Leveraging ECHO for Individuals with Developmental Disabilities

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What is ECHO?

Project ECHO
(Extension for Community Healthcare Outcomes)
"Moving knowledge not patients"

MISSION of ECHO

Democratize knowledge and get best practice care to underserved people all over the world.

*"Right knowledge at right place at right time"*

Principles of the ECHO Model

A — Amplification - Use *Technology* to leverage scarce resources

B — Share **Best Practices** to reduce disparity

C — Case Based Learning to master complexity

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

Key ECHO Features

- A virtual learning network of participants; "community of practice"
- Bridge gap between end of formal education and practice
- Connection to specialization in various diseases
- Moving specialty expertise to primary care community clinicians
- Real-time access to experts and each other
- Increase confidence
- Expand knowledge
- Reduce isolation
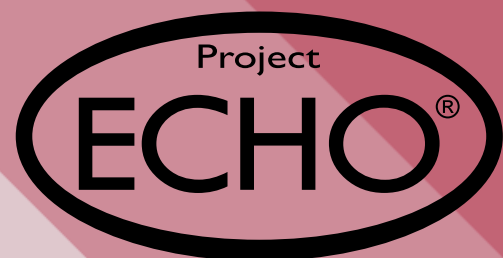- Reduce inequalities
- Reduce patient transfers

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The ECHO model is not traditional telemedicine
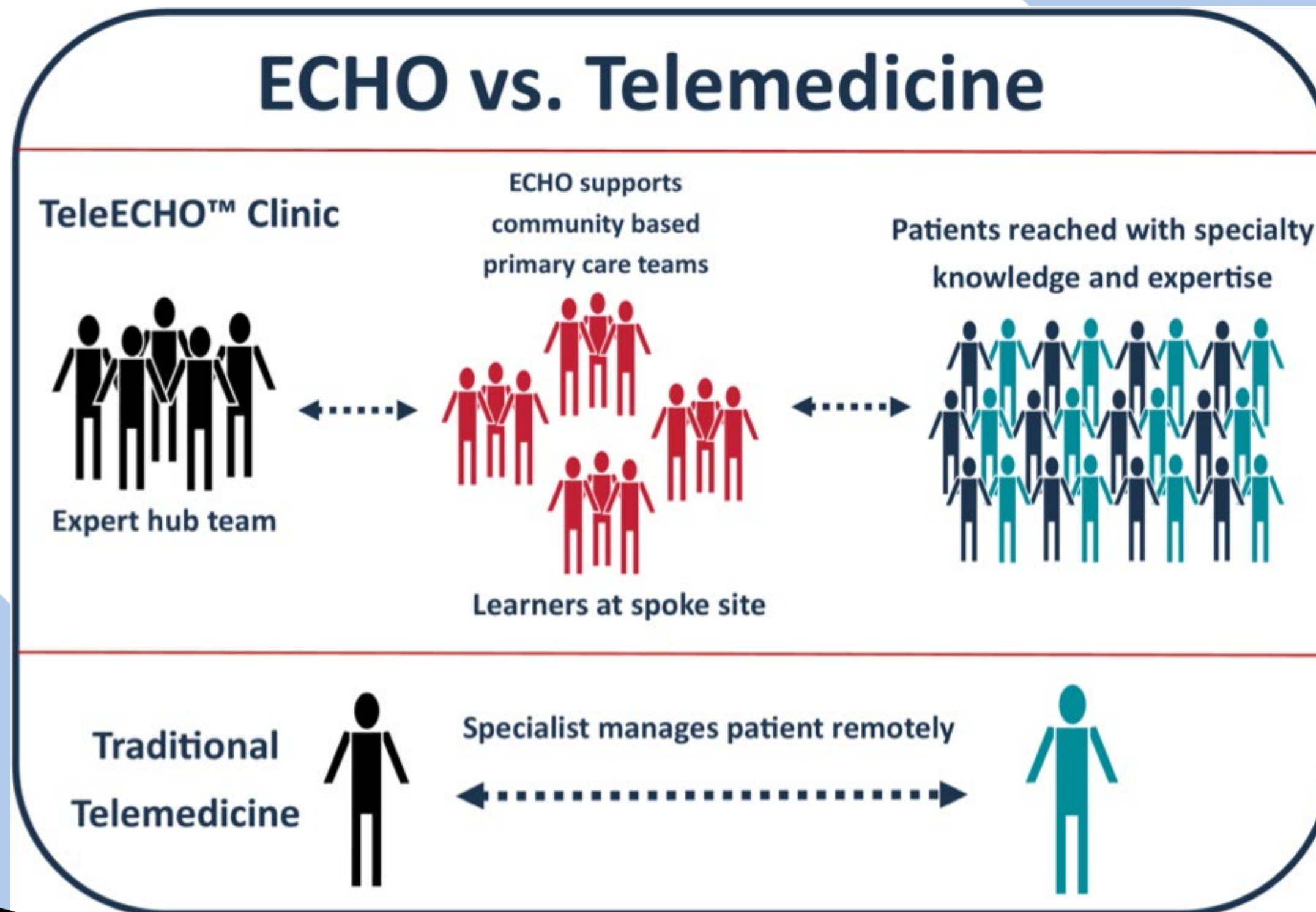
ALL TEACH ALL LEARN

