



# Project ECHO<sup>®</sup> (Extension for Community Health Outcomes)

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** @ProjectECHO**

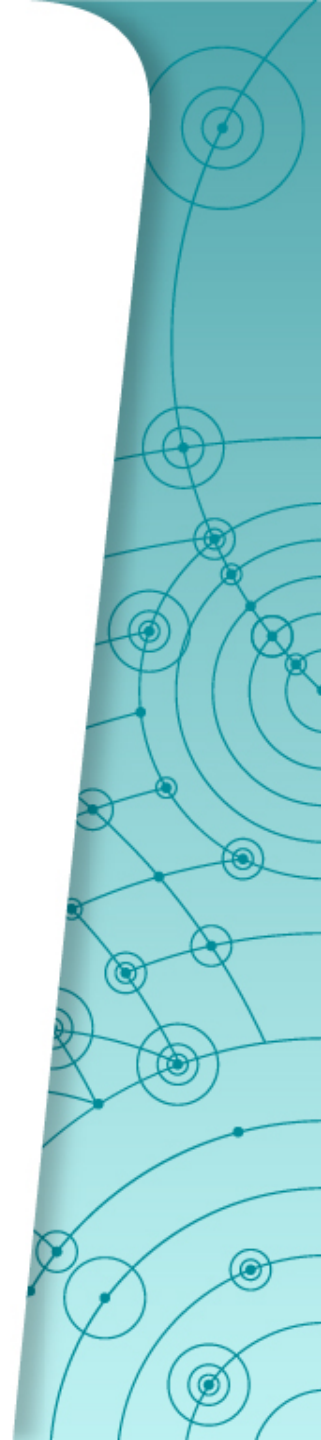
** UNMProjectECHO**

**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.**

Project  
**ECHO**®

**Moving Knowledge Instead of  
Patients and Providers**



# HCV

- 70 million in the world infected with HCV
- In New Mexico estimated number was greater than 28,000 in 2004.
- In 2004 less than 5% of patients in NM had been treated.
  - 2,300 prisoners were HCV positive

# HCV Treatment 2004

## Good news...

- Curable in 70% of cases

## Bad news...

- Severe side effects:
  - anemia (100%)
  - neutropenia >35%
  - depression >25%
  - No Primary Care Physicians treating HCV

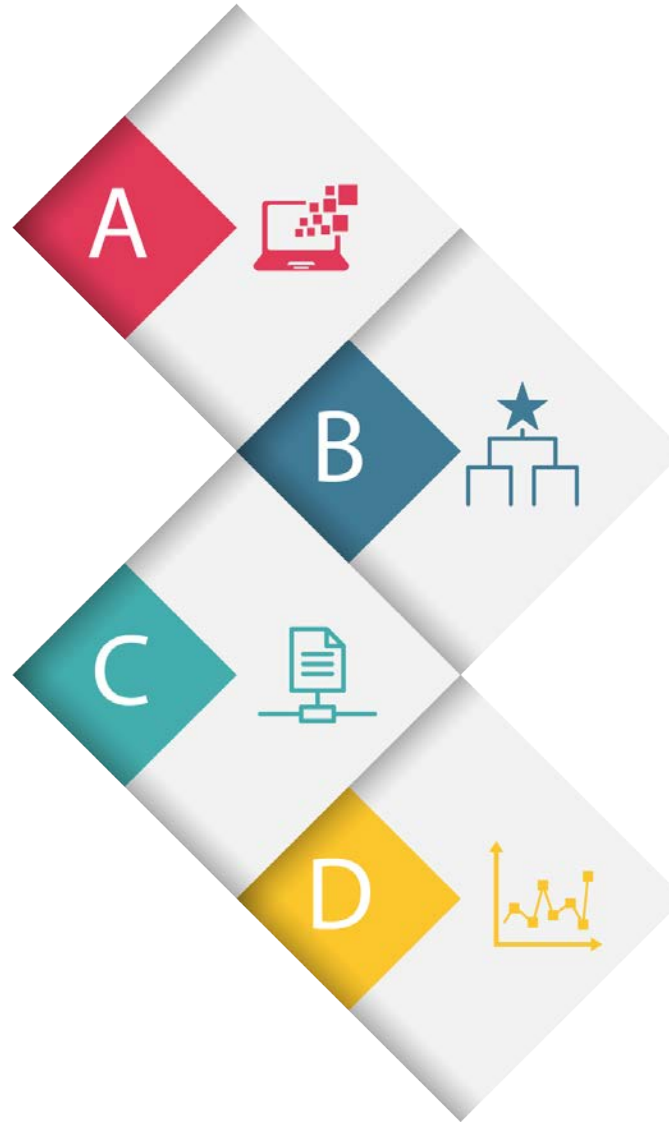
# Goals of Project ECHO

Develop capacity to safely and effectively treat HCV in all areas of New Mexico and to monitor outcomes.

Develop a model to treat complex diseases in rural locations and developing countries.

# The ECHO Model

**A**mplification – Use **T**echnology to leverage scarce resources



Share **B**est Practices to reduce disparity

**C**ase Based Learning to master complexity

Web-based **D**atabase to **M**onitor **O**utcomes

# Steps

- Train physicians, physician assistants, nurse practitioners, nurses, pharmacists, educators in HCV
- Train to use web-based software — **iECHO & ECHO Health®**
- Conduct teleECHO™ clinics — **“Knowledge Networks”**
- Initiate case-based guided practice — **“Learning Loops”**
- Collect data and monitor outcomes centrally
- Assess cost and effectiveness of programs



# Benefits to Rural Clinicians

- No cost CMEs and Nursing CEUs
- Professional interaction with colleagues with similar interest
  - Less isolation with improved recruitment and retention
- A mix of work and learning
- Access to specialty consultation with GI, hepatology, psychiatry, infectious diseases, addiction specialist, pharmacist, patient educator



ECHO Whale



PCA Española



Baton Rouge



Pecos Valley MC



DOH Las Cruces



SBRT-First Choice South Va



Memorial HDX7000

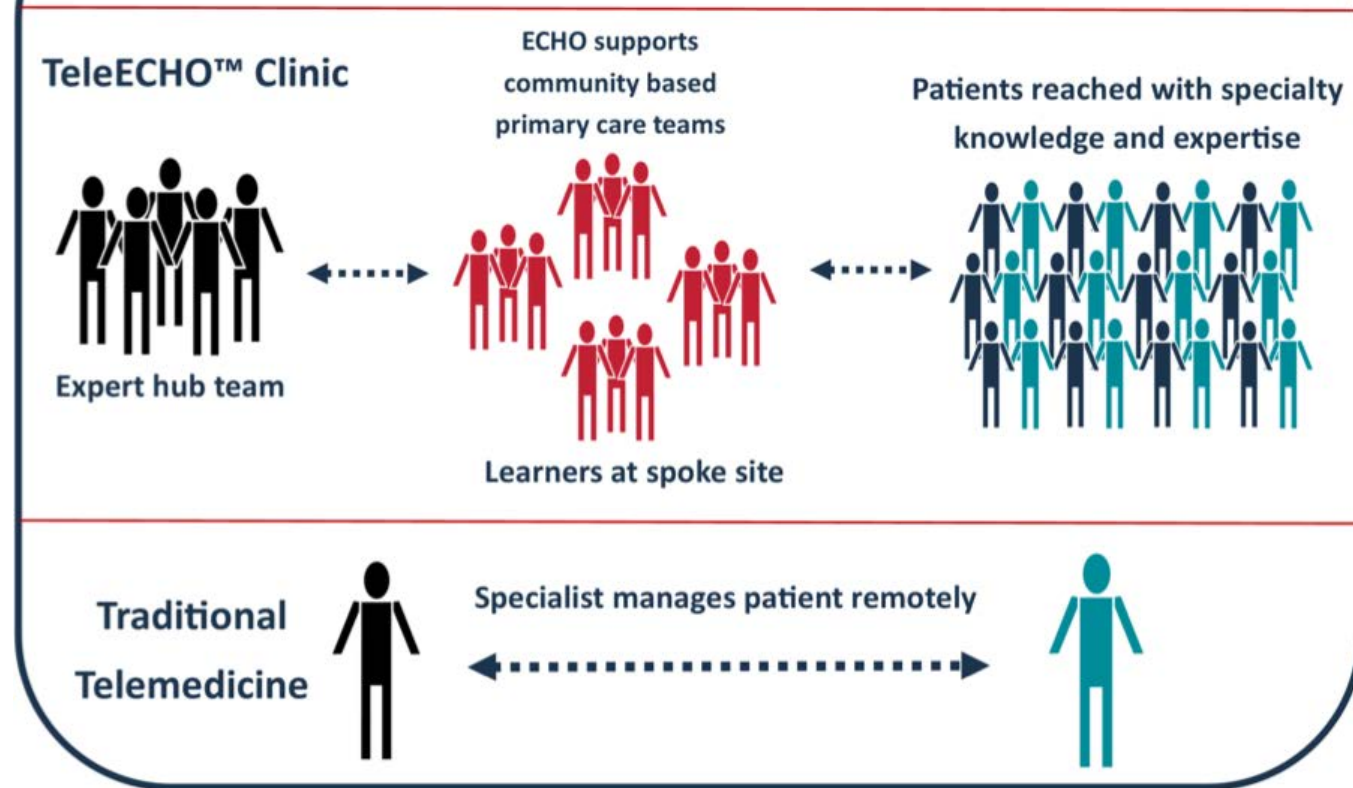


LAS VEGAS ECFH



Arora S., Kalishman S., Thornton K., et al. *Hepatol.* 2010;52(3):1124-33.

# ECHO vs. Telemedicine



**ECHO model is not ‘traditional telemedicine’.**

**Treating Physician retains responsibility for managing patient.**

# Technology

- Web Cam
- Videoconferencing Software
- Video Recording System
- ECHO-Pearl Repository
- **ECHO Health** – Electronic Clinical Management Tool
- **iECHO** – Electronic TeleECHO Clinic Management Solution

# How well has model worked?

- 600 HCV teleECHO Clinics have been conducted
- >6,000 patients entered HCV disease management program

## CME's/CE's issued:

- Total CME hours 79000 hours at no cost for HCV and 19 other disease areas

# Project ECHO Clinicians

## HCV Knowledge Skills and Abilities (Self-Efficacy)

scale: 1 = none or no skill at all 7= expert-can teach others

Community Clinicians N=25	<u>BEFORE</u> Participation MEAN (SD)	<u>TODAY</u> MEAN (SD)	Paired Difference (p-value) MEAN (SD)	<u>Effect Size</u> for the change
1. Ability to identify suitable candidates for treatment for HCV.	2.8 (1.2)	5.6 (0.8)	2.8 (1.2) ( $<0.0001$ )	2.4
2. Ability to assess severity of liver disease in patients with HCV.	3.2 (1.2)	5.5 (0.9)	2.3 (1.1) ( $< 0.0001$ )	2.1
3. Ability to treat HCV patients and manage side effects.	2.0 (1.1)	5.2 (0.8)	3.2 (1.2) ( $<0.0001$ )	2.6

(continued)

# Project ECHO Clinicians

## HCV Knowledge Skills and Abilities (Self-Efficacy)

Community Clinicians N=25	<u>BEFORE</u> Participation MEAN (SD)	<u>TODAY</u> MEAN (SD)	Paired Difference (p-value) MEAN (SD)	<u>Effect</u> <u>Size</u> for the change
4. Ability to assess and manage psychiatric co-morbidities in patients with hepatitis C.	2.6 (1.2)	5.1 (1.0)	2.4 (1.3) ( $<0.0001$ )	1.9
5. Serve as local consultant within my clinic and in my area for HCV questions and issues.	2.4 (1.2)	5.6 (0.9)	3.3 (1.2) ( $< 0.0001$ )	2.8
6. Ability to educate and motivate HCV patients.	3.0 (1.1)	5.7 (0.6)	2.7 (1.1) ( $<0.0001$ )	2.4



# Project ECHO Clinicians

## HCV Knowledge Skills and Abilities (Self-Efficacy)

Community Clinicians N=25	<u>BEFORE</u> Participation MEAN (SD)	<u>TODAY</u> MEAN (SD)	Paired Difference (p-value) MEAN (SD)	<u>Effect Size</u> for the change
<b>Overall Competence (average of 9 items)</b>	<b>2.8* (0.9)</b>	<b>5.5* (0.6)</b>	<b>2.7 (0.9) (&lt;0.0001)</b>	<b>2.9</b>

Cronbach's alpha for the BEFORE ratings = 0.92 and Cronbach's alpha for the TODAY ratings = 0.86 indicating a high degree of consistency in the ratings on the 9 items.

