Army Pain Management ECHO
Implementation Profile

"We're taught as facilitators to reach out and ask and get everybody involved. We build a relationship in which we care for them. We want them to deploy the greatest medicine and the recent medicine as well."

The United States Army Pain Management ECHO hub and programs at the Madigan Medical Center (Tacoma, WA) and Landstuhl Regional Medical Center (Germany) 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.

This profile is based on interviews conducted in January-February 2021 by R. Sam Larson, PhD, director of Diffusion Associates, and Leah Willis, MS, director of programs at ECHO Colorado and a 2020 ECHO implementation fellow.

We begin this profile by sharing unique implementation insights from Army Pain Management ECHO.

ECHO Implementation Insights

Shared Curriculum

All Army Pain Management ECHO programs used the Joint Pain Education Program Curriculum. These curricular modules were evidence-based and included videos and templates. Hubs could add to the slides and update or adapt content within reason. The shared curriculum had two advantages. One, it reduced the amount of time required to pull a session together. Two, it ensured that the same evidence-based practices were being promoted across the hubs. While the Army was unique in its structure, hubs that share a topical focus can come together to develop a shared curriculum.

Protected Time

Primary care pain champions had protected or release time to attend and participate in ECHO sessions—it was an expectation and responsibility built into their role. They had reduced patient load and reduced Relative Value Units (RVUs) expectations. However, the protected time was modest—sometimes no more than .10 FTE—and some champions found it challenging to make the time commitment. Protected time can greatly facilitate implementation and sustainability, but the time needs to be sufficient for the task and may require reminding the champions and their supervisors of this responsibility.

Video Conferencing Technology

For many ECHO sites, Zoom and other video conferencing technologies were ubiquitous. The Army was a reminder that this technology was not always available and some programs relied on phone-based conferencing.

ECHO Model Adoption

Army Pain Management ECHO can be traced back to a 2010 Pain Management Task Force Report that led to the establishment of Interdisciplinary Pain Management Centers (IPMCs) at each of the U.S. Army Medical Command (MEDCOM) regions. A major challenge identified by the task force was how to maximize the role of primary care providers in managing chronic pain. In 2012, the Army determined that the ECHO Institute would be a key mentor in overcoming this challenge. In collaboration with the ECHO Institute Pain team, MEDCOM developed a phased Army Pain Management ECHO roll-out plan across five regional hubs—three in the continental United States, one in Hawaii, and one in Germany. Each hub was home to an Interdisciplinary Pain Management Center (IPMC). Spokes were providers from soldier-centered medical homes and patient-centered medical homes throughout the Army. Each medical home had a designated primary care pain management champion who was expected to attend and participate in the Pain Management ECHOs. The Army Pain Management ECHO Program Office coordinated the roll-out, facilitated training and fidelity checks, and provided continuing medical education units. The ECHO Model was one of several approaches implemented by the Military Health System to improve pain management.

Lori L. Whitney, LTC, AN, director of the Army Comprehensive Pain Management Program from 2019-2022, coordinated and advocated for ECHO across the system. Army Pain Management ECHO was in place when Whitney joined the office. She kept the program going by "keeping it on the front burner." The ongoing overview of operations and reporting, as well as monitoring the continuing medical education units, was overseen by civilian members of the Army Pain Management ECHO team. Whitney coordinated requests from the Army Pain Management ECHO hub leads to adapt centrally organized tools, such as case forms, and participated in a monthly Connected Health ECHO meeting that involved the U.S. Army, Navy, and Air Force. She advocated for ECHO by reminding her superiors that "part of the primary care pain champions' role is to attend ECHO and participate in ECHO." Whitney also led a meeting for all IPMCs, which was open to anyone. Lead administrators and their medical directors participated. Participants could discuss anything related to IPMCs, not just ECHO. One respondent said this was a "venue where we could discuss ECHO-related issues. Lori Whitney is very interested in ECHO and wants us to share ideas with one another."

Madigan Medical Center Army Pain Management ECHO Program

In 2010-2011, Diane Flynn, MD, became the first director of the Integrated Pain Management Center (IPMC) at the Madigan Medical Center (Madigan). In her first year in this role, Flynn was invited by Kevin Galloway, deputy director with the Defense & Veterans Center for Integrative Pain Management (DVCIP) and a retired Army colonel, to attend ECHO immersion training at the ECHO Institute in New Mexico. Flynn was "blown away" by the training and started dialing into ECHO weekly sessions by telephone. At about the same time, Flynn was associating with people at the University of Washington who "were very interested in helping us establish this new Interdisciplinary Pain Management Center and, coincidentally, they also had an ECHO educational program for primary care teams around our region."

The Madigan IPMC was building out an interdisciplinary team, hiring people from disciplines such as physical therapy, occupational therapy, chiropractic, acupuncture, yoga, massage, and psychology. Honor McQuinn, DNP, joined Flynn at the Madigan IPMC. While building out the team, Flynn and McQuinn continued to attend the ECHO program sponsored by the University of Washington where they "became more experienced in how to do ECHO. We really learned from the experts. We gained a lot of confidence as we were participating regularly with the team at the University of Washington."

