

# New Hampshire Citizens Health Initiative Annual Symposium

## Telehealth and Project ECHO: “Connected” Care for Improved Outcomes

**September 25, 2019**

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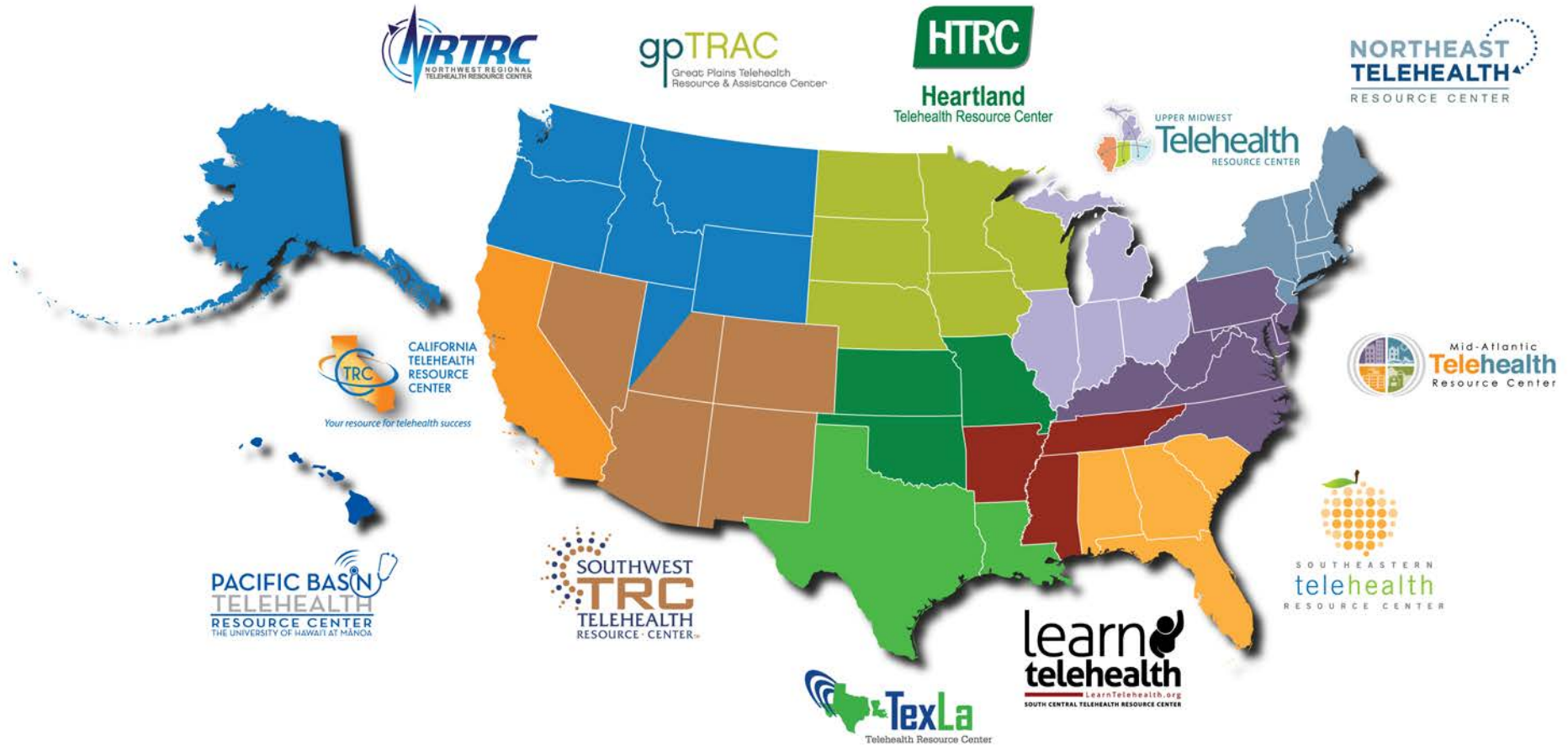
# Disclosures

I have no financial relationships with a commercial entity producing healthcare related products and/or services relevant to the content I am presenting