Arora S., Kalishman S., Thornton K., et al. *Hepatol.* 2010;52(3):1124-33.

# Clinician Benefits

(Data Source; 6 month Q-5/2008)

Benefits N=35	Not/Minor Benefits	Moderate/Major Benefits
Enhanced knowledge about management and treatment of HCV patients.	3% (1)	97% (34)
Being well-informed about symptoms of HCV patients in treatment.	6% (2)	94% (33)
Achieving competence in caring for HCV patients.	3% (1)	98% (34)

# Project ECHO

## Annual Meeting Survey

	Mean Score (Range 1-5)
Project ECHO® has diminished my professional isolation.	4.3
My participation in Project ECHO® has enhanced my professional satisfaction.	4.8
Collaboration among agencies in Project ECHO® is a benefit to my clinic.	4.9
Project ECHO® has expanded access to HCV treatment for patients in our community.	4.9
Access, <u>in general</u> , to specialist expertise and consultation is a major area of need for you and your clinic.	4.9
Access to <u>HCV specialist</u> expertise and consultation is a major area of need for you and your clinic.	4.9

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

Results of the HCV Outcomes Study

# Objectives

- To train primary care clinicians in rural areas and prisons to deliver Hepatitis C treatment to rural populations of New Mexico
- To show that such care is as safe and effective as that give in a university clinic
- To show that **Project ECHO** improves access to Hepatitis C care for minorities

# Participants

- Study sites
  - Intervention (ECHO)
    - Community-based clinics: 16
    - New Mexico Department of Corrections: 5
  - Control: University of New Mexico (UNM) Liver Clinic

# Principle Endpoint

Sustained Viral Response (SVR):  
no detectable virus 6 months  
after completion of treatment

# Treatment Outcomes

Outcome	ECHO	UNMH	p-value
	n = 261	n = 146	
Minority	68%	49%	p < 0.01
SVR* (Cure) Genotype 1	50%	46%	ns
SVR* (Cure) Genotype 2/3	70%	71%	ns

\*SVR=sustained viral response

Arora S., Thornton K., Murata G., et al. *N Eng J Med.* 2011;364(23):2199-207.



# Conclusions

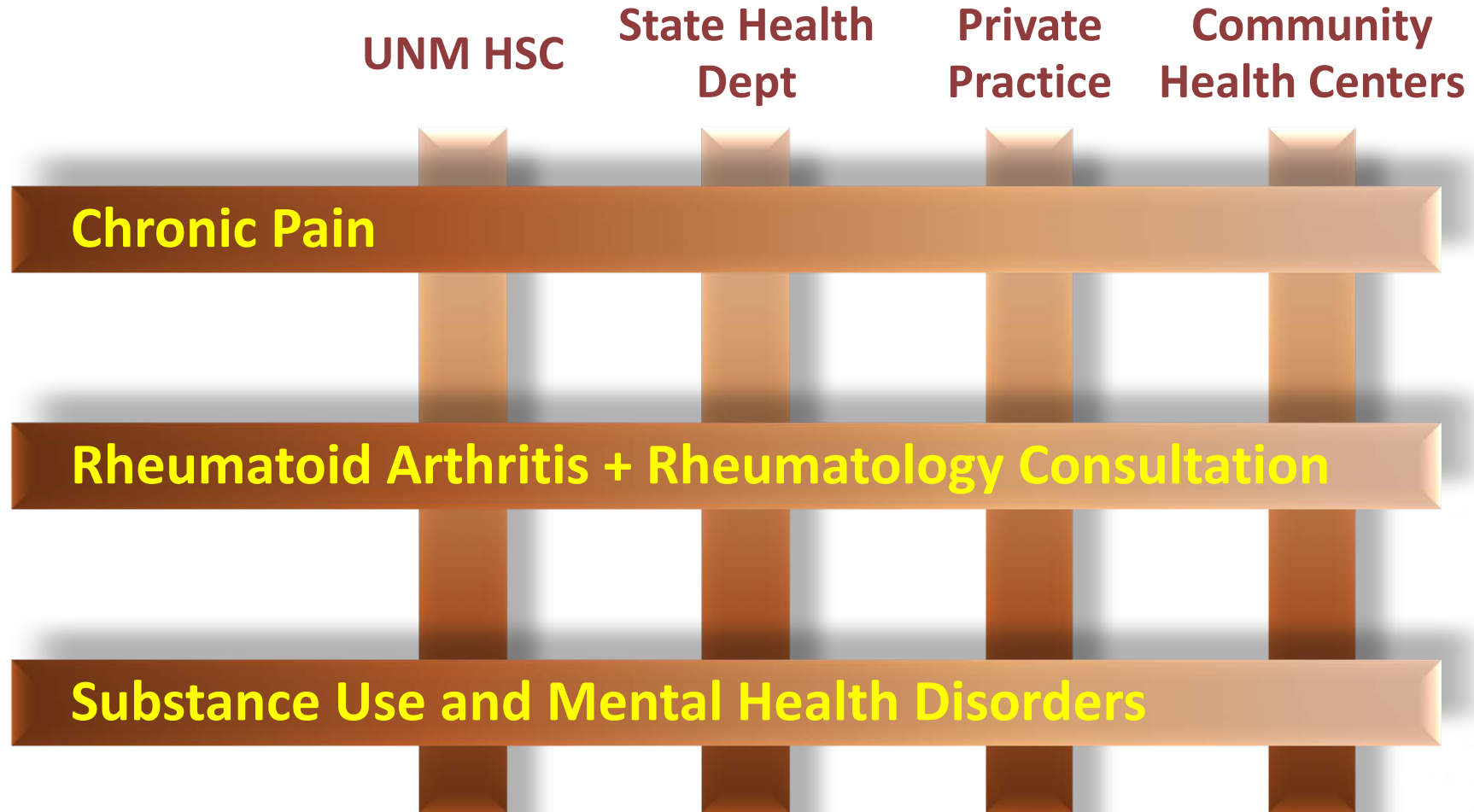
- Rural primary care Clinicians deliver Hepatitis C care under the aegis of Project ECHO that is as safe and effective as that given in a University clinic.
- Project ECHO improves access to hepatitis C care for New Mexico minorities.

# Disease Selection

- **Common diseases**
- **Management is complex**
- **Evolving treatments and medicines**
- **High societal impact (health and economic)**
- **Serious outcomes of untreated disease**
- **Improved outcomes with disease management**

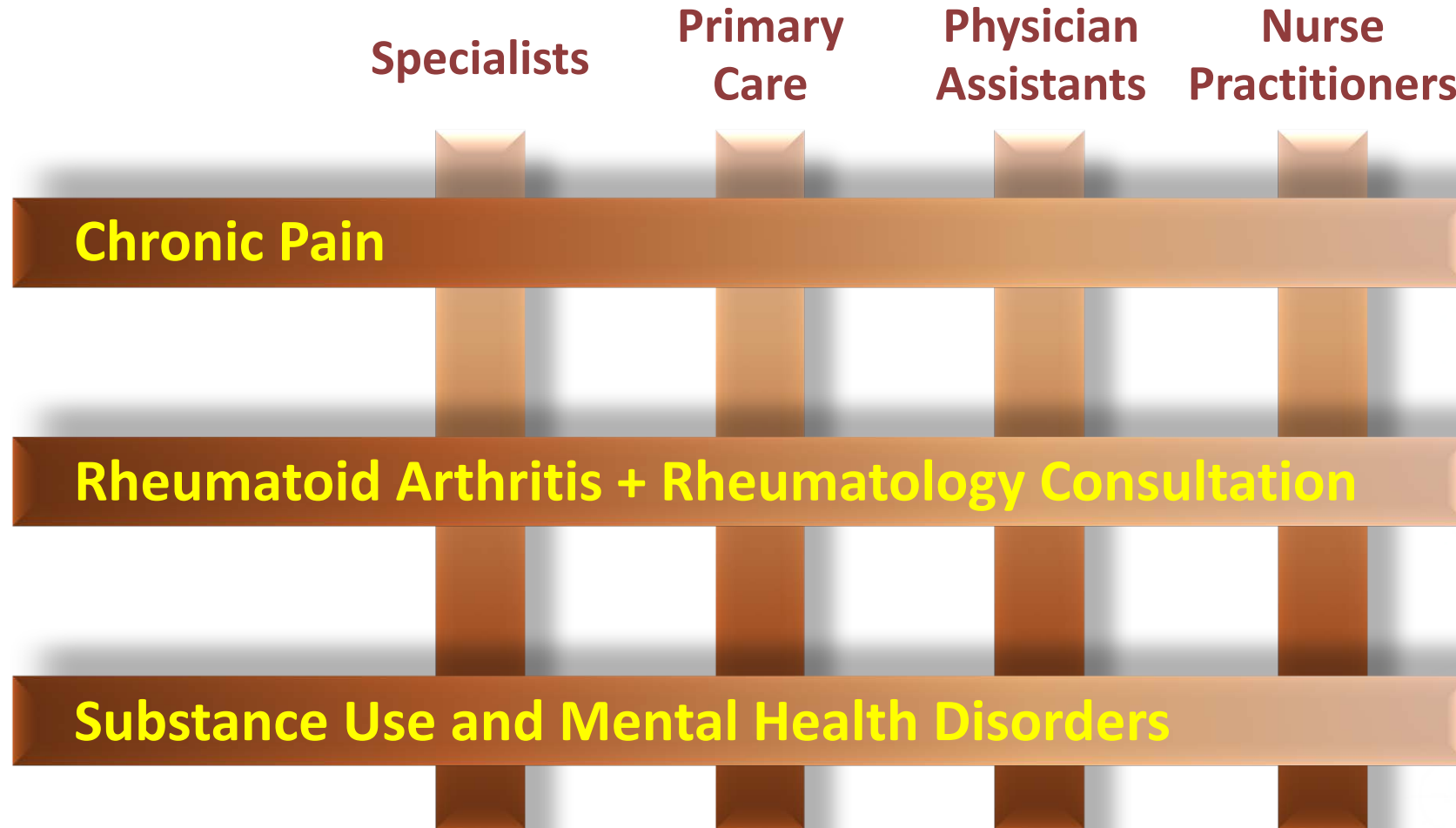
# Bridge Building

## Pareto's Principle



# Force Multiplier

## Use Existing Community Clinicians



# ECHO now reaching a breadth of areas

- Antimicrobial Stewardship
- Autism
- Behavioral Health
- Bone Health
- Cancer
- Cardiology
- Chronic Lung Disease
- Chronic Pain
- Crisis Intervention
- Diabetes and Endocrinology
- Education
- Geriatrics
- Good Health and Wellness in Indian Country
- Hepatitis
- High-Risk Pregnancy
- HIV/AIDS
- Infectious Disease
- Integrated Addictions & Psychiatry
- Laboratory Medicine
- LGBT Health
- Opioid Use Disorder
- Palliative Care
- Pediatrics
- Prison Peer Education
- Quality Improvement
- Rheumatology
- Sexually Transmitted Diseases
- Trauma-Informed Care
- Tuberculosis

