



Project ECHO

The Power and Promise to Enhance Patient Care
through Empowered Learner Communities

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Oregon ECHO Network

Oregon Rural Practice-based Research Network

Oregon Health & Science University



I have no conflicts of interest to disclose.

Session Goals

1. Describe the Project ECHO methodology and essential components of an ECHO session.
2. Summarize the evidence to support ECHO as an effective educational method.
3. Describe how ECHO is used to support the health care needs of underserved communities and educational needs in a variety of settings.
4. Discuss the roles of the academic medical center and faculty in providing an ECHO program

Project ECHO

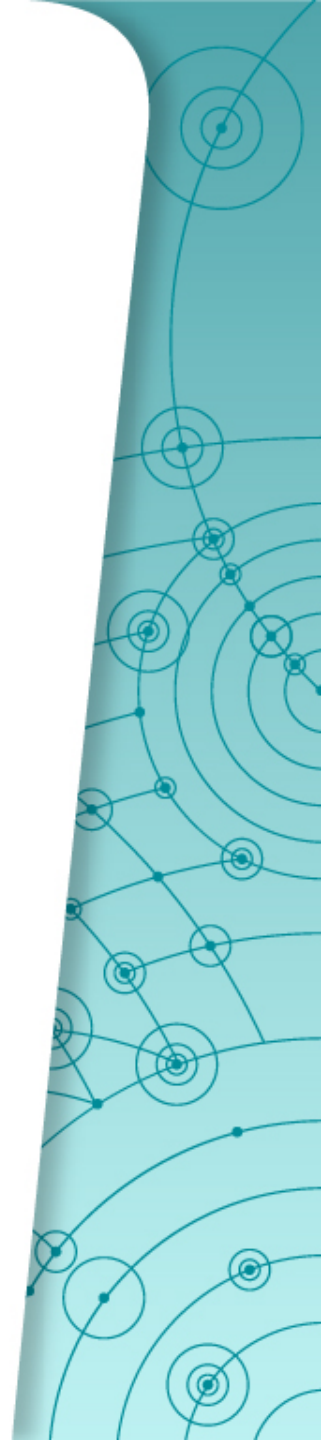
(Extension for Community Healthcare Outcomes)

University of New Mexico – 2003





**Moving Knowledge Instead of
Patients and Providers**



At ECHO, our mission is to democratize medical knowledge and get best practice care to underserved people all over the world.

Our goal is to touch the lives of 1 billion people by 2025.

The ECHO Model

Automation - Use *Technology* to leverage scarce resources

A



B



Share **Best Practices** to reduce disparity

Case Based Learning to master complexity

C

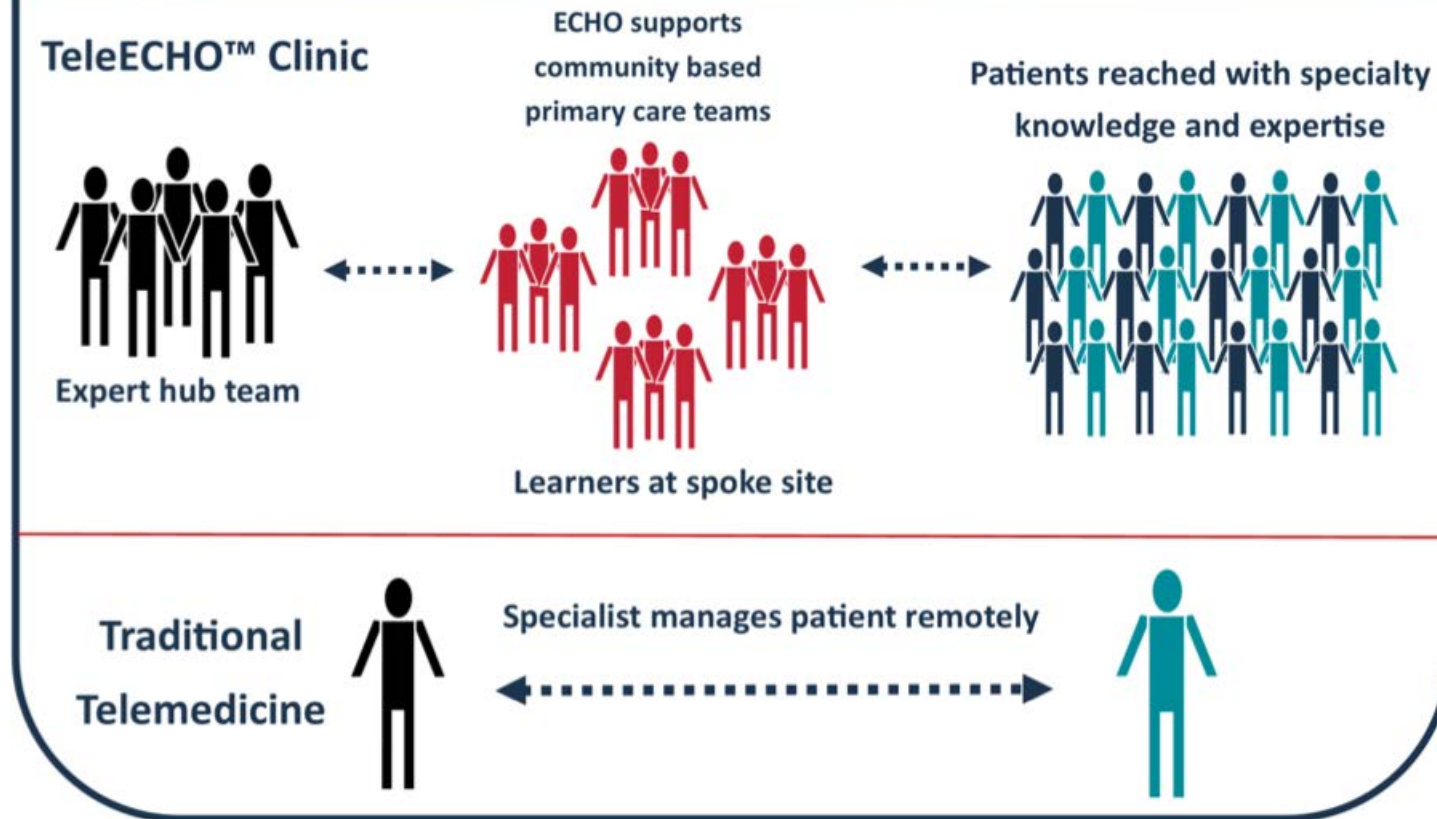


D



Web-based **Database** to *Monitor Outcomes*

ECHO vs. Telemedicine



ECHO model is not ‘traditional telemedicine’.
Treating Physician retains responsibility for managing patient.

