

# Project ECHO

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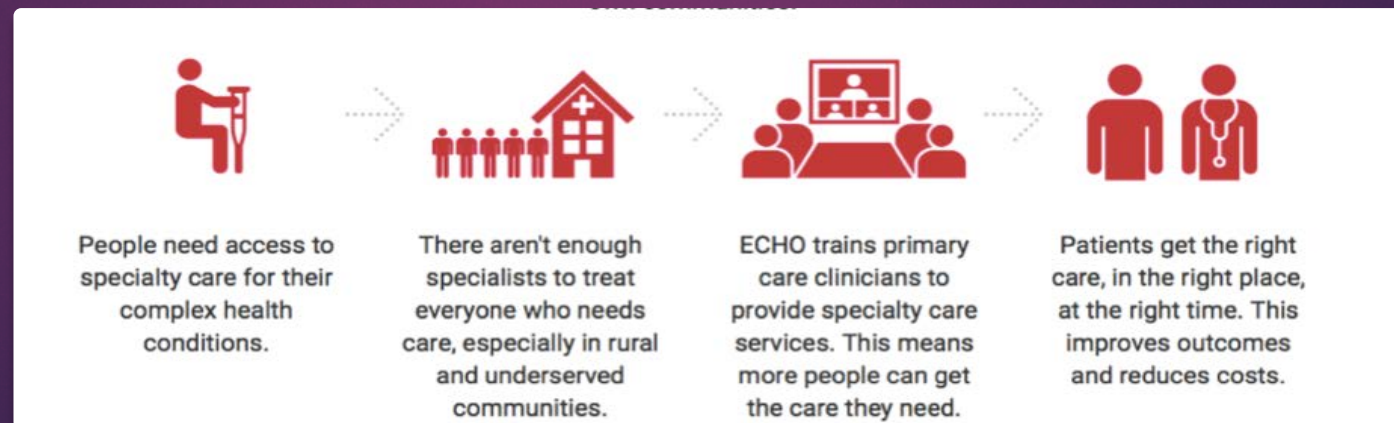
DECEMBER 4TH, 2018

# Objectives

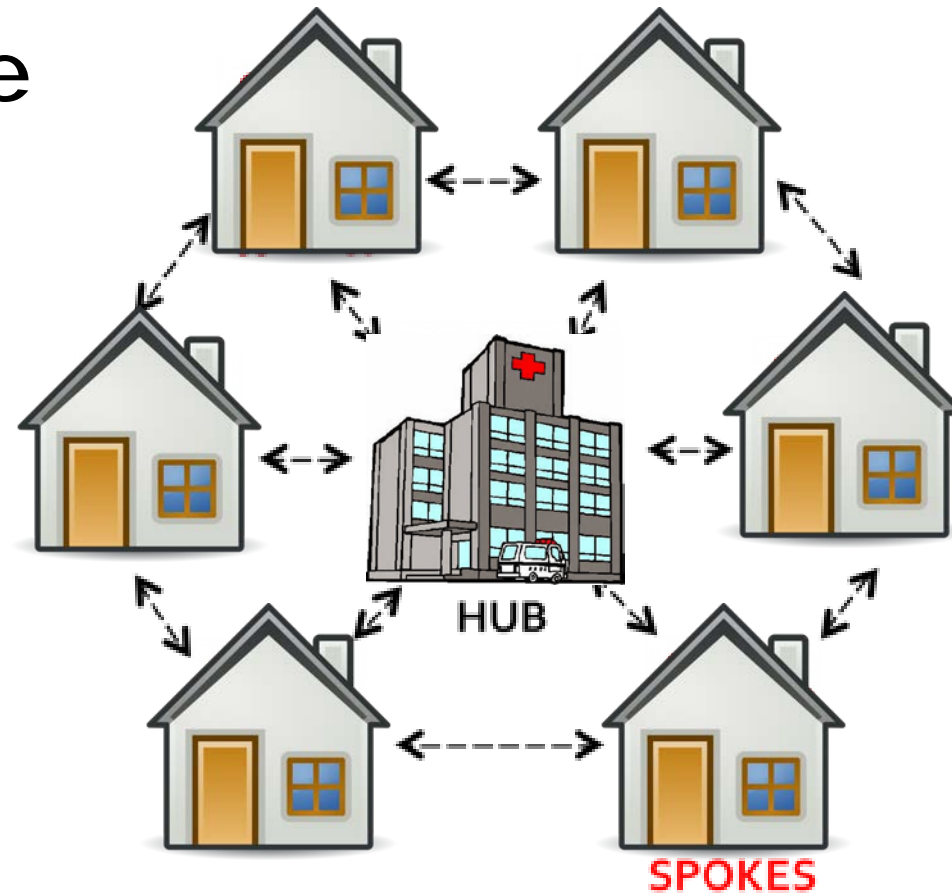
- ▶ Describe what Project ECHO is and its current national and global impact
- ▶ Discuss how Project ECHO aligns with IHI's quadruple aim
- ▶ Discuss how Project ECHO empowers primary care to keep care local
- ▶ Summarize current ongoing Project ECHO activities in Massachusetts