# Project ECHO:

## Views of Participating Providers, Health Workers, And Educators

1 = Strongly Disagree, 5 = Strongly Agree

Benefit	Mean
Through the Project ECHO telehealth clinics, I am <b>learning best-practice care</b> in chronic disease.	4.68
I am <b>connected with peers</b> in the ECHO telehealth clinic whose opinion I respect for professional advice and consultation.	4.55
I <b>learn with guidance</b> from Project ECHO academic specialists in chronic disease management whose knowledge and skills I respect.	4.73
I am <b>connected to and respected by the academic specialists</b> in the ECHO telehealth clinic in which I participate.	4.4
I am <b>developing my clinical expertise</b> through participation in Project ECHO.	4.48
After gaining expertise in the clinical diseases addressed in Project ECHO, I am <b>comfortable teaching others what I have learned</b> .	4.33

Arora S., Kalishman S., Dion D., et al. *Health Aff (Millwood)*. 2011;30(6):1176-84.

Patient Benefit	Mean
My participation in Project ECHO <b>benefits patients under my care</b> whom I co-manage with ECHO specialists.	4.45
<b>The patients</b> under my care whom I co-manage with ECHO specialists <b>receive best-practice care.</b>	4.43
My participation in Project ECHO <b>benefits the patients</b> under my care <b>whom I do not co-manage with ECHO specialists.</b>	4.19
<b>I apply what I have learned</b> about best practices through Project ECHO <b>to all of my patients with similar chronic diseases.</b>	4.45
<b>I feel comfortable applying the principles I learned from Project ECHO to other patients</b> in my practice with similar chronic disease, independently, without presenting them on the network.	4.23

Arora S., Kalishman S., Dion D., et al. *Health Aff (Millwood)*. 2011;30(6):1176-84.

# VA SCAN-ECHO for Liver Disease University of Michigan

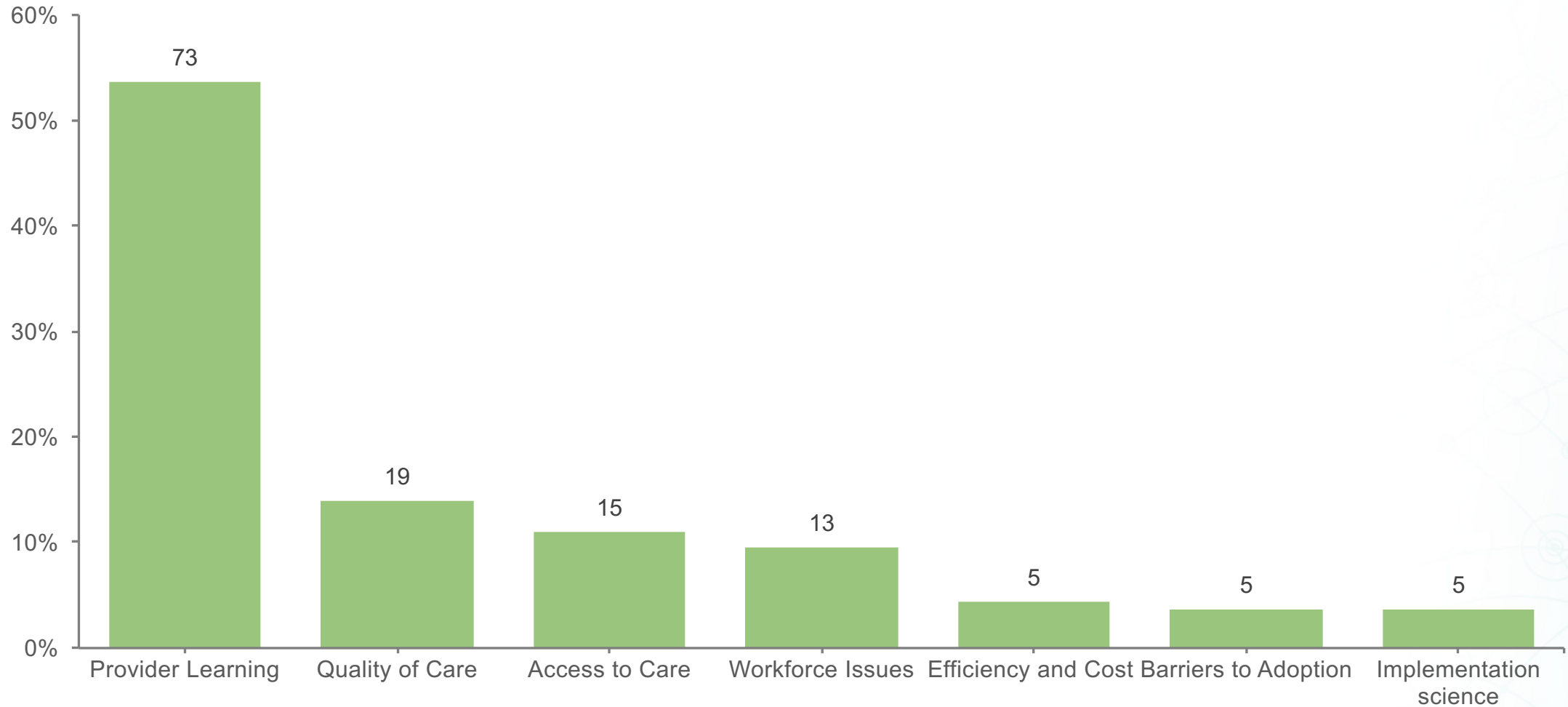
513 patients who had a liver SCAN-ECHO visit were found within the cohort. Patients who had completed a virtual SCAN-ECHO visit were more likely younger, rural, with more significant liver disease, and evidence for cirrhosis. Propensity adjusted mortality rates using Cox Proportional Hazard Model showed that a SCAN-ECHO visit was associated with a hazard ratio of 0.54 (95% CI 0.36-0.81,  $p = 0.003$ ) compared to no visit.

**Virtual Consultations through the Veterans Administration SCAN-ECHO Project Improves Survival for Veterans with Liver Disease** Su. GL, Glass L, et al; Hepatology . 2018 May 5. doi: 10.1002/hep.30074