Multidisciplinary team of subject matter experts

Community based primary care teams

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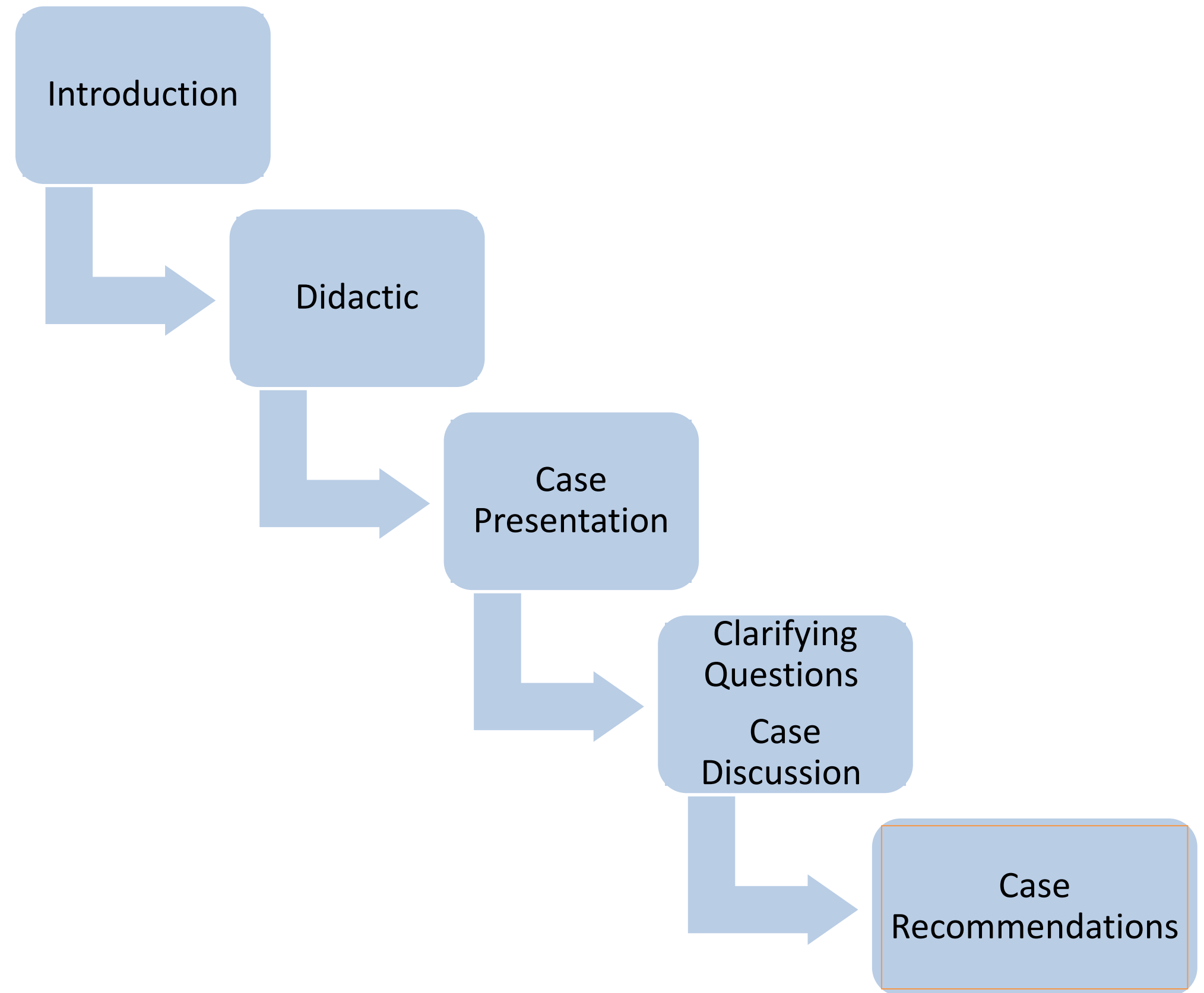
How does it work?