“All teach, All learn”

- Health professionals learn from specialists
- Health professionals learn from each other
- Specialists learn from health professionals

Benefits of the ECHO Model

Speaker View Exit Full Screen

Patients and Families

- Receive “Best Practice” Care from clinicians that know them best
- Quality and Safety
- Increased Patient Satisfaction
- Reduced travel to specialty appts

Clinicians & Staff

- Access to specialists and team
- Professional development
- Improved satisfaction/retention
- No-cost CME and MOC
- Participate from home or office

Health Systems & Payers

- Cost-effective care- avoid excessive testing, referrals and costs of untreated care
- Reduces variation in care
- Encourages team-based care
- Reduces ED use in some populations
- Provides method to impact quality measures
- Rapid learning and best practice care dissemination

Unmute Stop Video

Invite

Participants 34

Share Screen

Chat

Record

Leave Meeting

The Evidence for ECHO

THE NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Outcomes of Treatment for Hepatitis C Virus Infection by Primary Care Providers

Sanjeev Arora, M.D., Karla Thornton, M.D., Glen Murata, M.D.,
Paulina Deming, Pharm.D., Summers Kalishman, Ph.D., Denise Dion, Ph.D.,
Brooke Parish, M.D., Thomas Burke, B.S., Wesley Pak, M.B.A.,
Jeffrey Dunkelberg, M.D., Martin Kistin, M.D., John Brown, M.A.,
Steven Jenkuskus, M.D., Miriam Komaromy, M.D., and Clifford Qualls, Ph.D.

POPULATION HEALTH MANAGEMENT
Volume 00, Number 00, 2017
© Mary Ann Liebert, Inc.
DOI: 10.1089/pop.2016.0087

Original Article

Telementoring Primary Care Clinicians to Improve Geriatric Mental Health Care

Elisa Fisher, MPH, MSW,¹ Michael Hasselberg, PhD, RN, PMHNP-BC,^{2,3} Yeates Conwell, MD,²
Linda Weiss, PhD,¹ Norma A. Padrón, PhD, MPH,^{4,5} Erin Tiernan, BS,² Jurgis Karuza, PhD, MA,^{6,7}
Jeremy Donath,⁸ and José A. Pagán, PhD^{1,9,10}

Review

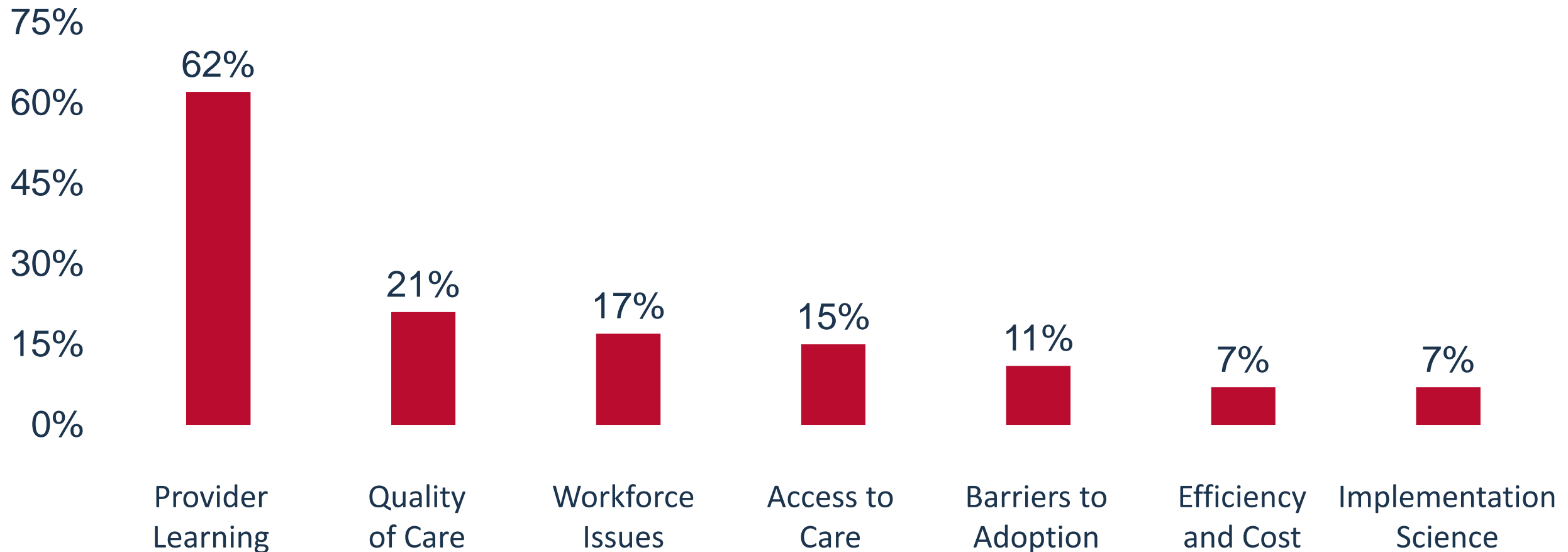
The Impact of Project ECHO on Participant and Patient Outcomes: A Systematic Review

Carrol Zhou, MD, Allison Crawford, MD, Eva Serhal, MBA, Paul Kurdyak, MD, PhD,
and Sanjeev Sockalingam, MD, MHPE