# About Us



# TelehealthResourceCenters.org



**TTAC**  
TelehealthTechnology.org  
National Telehealth Technology Assessment Resource Center

**Center for Connected Health Policy**  
The National Telehealth Policy Resource Center

2 National Resource Centers

NRTRC	gpTRAC	NETRC
CTRC	HTRC	UMTRC
SWTRC	SCTRC	MATRC
PBTRC	TexLa	SETRC

12 Regional Resource Centers

# Who do we serve?

- ✓ Individual Providers
- ✓ Community & Urban Hospitals
- ✓ Academic Institutions
- ✓ National, State, or Regional Associations
- ✓ Federal, State, Regional, or Local Government Agencies
- ✓ Legislators/Policy makers
- ✓ Health Systems
- ✓ Rural Clinics
- ✓ Federally-Qualified Health Centers (FQHC)
- ✓ Critical Access Hospitals (CAH)
- ✓ Primary Care Clinics
- ✓ Ambulatory Care Centers
- ✓ Nursing Homes
- ✓ Schools
- ✓ Vendors
- ✓ *and many others!*

# We Provide:

- ✓ Short and long term technical assistance services for organizations
- ✓ Education for the telehealth workforce
- ✓ Access to educational materials
- ✓ Access to specialized tools + templates
- ✓ Access to telehealth experts willing to share their experiences
- ✓ Monthly newsletter updates and other alerts on telehealth in the northeast
- ✓ Support for collaboration that fosters a favorable environment for telehealth
- ✓ *And more!*



# Select Resources

Join our newsletter!



- **[NETRC Site & Telehealth Resource Library](#)**
  - Latest in national and regional telehealth news and resources
  - Over 3,500 publicly available journal articles and other resources
- **[Regional Telehealth Conference](http://www.netrc.org/conference)** ([www.netrc.org/conference](http://www.netrc.org/conference))
  - Opportunity to network and learn from regional colleagues!
- **[National Telehealth Resource Center website](#)**
  - Fact Sheets, Guides and Templates, Evidence for Telehealth, Webinar series, etc.
- **[Online Telehealth Coordinator Training](#)**
- **[Personalized Toolkits](#)**
  - We are available to create toolkits with resources to fit your needs!



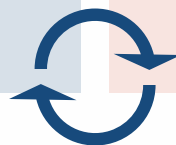
# Telehealth Drivers & Barriers

## Drivers

- Aging Population
- Consumer Demand
- Expanding Reimbursement
- Provider Shortages
- Payment Reform
- Readmission Penalties
- Competitive Forces

## Barriers

- Access to Broadband/Technology
- Cost
- Licensure
- Limited Reimbursement
- Privacy and Security Concerns
- Resistance to Change
- Legal/Regulatory Questions





# Value Perspectives

## Patients

- Accessibility: care when and where they need it
- Affordability: reduces travel time, expense and time away from work/family
- Timeliness: reduces wait time to access specialists
- Integrated and coordinated care

## Communities

- Keeps patients local whenever possible
- Promotes rapid diagnosis and treatment linked to improved patient outcomes
- Improves outcomes and therefore improves health of population

## Primary Care Providers

- Promotes coordinated care
- Maintains primary relationship with patient
- Promotes greater patient satisfaction
- Generates revenue – visit reimbursement
- Access to education
- Working at top of scope

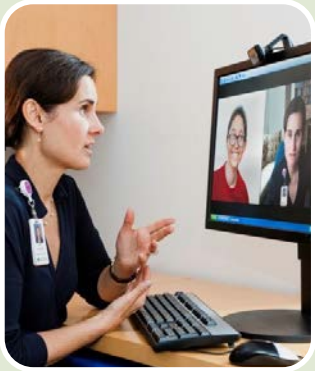
## Specialists

- Extends reach to patients
- Increases patient volume, maximizes time and efficiency, working at top of scope
- Reduces documentation redundancy by using common EMR platform with PCPs
- Promotes coordinated care

## Dental Providers

- Improved access and delivery
- Lower costs
- Resource for dental consulting
- Referral for specialized care
- Dental monitoring
- Dentist-Laboratory Communication
- Continuing Education

# Types of Telehealth



Video-conferencing  
(Synchronous)



Store And Forward  
(Asynchronous)



Remote Patient Monitoring  
(RPM)



Mobile Health  
(mHealth)



Provider to Provider  
(eConsults, Project ECHO, etc.)

