Arizona Center for Rural Health State Office of Rural Health Webinar Series

Partners:







THE UNIVERSITY OF ARIZONA MEL & ENID ZUCKERMAN COLLEGE OF PUBLIC HEALTH Center for Rural Health

Webinar notes:

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THE UNIVERSITY OF ARIZONA MEL & ENID ZUCKERMAN COLLEGE OF PUBLIC HEALTH Center for Rural Health



Adrienne Madhavpeddi Director of ASU's Project ECHO programs

Project ECHO: Improving Health in Arizona, Fast



Mel & ENID ZUCKERMAN COLLEGE OF PUBLIC HEALTH

Project ECHO

Let's improve health in Arizona, and let's do it fast.



Arizona State University



Adrienne Madhavpeddi, MS Director, ASU Project ECHO College of Health Solutions Arizona State University

The 13 biggest threats to global health, according to the WHO¹

- 1. Climate crisis
- Healthcare delivery in areas of conflict & crisis
- 3. Healthcare equity
- 4. Access to treatments
- 5. Infectious disease prevention
- 6. Epidemic preparedness

7. Unsafe products

- 8. Underinvestment in health workers
- 9. Adolescent safety
- 10. Improving public trust of healthcare workers
- 11. Capitalizing on technological advancements
- 12. Threat of anti-microbial resistance & other medicines
- 13. Healthcare sanitation

Threats to accessing healthcare the United States



year age difference in life expectancy between the highest & lowest performing counties in the US²



medically underserved areas (MUAs) and medically underserved populations (MUPs) in the United States³



health professional shortage areas (HPSAs) in the United States³



PCPs per 100,000 population in urban vs. rural America⁴

A path to improve healthcare disparities



activities & program outcomes



CME Activity Types, Definitions, and Size of CME Enterprise in the United States (2021)⁵

	Activity Type	Definition/Activity Characteristics	Number of Activities	AMA PRA Category 1 Credits	Physician Interactions	Other Learner Interactions
	Enduring Material	Independent learning materials design as self-study activities	89,389	191,756	9,982,167	20,649,246
	Live Course	Takes place in real time; must involve two or more physicians; provide opportunity for real time, face-to-face interaction between mentors and learners	79,673	392,432	1,650,933	2,943,286
	Regularly Scheduled Series	Live activity; planned as a series with multiple, ongoing sessions; session content varies (e.g. Project ECHO)	26,766	544,940	6,225,162	2,979,231
	Journal-Based CME	Learner reads one or more articles from a peer-reviewed, professional journal	4,930	9,022	1,310,201	231,995
	Other/blended learning	Hybrid, new, or unique approaches that do not fall into any of the other activity types	2,035	36,880	340,945	207,401
	Performance Improvement	Structured, long term projects; participant learns specific performance measures, retrospectively assesses practice, applies performance measures, reevaluates performance	444	9,063	169,288	10,696
	Committee Learning	Live participation in a committee process centered upon a subject which (if delivered in another CME format) would be considered an appropriate CME activity	204	1,975	9,632	9,309
	Manuscript Review	Critical review of assigned journal manuscript during pre-publication process	177	2,305	91,445	4,434
	Test-Item Writing	Learning structured through contributions to the development of examinations; peer-reviewed self-assessment activities by researching, drafting, and defending potential test-items	132	1,326	2,495	115
	Internet Searching and Learning	Self-directed research, online learning; content must be vetted by accredited CME provider	63	2,143	1,953,344	1,021,438
	Learning from Teaching	Facilitation of practice-based learning and improvement; practice can be defined as professional teaching practice, clinical practice, or research practice	48	783	3,294	284



theory alignment

with continuing medical education activities

- 01 **Deliberate practice**⁶
- ⁰² Social cognitive & self-determination⁷
- 03 Situated learning & communities of practice⁸
- 04 Adaptive expertise^{9,10}
- 05 Experiential learning (Kolb's cycle)^{11,12}
 - Diffusion of innovation¹³

06

tele-mentoring

integrates 88% of theoretical elements, while live courses integrate 33% and enduring material 27%, respectively.





understanding the relationship between CME activities & program outcomes

Project ECHO

(extension for community healthcare outcomes)



Our mission is to **democratize medical knowledge and amplify capacity** to get best practice care to underserved people all over the world.¹⁴



All teach, all learn.