# 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



# Hub and Spoke Network

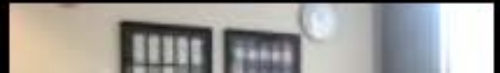
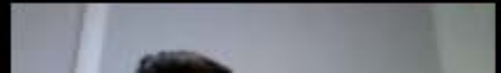
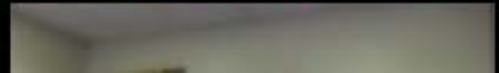
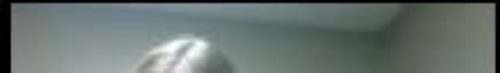


# Anatomy of an ECHO Session

- ▶ 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



Recording



# ECHO vs. Telemedicine

## TeleECHO™ Clinic



Expert hub team

ECHO supports  
community based  
primary care teams



Learners at spoke site

Patients reached with specialty  
knowledge and expertise



## Traditional Telemedicine



Specialist manages patient remotely



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!



# History of Project ECHO



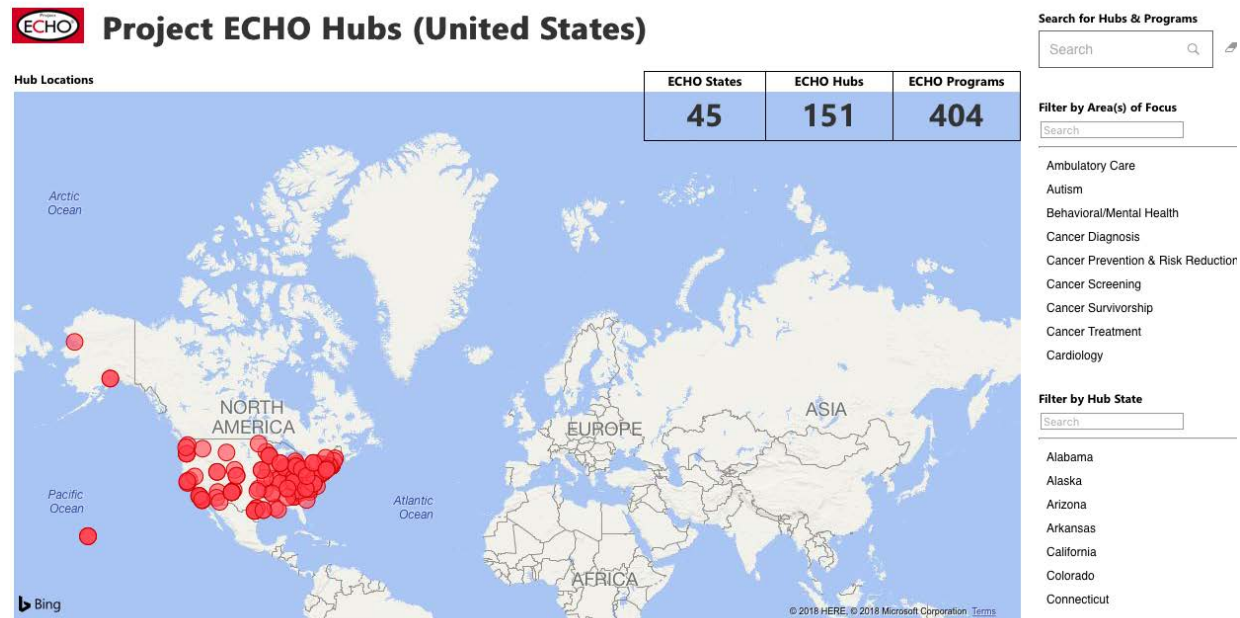
- ▶ First developed & utilized in 2003 by GI specialist Dr. Sanjeev Arora in order to solve NM's problem with hepatitis C infection
- ▶ Dr. Arora sought out primary care clinics to help manage and treat patients living with chronic hepatitis C (in the age of interferon!)
- ▶ Patients treated via Project 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/>