McQuinn and Flynn oversaw the launch of the Pain Management ECHO Program at Madigan once they had a fully assembled interdisciplinary team.

Landstuhl Regional Medical Center Army Pain Management ECHO Program

Brian McLean, MD, LTC, and Lester Gresham, MSM, a health system specialist, were leads for the Landstuhl Regional Medical Center (Landstuhl) Army Pain Management ECHO Program. Gresham had worked at the ECHO Institute prior to working at Landstuhl. ECHO Project founder Sanjeev Arora, MD, and Joanna Katzman, MD, asked Gresham, who had previously served in the Army, to "roll out ECHO to the Army. I was Army, I know Army, and I have a healthcare background. We created an ECHO specifically for Army." McLean was one of the pain doctors convened by the Pain Management Task Force when the decision was made to create Interdisciplinary Pain Management Centers. McLean attended ECHO immersion training in New Mexico along with other IPMC facilitators.

Gresham left the ECHO Institute to work with the Landstuhl ECHO. During initial adoption, "all the different Interdisciplinary Pain Management Centers at the different regions had a regional call. For a while, we were doing it weekly and talking about, 'How can we make ECHO successful?' and 'How can ECHO help these IPMCs be successful?' That's how it got started." The regional hubs faced a challenge—getting ECHO Model buy-in for the Interdisciplinary Pain Management Centers. That changed when the Army wrote an "order that said every single solider- centered medical home and patient-centered medical home will identify a primary care pain champion. That primary care pain champion has to go to ECHO. The way we got buy-in was by ordering people, telling them they had to do it." The Landstuhl ECHO reached 20 military facilities and was open to exterior spoke participants from the Air Force and Navy.

ECHO Model Implementation

The ECHO Model seeks to build a learning community where "all teach, all learn." This is done by leveraging technology, sharing best practices, through case-based learning, and using data. We asked respondents to tell us what "all teach, all learn" meant to them. "All teach, all learn" began with understanding where spokes were coming from. One respondent said that primary care pain champions were "reticent to participate in ECHO when they first start attending. ECHO can be anxiety provoking, especially when people haven't presented a case before, or asked a question during the ECHO didactic. It's anxiety provoking because they are in front of their peers." Creating a safe and welcoming environment was a strategy used in both programs to overcome participant uncertainty or reticence. Flynn said, "We never judge. We never second guess. It's always very kind. And we see people grow in their confidence to the point that they're offering advice to others." Similarly, McLain said sessions were "open and include everybody. We're taught as facilitators to reach out and ask and get everybody involved. We build a relationship in which we care for them. We want them to deploy the greatest medicine and the recent medicine as well."

A safe environment and caring relationships supported a definition of "all teach, all learn" where "learners become the teachers. A care provider can be a spoke in one session and a lecturer in another session." McLain shared an example where a patient presented in a case had an internal medical condition that wasn't familiar to the pain specialists. An internal medicine doctor who was a spoke was able to teach spokes and hub members about the condition. Learning was also taking place among the

faculty. McQuinn commented that “subject matter experts learn a lot about primary care and the challenges of primary care. They benefit from this knowledge in how they look at their patients.”

The Army had limitations on how technology was deployed and video conferencing was not always accessible. The Madigan Pain Management ECHO was conducted primarily via phone. Efforts were made to provide camera and video functioning at both hubs, including using a dedicated Polycom or a Cisco room, though that was not always possible.

The curriculum for the Army Pain Management ECHO programs was developed by the Joint Pain Education Program team. This curriculum was the approved curriculum and what all Army programs were expected to use. Subject matter experts could add to the evidence base or share their experiences during the lecture. The curriculum lasted about seven months and could be repeated every cycle. One respondent found the repetition helpful for learning and said different presenters brought different perspectives to the same didactic. Another respondent found the didactics more limiting, commenting that materials were four or five years old and becoming repetitive.

Primary care pain champions were expected to provide patient cases and had time on their schedule to attend ECHO and to present a case. McQuinn commented, “Some people have a lot of challenges with getting cases. We haven't had that.” Still, another respondent commented that getting cases “feels like pulling teeth because everyone is busy. But when they finally present a case, they say, ‘I’m glad I did this.’”

Factors Influencing Implementation

Studies of program implementation identify outer and internal contextual factors that can shape how a program is implemented. Factors in the outer context include external leaders or champions, state and federal policies, external funding, and external partnerships or collaborations. The inner context refers to characteristics within an organization such as internal structures and processes, leadership within the organization, monitoring for quality and fidelity, and staffing—including how people are trained and the characteristics of the people leading and supporting the program.

Not all of these factors play a role in how ECHO was implemented here or elsewhere, and some factors were more important than others. Below we identify factors that emerged during interviews and that impacted Army Pain Management ECHO implementation.