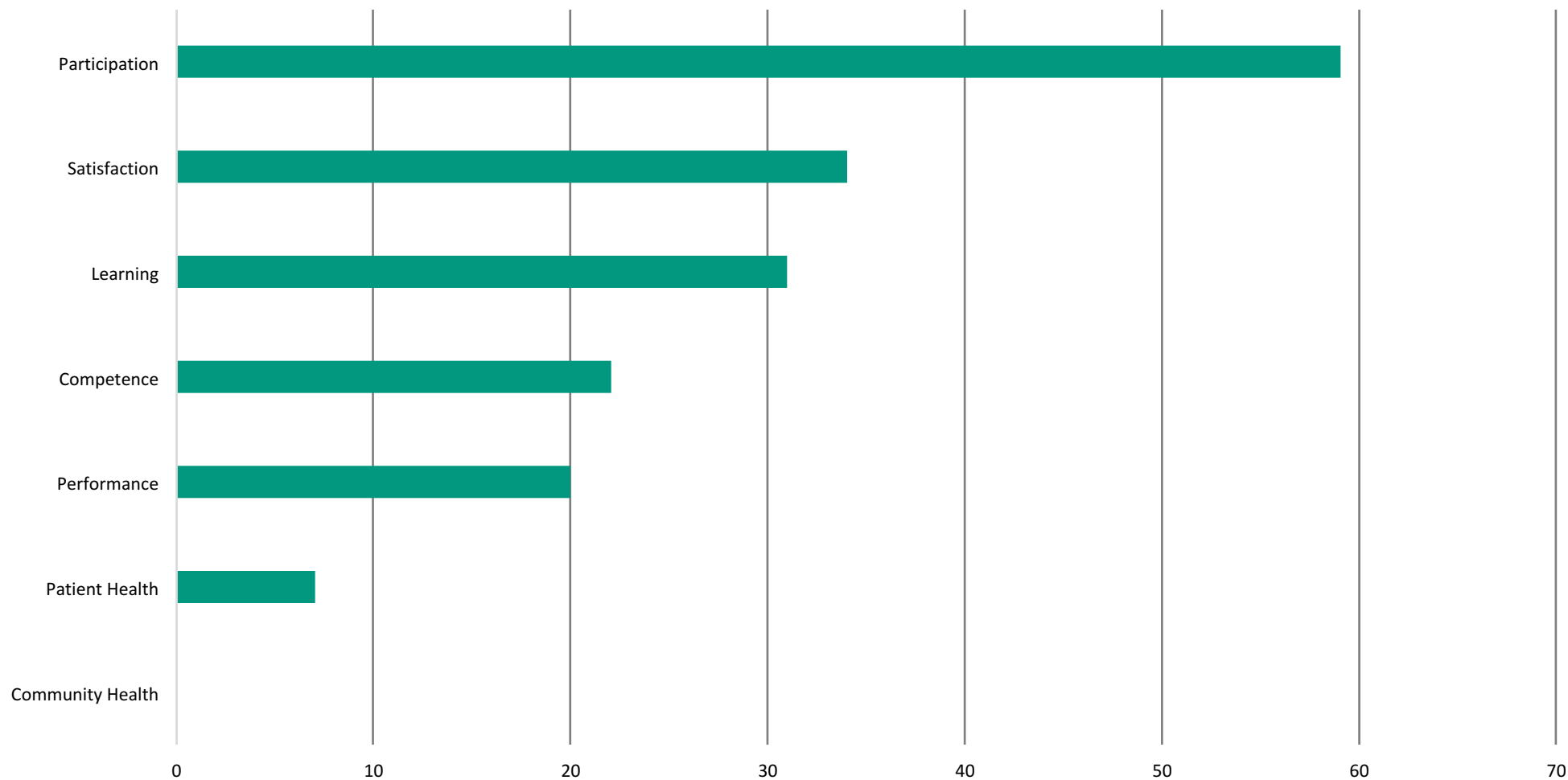


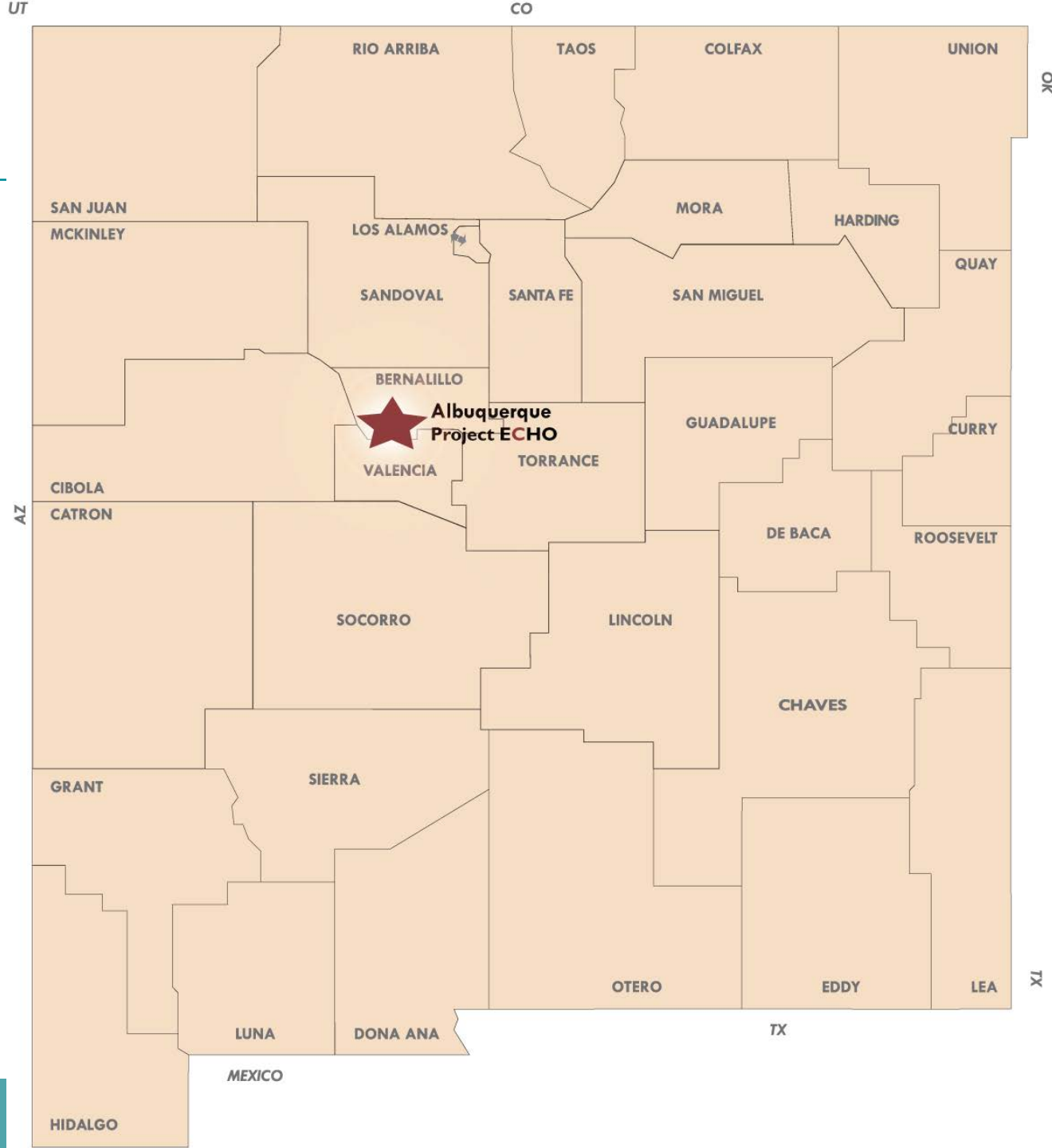
# Peer Reviewed Publications n=129

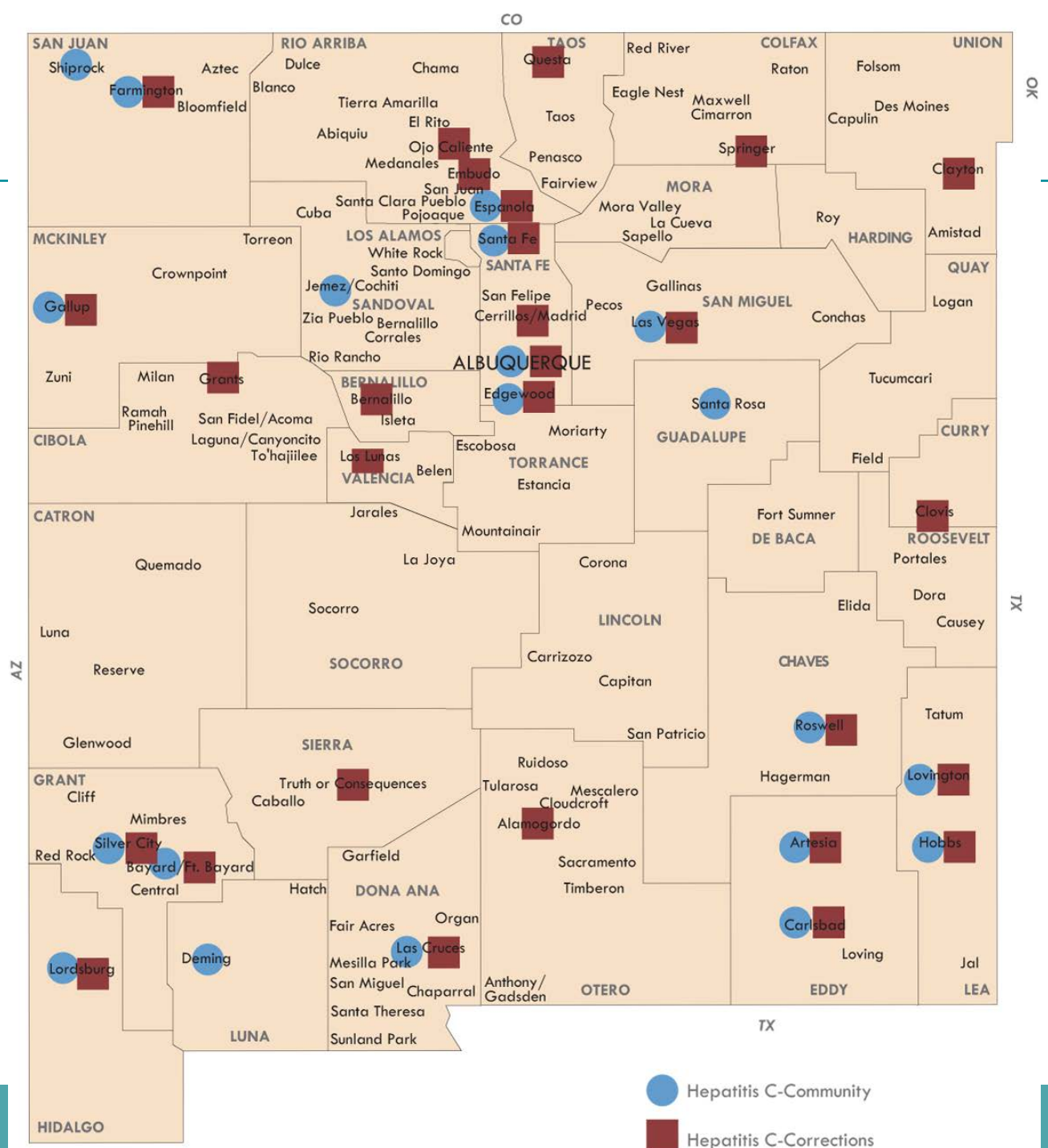
% of peer-reviewed publications (N=116)