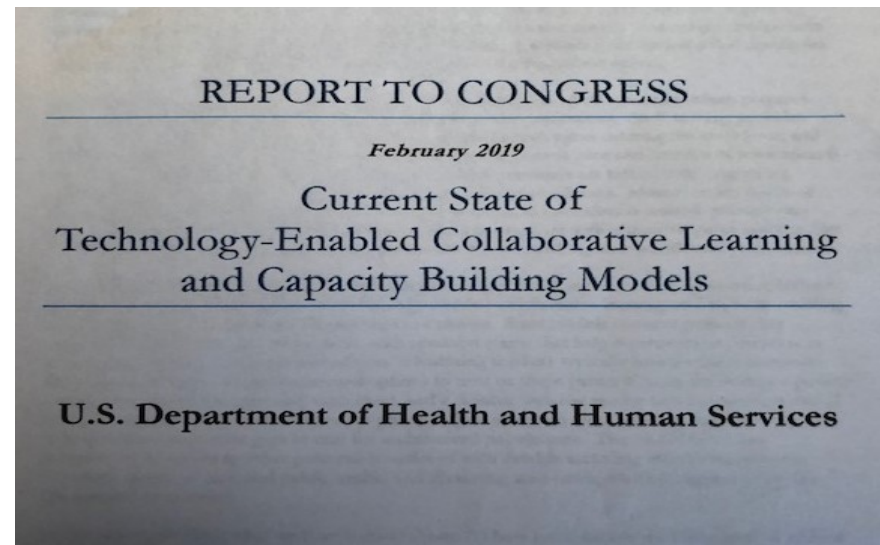
Acad Med 2016 Oct, 91(10): 1439-1461

Peer Reviewed Publications (182)

Publications % by Topic



ECHO Act 2016



Key Points

- “Empirical evidence for the impact of ECHO on patient and provider outcomes remains modest, though the evidence consistently shows positive effects in the areas that have been measured”
- Most studies have focused on provider outcomes
- 15 studies on patient-related outcomes, eg sustained viral response for Hep C, none were randomized
- Small number of studies related to cost of care delivered
- Build an evidence base (research portfolio)
- Identify the specific attributes that leads to better outcomes
- Use funding to directly support evaluation
- TEP: “It is important to balance the enthusiasm for the promise of EELM, which led to significant demand for this model, with the need for a strong evidence base”

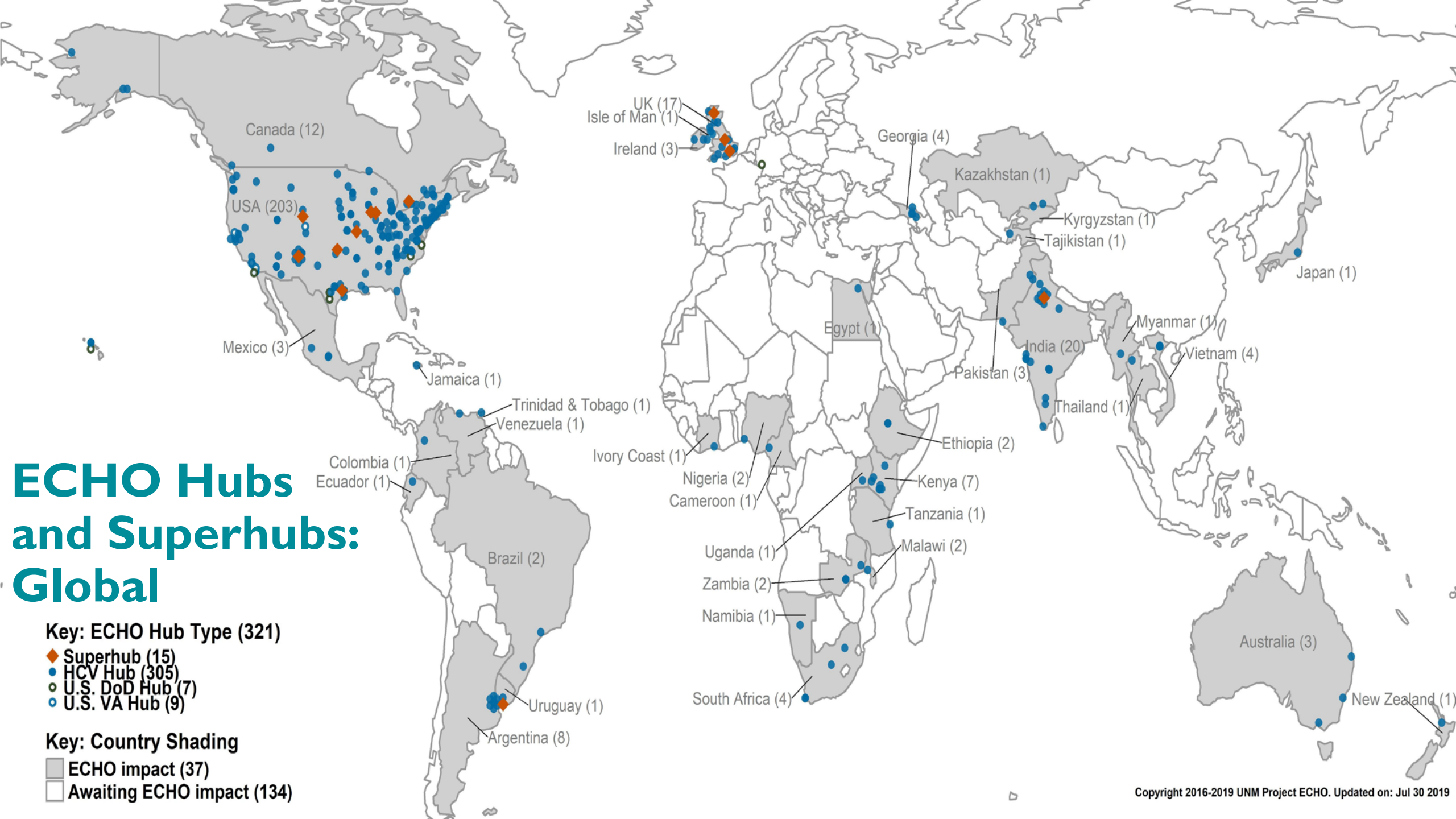
ECHO Hubs and Superhubs: Global

Key: ECHO Hub Type (321)

- ◆ Superhub (15)
- HCV Hub (305)
- U.S. DoD Hub (7)
- U.S. VA Hub (9)