## Off the Shelf



## Peripherals



## Field Kits



## Telemedicine Carts



## Telehealth Tablet Carts



## Remote Presence



## Remote Patient Monitoring



# In the Northeast, Telehealth Gets Creative With Good Results

*mHealth Intelligence*

<http://mhealthintelligence.com/news/in-the-northeasttelehealth-gets-creative-with-good-results>

# School-based Telepsychiatry

## Athol Hospital/Heywood Healthcare (MA):

- Critical access, non-profit acute care hospital serving 9 Communities in North Quabbin Region.

## Program Description and Outcomes:

- Collaborative program between hospital, school district, and behavioral health, initially supported by grant funds
- Benefits Include:
  - Increased access to vital child psychiatric services
  - Improved medication management
  - High student, family and provider satisfaction
  - Anticipated outcomes: Decreased ED utilization and improved academic achievement



*Photo courtesy of AMD Global Telemedicine*

Launched 1st school  
in 2016 – funding  
from MA HPC and  
HRSA to expand to  
four more!

# Speech Telepractice

## Waldo County General Hospital

Michael Towey, MA, CCC-SLP

Manager Speech-Language Pathology Department

Fellow of the American Speech-Language-Hearing Association

[National TRC Webinar – Innovation and Impact with Speech Language Pathology Telepractice](#)



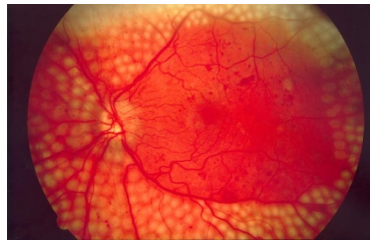
# Diabetic Retinopathy

## Finger Lakes Community Health (NY):

- Community/Migrant Health Center (FQHC) with 9 sites.

## Program Description:

- Primary care providers identify patients who need Diabetic Retinopathy Screening. Images are taken using the EyePACS system and an EyePACS eye specialist will read/grade image.
- Increased screening rates allowed FLCH to negotiate incentive payments with their ACO.



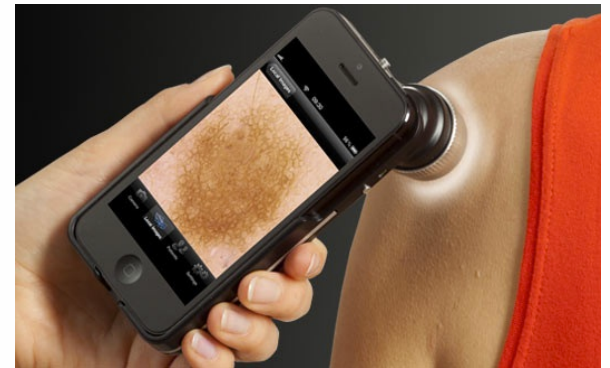
# Teledermatology

## University of Vermont Medical Center (VT):

- Academic medical center with a five-hospital network in VT and northern NY.

## Program Description/Setup:

- Uses Access Derm, a free, HIPAA compliant application sponsored by American Academy of Dermatology to facilitate referrals from primary care providers for remote dermatology consults using mobile devices and the internet (store and forward).
- Outcomes of pilot included:
  - Post-implementation: 44 SAF consults
  - Average response time of SAF consult: 9.2 hrs
  - Average wait for appointment: 12.9 days vs. 60.2 days for traditional consults (**78.6% reduction**)





# Pediatric Teledentistry

## Finger Lakes Community Health (NY):

- Community/Migrant Health Center (FQHC) with 9 locations.



## Program Description:

- Uses point-to-point telehealth network to connect clinic pediatric patients in rural NY with dental providers in Rochester, NY
- MouthWatch with AmCap software; cameras ~ \$300 each
- Benefits include:
  - Decreased travel time for patient/families and Health Liaisons
  - Treatment and follow-up compliance rates > 90%

# Teledentistry - Senior Living Facility

## Case Study

- RDH from a local practice scheduled to provide hygiene services in local senior living facility
- Uses MouthWatch TeleDent system with laptop and intraoral camera
- Performs 50 reimbursable screenings-records patient info, individual exam details, and high-quality intraoral images during visit
  - Sessions can be live videoconferencing with dentist (synchronous) or recorded to the cloud to be reviewed at a later time by the assigned provider (asynchronous)
- Outcomes:
  - 5–10 residents schedule restorative care at affiliated dental practice
  - Practice increases revenue by providing outreach to the community without adding more chairs



# Remote Patient Monitoring

## MaineHealth Care at Home:

- Fully licensed not-for-profit provider of home health care (nursing, PT, OT, speech, home health aide, and counseling services) 24/7 throughout 3 counties.