# ECHO Publications by Moore's Outcome Levels



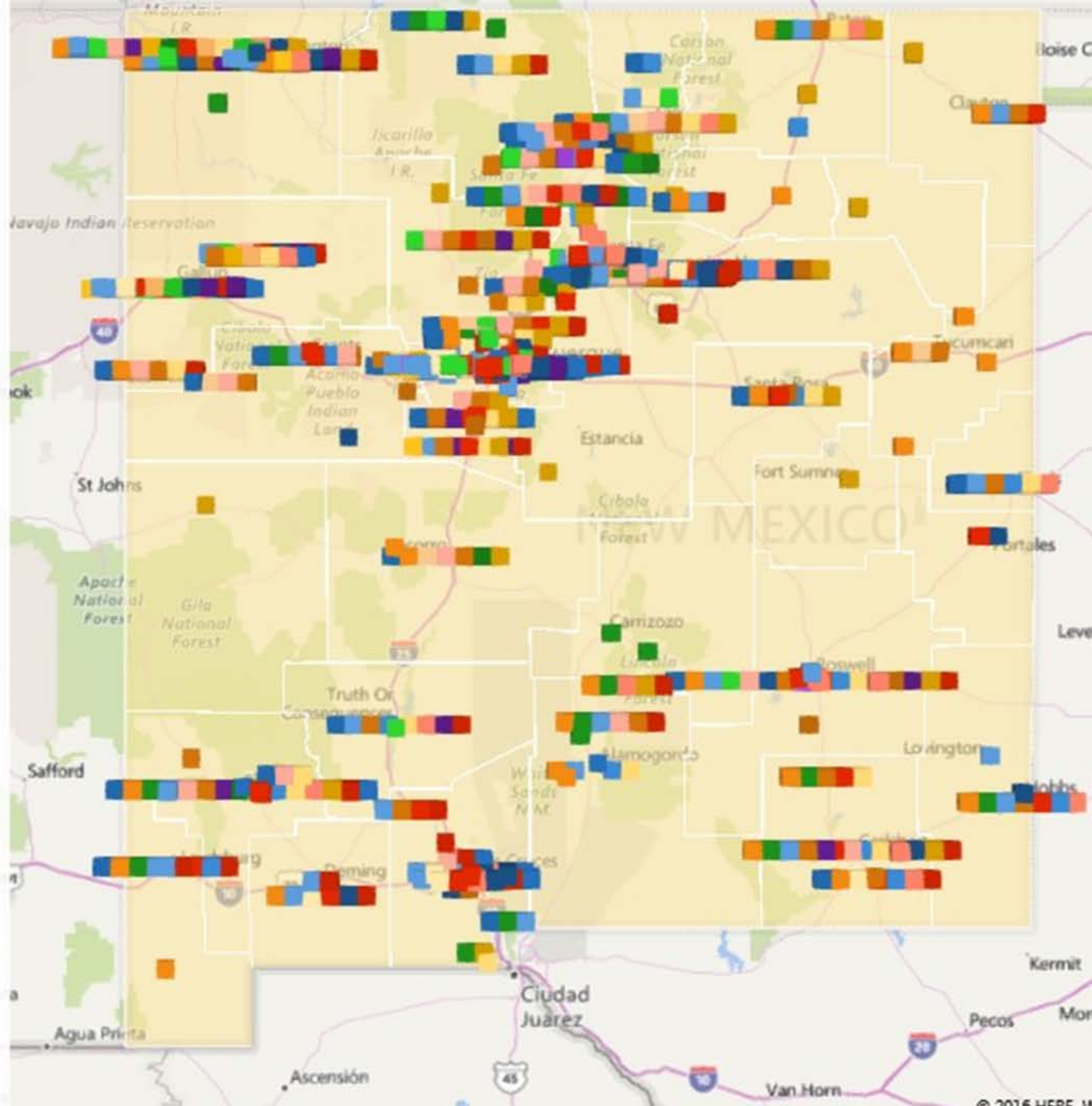




 Hepatitis C-Community  
 Hepatitis C-Corrections

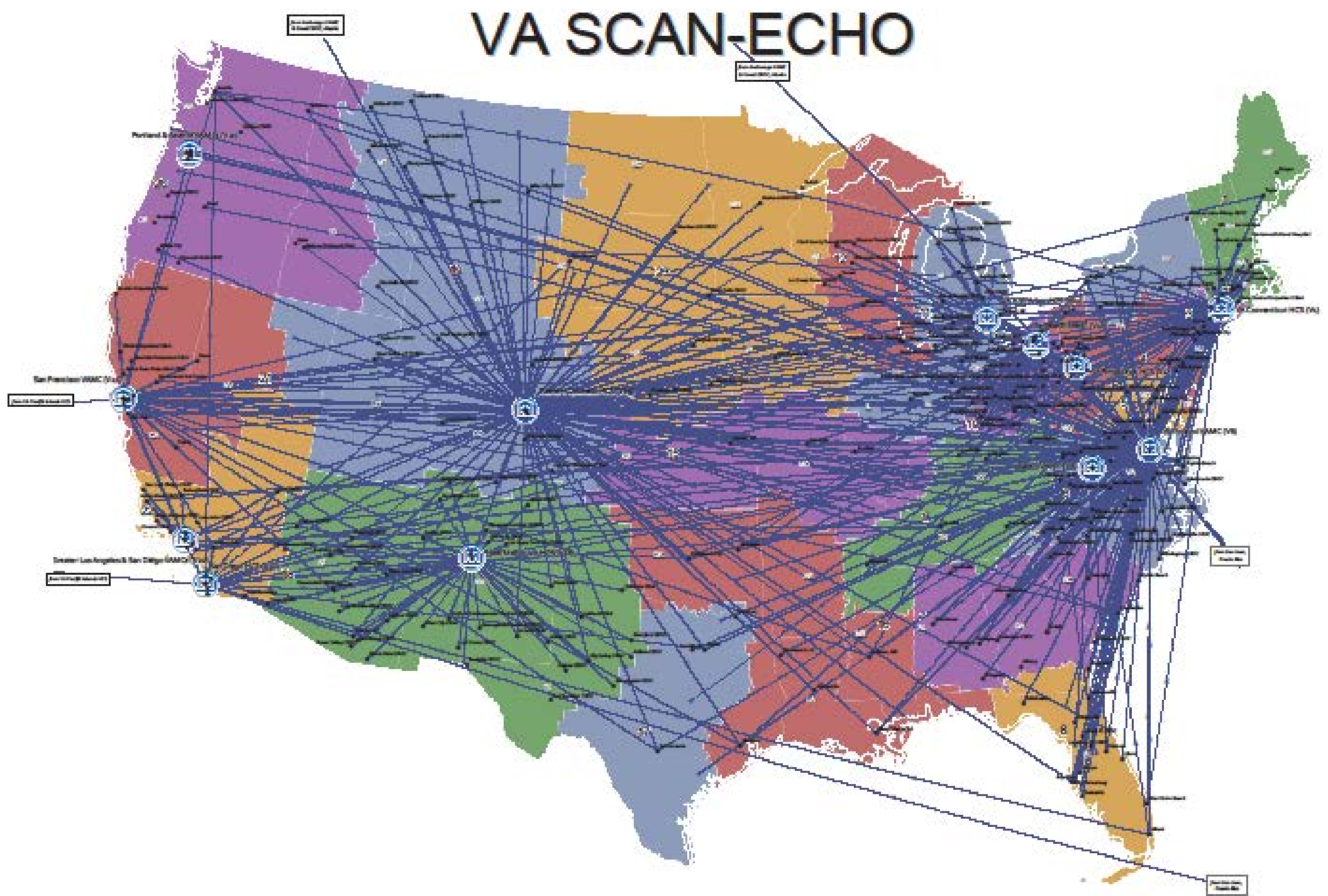


- Addiction/Psychiatry
- Asthma/Pulmonary
- Autism
- Child and Youth Epilepsy Clinic (CYE)
- Child Psychology
- Childhood Obesity
- Chronic Pain and Headache
- CHW Care Competency
- Community Addictions Recovery Specialist
- Complex Care Clinic
- Dementia Care Clinic
- Diabetes and Cardiovascular Care
- 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

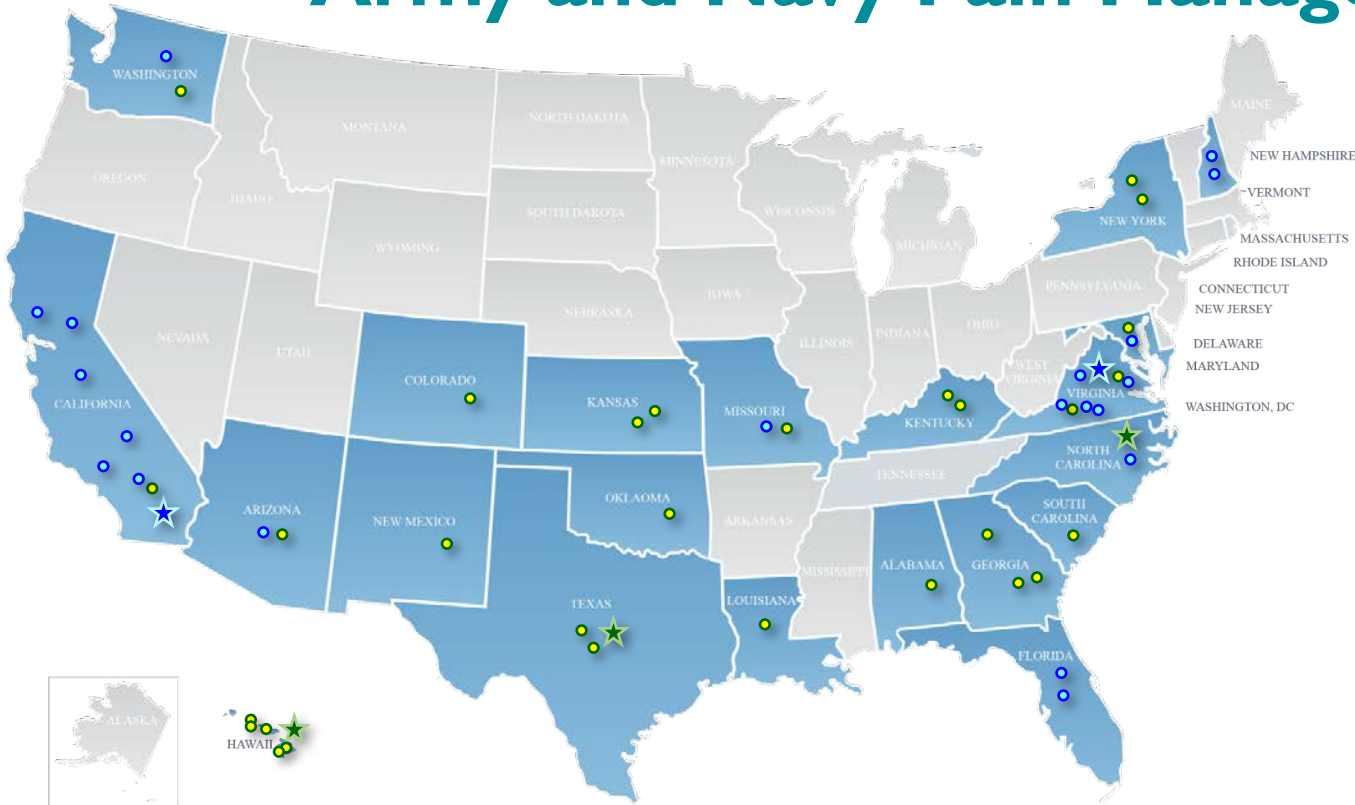


# ECHO Hubs and Spokes: State of New Mexico

# VA SCAN-ECHO



# Army and Navy Pain Management ECHO Clinics



**★ Army ECHO Hubs:** Regional Health Command-Europe (RHC-E) – Landstuhl, Germany | Regional Health Command-Central (RHC-C)-Joint Base San Antonio-Brook Army Medical Center – TX | Regional Health Command-Pacific (RHC-P)-Tripler Army Medical Center – HI | Regional Health Command-Atlantic (RHC-A) – Ft. Bragg, NC

- **Belgium:**
  - Camp Casey
  - Supreme Headquarters Allied Powers Europe (SHAPE)
- **Germany:**
  - Grafenwoehr
  - Hohenfels
  - Katterbach
  - Landstuhl Regional Medical Center (LRMC)/FHC
  - LRMC/IMC
  - Stuttgart
  - Wiesbaden
  - Vilsack
- **Italy:**
  - Livorno
  - Vicenza
- **Japan:**
  - Camp Zama
- **South Korea:**
  - Camp Humphreys
  - Camp Carroll
  - Camp Walker
  - Brian Allgood Army Community Hospital/ 121st Combat Support Hospital
- **Alabama:**
  - Redstone Arsenal
- **Arizona:**
  - Fort Huachuca
- **California:**
  - Fort Irwin
- **Colorado:**
  - Colorado Springs
- **Georgia:**
  - Fort Gordon
  - Fort Benning
  - Ft. Stewart
- **Hawaii:**
  - Schofield Barracks (Family Medicine and Troop Medical Clinic)
  - Adult Medicine Patient Centered Medical Home (PCMH) Tripler
  - Family Medicine PCMH Tripler
  - Warrior Ohana PCMH
  - VA Pain Clinic
- **Kansas:**
  - Fort Leavenworth
  - Fort Riley
- **Kentucky:**
  - Fort Knox
  - Fort Campbell
- **Louisiana:**
  - Fort Polk
- **Maryland:**
  - Fort Meade
- **Missouri:**
  - Fort Leonard Wood
- **New Mexico:**
  - White Sands Missile Range
- **New York:**
  - Fort Drum
  - West Point
- **Oklahoma:**
  - Fort Sill
- **South Carolina:**
  - Fort Jackson
- **Texas:**
  - Fort Bliss
  - Fort Hood
- **Virginia:**
  - Joint Base Langley-Eustis
  - Fort Lee
- **Washington:**
  - Madigan Army Medical Center



**★ Navy ECHO Hubs:** Navy Medicine East (NME)- Naval Medical Center (NMC) Portsmouth, VA | Navy Medicine West (NMW)- Naval Medical Center San Diego (NMCS), CA