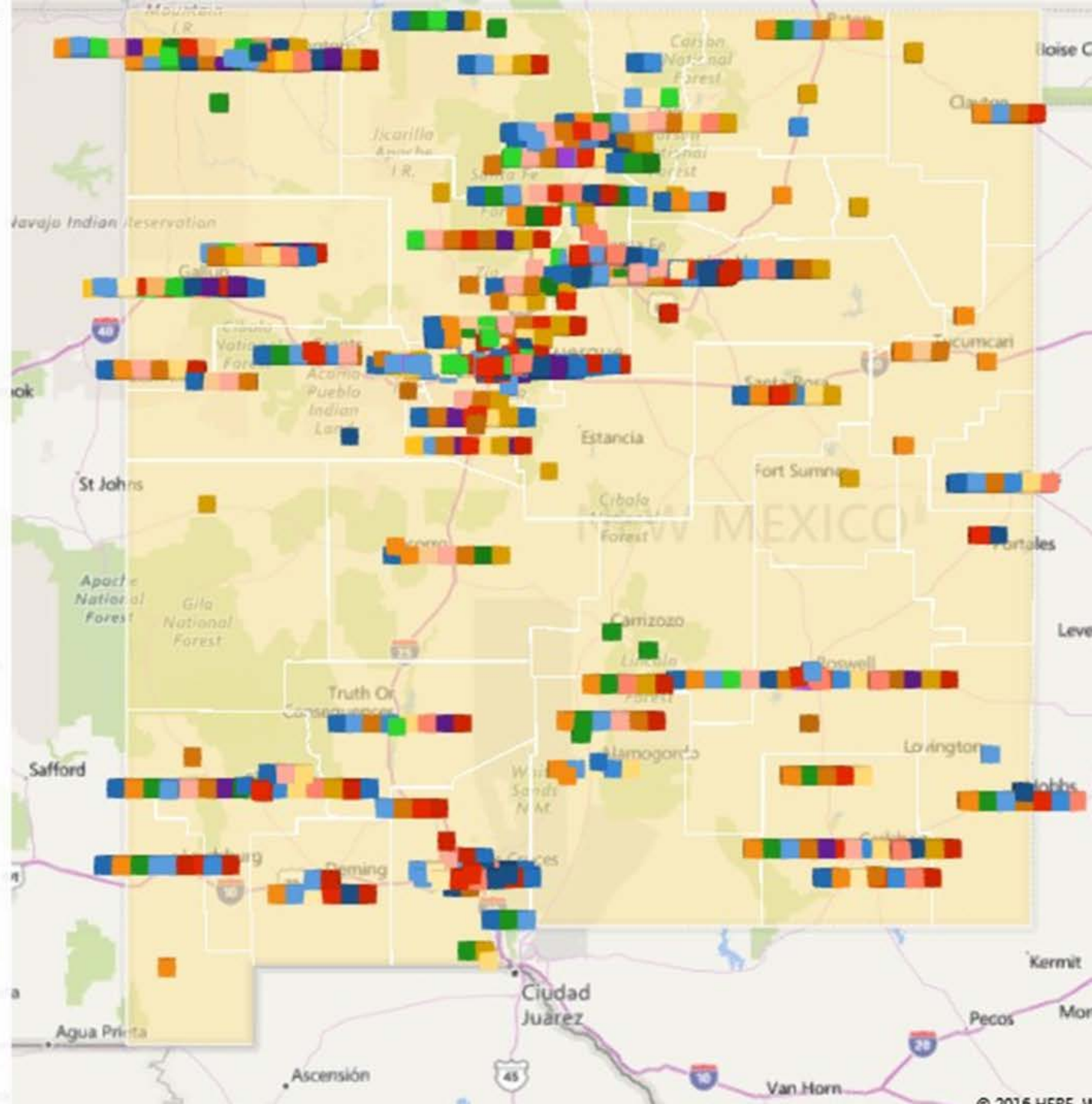
Key: Country Shading

- ECHO impact (37)
- Awaiting ECHO impact (134)



ECHO Hubs and Spokes: State of New Mexico

- Addiction/Psychiatry
- Asthma/Pulmonary
- Autism
- Child and Youth Epilepsy Clinic (CYE)
- Child Psychology
- Childhood Obesity
- Chronic Pain and Headache
- CHW Care Competency
- Community Addictions Recovery Specialist
- Complex Care Clinic
- Dementia Care Clinic
- Diabetes and Cardiovascular Care
- Disease Prevention Program
- Endocrinology TeleECHO
- HCV
- HCV-HIS
- Heart Failure
- Hepatitis C - Community
- Hepatitis C - Correctional
- Hepatitis C - IHS
- Hepatitis C -Community
- High-risk Pregnancy
- HIV / AIDS (IHS)
- HIV/AIDS
- Integrated Addiction / Psychiatry
- New Mexico Peer Education Program
- Palliative Care
- Pediatric Obesity
- Psychiatry
- Rheumatology
- Women's Health/Genomics



Oregon:

A Case Study



Oregon ECHO Network

- **Statewide resource for ECHO programs and services**, e.g. supports participant recruitment, evaluation, IT support, faculty engagement and contracting, curriculum development, delivery of sessions, CME, Maintenance of Certification Part 2
- **Hosted at Oregon Rural Practice-based Research Network (ORPRN)**
- **“One-stop shop” website**
(www.oregonechonetWORK.org)
- **Hybrid business model** (grants, contracts, OEN Advisory Board)



Oregon ECHO Network and Partners



Oregon ECHO Network (OEN)