Subject matter experts connect virtually with local primary care teams across Arizona in biweekly teleECHO sessions.



Moving knowledge, not people.

Knowledge is shared across the learning network through didactic presentations and case-based learning.



Patients get healthcare close to home.

As knowledge and confidence grows among primary care teams, patient's get increased access to the care they need within their local community.



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 Jenkusky, M.D., Miriam Komaromy, M.D., and Clifford Qualls, Ph.D.

Program growth since 2003¹⁸



Project ECHO Programs | 2545 Programs | 193 Countries

ECHO BY THE NUMBERS AS OF YEAR END 2022¹⁸







anatomy of an ECHO



lessen healthcare disparities

continuing medical education amplify capacity of local healthcare providers

improved access to healthcare services

understanding the relationship between CME activities & program outcomes



- 1. Behavioral Health Integration
- 2. Dermoscopy
- 3. Human Trafficking*
- 4. Liver Disease
- 5. Medications for Opioid-Use Disorder
- 6. Nursing Home Covid-19 Action Network*
- 7. Palliative Care
- 8. Substance Use Disorder Treatment for Women
- 9. Veteran Community Care
- 10. Long COVID

ASU's education focused ECHO programs

- 1. Business Practices for Child Care Programs*
- 2. Strengthening Business Practices in Child Care Programs*
- 3. Early Language and Literacy*
- 4. Advancing Equity in Early Childhood Settings*
- Teaching Phonological Awareness in Early Childhood Program*
- 6. Supporting the Emotional Well-Being of Teachers and Children in Early Childhood Environments*
- 7. Developmentally Appropriate Practices (DAP)
- 8. Literacy Rich Center or Classroom Environments
- 9. Institutes for Higher Education (IHE) Pre-Service Faculty
- 10. Building Expertise with Early Childhood Professionals
- 11. Supporting Collaborative Services in Schools

supported by 63 subject matter experts from 39 community partner organizations...



funded with over \$2.1 million in external grants and sponsorship from...



Agency for Healthcare Research and Quality

CCS

lealth Care Cost Containment System



An Independent Licensee of the Blue Cross Blue Shield Association

MAR COPA

COUNTY

PUBLIC HEALTH



MOLINA[®] HEALTHCARE











American Medical Colleges

Association of

summary of program outcomes

7 ECHO programs* (January 1, 2020 – December 31, 2022)





12,184Iearning
hours



average session satisfaction Rate** (n=2,923)

*Nursing Home ECHO and Liver Disease ECHO program data not included. **5 point Likert scale (5=extremely satisfied, 1= extremely dissatisfied)

Medications for Opioid Use Disorder



Funded by: Blue Cross Blue Shield of Arizona & AHCCCS

need

Nearly 108,000 people died of drug overdoses in 2021, two-thirds of which involved fentanyl or another synthetic opioid.²⁰ However, only 3% of waivered providers are treating OUD patients, citing lack of knowledge on MOUD and continued stigma surrounding patients with OUD.

program aim

Establish a state-wide collaborative partnership to scale evidence-based education and practice in the management of patients with opioid use disorder.



clinical

- Diagnosing OUD
- Medications for OUD
- Precipitated withdrawal
- MOUD in pregnant & post-partum women
- MOUD treatment considerations for surgical patients
- Pain management
- Treating OUD with mental health comorbidities
- Suicide prevention
- Treating LGBTQ patients
- OUD in adolescents
- Infectious disease & injection drug use

curriculum topics

non-clinical

Stigma

Historical context of racism in OUD policy

Quarterly research updates

- Engaging families in OUD treatment
- OUD in rural Arizona
- Provider biases & impacts on patient care



