

**Clinical Education Initiative ECHO
University of Rochester Medical Center
Implementation Profile**

“If you can give clinicians money or protect their time so that they don't have to see two patients, then they can attend this training. I think that's all you need.”

The Clinical Education Initiative ECHO hub at the University of Rochester Medical Center, and its Sexual Health Center of Excellence ECHO and Drug User Health Center of Excellence 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.

Maggie McLain McDonnell, director of the Oregon ECHO Network, was one of 10 implementation fellows in 2020, and worked alongside Diffusion Associates in this study. McDonnell and Nagesh Rao, PhD, professor at Ohio University, conducted interviews in December 2020 that were the basis of this case report.

We begin this profile by sharing unique implementation insights from the Clinical Education Initiative (CEI) ECHO hub at the University of Rochester Medical Center and its Sexual Health Center of Excellence ECHO (Sexual Health ECHO) and Drug User Health Center of Excellence ECHO (Drug User ECHO) programs.

ECHO Implementation Insights

Leveraging Resources Effectively

The experience of the CEI ECHO hub demonstrates that ECHO can operate with minimal resources without compromising access to specialty knowledge or deviating substantially from the ECHO Model. The Sexual Health ECHO and Drug User ECHO were part of larger initiatives and recruited presenters in sexual health and drug user health to share their expertise with the participants. Only a few of the hub team members had attended immersion training, yet the programs still incorporated many features of the ECHO model as recommended by the ECHO Institute.

Case for Every Session

While many ECHOs struggled to get attendees to submit a case, both the Sexual Health and Drug User ECHO programs were successful in this and had a participant case for each session. The Sexual Health ECHO used cases submitted to a consultation line and the Drug User ECHO made it mandatory for participants to submit cases. Both had, if needed, back-up plans for cases.

Culturally Compatible Programming

The Sexual Health ECHO has strategically and consciously addressed access and equity issues in all their programming by making it a core value and discussing equity in each session. With a primary focus on enhancing the capacity of rural physicians in New York to improve health outcomes, the program offered culturally compatible topics (e.g., transgender health, health disparities, racial inequities).

ECHO Model Adoption

The CEI ECHO hub was part of the University of Rochester Medical Center's (URMC) Clinical Education Initiative, a project sponsored by the New York State Department of Health AIDS Institute. The goal of the medical center's Clinical Education Initiative was to enhance the capacity of New York state's healthcare workforce to improve health outcomes. This initiative had four centers of excellence: HIV, sexual health, drug user health, and hepatitis C. In 2015, Monica Barbosu, MD, PhD, a research assistant professor at University of Rochester Medical Center, was asked by the New York State Department of Health AIDS Institute to make ECHO a part of their broader initiatives within the Clinical Education Initiative Resource Center of Excellence. The CEI ECHO hub offered the Sexual Health ECHO in 2016 and the Drug User ECHO in 2020. The Sexual Health ECHO support team was located at the University of Rochester. The Drug User ECHO's team was located at the Mount Sinai Institute of Advanced Learning in New York City.

Dr. Barbosu participated in the University of New Mexico's ECHO immersion training. Jahron Marriott, ECHO program coordinator for CEI ECHO, learned about ECHO from the materials Barbosu shared with him and learned about ECHO on the job while coordinating the three ECHO programs. The CEI ECHO hub was managed by the OB/GYN Department, University of Rochester Medical Center (URMC), and was independent from seven other ECHO programs offered by URMC. While Jahron occasionally helped with other ECHO programs, there appears to be little knowledge transfer between CEI ECHO and the other URMC ECHO programs.

Sexual Health ECHO – Sexual Health Center of Excellence

Marguerite Urban, MD, professor of medicine, URMC, started the Sexual Health ECHO in 2016. Urban explained that the overarching HIV education programs have been around for 25 years, but the Sexual Health ECHO was started from a grant awarded by the New York Department of Health AIDS Institute to create a Sexually Transmitted Disease (STD) Center of Excellence (later renamed Sexual Health Center of Excellence). Urban was the principal investigator for this five-year grant that was currently in the second five-year cycle. The Sexual Health ECHO was not a cohort-based program and had around 25 participants each month. Neither Urban nor other members of this team had participated in the UNM ECHO Institute immersion program. They learned about ECHO by observing other ECHO programs offered at URMC and by the other Clinical Education Initiative centers.

Drug User ECHO – Drug User Center of Excellence

Linda Wang, MD, assistant professor, internal medicine, Mount Sinai Health System, led the Drug User ECHO program that was started in 2020 with a five-year grant from the New York Department of Health AIDS Institute. Wang emphasized that the Drug User ECHO was a part of a larger initiative offering drug user health education. Wang had not participated in the ECHO Institute immersion training though a few members of her team had participated.