- **Arizona:**
  - NH Yuma
- **California:**
  - NMCS Naval Training Center
  - NH Lemoore
  - NH Twentynine Palms
  - NH Camp Pendleton
  - Naval Air Facility El Centro
  - Naval Air Station North Island
- **Florida:**
  - Naval Hospital (NH) Jacksonville
  - Naval Air Station Jacksonville
- **Maryland:**
  - NHC Pax River
- **Missouri:**
  - Behavioral Health Clinic (BHC) Boone
- **North Carolina:**
  - NH Camp LeJeune
- **New Hampshire:**
  - BHC Portsmouth NH
  - Navy Safe Harbor
- **Virginia:**
  - NMC Portsmouth (Case Management, Pain Clinic, Psychiatry, Internal Medicine)
  - BHC Oceana
  - TriCare Prime Clinic (TPC) Chesapeake
  - TPC Virginia Beach
  - 633rd Medical Group-Langley





# ECHO Hubs and Superhubs: Global

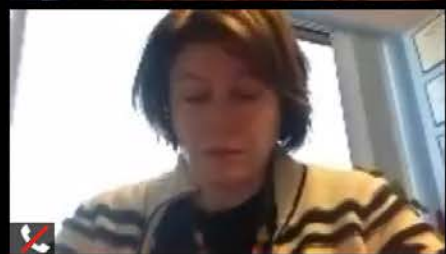
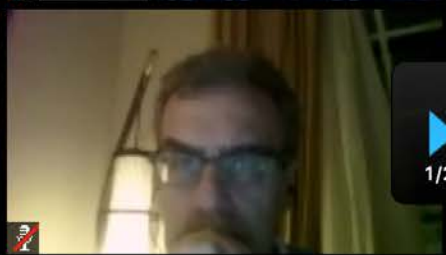
## Key: ECHO Hub Type (215)

- ◆ Superhub (11)
- Hub (199)
- U.S. DoD Hub (7)
- U.S. VA Hub (9)

## Key: Country Shading

- ECHO impact (31)
- Awaiting ECHO impact (139)

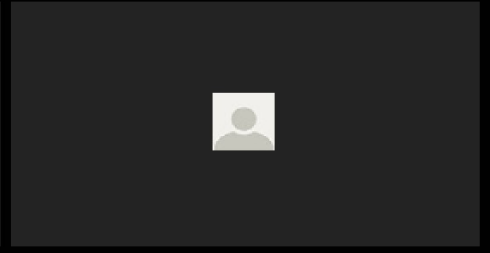
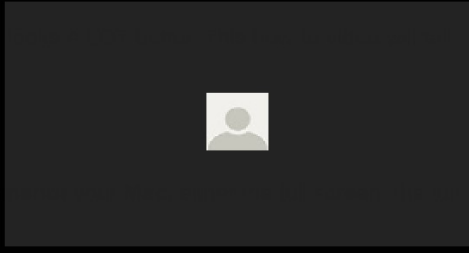
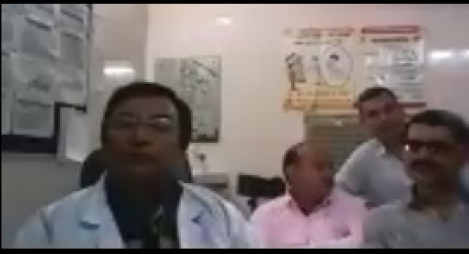






Vietnam NTP

Cần Thơ

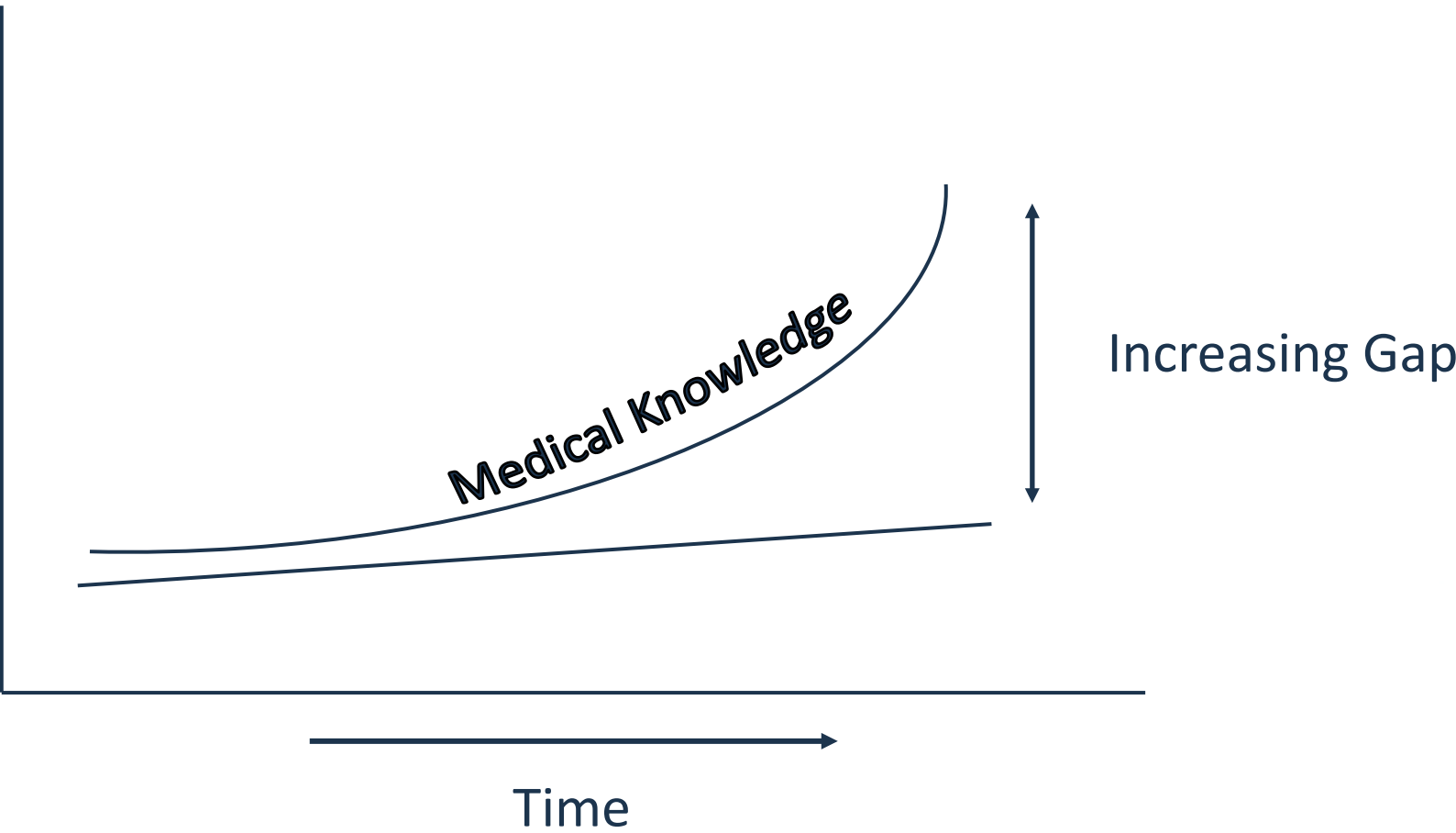


# Potential Benefits of the ECHO Model

- 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
- 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

**Democratize Knowledge**

# What The Mind Does Not Know The Eye Cannot See



“Expanding the Definition of Underserved Population”

# Cancer Incidence and Mortality Higher in Rural Areas

- Mortality rates higher for cervical, colorectal, kidney, lung, melanoma and oropharyngeal cancer

Blake, K.D., Moss, J.L., Gaysynsky, A., et al. *Cancer Epidemiol Biomarkers Prev.* 2017;26(7):992-7.

- Nonmetropolitan rural areas have lower average annual age-adjusted cancer incidence rates for all anatomic cancer sites combined but higher death rates than metropolitan areas. During 2006-2015, the annual age-adjusted death rates for all cancer sites combined decreased at a slower pace in nonmetropolitan areas (-1.0% per year) than in metropolitan areas (-1.6% per year), increasing the differences in these rates.

Henley, S.J., Anderson, R.N., Thomas, C.C., et al. *Morb Mortal Wkly Rep.* 2017;66(14):1-13.

# Cancer Incidence and Mortality Higher in Rural Areas



## Prevention

- Smoking cessation
- HPV vaccination
- Hepatitis B vaccination
- Sun safety & skin cancer prevention
- Community cancer intervention & prevention



## Screening

- Dermatology
- Breast cancer
- Cervical & colorectal cancer
- Oral & lung cancer
- Pathology best practices
- Training peer and community health advocates



## Treatment

- Hepatitis B and C
- Pain & toxicity management
- Tumor Boards
- Cancer care navigation
- Precision medicine & cancer genomics
- Palliative care
- Survivorship
- Clinical trial enrollment





# Cancer ECHO Hubs & Programs

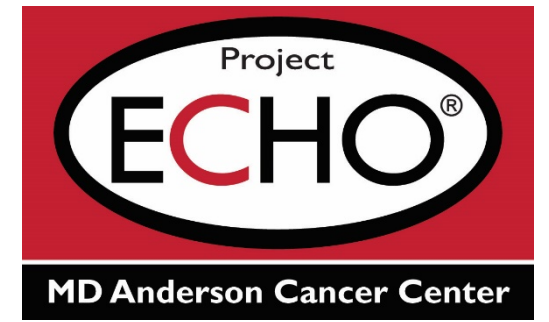


Cancer ECHO  
Hubs  
**24**

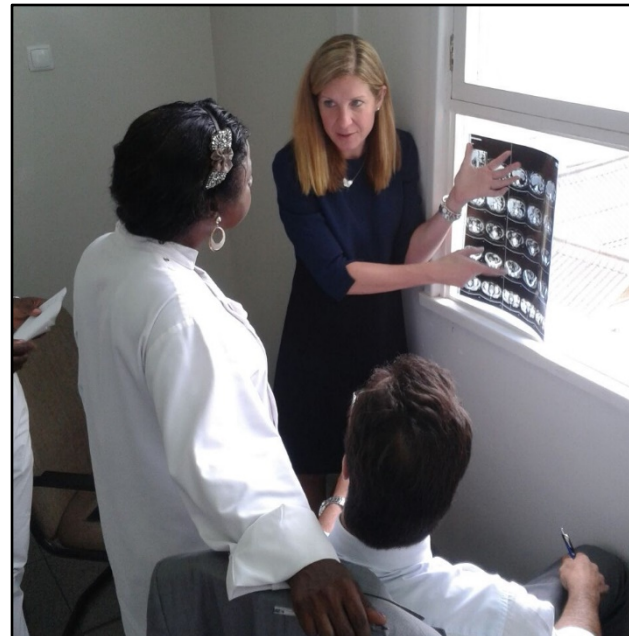
Countries  
**7**

Programs  
**65**

# University of Texas MD Anderson Cancer Center ECHO Superhub



- **Superhub: 2017, 11 active programs serving the United States, Latin America, and Africa**
- Championed by Ernest Hawk, MD, MPH – VP, Cancer Prevention, OVP, Cancer Prevention & Population Science and Kathleen Schmeler, MD – Associate Professor, Gynecologic Oncology & Reproductive Medicine
- Ellen Baker, MD, MPH – Director
- Melissa Lopez, MS – Program Manager



# American Cancer Society ECHO



- Lung Cancer Patient Support ECHO serving the United States
- ACS Advisory Group: co-chaired by Sarah Shafir, MPH, Strategic Director of State and National Systems, and Dawn Wiatrek, PhD, Strategic Director of Cancer Treatment Access.
- ECHOs in design:
  - Tobacco Cessation in Public Housing
  - HPV Vaccination & Screening

**Lung Cancer Patient Support ECHO Clinic:  
Helping You Provide The Best Care For Your Patients**

Comprehensive Lung Cancer Patient Support Program

Supported in part by the Bristol-Myers-Squibb Foundation

American Cancer Society®

Project ECHO®  
American Cancer Society®

## Additional Resources Available

**Participant Welcome Guide**

A multidisciplinary team of experts will be supporting the Lung Cancer Patient Support ECHO including the following facilitators:

Joseph Vignone, MD, MCh, MEd  
Director, Lung Cancer Program, University of Colorado Cancer Center

Joseph A. Sparano, MD  
Chairman, Cancer Therapy Evaluation Program, National Cancer Institute

Robert Smith, PhD  
Lead Director, Cancer Community and Family Engagement, American Cancer Society

**What is ECHO?**

We will expand a team of multidisciplinary experts (physicians, nurses, dietitians, social workers, etc.) to provide a virtual, goal-oriented, learning, and support environment for your patients.