- HIPAA compliant videoconference technology – Zoom
- Professional facilitation
- Meets for 60 minutes over lunch – start and end time very tightly observed
- Participants present a de-identified patient case
- Discussion and recommendations
- Didactic presentation – current research and "best practices"

Objectives of ECHO

Sharing knowledge so that community members in underserved communities can receive high-quality care/services

Improve workforce capacity

Improve access to specialized care and treatment

Improve access to multidisciplinary care

Share best practices

TeleECHO Participants

- Physicians
- Physician Assistant
- APRNs
- RNs
- Administrators
- EMTs
- Dentists
- Psychologists
- Therapists
- Physical Therapists
- Occupational Therapists
- Many others
- INTERDISCIPLINARY!!

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Numerous IDD ECHOs Nationally

- University of Missouri – Show-Me-ECHO

  https://showmeecho.org/clinics/developmental-disabilities/

- University of North Dakota – Center for Rural Health

  https://ruralhealth.und.edu/videos/echo/intellectual-developmental-disability

- University of Washington – ECHO IDD Wraparound

  https://uw-ctu.org/echo/echo-idd-wraparound-impact/

- University of Rochester Medical Center – ECHO FASD

  https://www.urmc.rochester.edu/strong-center-developmental-disabilities/programs/echo-fasd.aspx

- University of Kansas Medical Center

  https://www.kumc.edu/community-engagement/project-echo/past-teleecho-series.html

KUMC Project ECHO
Beyond the Developmental Screen
June 2019

- ✓ Importance of early screening, assessment and referrals
- ✓ Developmental screening efforts in Kansas
- ✓ Strategies to conduct developmental screenings
- ✓ Value of referrals to intervention and diagnostic services
- ✓ Communicating across systems to families
- ✓ Connecting families to necessary resources and services

Heather Smith, MPH
Director, Special Health Services, KDHE
Jo Ann Matthews, Social Worker
KUMC-Wichita

Kathleen Davis, Ph.D., MSEd
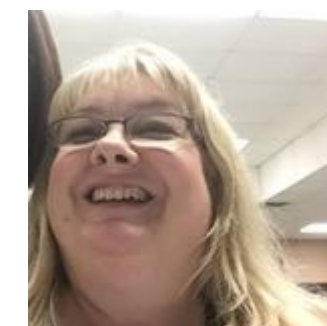Associate Professor, KU Pediatrics

Erica Figueroa, Research Project Coordinator
Center for Public Partnership and Research KU

Debra Birdwell, RN
Nurse Manager,
KUMC-W
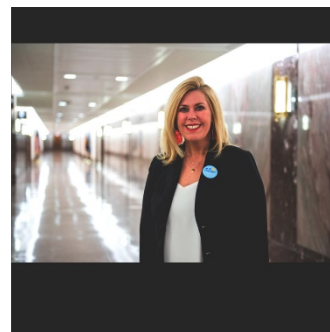
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KUMC Project ECHO

2021

AHRQ National Nursing Home ECHO (KUCTT): 3 Cohorts reaching 115 nursing home teams
Cancer Survivorship ECHO (2020) (MCA): 1 clinic reaching 18 individuals
Cultural Sensitivity in Community-Based Care (KUCTT): 4 clinics reaching 17 individuals
KanSurvive - Cohort 1 (MCA): 4 clinics reaching 17 individuals
Substance Use Disorder (2021) (KUCTT): 5 clinics reaching 134 individuals
Telehealth ECHO: Sustaining Telehealth Beyond COVID-19 (KUCTT): 7 clinics reaching 95 individuals