## Program Description:

- 4G tablet with pre-loaded software and peripherals (scale, pulse oximeter, BP monitor, etc.) at patient home
- Algorithms highlight patients at ↑ risk for readmission
- Served 474 Patients (CHF, COPD, Diabetes) 4/2015 – 4/2016;
  - Patient Adherence: 85%;
  - 75% reduction in overall 30-day readmission rate (4.2% compared to state average of 16.6%)

# Telepsychiatry in a Clinic

**CHC of Cape Cod** – CHC with more than 15,000 patients; 78% are at 200% of poverty level or below

## Program Description and Outcomes:

- Staff Psychiatrists conduct Telepsychiatry visits throughout 3 locations using real-time video conferencing
- Benefits Include:
  - Increases access to Behavioral Health appointments, Decrease transportation barriers, and Reduces the cost of providing quality care
  - Patients have saved lost wages in time away from work and reduced transportation needs
  - Increased efficiency in Controlled Substance RX Management
- Sustainability Plans:
  - Continue to bill for visits; expand to additional Providers
  - Increased integrated Telemedicine scheduling-more fluidity between in-person and telehealth visits
  - Increase in overall volume of visits



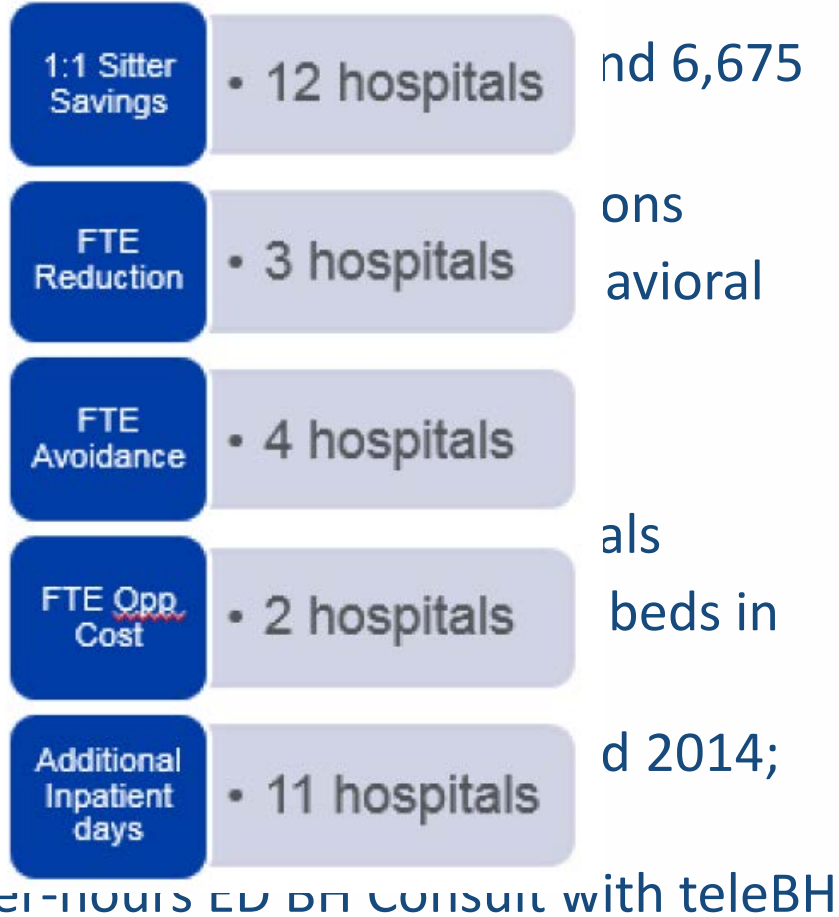
# Emergency Telepsychiatry

## Northwell Health (NY)

- Large urban health system with 100 hospital beds
- 25,000 ED BH Consultations
- Jonathan Merson, MD, MHA, Director of Telehealth

## Program Description/Scope

- End-to-end live video
- Consensus on no ED system; online bedblock
- Next-day insurance authorization
- 4000 patients transferred
- 92% reduction in after-hours ED BH consult with teleBH



Hardware: Cisco DX70  
Software: Cisco Jabber  
Transitioning to Avizia One



Hub



Spoke

# Primary Care by Boat

## Maine Seacoast Mission (ME):

- 110 years old with history of spiritual and medical care provided by nurses visiting the islands.