Using the ECHO model, your team will receive expert advice and support from the ECHO team. This will help you provide the best care for your patients.

There are several benefits to participating in this program:

- Access to expert advice and support from the ECHO team
- Improved patient care and outcomes
- Increased knowledge and skills for your team
- Support for your patients and their families
- Access to the latest research and clinical trials
- Support for your team's professional development

For more information on how to participate in the Lung Cancer Patient Support ECHO, please contact your ECHO coordinator at [email address].

# Kimberley Hospital Complex ECHO



- **Lung Cancer & Mesothelioma ECHO serving the Norther Cape of South Africa**

- Addressing the entire Continuum of Care: Prevention, Screening, Diagnosis, Treatment, Survivorship and End of Life Care
- Led by Daniel Osei-Fofie, MD – Medical Director and Brenda Masuabi, Oncology Specialist Nurse – Program Manager and Facilitator



# National Cancer Institute – Center for Global Health ECHO

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**Active Programs:** Participation from ministries of health, NGOs, UICC, WHO, CDC, AORTIC, international foundations, cancer centers.

- **Asia-Pacific Economic Cooperation (APEC) ECHO:** Cancer Control Planning ECHO with work in Cervical Cancer Implementation of evidence based practices
  - Participants from China, Malaysia, Peru, Papua New Guinea, Thailand, Vietnam, Canada and the United States
- **Africa ECHO:** Cancer Control Planning ECHO
  - Participants from Botswana, Ethiopia, Kenya, Malawi, Namibia, Nigeria, Rwanda, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe

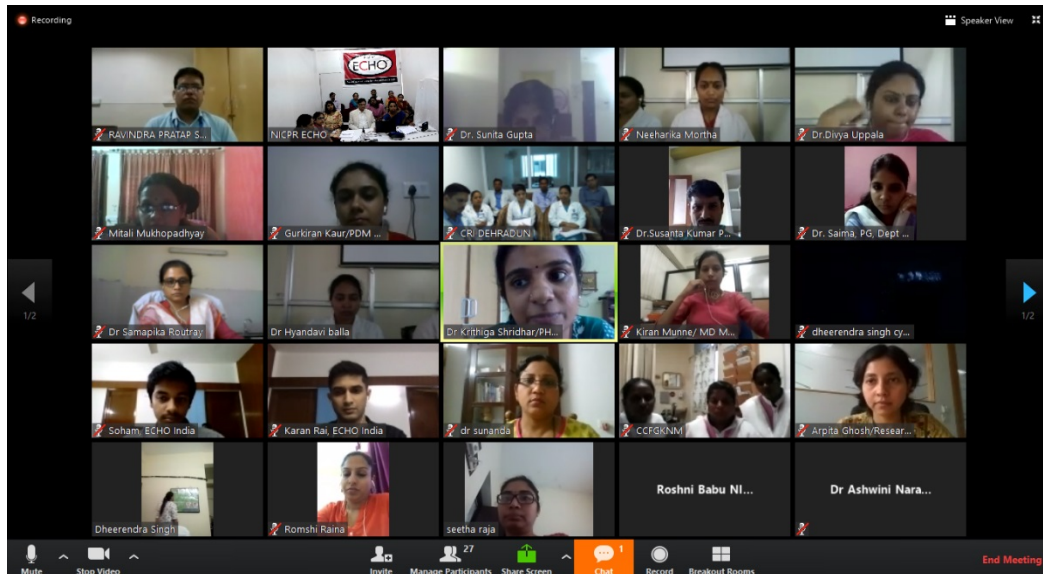
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## Cohort Program

- **Caribbean ECHO:** Cancer Control Planning specific to Cervical Cancer Caribbean ECHO Asian Pacific Economic Cooperation ECHO
  - Participants from Suriname, Jamaica, Trinidad and Tobago, Grenada, Barbados, Dominican Republic and Dominica

# National Institute of Cancer Prevention and Research (NICPR), Noida, India

- Goal: to build capacity in the area of cancer screening services among health care providers which will empower them to carry out screening independently, thereby enabling their services to be accessible to every eligible citizen in India.
- Cancer screening pilot project with Community Health Workers in 2016 led to two publications in the Journal of Global Oncology.
- Currently running Oral Cancer Screening and Tobacco Cessation ECHO for Dentists.



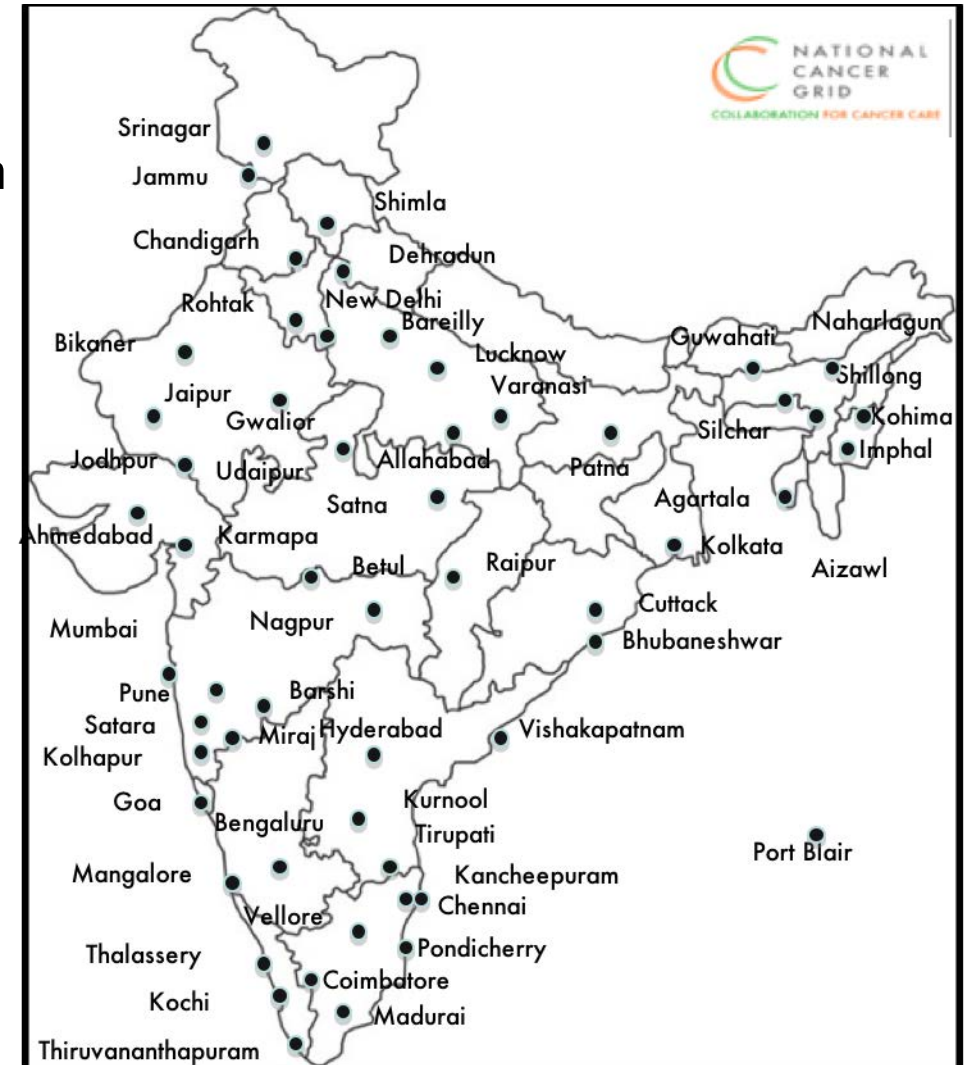
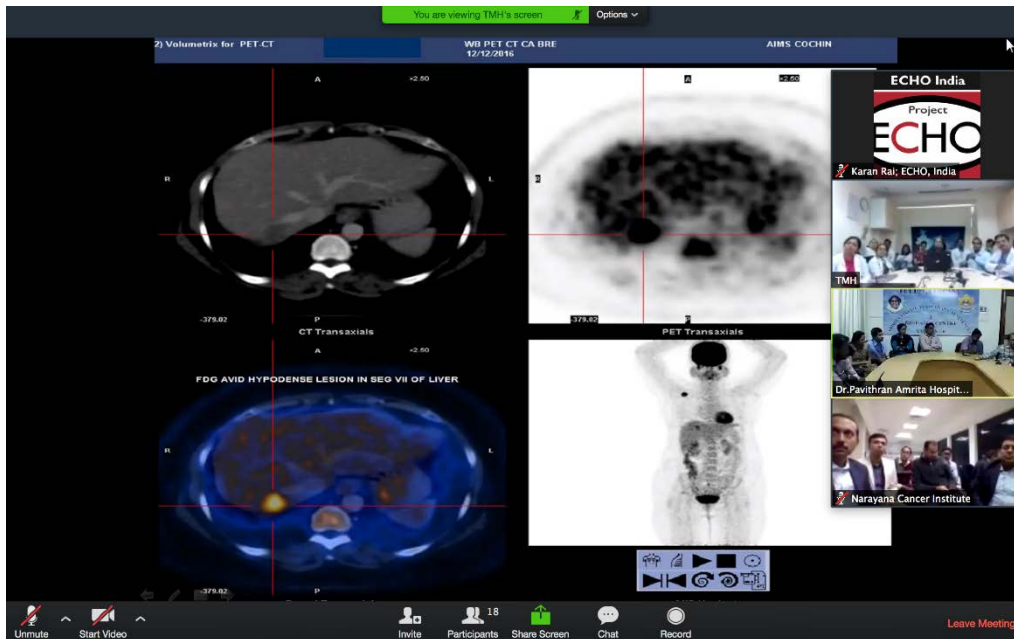
# Palliative Care Programs in India

1. Trivandrum Institute of Palliative Sciences, Thiruvananthapuram, India
  - Palliative care program launched January 2017 with 20-25 spokes per session.
2. Pain Relief and Palliative Care Society – Hyderabad, India
  - “No Pain Too Small” ECHO launched March 2018, connecting experts in pediatric palliative care with health care workers caring for children with life-limiting conditions across South Asia.



