting as a support system, too.” Leffelman agreed. “It’s this collaboration between everyone. With SBIRT we’d hear people say ‘Wow, I never thought of doing it that way. That’s great. I’m going to take that back to our practice, too.’ Normally these individuals with different expertise would never have the time together just to have that open dialogue during a case discussion.”

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 was implemented at AAP.

Funding/Contracting

Much of the AAP support for its ECHO operations came from contracts and grants in which ECHO was specified as one of the tools that the Academy would use to accomplish proposal objectives. Reliance on external support from funders required nearly constant proposal writing and came with risks. The success of the AAP in receiving contracts and grants meant that ECHO programs and training roles changed according to which proposals were funded. So topical emphases could be short-lived, in line with the intervention timelines in funded proposals.

Inter-Organizational Environment and Networks

Professional associations are inherently networking organizations. AAP, like other professional associations, conducted their work by forming and nurturing relationships with individuals in other organizations. The AAP was intricately tied into U.S. federal agencies, state agencies, and regional and local health and child welfare agencies, and closely wedded to healthcare organizations, public health departments, and universities through academic departments of pediatrics. Funding proposals for contracts and grants in which the Academy was involved were most often drawing on connections with partnering organizations.

Leadership

Project ECHO hubs and their topic-specific programs often benefit from dedicated health providers and support staff. In the case of the AAP, the implementation and routinization of ECHO into operations received an unusually high degree of support from top leaders. Having Waldron, a vice president, and Tait, a chief medical officer, as organizational champions resulted in Project ECHO being adopted for multiple purposes in the AAP. ECHO was used to communicate with large numbers of pediatricians about an array of medical topics, and to demonstrate how the organization can rapidly respond to practitioner uncertainty and need during emergencies such as the Zika and COVID-19 viral outbreaks. ECHO was used to facilitate the AAP's training mission nationally and internationally especially through the organization's growing prominence as an ECHO Superhub. ECHO was used to drive quality improvement at disparate clinical practices through real-time practice change and measurement. And ECHO was used as a tool to support the objectives in research and quality improvement grant proposals. The use of a platform like Project ECHO in support of so many of an organization's activities would be unlikely without real enthusiasm for the platform among top leadership.

Organizational Characteristics

The nature of a professional association can help determine how ECHO is implemented and whether it sustains. Professional associations such as the AAP have populations of members of a particular type, such as pediatricians. They are often geographically dispersed across urban, suburban, and rural locations and, because of local demand for service, they may be very or somewhat disassociated from other service providers like themselves. And professional associations typically have a capacity-building mission to keep members up to date about the latest research evidence, practice improvements, new technology, and policy changes that can affect patient populations and clinical success. The AAP experience with Project ECHO suggests a strong compatibility of the ECHO Model with the organization's needs. ECHO fit the AAP.

Quality and Fidelity Monitoring

In many of its programmatic offerings via ECHO, the AAP required spoke pediatric teams of participants to identify an aspect of their clinical practice for improvement, plan an intervention, set up a measurement system, and implement the intervention for assessment. A requirement was also made that participating teams present a patient or organizational case for discussion during an ECHO session. This use of ECHO, not just for provider education but for real-time change, was unusual and noteworthy.

Organizational Staffing

The expansive use of ECHO by the Academy does not “just happen.” Compared to many ECHO implementations in North America, the AAP operation was highly staffed with a senior director, director, program managers, program specialists, trainers, facilitators, and content experts.

Individual Characteristics

Interviewees for this profile were expert in administering ECHO. This level of proficiency was likely the result of the diversity of ways that ECHO was applied to the organization’s mission, and also because the AAP did not just use the ECHO Model, it was teaching others to use the ECHO Model. When users of an intervention like ECHO become instructors, they learn the intervention all the more deeply, which benefits their own use.

ECHO Vision and Sustainability

AAP leadership planned to continue in its role as an ECHO Pediatric Superhub. The model served the AAP well so far in this capacity. The vision for ECHO included expanding support internally and externally, and involving families as faculty; that is, by engaging family members on the panel of ECHO experts who participate in sessions to reinforce the vision that everything the pediatrician does was in support of the family. ECHO’s reliance on external support made sustainability uncertain, yet this risk was reduced by being a professional association for members at academic medical centers who understood, were familiar with, and were successful with the submission of research proposals and service delivery proposals with an evaluative dimension.

The AAP exemplified how a professional association can use Project ECHO in support of federally funded, state funded, and private foundation–funded research and evaluation by having its professional members at academic medical centers step up as principal investigators and co-investigators. The Academy was also exemplary in its use of ECHO to engage, train, and share learnings about pediatric care internationally.

Respondents

Jessica Leffelman
Program Manager, Telehealth and ECHO Initiatives,
American Academy of Pediatrics

Shannon Limjuco, MPH
Director of Telehealth and ECHO Initiatives
American Academy of Pediatrics

Amy Shah, MPH
Program Manager, Telehealth and ECHO Initiatives
American Academy of Pediatrics

Vera Tait, MD, FAAP
Chief Medical Officer
American Academy of Pediatrics

Debra Waldron, MD, MPH, FAAP
Senior Vice President, Healthy Resilient Children, Youth & Familie,
American Academy of Pediatrics

Suggested Citation

Dearing, J. W., & Junge-Maughan, L. (2022). *American Academy of Pediatrics Project ECHO Implementation Profile*. Diffusion Associates. <http://www.diffusionassociates.com/echo>.