# Honorable Mentions

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

# SCAN-ECHO

- ▶ 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



The screenshot shows the VA website's news release page. At the top, there is a navigation bar with the VA logo, the U.S. Department of Veterans Affairs name, and links for Search, Contact Us, and Sign In. Below this is a secondary navigation bar with links for VA Benefits and Health Care, About VA, and Find a VA Location. The main content area is titled "Office of Public and Intergovernmental Affairs" and features a news release titled "VA Uses Technology to Provide Rural Veterans Greater Access to Specialty Care Services". The release is dated July 10, 2012, at 08:00:00 AM. It includes a "Printable Version" link and a "Need Viewer Software?" link. The text of the release describes the implementation of the SCAN-ECHO initiative to increase access to specialty care services for rural and medically underserved veterans through videoconferencing. A quote from Secretary Eric K. Shinseki is included, along with a mention of a demonstration scheduled for July 11, 10 a.m. at the VA Central Office. The release also notes that SCAN-ECHO is modeled after an outreach program developed by the University of New Mexico Health Sciences Center's Project ECHO.

**VA** |  U.S. Department of Veterans Affairs

Search  Contact Us

VA Benefits and Health Care  Find a VA Location

I AM A...  
Select One

- ▶ For Veterans
- ▶ For Family Members & Spouses
- ▶ For Employees
- ▶ For Business
- ▶ Forms & Publications
- ▶ Jobs
- Volunteer or Donate
- Public & Intergovernmental Affairs

VA » Office of Public and Intergovernmental Affairs » News Releases

## Office of Public and Intergovernmental Affairs

### VA Uses Technology to Provide Rural Veterans Greater Access to Specialty Care Services

July 10, 2012, 08:00:00 AM

[Printable Version](#)   
[Need Viewer Software?](#)

*Demonstration Scheduled for July 11, 10 a.m. at VA Central Office*

WASHINGTON - The Department of Veterans Affairs (VA) has implemented a new initiative, Specialty Care Access Network-Extension for Community Healthcare Outcomes (SCAN-ECHO), to increase access to specialty care services for Veterans in rural and medically under-served areas through the use of videoconferencing equipment.

"We are committed to providing increased access to high-quality health care to Veterans regardless of where they live," said Secretary Eric K. Shinseki. "Through SCAN-ECHO, patients in rural areas with complex medical conditions are now able to receive specialty care treatment from their local VA physician."

SCAN-ECHO is modeled after an outreach program developed by the University of New Mexico Health Sciences Center's Project ECHO. SCAN-ECHO enables specialty care teams in areas such as diabetes, pain management, and Hepatitis C to use videoconferencing equipment to connect with Veterans' local primary care providers (PCPs) and Patient Aligned Care Teams. During a scheduled SCAN-ECHO clinic, the PCP presents a patient's case and the

  
1-800-273-8255 **PRESS 1**

# 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

## Extending Specialty Care into Primary Care



Show-Me ECHO (Extension for Community Healthcare Outcomes) uses

### FREE WEBINAR



RURAL VETERANS BEHAVIORAL HEALTH

### CONTACT US

**Email:**

showmeecho@health.missouri.edu

**Phone:**

573-884-7958

**Toll Free:**

877-882-9933

# UW ECHO

- ▶ Behavioral health, career development, early childhood, educational leadership, geriatrics, student health, etc.
- ▶ Tackles less clinically oriented topics – creative use of ECHO model