# Tata Memorial Hospital, Mumbai, India

- Virtual Tumour Board ECHO launched December 2016 including 100+ spokes from 20+ centers of excellence from the National Cancer Grid
- Currently running three Virtual Tumour Board ECHO programs with 30+ centers of excellence.



Courtesy Swasth India & Dr. C S Pramesh, TMH



# Cancer ECHO Replication Sites in the United States

- **Alaska Native Health Consortium** – Anchorage, AK
  - Palliative Care with Community Health Aides
- **American Academy of Pediatrics** – Itasca, IL
  - HPV Screening and Quality Improvement
- **American Cancer Society, Inc.** – Atlanta, GA
  - Lung Cancer Patient Support
- **Center for Asian Health Equity** – Chicago, IL
  - Colorectal Cancer Screening
- **Charleston Area Medical Center** – Charleston, WV
  - Breast Cancer Survivorship
- **Four Seasons Compassion for Life** – Flat Rock, NC
  - Palliative Care
- **International Gynecologic Cancer Society** – Louisville, KY
  - Management of Gynecologic Cancers (Belarus),  
Management of Gynecologic Cancers (Vietnam),  
Management of Gynecologic Cancers (Kenya),  
Management of Gynecologic Cancers (Ethiopia),  
Management of Gynecologic Cancers (Mozambique),  
Management of Gynecologic Cancers (Kazakhstan),  
Management of Gynecologic Cancers (Caribbean),
- **Missouri Telehealth Network** – Columbia, MO
  - Dermatology & Skin Cancer Prevention for PCPs
- **National Cancer Institute – Center for Global Health** – Bethesda, MD
  - Cancer Control Planning & Cervical Cancer (APEC),  
Cancer Control Planning (Africa)
- **University of Colorado School of Public Health** – Aurora, CO
  - Cancer Survivorship
- **University of Rochester Medical Center** – Rochester, NY
  - Palliative Care

# Cancer ECHO Replication Sites in the United States

- **University of Texas MD Anderson: Superhub** – Houston, TX
  - Cervical Cancer Prevention in the Rio Grande Valley
  - Community Cancer Survivorship for CHWs
  - Early Diagnosis of Melanoma Using Dermoscopy
  - Survivorship Training for Family Medicine Residents
  - Tobacco Education and Cessation in the Health System (TEACH)
  - Palliative Care in Africa (PACA)
  - Cervical Cancer Management (Latin America)
  - Pathology (Zambia)
  - Pharmacy (Zambia, Tanzania)
  - Radiation (Zambia)
  - Mozambique: Breast Cancer Management, Cervical Cancer Management, Cancer Hematology, Cervical Cancer Management, Head & Neck Cancer Management

# Cancer ECHO Replication Sites Worldwide

- **Highland Hospice** – Inverness, Scotland
  - Community Pharmacists, Nurse Specialists, Emergency Practitioners, Rural General Practitioners
- **Hospice UK** – Kings Cross, England
  - Care Homes and Palliative Care
- **Instituto de Oncología Ángel H. Roffo** – Buenos Aires, Argentina
  - Head & Neck Cancer
- **Instituto Alexander Fleming** – Buenos Aires, Argentina
  - Colorectal Cancer VirtualTumor Boards
- **Kimberley Hospital** – Northern Cape, South Africa
  - Lung Cancer & Mesothelioma
- **National Institute for Mental Health and Neurosciences** – Bengaluru, India
  - Tobacco Cessation
- **National Institute of Cancer Prevention & Research** – New Delhi, India
  - Oral, Breast and Cervical Cancer Prevention and Screening, Virtual Advanced Cancer Screening Training Program for Dentists

# Cancer ECHO Replication Sites Worldwide

- **Northern Ireland Hospice** – Newtownabbey, Northern Ireland
  - Nursing Home NI Reach & Palliative Care
- **Pain Relief and Palliative Care Society** – Hyderabad, India
  - Palliative Care
- **Tata Memorial Centre** – Mumbai, India
  - Virtual Tumor Boards
- **The Hospital for Sick Children** – Toronto, Canada
  - Pediatric Palliative Care
- **Trivandrum Institute of Palliative Sciences** – Thiruvananthapuram, India
  - Palliative Care, Chronic Pain
- **Universidad de la República** – Montevideo, Uruguay
  - Cervical Cancer, Virus del Papiloma Humano (HPV), Cuidados Paliativos Pediatricos (Pediatric Palliative Care), Cuidados Paliativos de Adultos (Adult Palliative Care)

# The “ECHO Act” (Expanding Capacity for Health Outcomes Act)

Passed House/Senate by unanimous vote, November-December 2016

Signed into law by President Barack Obama, December 2016

Asks the Secretary of Health and Human Services to study the impact of Project ECHO on:

**Conditions** Mental and substance use disorders, chronic diseases and conditions, prenatal and maternal health, pediatric care, pain management, and palliative care

**Workforce** Implementation of public health programs, including those related to disease prevention, infectious disease outbreaks, and public health surveillance

**Public Health** Health care workforce issues, such as specialty care shortages and primary care workforce recruitment, retention, and support for lifelong learning

**Rural and Underserved Populations** Delivery of health care services in rural areas, frontier areas, health professional shortage areas, and medically underserved areas, and to medically underserved populations and Native Americans



Utah

- Hatch(R)



Hawaii

- Schatz (D)

# Co-sponsors



Texas

- Burgess(R)



California

- Matsui(D)



Louisiana

- Sen. Bill Cassidy (R)



New Mexico

- Sen. Martin Heinrich (D)
- Sen. Tom Udall (D)
- Rep. Michelle Lujan Grisham (D)



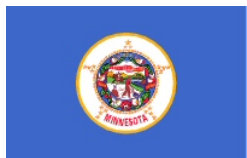
Massachusetts

- Sen. Elizabeth Warren (D)



Oklahoma

- Sen. James Inhofe (R)



Minnesota

- Sen. Al Franken (D)



Tennessee

- Sen. Lamar Alexander (R)



Mississippi

- Sen. Roger Wicker (R)



Texas

- Sen. John Cornyn (R)
- Rep. Kay Granger (R)



Washington

- Sen. Maria Cantwell (D)
- Sen. Patty Murray (D)



Montana

- Sen. Steve Daines (R)
- Sen. Jon Tester (D)



Virginia

- Sen. Mark Warner (D)



Wyoming

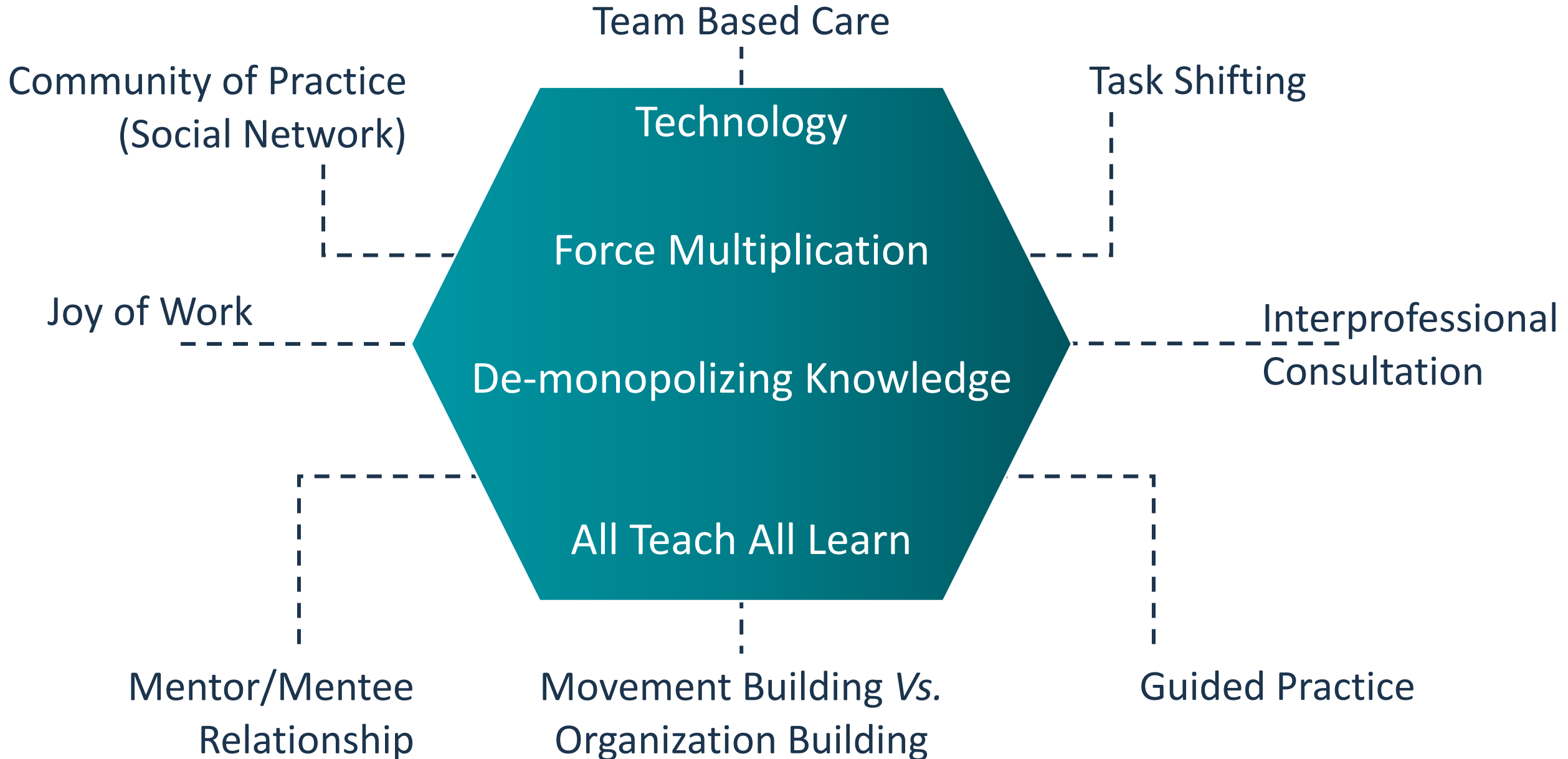
- Sen. John Barrasso (R)

# The ECHO Team



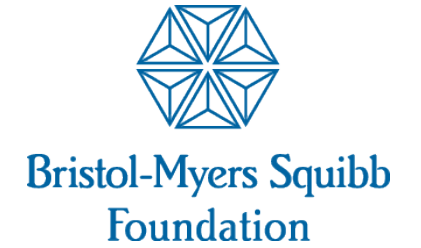


# What Makes ECHO Work?





# Thanks to our supporters



# Join Us

Be part of the movement to  
improve 1 billion lives

For more information

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