550

Unique clinicians across
Oregon have participated in
ECHO programs

350

Unique clinical sites
across Oregon

360

ECHO sessions have
been delivered to
learners

34

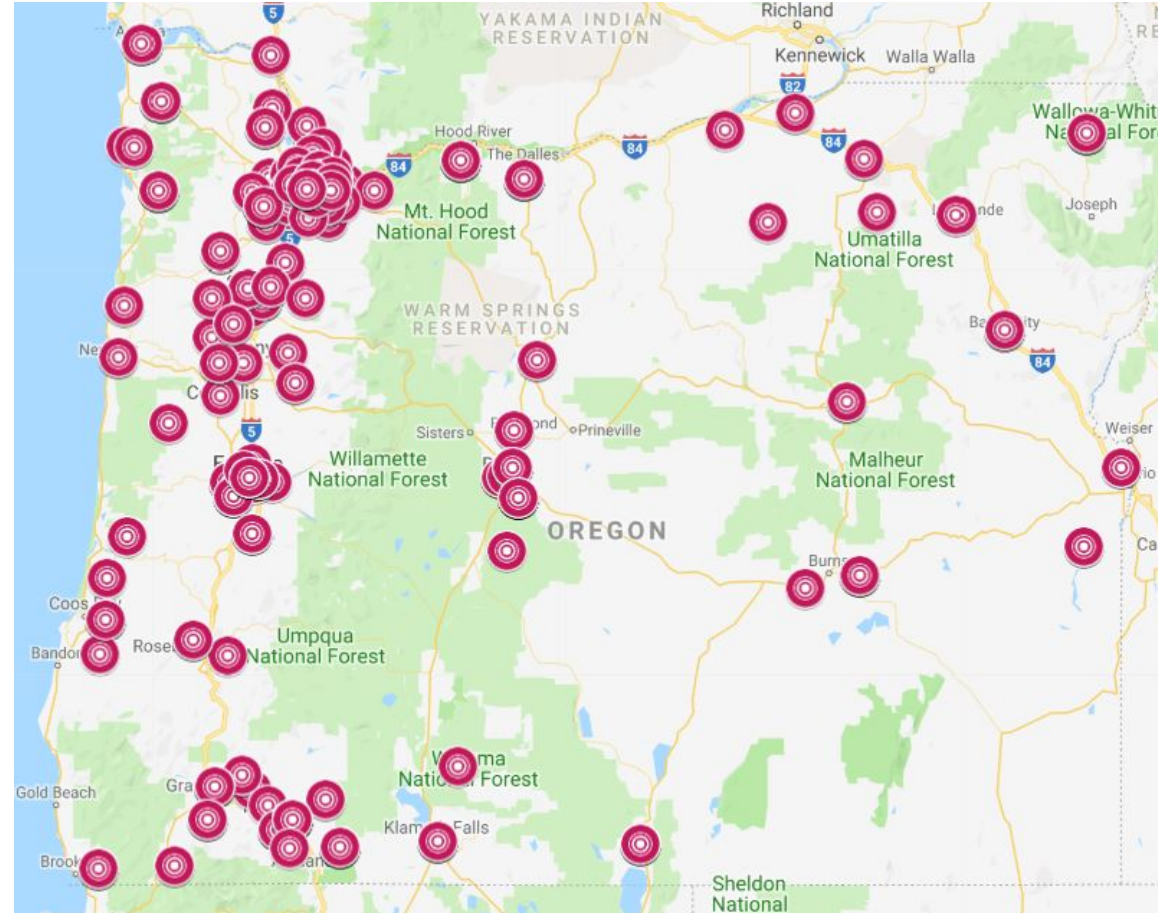
Of 36 Counties impacted

Map of Participating Spoke Sites Since 2014

Fall 2017- 180
spoke sites

Fall 2018-
240+ spoke
sites

Winter 2019-
300+ spoke
sites



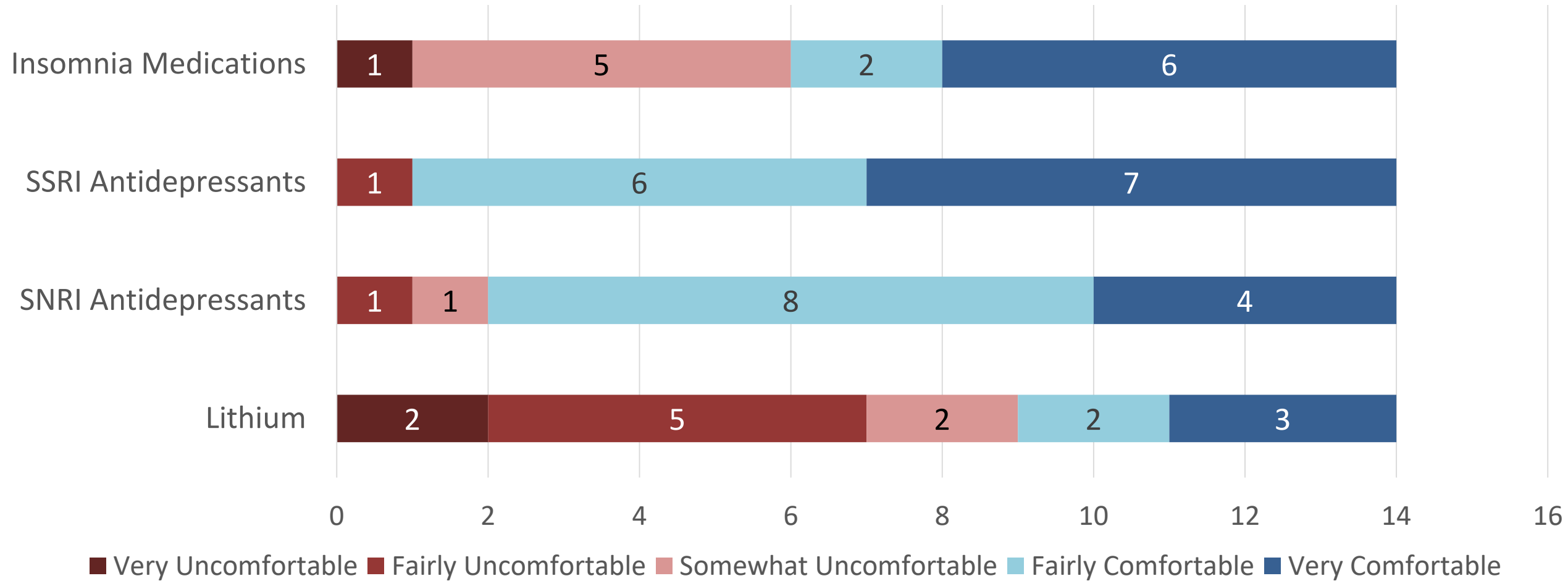
15 different
ECHO
topics have
been offered
in Oregon

Winter/Spring 2020 TeleECHO Programs

- **Adult Psychiatry**
- **Chronic Pain & Opioids**
- **Effective Systems for Treating Addiction in Primary Care**
- **Substance Use Disorders in Hospital Care**
- **Pain Management in Dentistry**
- **Nursing Facility Behavioral Health**
- **Parkinson's**
- **Care Coordination for Children & Youth with Complex Health Needs,**
- **Hepatitis C: Treatment and Elimination**
- **Geriatrics Behavioral Health in an Age-friendly Health System**