The screenshot shows the top navigation bar of the UW Project ECHO website. It includes links for FUTURE/CURRENT STUDENTS, PARENTS, ALUMNI, PEOPLE, WYOWEB, VIRTUAL TOUR, and GIVE TO UW. A yellow navigation bar contains the UW logo and 'NAVIGATION' text. To the right is an 'A-Z DIRECTORY' search bar with a search icon and a magnifying glass. A vertical 'APPLY NOW' button is on the far right. Below the navigation is a central diagram with 'Project ECHO' in a red oval, 'University of Wyoming' below it, and a 'UW' logo above. Dotted lines connect this central hub to icons representing a person, a video conference, a medical symbol, a school building, and a home with a heart.

## UW PROJECT ECHO

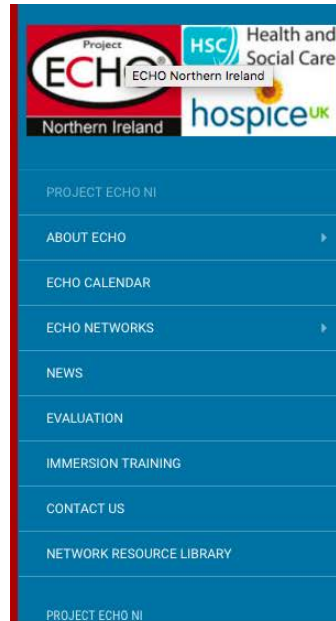
[WIND](#) | [Case Presentation](#) | [View Recorded Sessions](#) | [ECHO Model](#) | [ECHO Replication](#) | [Publications](#)

Project ECHO® is a lifelong learning and guided practice model that exponentially increases workforce capacity to provide the application of best practices. The heart of the ECHO model is its hub-and-spoke knowledge-sharing networks, led by expert teams who use multi-point videoconferencing to conduct learning sessions about evidence-based practices in education, health, and disability services. With this method, educators, healthcare providers, special service providers, case managers, administrators, and families have access to expert advice right in their homes, schools, and offices.

UW ECHO Networks provide ongoing support for educators, healthcare providers, and families in a rural state where specialized knowledge is not always locally

# Project ECHO Northern Ireland

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



## PROJECT ECHO NI

ECHO Leads Celebration November 2018



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# ECHO Act

- ▶ Introduced and signed into law in 2016
- ▶ This bill require 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 delivery 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.



**FOR IMMEDIATE RELEASE:**

Media Contact:  
Matt Whitlock (Hatch) 202-224-4511  
Mike Inacay (Schatz) 202-224-3123

**Hatch, Schatz Introduce Bill Increasing Access to High Quality Health Care in Remote Regions**

**Washington, D.C.**—Senators Orrin Hatch (R-UT) and Brian Schatz (D-HI) issued the following statements after introducing the Expanding Capacity for Health Outcomes (ECHO) Act, which will increase access to high-quality health care in hard-to-reach regions.

"In states with large rural populations like Utah, it's vital that we do everything we can to ensure that patients have access to quality health care—no matter where they live," **Senator Hatch said.** "By using technology to connect patients and providers, this bill will benefit Utahns living in rural areas by helping them receive the care they need. I'm grateful for the valuable input Utah's health leaders have provided in crafting this proposal, and I hope the Senate will act quickly to advance this critical legislation."



# Project ECHO: A Love Story

# IHI Quadruple Aim



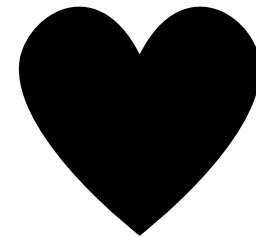
# Quadruple Aim: Improved Clinician Experience



- ▶ 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)



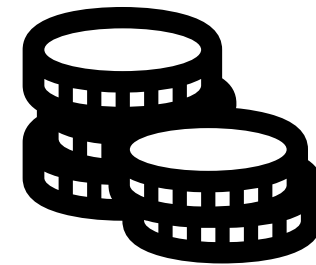
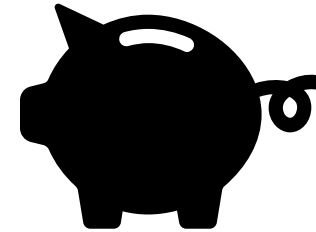
# Quadruple Aim: Improved Patient Experience