subject matter experts

Matt Evans, MD Valle Del Sol

Beth Tranen, MD VA Health System Tucson

Michael Dekker, DO Southwest Network

Charrisa Riggs, FNP Community Medical Services

Taylor Riedley, PharmD VA Health System Tucson

Natasha Mendoza, PhD, MSW ASU School of Social Work

Basia Andraka-Christou, PhD, JD

University of Central Florida School of Medicine

Christopher Abert Southwest Recovery Network

Summary statistics of the Medications for Opioid Use Disorder ECHO program

February 1, 2020 - December 31, 2022

Program Measure	Count
Total Sessions	71
Average Attendance per Session	39.0
Total Unique Individual Attendees	587
Total Learning Hours	2,768
Mean Session Satisfaction (2022)*	4.68

*(n=455); 5-point Likert scale (5=extremely satisfied; 1=extremely dissatisfied)

Program outcomes

January 1, 2022 – December 31, 2022

MOUD ECHO Participant Self-Reported Changes in Knowledge & Confidence

Self-reported change among MOUD ECHO participants (n=47)	Before Attending	After Attending	Change	p Value
Rate your knowledge about medications to treat opioid use disorder	3.09	4.00	0.91	<.001
Rate your confidence to provide comprehensive opioid use disorder treatment	2.95	3.70	0.75	<.001

*5-point Likert scale (5=extremely high; 1=extremely low)

MOUD ECHO Participant Self-Reported Changes in Clinician Wellness



Human Trafficking ECHO Kaitlyn Felix, MS



Funded by: Molina Healthcare

need

When surveyed, 92% of medical providers in Arizona report having little or very little knowledge on how to effectively treat victims of trafficking. However, these providers are often the first point of contact for victims when they seek care, leaving a large gap for potential lifesaving interventions.

program aim

Equip medical providers with the necessary awareness, tools, and confidence to screen, identify, and connect patients affected by human trafficking to appropriate resources from the clinical setting.



clinical

- Screening tools
- Mandatory reporting & patient safety
- Trauma informed care
- Labor trafficking vs. sex trafficking
- Treating pediatric populations
- Provider-patient communication strategies
- Medical forensic exam
- Referring patients of trafficking
- LGBTQ populations

curriculum topics

non-clinical

- Definitions & distinctions (dispelling myths)
- Key players in trafficking
- Community-based resources
- Vicarious trauma
- · Law enforcement interactions
- Intersection of medical care and the legal system



End of session: grounding techniques

subject matter experts

Samantha Mendez, MPH, BSN, SANE HonorHealth

Jenny Anand, BSN, SANE University of North Carolina (UNC) Health

Christopher Anderson, MA Peace Officer, Queen Creek, AZ

Darwyn Chern, MD Copa Health

Gregory Gale, MD Molina Healthcare

Matthew Johnson Alpha Star Aviation Flight Paramedics

Summary statistics of the Human Trafficking ECHO program

January 1, 2021 – December 31, 2022

Program Measure	Count
Total Sessions	60
Average Attendance per Session	44.8
Total Unique Individual Attendees	532
Total Learning Hours	2,681
Mean Session Satisfaction* (n=1,503)	4.71

*5-point Likert scale (5=extremely satisfied; 1=extremely dissatisfied)

program outcomes

January 1, 2021 – December 31, 2022

Self-Reported Changes in Clinician Wellness (n=86)



*5-point Likert scale (5=extremely high; 1=extremely low)

Scalability.

The ECHO model has proven to be scalable across disciplines, health systems, and geographic regions.

02

01

Replicability.

Project ECHO has proven to be an effective model for delivering evidencebased, quality continuing medical education to simultaneously increase knowledge and confidence to an interdisciplinary audience.

03

Responsive.

The model proved to be highly responsive in times of rapidly changing healthcare environments, acting as a centralized resource for medical providers to obtain clearly outlined, evidence-based information.

04

Emerging.

Project ECHO is still emerging as a thoroughly understood model. Several integral elements have struggled to keep pace with overall program growth, including 1) A comprehensive body of research outlining its efficacy to improve patient outcomes and clinician well-being; and 2) Effective instruments to measure program fidelity

Arizona State University Project ECHO



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