## Program Description:

- Telemedicine started 14 years ago to four islands visited by Sunbeam - going off island for a medical appointment can be a 2- 3 day trip.
- Primary Care provided on 5 islands, 3 by Sunbeam and two land-based units operated by trained medical assistants.



# Telemedicine can help fight the opioid epidemic

## From “Rural Hospitals Services and Solutions”

Sharon Daley RN, Director of Island Health for the Maine Seacoast Mission Society utilizes telemedicine aboard a seventy-six foot boat called the Sunbeam. Once every two weeks, Sharon and the Sunbeam crew provide telemedicine services to patients on three isolated islands and in two land-based telemedicine clinics. The types of telemedicine services that have or are being provided for opioid addiction include substance abuse counseling and medication management of Suboxone. Sharon is passionate about the impact the Mission and telemedicine are having.

"Without telemedicine, people simply would not have access to substance abuse services," Sharon stated. "For example, missing work for an appointment off the island can cost a sternman his job and the travel cost and time it requires, often makes on-going treatment prohibitive or impossible."



# TeleWOW!

## Eastern Maine Medical Center:

- WOW! Program: Way to Optimal Weight - tiered program for children and adolescents (age 4-19), with body mass index (BMI) at or above 85<sup>th</sup> percentile designed for children who are at higher risk for weight related health problems

## Program Description and Outcomes:

- Multidisciplinary visits via live videoconferencing
  - MSW, clinician, and nutritionist take turns
- Benefits Include:
  - Provides program access and health benefits to patients in some of Maine's most rural communities
  - High Patient and family satisfaction – decreased travel time/cost
  - High satisfaction among provider team

Weight loss program for kids at EMMC works to boost confidence, teach healthy lifestyles

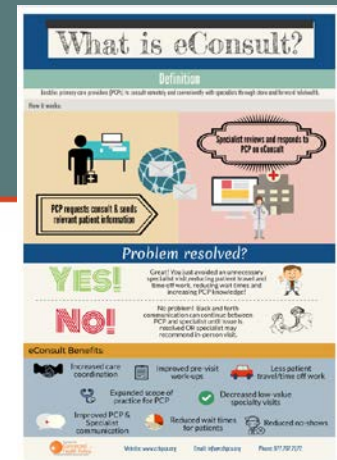


Courtesy of EMMC Community Relations



# Provider-to-Provider Models

**eConsults:** Enables primary care providers (PCPs) to consult remotely and conveniently with specialists via store and forward



## New Medicare Codes – CY 2019 Physician Fee Schedule

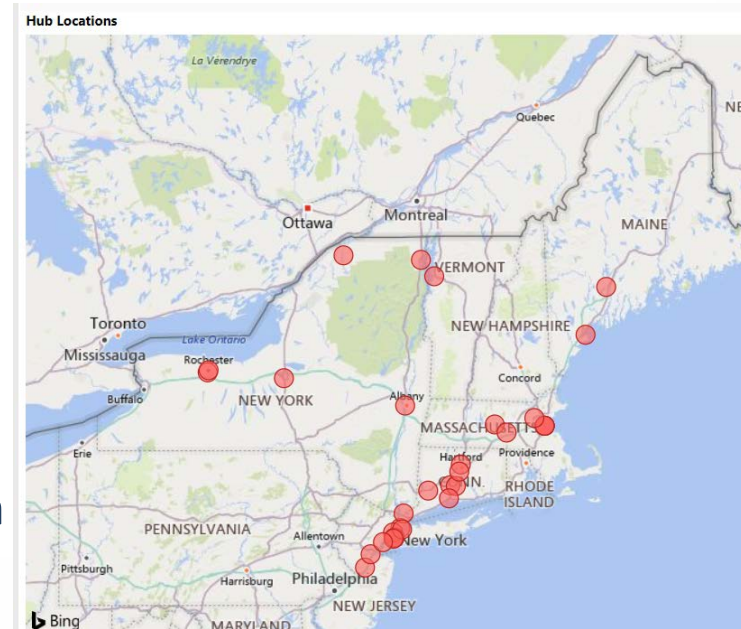
### Interprofessional Internet Consultation (CPT codes 99452, 99451, 99446, 99447, 99448, and 99449):