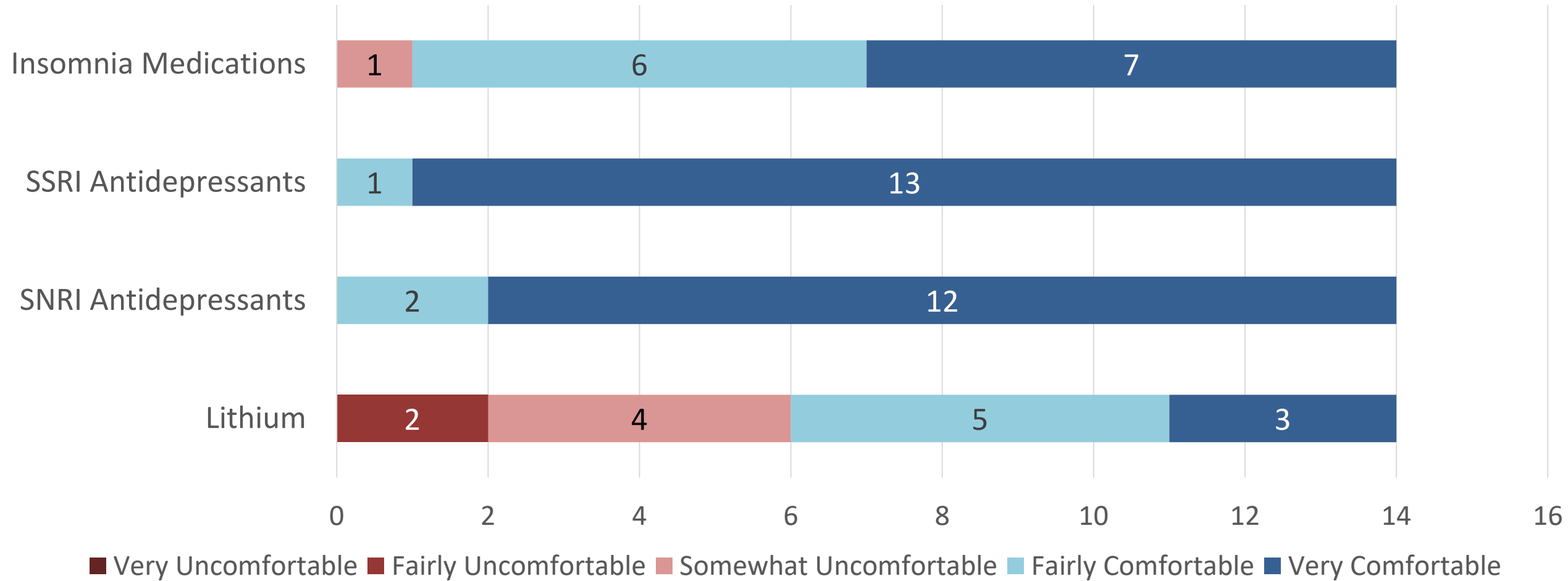
Pre-survey

How comfortable are you prescribing the following medications? (n=14)



Post-survey

How comfortable are you prescribing the following medications? (n=14)

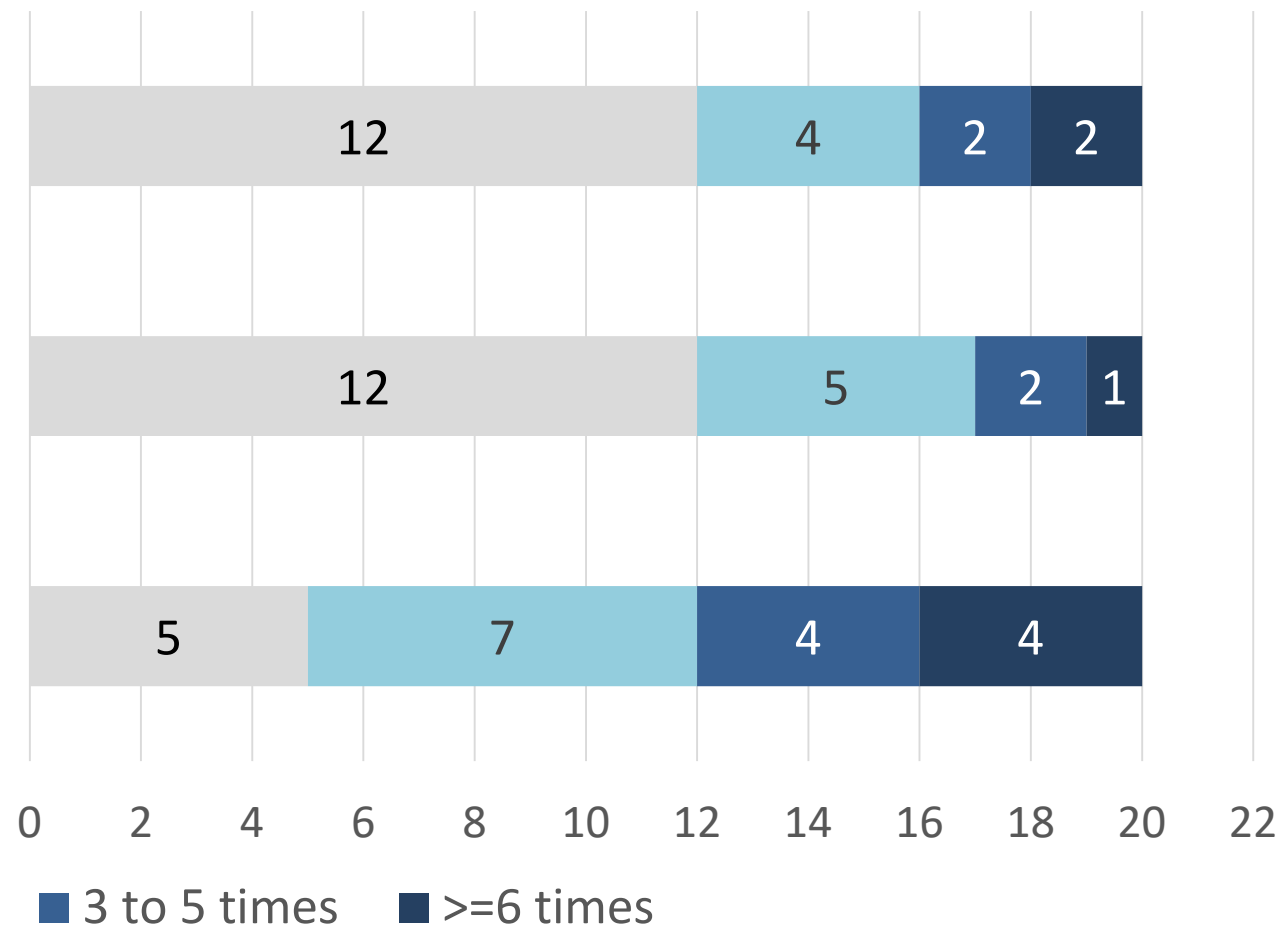


How post-survey respondents shared knowledge gained from ECHO with colleagues. (n=20)

I convened a multi-disciplinary group within my clinic to discuss improving care for patients with mental health disorders.