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. Respondents defined it as the opportunity for the facilitators and the participants to learn from each other. Urban explained that for

Sexual Health ECHO, “all teach, learn” was a bi-directional exchange between the participants and the hub. For the Drug User ECHO, Wang shared, “I think it [“all teach, all learn”] means that everyone is a stakeholder in the learning process. Whether you're on faculty or whether you're an ECHO participant, you are doing both during the ECHO session. Everyone is teaching each other through cases, through PERL [Project ECHO Resource Library], and everyone is learning together.”

Both Wang and Urban shared that faculty were comfortable conversing but it was a challenge to get attendees to participate in ECHO sessions. Wang explained, “So we really struggle with engagement. It is tough because people have a hard time participating especially if it's a group that you might not know very well or if it's your first time attending.” Urban added that attendees from some locations were vocal and came back for later sessions. Attendees from other locations didn't participate during the session but reached out later with questions. Urban tried calling on specific attendees to participate, but said this made them uncomfortable. She dropped that strategy; “We've just decided that people vote with their feet and if they come back, they see some value to what we're doing.”

The Sexual Health and Drug User ECHO programs both use a case for every session. Wang noted that she let the Drug User ECHO participants know in advance that they will have to submit a case. If a participant was unable to submit a case, she requested an ECHO faculty to present a case. Acknowledging that getting cases were difficult, Wang emphasized, that they try to hold to the traditional ECHO model and have a formal case presentation. For the Sexual Health ECHO, Urban explained that “another function of our grant is we have a clinical consultation line, which is very active. We use those consultations as our ECHO cases and then I select the ones that seem most pertinent to make a point.” Urban noted that they have five cases per week via the consultation line. As medical director of the County Health Department STD clinic, Urban had access to a range of relevant cases if needed.

Factors Influencing Implementation

Studies of program implementation identify outer and internal contexts that can shape how a program was implemented. Factors in the outer context that can influence program implementation 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 were 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 that influenced how the CEI ECHO hub and the Sexual Health and Drug User ECHO programs were implemented.

Funding

The CEI ECHO programs were part of larger health initiatives at the University of Rochester Medical Center and Mount Sinai. The hub received funding from the New York State Department of Health for many initiatives, and apportioned a part of this budget to ECHO programs. Respondents shared their frustration in not having budget oversight, saying: “Right now we don't have a budget. I'm the director of the CEI and I have to scramble for money.” All the ECHO staff members were paid through the grant

and only the Sexual Health ECHO presenters were paid a small honorarium. The lack of remuneration, as one respondent shared, should be addressed: “If you can give clinicians money or protect their time so that they don't have to see two patients, then they can attend this training. I think that's all you need.”

Organizational Staffing

The hub had a lean staffing model with one lead for the Sexual Health ECHO and the Drug User ECHO programs, and one person coordinating all of the CEI ECHO programs. The lean staffing model explained the limited evaluation of programs and the challenge in adding more programs. The hub respondent attended the ECHO Institute immersion training and some current programs.

Partnership and Networks

The CEI ECHO hub was part of the OB/GYN Department in the University of Rochester Medical Center. The four centers of excellence worked independently with occasional collaboration among teams. The CEI ECHO programs, however, did not collaborate with ECHOs outside the University of Rochester except with Mount Sinai Hospital where the drug user health and HIV centers were located.

Culturally Adaptive Programs

Urban from the Sexual Health ECHO program stressed that addressing access and equity were core values of all their programs. All CEI ECHO programs were expected to address the needs of the rural healthcare workforce in New York State and to increase the capacity of clinicians in rural areas to improve health outcomes. The Sexual Health ECHO made inclusion and equity a core part of their program design. Urban explained: “We did a lot of transgender health, gender non-binary health from the beginning. I think maybe the only adjustment across all our activities is a more upfront acknowledgement of Black Lives Matter and equity—health equity kinds of questions—and addressing those head on.”

ECHO Vision and Sustainability

When asked about the vision for CEI ECHO hub in the next several years, respondents expressed they would like to offer more ECHOs but were unable to do so without budget oversight. With limited funds coming from the New York State Department of Health, the ECHO budget assimilated into the CEI budget, and being one of many programs offered by CEI, the CEI ECHO administrators had limited influence in resource allocation. Respondents noted that they hoped to continue the existing ECHO programs in sexual health and drug user health.

The Sexual Health ECHO interviewee noted that they have never repeated a didactic program, but was unsure if they could repeat the program dividing them into basic, intermediate, and expert sessions. The Drug User ECHO interviewee expressed an interest in greater participation from clinicians, but noted that with their busy schedules, clinicians should be incentivized to attend.

Respondents

Monica Barbosu, MD, PhD
Research Assistant Professor, University of Rochester Medical Center

Jahron Marriott, MS
Information Analyst, OB/GYN Department, University of Rochester Medical Center

Marguerite Urban, MD
Professor of Medicine, University of Rochester Medical Center

Linda Wang, MD
Assistant Professor, Internal Medicine, University of Rochester Medical Center

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