These codes cover interprofessional consultations performed via communications technology such as telephone or Internet, supporting a team-based approach to care that is often facilitated by electronic medical record technology.

**Project ECHO:** Medical education model focused on enhancing capacity of rural providers to manage complex patients locally, through specialty support and communities of practice

- 12 hubs in NYS
- Several existing ECHO hubs across the Northeast and more emerging across the region

6 NE States	35 Hubs	70 Programs
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# Potential Benefits of ECHO Model to the Rural Health System

- Enhanced Quality and Safety
- Rapid Learning and Best-practice Dissemination
- Reduce Variations in Care
- Access for Rural and Underserved Patients, Reduced Disparities
- Workforce Training and Force Multiplier
- **Democratize Knowledge**
  - Improving Professional Satisfaction/Retention
  - Supporting the Medical Home Model
  - Cost Effective Care - Avoid Excessive Testing and Travel
  - Prevent Cost of Untreated Disease (e.g.: liver transplant or dialysis)
  - Integration of Public Health into Treatment Paradigm

# Project ECHO: Northern New England Network

## HRSA Rural Health Network Development Grant

- Strengthens and expands network across ME, NH, VT
- The Project ECHO Northern New England Network was made possible by grant number D06RH31043 from the U.S. Health Resources and Services Administration, DHHS

## Formal Network Partners:

- Project Lead: Quality Counts – A Qualidigm Company
- Quality improvement organizations in Maine, New Hampshire and Vermont
- Northeast Telehealth Resource Center (NETRC);
- Area Health Education Centers (AHECs) in ME, NH, and VT; and academic centers for medical and health education in the three states, including the University of New England (UNE); UNH; Dartmouth-Hitchcock Medical Center; and University of Vermont (UVM) Medical Center.

The Collaborative serves a broad network of healthcare stakeholders across the three states.

# Project ECHO: NNE Network Leadership Team

Maine Team		
Name	Role/Title	Email
Lise Tancrede	QC Project Manager	ltancrede@mainequalitycounts.org
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New Hampshire Team		
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Marguerite Corvini	Project Director	margherite.corvini@unh.edu
Kristina Fjeld-Sparks	AHEC Director	Kristina.e.fjeld-sparks@dartmouth.edu



# Project ECHO: Perinatal SUD

## Program Goals

- Increase the capacity and competence of providers and practice teams caring for women with substance use during pregnancy and newborn infants exposed to substances.
- Provide an overview of evidence informed tools to care for pregnant women with substance use disorders and their newborns to family medicine, obstetric, pediatric and addiction medicine providers.
- Provide an overview of current evidence informed guidelines for care for mothers and their newborns.
- Identify strategies, best practices, resources, and emerging topics in this field.

## General Participant Satisfaction



88%

Usefulness and Value  
of Didactic Portion  
Good/Excellent



99%

Didactic  
Appropriate for  
Educational Needs



87%

Value of  
Discussion Portion  
Good/Excellent

## Change in Participant Knowledge/Practice



### Participant Response to Didactic

96% reported the didactic enhanced their competence

88% reported the didactic influenced their practice

75% reported it impacted patient outcomes



### Participant Response to Case Presentations

81% reported the case presentation enhanced their competence

71% reported the case presentation influenced their practice

58% reported it impacted patient outcomes

- Communications and access to peer recommendations through case-based learning improved from 2.67 pre-ECHO, to 4.5 post-ECHO, on a weighted scale of 1-5.
- All respondents reported that coordination and relationships with specialists/specialty providers were "somewhat improved" or "improved" after participating in the Perinatal SUD ECHO (3.5 weighted average).
- All respondents reported they are "somewhat likely" or "likely" to change the way care is provided to pregnant women and/or newborns as a result of their participation.
- Workplace satisfaction improved slightly, with a 4.0 average pre-ECHO, as compared to 4.33 post-ECHO.