2020

AHRQ National Nursing Home ECHO (KUCTT): 3 Cohorts reaching 115 nursing home teams
Cancer Survivorship COVID-19 Mini-Series (2020) (MCA): 3 clinics reaching 40 individuals
Cancer Survivorship ECHO (2020) (MCA): 8 clinics (8.00 hours) reaching 65 individuals
KSKidsMAP (KUCTT): 17 clinics reaching 50 individuals
Navigating Pain RX (2020) (KUCTT): 5 clinics reaching 100 individuals
Substance Use Disorder (2020) (KUCTT): 5 clinics reaching 141 individuals
TeleHealth COVID (2020) (KUCTT): 4 clinics reaching by 237 individuals
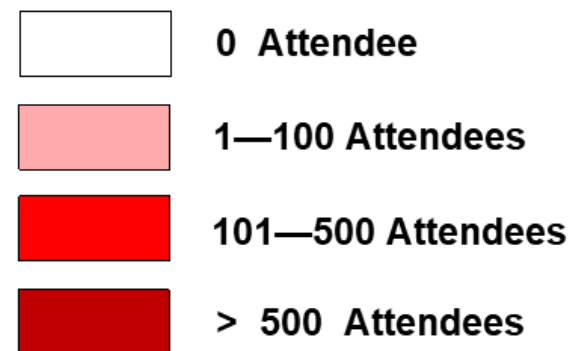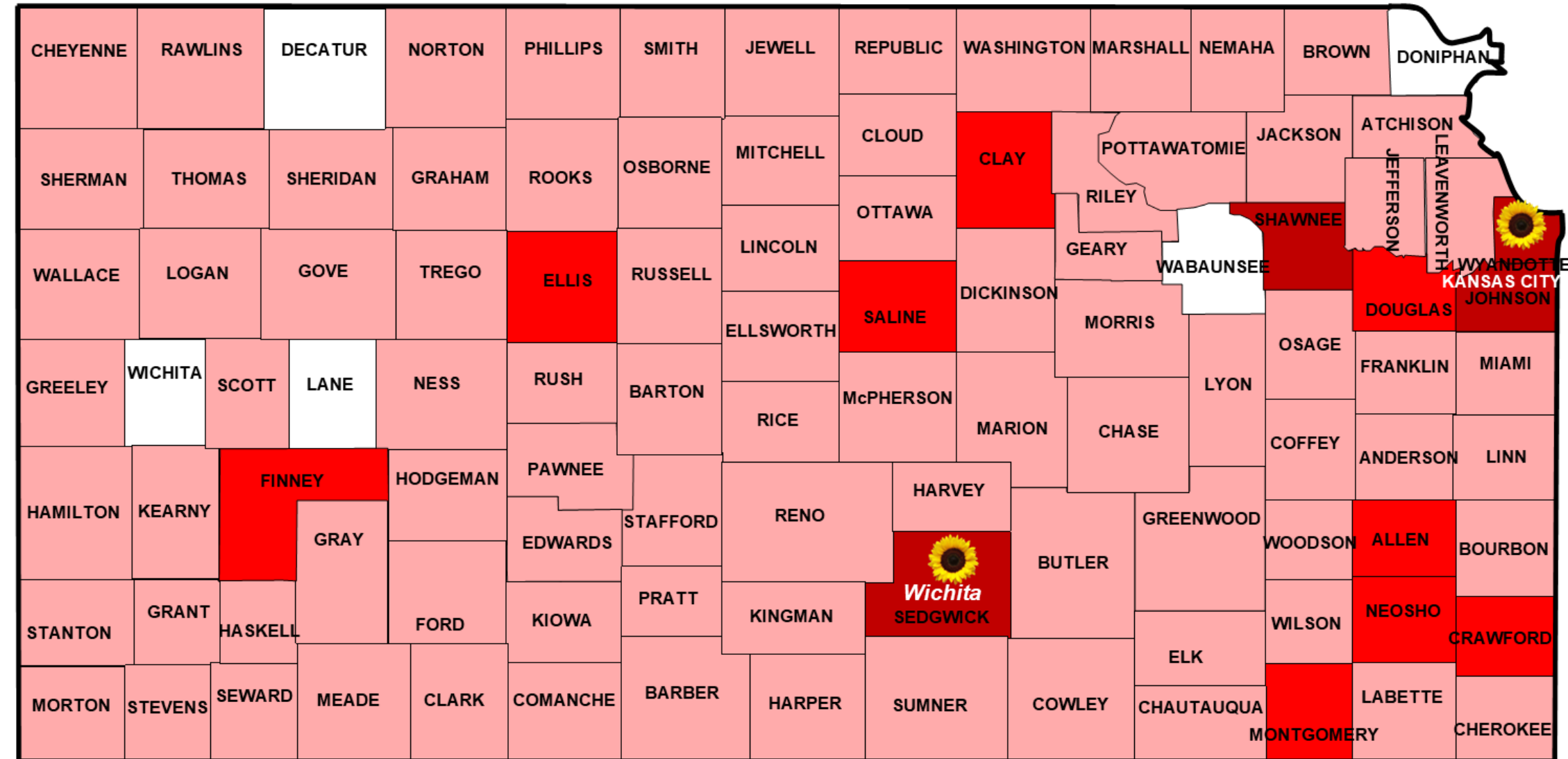**Telehealth Lunch Bytes (KUCTT):** 6 clinics reaching 139 individuals