My clinic changed a policy or procedure to improve care for patients with mental health disorders.

I provided case consultation for a colleague on a patient with a mental health disorder.



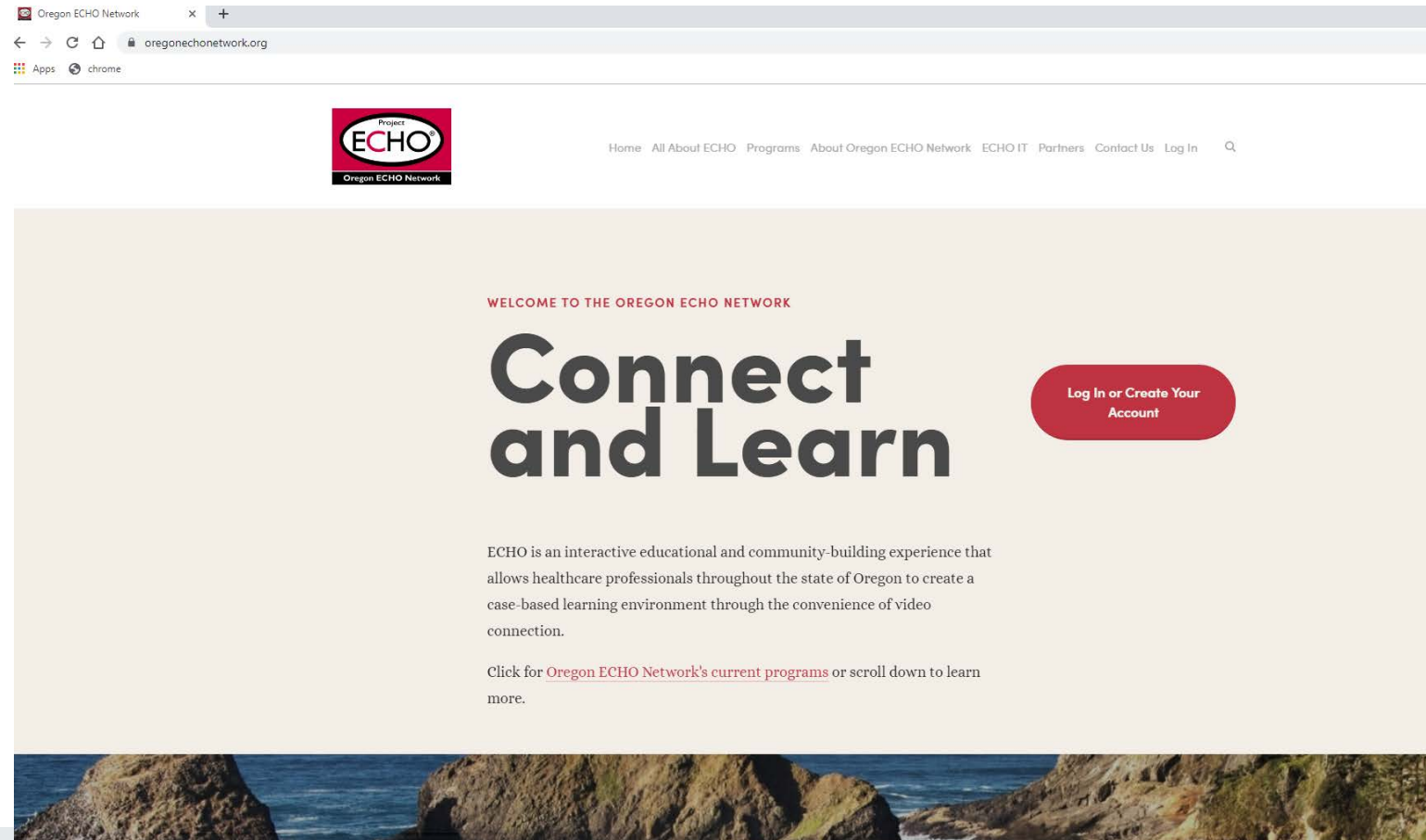
The Role of the Academic Medical Community and Faculty

- Fulfilling the Mission(s) of the Academic Medical Center
 - Education
 - Clinical
 - Rural/Outreach
 - Research
- Faculty Roles
 - Specialty expert
 - Provide didactic presentations
 - Participant
 - Researcher



ECHO Institute **<https://echo.unm.edu>**

oregonechonetwork.org



“This program was **EXTREMELY** helpful in allowing us to improve our MAT (Medication Assisted Treatment) care for our patients. We are the sole providers in our county and making these services available is saving many lives! Thank You!”

–Rural Oregon Clinician



“I love these programs. I couldn’t even attempt what I’m doing without this education and insight from experienced practitioners.

–Oregon Hospitalist



TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER™
EL PASO

One Physician's Experience

Border ECHO

One ECHO Project

Lisa Ayoub-Rodriguez MD

Assistant Professor

Division Chief Pediatric Hospital Medicine

Director of Pediatric Border Health Curriculum



Disclosures

I have no financial disclosure or conflicts of interest.

Objectives

- Report how and why Border ECHO was set up.
- Explain examples of distance learners' experiences in Border ECHO.
- Analyze successes and opportunities.
- Conclude expressing physician impact from participation in ECHO projects.



- Move knowledge, not people...
- Project ECHO is committed to addressing the needs of the most vulnerable populations by equipping communities with the right knowledge, at the right place, at the right time.