# Project ECHO: NNE MAT

## Program Goals

- Improve lives of patients and families living with Substance Use Disorder (SUD).
- Enhance capacity and quality of services available to patients in their communities through their primary care practices.
- Establish primary care culture that understands addiction as a chronic disease and is prepared and capable to address the range of issues, including underlying trauma and mental health conditions that emerge during the process of treatment.
- Identify strategies, best practices, resources, and emerging topics in this field.

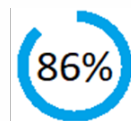
## The Cohort

- 99 spokes (53 – ME, 46 – NH)
- 26 site locations (14 – ME, 12 – NH)

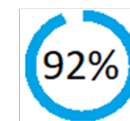
## Demographics

- Primary Care Providers (MD,NP,DO,PA) – 40 participants (34 X-waivered)
- Nurses – 9 participants
- Behavioral Health – 18 participants
- Medical Assistants – 8 Participants
- Other (Not Identified, Management, System Leaders, CEOs) – 24 participants

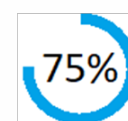
## *Usefulness and value of this teleECHO session didactic*



Excellent or good

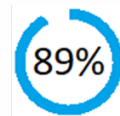


Enhanced Competence

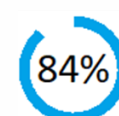


Positive influence on practice

## *Value of the case presentation and discussion*



Excellent or good



Enhanced competence

# Project ECHO: Older Adult Care

## Program Goals

- Enhance the capacity of primary care providers, and care coordinators to treat and manage the care of older adults.
- Improve assessment skills to more accurately diagnose and treat geriatric patients living with complex conditions specific to older adult populations.
- Increased understanding of the general prognosis of different forms of dementia, allowing patients and families to better plan their future.
- Learn techniques for managing conditions that are commonly associated with dementia, such as urinary incontinence, falls, depression, insomnia, pain, diabetes, and nutritional deficiencies.

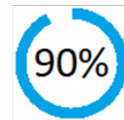
## The Cohort

- 39 spokes (18 – ME, 16 – NH, 5 – VT)
- 19 site locations (9 – ME, 6 – NH, 4 – VT)

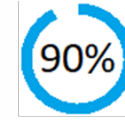
## Demographics

- Primary Care Providers (MD,NP,DO,PA) – 16 participants
- Psychiatrist – 2 participants
- Care Coordinator/Nurse – 7 participants
- Other (Behavioral Health, Management, System Leaders, Unidentified) – 14 participants