Quality Control

Army Pain Management EHCO hubs were required to submit an annual schedule of didactics and list of presenters to a lead health education services specialist at the start of each fiscal year. Hubs were required to draw from a pre-approved Joint Pain Education Program Curriculum, which consisted of a standardized curriculum that included PowerPoints and videos that served as the didactic portion of each session. These modules were made especially for the Army Pain Management ECHO programs by the Defense & Veterans Center for Integrative Pain Management. Army Pain Management ECHO program leads could go into a library and pick the didactic that they wanted to use. If the ECHO lead wanted to add to that didactic, they could. CMEs associated with these didactics were monitored and approved by a central office. The standardized curriculum helped to ensure fidelity to the ECHO Model and ensure that guidance was evidence based. The curriculum included a guideline about how patient

cases should be presented. It also included a lengthy template that was a challenge in some situations as it was burdensome to some presenters.

Funding

When the Army was initially setting up the IPMCs, Congressionally appropriated funding was used to hire pain management staff, including ECHO coordinators. When these funds sunset, ECHO was expected to happen out of the budget. One respondent shared that ECHO was "just part of our job; it's just part of our salary and we don't have to provide grant funding or anything like that for it." Still, the Army prioritized funding decisions that impacted ECHO operations. As one respondent explained, "The hospital receives a budget and is told to 'Spend it the best way you can.' So, for instance, if you lose an ECHO coordinator, then you have to go back to the commander and say we need to re-hire this person. But they can say, 'This work doesn't generate RVUs [Relative Value Units]and we're over budget; sorry, not this year.' When that happens, people just add ECHO to their job."

Staff Time

Primary care pain champions at the spoke clinics had dedicated time on their schedule to attend ECHO sessions and present a case. One respondent shared that the panel size and number of patients managed by primary care pain champions participating in ECHO was "reduced and their expected RVU number is reduced. That decision was made at the DHA [Defense Health Agency] level. There was widespread recognition that ECHO is a good use of their time." On occasion, Whitney would "remind the chief that part of the primary care pain champions role is to attend ECHO and participate in ECHO." Still, when ECHO staff turned over it has taken a long time to refill these roles and sometimes the role would not be filled. One respondent commented: "We have a different commander every two years or so. Each commander is trying to balance competing priorities. And at the same time, there's some constraints with regard to the size of the staff. At the time that we lost our nurse educator, we had a hospital commander whose priority was either generating RVUs or supporting people who generate RVUs. The nurse educator supporting ECHO was not a high priority."

Training

Immersion training in New Mexico provided by the ECHO Institute motivated pain management champions and ECHO facilitators to move ECHO forward. One respondent shared that the Army "can tell somebody to do something, and they'll do it because they're told to do it. But if you get them to champion it and believe in it, then they will do so much more. They will ingest it and every part of what they are is part of it as well. The ECHO Institute does a great job accomplishing that. They bring you in, they show you, they do the boot camp, and you get bit by the ECHO bug." At the other site, a respondent said of immersion training, "It was just wonderful."

The Army supported travel to New Mexico to attend immersion training. When travel was not an option—due to COVID or costs— "immersive-like" training was provided to hubs by a central office.

ECHO Vision and Sustainability

We asked respondents to share their vision for the future of Army Pain Management ECHO at their respective site and also across all sites. All respondents shared that the Army had an ongoing

commitment to ECHO programs. This commitment could be strengthened by having more people attend immersion training, in-person as well as online training. Strengthening this commitment could be achieved by having more outcome data. Whitney was a data champion, seeking to identify and capture outcome data. Although the Army Pain Management ECHO had publications and research focused on fidelity of the implementation, one respondent shared that they "really don't have data that talks about either patient outcomes or patient-reported outcomes." The Connected Health group, which includes the Army, Navy, and Air Force, was discussing outcomes and how they could collect data to better evaluate the Pain Management ECHO programs.

Respondents at Madigan and Landstuhl wanted to expand their work. Gresham had a vision of addressing "multiple disease states and not just pain management." McLean wanted to "expand pain knowledge and pain education to everybody in the military. Down to the first person out of training, down to all the trainees in graduate medical education." McLean linked this thought to better and continuous promotion of ECHO, which was especially important given that many Army staff are on two-year rotations.

The Madigan Medical Center staff hoped to have more and better access to video conferencing technology. A few of their spoke sites had video conferencing technology, but most spoke sites participated via phone. McQuinn said, "I would love to be able to see our participants because those interactions make a big difference. I know some of the ECHO's don't have the restrictions that we have. They have the names of the person speaking and their specialty and they can type in the questions. That would be really, really nice to have."

Funding was a challenge mentioned at both the Landstuhl and Madigan sites. ECHO needed to be seen as a priority by those in charge to ensure sufficient release time for facilitators to support ECHO.

Respondents

Diane Flynn, MD, MPH
Interdisciplinary Pain Management Center
Madigan Army Medical Center

Lester Gresham, MSM
Health System Specialist
Landstuhl Regional Medical Center

Brain McLean, MD, LTC
Director, Interdisciplinary Pain Management Center
Landstuhl Regional Medical Center

Honor McQuinn, DNP
Nurse Practitioner Specialist
Interdisciplinary Pain Management Center
Madigan Army Medical Center

Lori L. Whitney, LTC, AN
Chair, DHA Pain Management Clinical Support Service Director
Army Comprehensive Pain Management Program
Office of the Surgeon General

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