Over 70,000 learners and 650 ECHO Programs in 37+ countries

Story of Migration

Root Causes

Escaping violence

- Family: abuse, domestic violence, parental abandonment
- Community: gang, narco-traffickers, non/government-sponsored persecution
- War

Escaping poverty

- Education Attainment
- Economic opportunities

Child Trafficking

- Labor, sex trade

Reunite with family

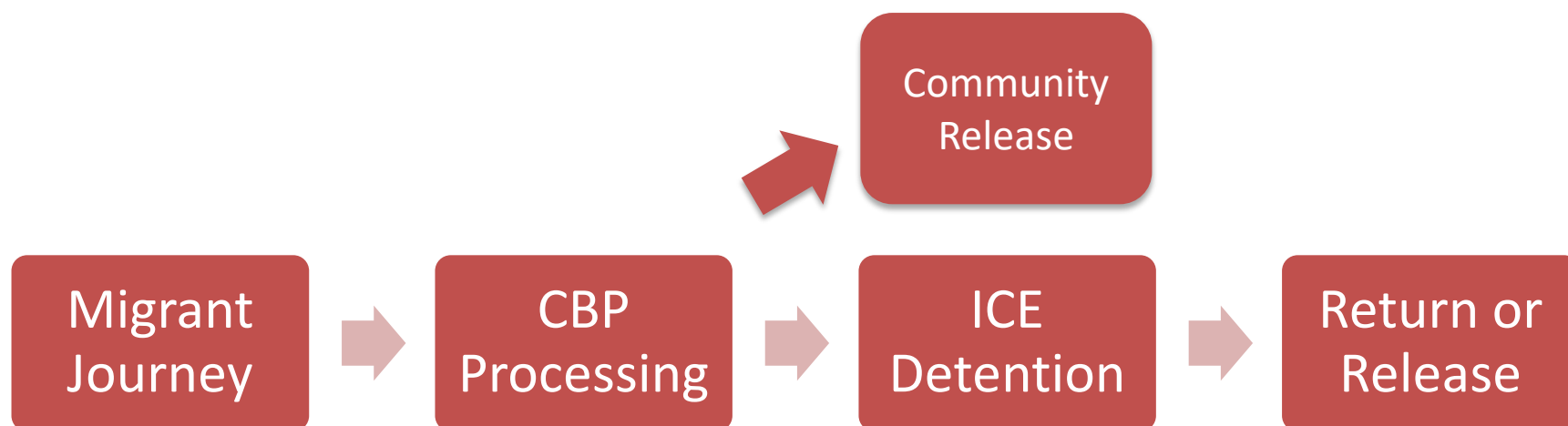


SOURCES: El Universal; Dallas Morning News research

Troy Oxford/Staff Artist



Steps of Migration Processing



CBP- Customs and Border Patrol

ICE – Immigration Customs Enforcement



Location of Community Releases





Community Release Needs

- Basic Needs
 - Housing, Clothing, Food
- Medical
 - Triage
 - Acute Needs
- Transportation

El Paso Refugee Health Care Provider Coalition



How Border ECHO started?

- Community releases in Las Cruces and Deming, NM
- University of New Mexico and Department of Public Health in NM wanted to support Las Cruces and Deming efforts
- ECHO did site visits with key stakeholders
- What if this vulnerable population could get the high-quality services they need, from local people?
- What if ECHO could connect the right people to create best practices to help them pursue their missions?
- ECHO saw the need and responded
- Initial goal was to knowledge share on medical care

Medical to Logistical, Education and International

- Medical information was less relevant but the coordination of volunteers and education around logistics was a big need
- Goal and success has been sharing models that work
- Focus transitioned to more logistical, followed by educational opportunities and now international considerations

Border ECHO Facilitators

- Joanna Katzman, MD
- Rachelle Rochelle, MPA
- Paige Menking, MPA
- Kelly Lister, BA
- Subject Matter Experts: All participants

Border ECHO – one among many ECHO projects, unlike the rest



What is involved?

- Meeting with key stakeholders.
- Find out the subject matter and finding experts.
- Tons of time scheduling people.
- Normally for a medical echo set curriculum a year in advance for CME needs.
- Border ECHO is focused on finding experts and putting the right people at the table.
 - Example: Current state in Mexico
 - Finding contacts in Chihuahua and Sonora Mexico to present the issues
- Survey for suggestions for topics.
- Flexibility and Timely – Given spur of the moment changes needed to adapt with current needs.

Logistics of Participating: Using Zoom



<https://zoom.us/home?zcid=2478>

Who Funds Border ECHO?

- Most ECHO projects are grant funded
- New Mexico Legislator gives some unrestricted funding for variety of ECHOs that do not have grant funding.
- Border ECHO is unfunded, current leadership is working on piecing together other funding options.

Characteristics of Border ECHO

- Over 50 individual attendees, an average of 15 attendees per session
- This does **not** include ECHO Institute staff
 - 10 have attended so far and average 7 staff per session
- Most recently 15 new participants from Mexico joined Border ECHO
- Closed ECHO project per decision of group

Current Organizations Participating

- NM Dept. of Health
- Memorial Medical Center
- Deming, NM Fire Dept.
- University of NM, and UNM Hospital
- University of AZ, Health Sciences Center
- Stanford University
- United Way, El Paso
- TX Tech University Health Science Center, El Paso
- Annunciation House
- Migrant Clinicians Network
- Clinica Medica Internacional
- Sonora Ministry of Health
- Mexico Secretary of Health

Topics Covered

- Topics so far have been:
 - Scheduling Strategies for Volunteers
 - Collaboration and Communication with: Customs and Border Patrol, Immigration and Customs Enforcement
 - Transferring Care to Destination Communities
 - Medical Malpractice and Licensing in Emergency Response Situations
 - Border Health Residencies & Rotations
 - Current State of Affairs in Chihuahua, Mexico



ECHO is all teach, all learn



Interactive



Co-management
of cases



Peer-to-peer
learning



Collaborative
problem solving

Border Health Education

Texas Tech
Health
Science
Center El
Paso



Southern
New Mexico
Family
Medicine
Residency

Combined
Border
Health
Education



Successes

- Great connections
- Helping tackle logistics
- National recognition - United Nations High Commissioner for Refugees Assistant Protection Officer representative
- Rapid Growth in participation
- Consistent and committed
- Shared sense of passion
- Relieves sense of isolation (Deming, Yuma, etc.)



Opportunities/Challenges

- All ECHO Projects
 - Finding Time – Given existing clinician commitments
 - Time that works across time zones
 - Often have them at lunch
- Border ECHO
 - Knowing who the right people are who should be at the table
 - Thinking through the targeted audience
 - Getting everything done in an hour (others are 1.5-2 hrs)
 - Translation needs – not yet an elegant fix
 - Can be weekly or monthly, ours are biweekly (can be individualized)

Physician Impact

- Improving Patient Care
- Knowledge sharing
- Collaboration and Networking
- Potential Scholarly Activity
- CME
- Relieving sense of isolation
- And much more...



Acknowledgements

- Border ECHO experts
- Dr. Manuel DeLaRosa
- Dr. Gary Gaddis
- Dr. Ron Stock



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