## Usefulness and value of this teleECHO session didactic



Excellent or good

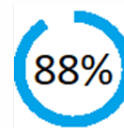


Enhanced Competence

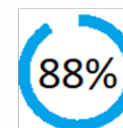


Positive influence on practice

## Value of the case presentation and discussion

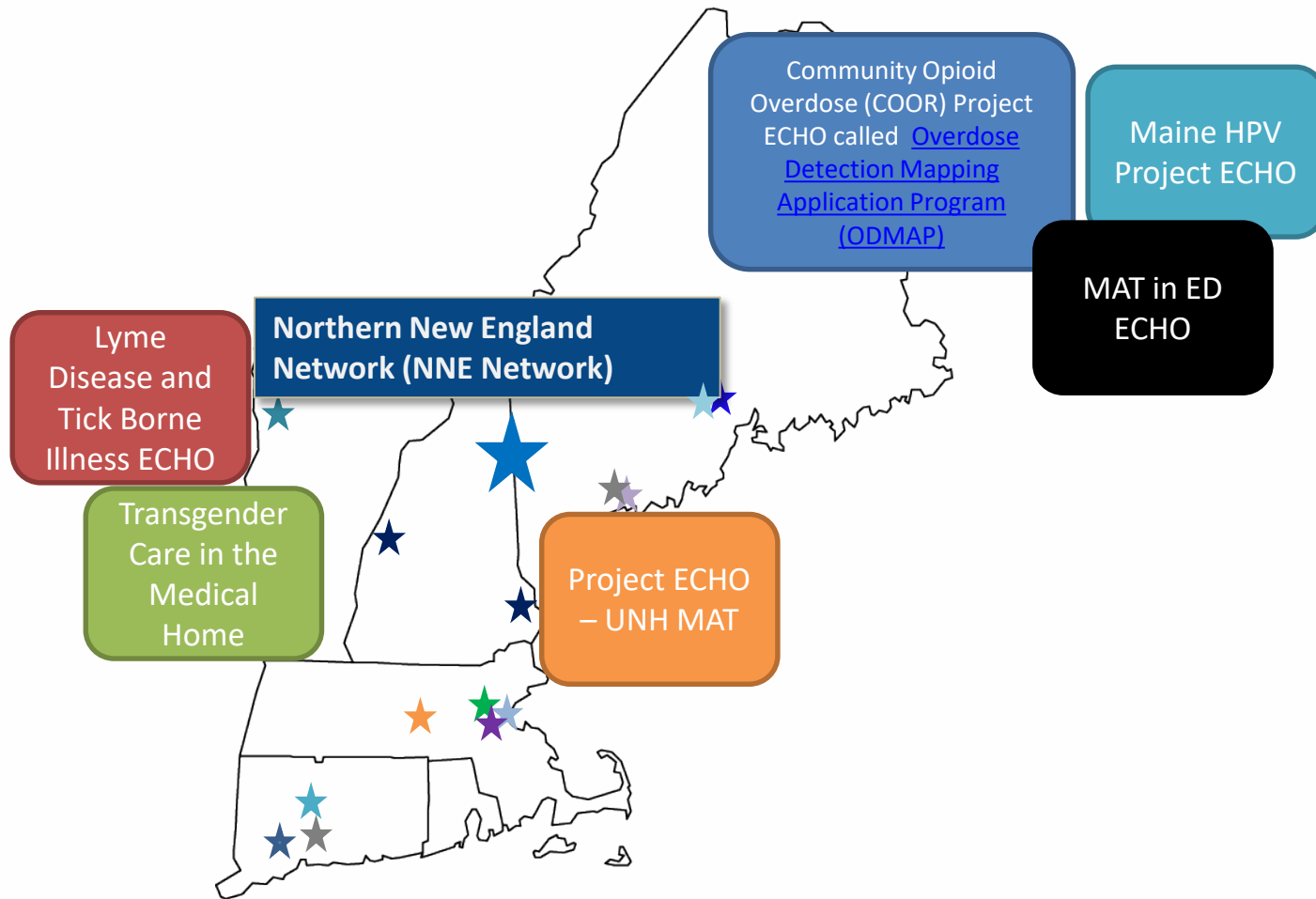


Excellent or good



Enhanced competence

# ECHO Innovations across the NNE Network





# ECHO Benefits – Faculty Perspective

**Stephanie Nichols**, Assoc. Professor at University of New England College of Pharmacy  
Psychiatry and Substance Use Disorder Pharmacist

# Tips to Get Started

- Be a **champion!**
- Think big, **Start small**
- Focus time, effort and \$ on **program development and a sustainable business model**, then choose technology that fits your plan
- **Keep technology simple** when possible – what fits your needs and budget?
- **Reach out** to folks who have already done this!
- **Lead advocacy efforts** for program development and policy growth





Save the Date:

June 8 + 9, 2020

Manchester NH

2020  
NORTHEAST  
TELEHEALTH  
regional  
conference

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AVAILABLE! ]

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# Questions? Contact Us



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[www.netrc.org](http://www.netrc.org) | 800-379-2021



# General TH Resources

- **Northeast Telehealth Resource Center**  
[www.netrc.org](http://www.netrc.org)
- **National Telehealth Resource Centers**  
[www.telehealthresourcecenters.org](http://www.telehealthresourcecenters.org)
- **Center for Connected Health Policy**  
[www.cchpca.org](http://www.cchpca.org)
- **Telehealth Technology Assessment Center**  
[www.telehealthtechnology.org](http://www.telehealthtechnology.org)
- **American Telemedicine Association**  
[www.americantelemed.org](http://www.americantelemed.org)
- **Center for Telehealth & e-Health Law**  
[www.ctel.org](http://www.ctel.org)
- *And many great regional programs willing to share!*