2019

Antibiotic Stewardship (2019) (KUCTT): 4 Clinics reaching 135 individuals
Beyond the Developmental Screen (2019) (KUCTT): 4 clinics reaching 104 individuals
ePOST-BC ECHO (2019) (MCA): 5 clinics reaching 46 individuals
FDA Opioid Awareness Training (KUCTT): 1 clinic reaching 34 individuals
Kansas CAREs (2019) (KUCTT): 1 clinic reaching 20 individuals
KS Connecting Communities (2019) (KUCTT): 4 clinics reaching 103 individuals
Pain RX (2019) (KUCTT): 6 clinics reaching 102 individuals
Stressed Out (2019) (KUCTT): 4 clinics reaching 133 individuals

2018

Problem Behaviors (2018) Evaluation, Diagnosis, Children, Differential Diagnosis, Medication, ASD (Autism Spectrum Disorder), Psychotherapy, Risk Assessment, Suicide
Autism (2018) Autism Spectrum Disorder (ASD), Screening, School, Co-occurring problems
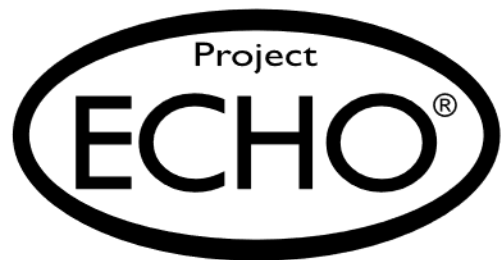
Sample of ECHO Impact in Kansas

"Your ECHO team was fantastic and a beacon of hope for me during our transition. I looked forward to seeing everyone on the ECHO team at noon on Fridays over the summer…"

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ECHO Research

- Significant amount of literature on <u>process</u> outcomes

- Limited research on <u>patient</u> outcomes

- Process outcomes most often include such domains as knowledge gained, clinician confidence in treating the disorder, clinician self-efficacy, satisfaction with model, self-reports of learning from colleagues

- Most common methods are pre-post measures or qualitative interviews; few randomized or comparison trials

- Not much published in context of IDD ECHOs

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7007502/

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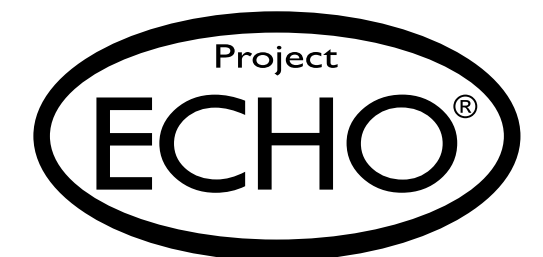The University of Kansas

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Study Example

- Partnership between faculty at the University of Washington and National Multiple Sclerosis Society

- 13 practice sites with 24 multiple sclerosis physicians

- Participants completed an "outcome survey"

- 10 out of 15 participants indicated:
  - ✓ they were more confident in treating patients with MS
  - ✓ they were satisfied with the training
  - ✓ felt better able to care for their patients
  - ✓ had made changes in their treatment based on the case consultations and didactic content
  - ✓ they valued the case studies and case-based didactics and learned from each other as well as from the team