- ▶ 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

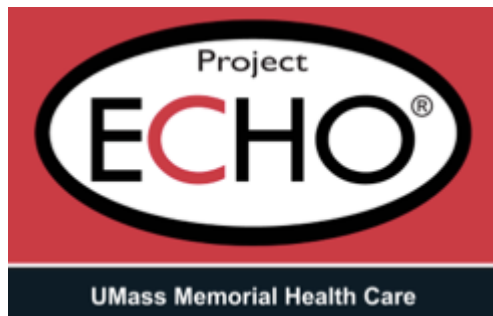
# Quadruple Aim: Lower Costs

- ▶ 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

- ▶ OAT ECHO at BMC
- ▶ ECHO-CT at BIDMC
- ▶ HCV ECHO at UMass



**Judy Hsu, DO**

**Academic Role:** ECHO Replication Program Director  
**Judy Hsu, DO** is the Director of the ECHO Replications Program and is an Assistant Professor with the Department of Family Medicine and Community Health at the University of Massachusetts Medical School. Dr. Hsu is also a primary care physician practicing full-spectrum family medicine at the Barre Family Health Center in rural Massachusetts with experience managing patients with hepatitis C and opioid use disorder. Since 2014, she has been involved in Project ECHO to learn how to better care for patients with hepatitis



**PROJECT DIRECTOR**

**Colleen LaBelle, MSN, RN-BC, CARN**, Program Director, MA State Technical Assistance Treatment Expansion of Office Based Addition Treatment (STATE OBAT), Boston Medical Center





## Project ECHO UMass Memorial Health Care

- ▶ 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

The screenshot shows the Project ECHO website homepage. At the top left is the UMass Medical School logo. To its right is the text "Project ECHO Center for Integrated Primary Care". On the top right is the Project ECHO logo, which includes the text "Project ECHO" and "UMass Memorial Health Care". Below the header is a blue navigation bar with a home icon and the following menu items: "WHAT IS PROJECT ECHO", "HEPATITIS C", "MEDICATION ASSISTED TREATMENT (MAT)", and "CONTACT US". The main content area features a large image of a doctor's hand holding a patient's hand, with a stethoscope around the doctor's neck. Overlaid on the image is the text "Right care, right place, right time." in blue. In the bottom right corner of the image area is a blue button with the text "ENTER UMASS HCV ECHO".

# How To Get Involved

The screenshot shows the Project ECHO website homepage. At the top left is the UNM School of Medicine logo and the Project ECHO logo. A search bar is located at the top right. Below the logo is a navigation menu with links: About ECHO, Locations, Initiatives, NM TeleECHO Clinics, Updates, Join the Movement, MetaECHO, and Superhubs. The main content area features three promotional cards:

- Card 1:** A video thumbnail of E. Michael Lewiecki, MD, with the text "Start Your Own Bone Health TeleECHO".
- Card 2:** A blue and purple graphic for "MetaECHO™ 2019 Infinite Possibilities" with the text "Save the Date!".
- Card 3:** A graphic of people connected by red lines, with the text "Sanjeev Arora – Quality Medical Care in Rural Communities is Out of Reach for Millions".

- ▶ 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

- ▶ Arora S, Thornton K, Murata G, et al. Outcomes of Treatment for Hepatitis C Virus Infection by Primary Care Providers. *New England Journal of Medicine* 2011; 364: 2199-2207.
- ▶ Joseph W. Frank, Evan P. Carey, Katherine M. Fagan, David C. Aron, Jeff Todd-Stenberg, Brent A. Moore, Robert D. Kerns, 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
- ▶ Rattay T, Dumont IP, Heinzow GS, Hutton DW. Cost-Effectiveness of Access Expansion to Treatment of Hepatitis C Virus Infection Through Primary care Providers. *Gastroenterology* 2017 Dec; 153(6): 1531-1543.
- ▶ Shanafelt T, Gorringer G, Menaker R, et al. Impact of organizational leadership on physician burnout and satisfaction. *Mayo Clin Proc.* 2015;90(4):432-440.



Questions?

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