Project ECHO

JUDY HSU D.O.
ASSISTANT PROFESSOR OF FAMILY MEDICINE
UMASS MEMORIAL/BARRE FAMILY HEALTH CENTER
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Objectives

- Describe what Project ECHO is and its current national and global impact
- Discuss how Project ECHO aligns with IHI’s quadruple aim
- Discuss how Project ECHO empowers primary care to keep care local
- Summarize current ongoing Project ECHO activities in Massachusetts
What is Project ECHO

- Tele-mentoring model that aims to increase workforce capacity in areas where access to care is an issue
- Virtual hub and spoke knowledge sharing networks led by topic experts to conduct topic-specific clinics via video conferencing
- Video conferencing sessions are held regularly over time, and through guided practice, primary care clinicians find themselves gaining proficiency in managing specific complex chronic conditions

Diagram:
- People need access to specialty care for their complex health conditions.
- There aren't enough specialists to treat everyone who needs care, especially in rural and underserved communities.
- ECHO trains primary care clinicians to provide specialty care services. This means more people can get the care they need.
- Patients get the right care, in the right place, at the right time. This improves outcomes and reduces costs.
Hub and Spoke Network
Anatomy of an ECHO Session

- Each session follows a prescribed format of case based discussions + didactic presentation
- Each session is conducted via multi-point videoconference platform (ZOOM)
- PCPs from multiple sites present de-identified cases and discuss development and treatment with the specialist teams. These specialists serve as colleagues/mentors to share their knowledge and expertise (40-60 min)
- Brief didactic presentation is provided at each session (10-20 min)
- Cases are usually submitted ahead of time on templated forms so that the hub team can review and prepare materials for the session
Project ECHO is NOT Telemedicine.
Benefits of Joining ECHO

- CME credits are typically offered
- Development of relationship with expert team over time which decreases professional isolation
- Direct access to specialists
- You become a “specialist” in your own practice
- No more patients falling through the crack in the referral process!
First developed & utilized in 2003 by GI specialist Dr. Sanjeev Arora in order to solve NM’s problem with hepatitis C infection

Dr. Arora sought out primary care clinics to help manage and treat patients living with chronic hepatitis C (in the age of interferon!)

Patients treated via Project ECHO achieved same SVR rate as those treated by GI clinic at UNM (Arora et al. 2011)

Since then Project ECHO has been utilized for many other disease entities in multiple states and countries in order to help expand workforce capacity and improve access to care
Sample List of Topic Focus

- Oncology
- Mental health/addiction
- Cardiology
- Endocrinology/diabetes
- Pulmonology
- Dermatology
- Infectious disease
- Pediatrics
- Palliative Care
- Chronic pain
- Rheumatology
- Dental & oral health
- Geriatrics

[https://echo.unm.edu/join-the-movement/join-echo/](https://echo.unm.edu/join-the-movement/join-echo/)
Honorable Mentions

- VA (SCAN-ECHO)
- Missouri (Show-Me ECHO)
- University of Wyoming (UW ECHO)
- Northern Ireland (Project ECHO Northern Ireland)
SCAN-ECCHO

SCAN = Specialty Care Access Network

Launched in 2011

Hepatology/hepatitis C, cardiology, chronic pain, neurology, COPD etc.

Evaluation of the program found improved provider satisfaction with their work
SHOW-ME ECHO

- Fully state funded – recently funding of 1.5 million dollars was approved to support the program
- Asthma, autism, child psych, chronic pain, community health worker, dermatology, healthcare ethics, hepatitis C, opioid use disorder
UW ECHO

- Behavioral health, career development, early childhood, educational leadership, geriatrics, student health, etc.

- Tackles less clinically oriented topics - creative use of ECHO model
Project ECHO Northern Ireland

- Mental health, prison health, dementia, neurology, palliative care, heart failure, etc.
- They are a “Superhub”
ECHO Act

- Introduced and signed into law in 2016
- This bill requires HHS to study Project ECHO’s impact on patient care and clinician development.
- The secretary of HHS must study ECHO’s infrastructure and its effect on 4 key areas:
  - Mental and substance use disorder, chronic conditions, maternal and pediatric health, palliative care
  - Health care workforce issues (e.g. specialty care shortages)
  - Public health programs (e.g. disease prevention)
  - Delivery of health care in rural and frontier areas
- No more than 2 years after enactment, the government accountability office and HHS must deliver a report to Congress on ease of integration of the ECHO model and any barriers to its use. The report must also include recommendations for overcoming these challenges.
Project ECHO: A Love Story
IHI Quadruple Aim

- Better Outcomes
- Improved Patient Experience
- Lower Costs
- *Improved Clinician Experience
Burnout in health care is becoming a major problem. In a study published in 2014 by Mayo Clinic Proceedings, nearly 55% of physicians who responded to the survey were professionally burned out.

- Bad for patients (broken continuity of care)
- Bad for institutions (costly to replace staff)
- In the same Mayo report, 16% of those who were burned out reported low sense of personal accomplishment
- A major driver of physician satisfaction comes from a sense that one is providing excellent care for patients
- Finding back joy of medicine
- Employees want to feel that their employers are investing in their growth and career trajectory. In another study published by the Mayo Clinic Proceedings, it shows a direct relationship between the quality of leadership and job satisfaction levels
Quadruple Aim: Better Outcomes

- Study published by NEJM in 2001 showed patients treated by PCPs through participation of ECHO achieved same SVR rate as those treated at tertiary center (Arora et al. 2011)

- Recent study published in Hepatology showed improved survival in patients with liver disease who participated in SCAN-ECHO (Su et al. 2018)

- Another study done by the VA showed higher utilization of physical medicine services and initiation of nonopioid medications among patients with chronic non-cancer pain with provider participation of their chronic pain ECHO (Frank et al. 2015)
Quadruple Aim: Improved Patient Experience

- When expertise is brought in-house, there is no need for patients to travel.
- Patients are being treated by the same care team that they’ve known to trust – and the same care team that knows their histories well (less medical errors and testing redundancy?)
- No more wait time for referral.
- The result is streamlining of care that is efficient and patient centered.
Quadruple Aim: Lower Costs

- Less literature on this, but intuitively, less referral to specialists means lower cost for the patients and the system.

- A study published by Gastroenterology in 2017 showed that Project ECHO is a cost effective way to find and treat patients with hepatitis C infection at scale using existing primary care providers (Rattay et al. 2017).
Project ECHO in Massachusetts

- OATECHO at BMC
- ECHO-CT at BIDMC
- HCV ECHO at UMass
HCV ECHO launched in 2016 followed by MAT ECHO in 2017*

HCV hub team members: Curtis Barry MD, Judy Hsu DO, Annie Vong PharmD, Sam Lam PharmD

25 spokes have signed up so far

Every Friday 12:30 – 1:30pm

It’s free and Low commitment
How To Get Involved

- As a hub: sign up for replication training with UNM (https://echo.unm.edu)
- As a spoke: search for existing networks to join via the Project ECHO website
- **Sign-up sheet available today to join HCV ECHO at UMass**
References


- Joseph W. Frank, Evan P. Carey, Katherine M. Fagan, David C. Aron, Jeff Todd-Stenberg, Brent A. Moore, Robert D. Kems, David H. Au, P. Michael Ho, Susan R. Kirsh; Evaluation of a Telementoring Intervention for Pain Management in the Veterans Health Administration, Pain Medicine, Volume 16, Issue 6, 1 June 2015


Questions?

Please contact me:

judy.hsu@umassmemorial.org