- *International Journal of Multiple Sclerosis Care*, 2017

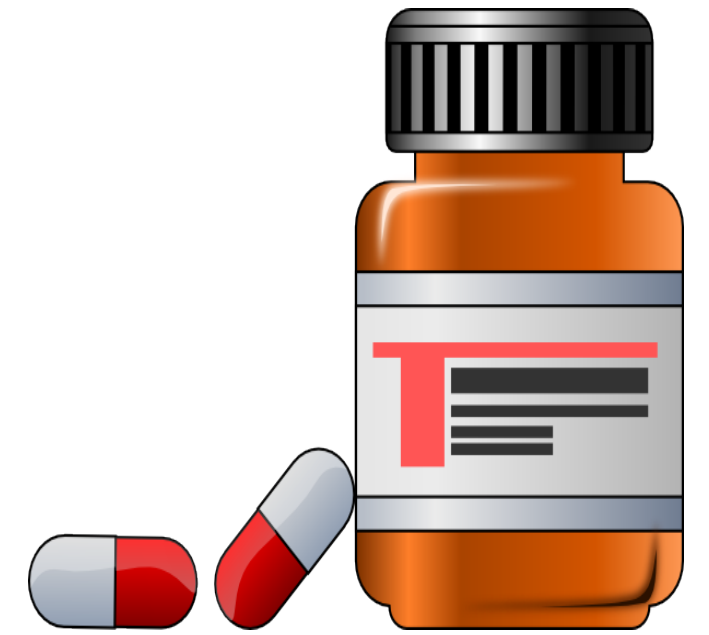https://meridian.allenpress.com/ijmsc/article/19/6/283/33419/Project-Extension-for-Community-Healthcare

Strongly agree ☐

Agree ✓

Disagree ☐

...ly disagree ☐

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Pain Management ECHO Comparison Study

- 2 multi-site FQHCs in Connecticut and Arizona
- 10 primary care providers in each condition
- Primary care providers attended 48 weekly Project ECHO Pain sessions between January and December 2013; control group received no condition
- Surveys and focus groups assessed providers' pain-related knowledge and self-efficacy.
- Electronic health record data were analyzed to evaluate opioid prescribing and specialty referrals.
- Compared with control, primary care providers in the intervention had a significantly greater increase in pain-related knowledge and self-efficacy.
- Providers who attended ECHO were more likely to use formal assessment tools and opioid agreements and refer to behavioral health and physical therapy compared with control providers.
- Opioid prescribing decreased significantly more among providers in the intervention compared with those in the control group.

https://psycnet.apa.org/record/2017-46211-007

Autism Study Example

- Conducted in North Carolina through the University of North Carolina

- 51 mental health providers in a 6-month ECHO series

- Pre and post measures

- Goals were to: 1) provide psychoeducation about autism symptoms and co-occurring mental health diagnoses and (2) strategies for implementing evidence-based interventions (e.g. CBT) tailored to meet the needs of autistic clients.

- Findings included significant increases in:
  - ✓ provider knowledge of autism spectrum disorders
  - ✓ self-efficacy and problem-solving
  - ✓ Participants reported high satisfaction with their experience

- Published in the journal *Autism, 2021*

  https://journals.sagepub.com/doi/pdf/10.1177/13623613211028000
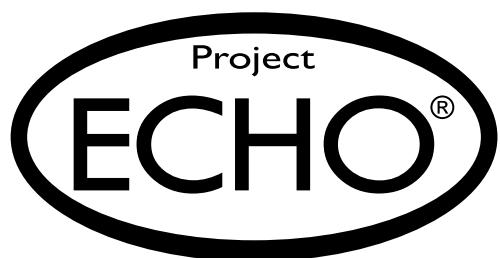
Closer to Home

- Pilot test for training primary care providers in best-practice care for ASD using ECHO

- 6-month ECHO Autism consisted of 12 biweekly clinics focused on screening and identification of ASD symptoms and management of medical and psychiatric comorbidities.

- Participants completed measures of practice behavior and self-efficacy in screening and management of children with ASD at baseline (pretest) and after 6 months of ECHO Autism (posttest).

- Statistically significant improvements were observed in self-efficacy, in adherence to ASD screening guidelines, and in use of ASD-specific resources. Participants also reported high satisfaction with the program.

- *Clinical Pediatrics* journal, 2016

https://journals.sagepub.com/doi/abs/10.1177/0009922816648288

Challenges

- Challenging for providers to spend an hour in ECHO sessions
- Labor and cost intensive to produce a session
- Getting community providers to present cases can be difficult
- Some participants are uncomfortable being on camera but is helpful in building community
- Specialty teams need to be sensitive to rural and underserved issues
- Fidelity to the ECHO model
- Limited research

Getting Connected

- University of New Mexico – ECHO Institute
https://hsc.unm.edu/echo/

- MetaECHO – Global ECHO Conference
https://hsc.unm.edu/echo/what-we-do/echo-conference/

- KUMC Project ECHO https://www.kumc.edu/community-engagement/project-echo.html

- Most states have an ECHO program – often academic medical centers

- Participation is often free, but not always

- Continuing education provided for most ECHO clinics, often low cost or free

- Often occur around the lunch hour to accommodate busy schedules, and some informality (i.e. eating) is encouraged