



**Building Capacity to Treat Complex Medical
Conditions through Project ECHO Telementoring
Program**

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Objectives

1. Describe Project ECHO
2. Examine the efficacy of the ECHO Model
3. Discuss Indiana's ECHO programs
4. Identify ways to become involved with these initiatives



ECHO Origin Story:

Hepatitis C (HCV) in New Mexico

- Estimated 36,000 individuals in New Mexico with HCV
 - Only 5% were in treatment
- Shortage of specialists
 - Only 2 clinics in New Mexico with the necessary expertise

Arora, S., Thornton, K., Murata, G., Deming, P., Kalishman, S., Dion, D., ... & Kistin, M. (2011). Outcomes of treatment for hepatitis C virus infection by primary care providers. *New England Journal of Medicine*, 364(23), 2199-2207.



Are You Part of the ECHO?

■



INDIANA UNIVERSITY

About Project ECHO

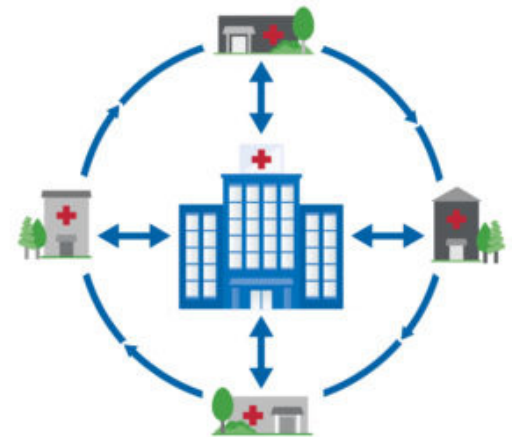
- ECHO = Extension for Community Healthcare Outcomes
- Mission: “...democratize medical knowledge and get best practice care to underserved people all over the world.”
- Project ECHO® is a lifelong learning and guided practice model that **revolutionizes medical education** and exponentially **increases workforce capacity** to provide **best practice specialty care** and **reduce health disparities** through its **hub-and-spoke** knowledge sharing networks
- Increased access to care → Reduction in racial and ethnic disparities in treatment outcomes → Healthier communities

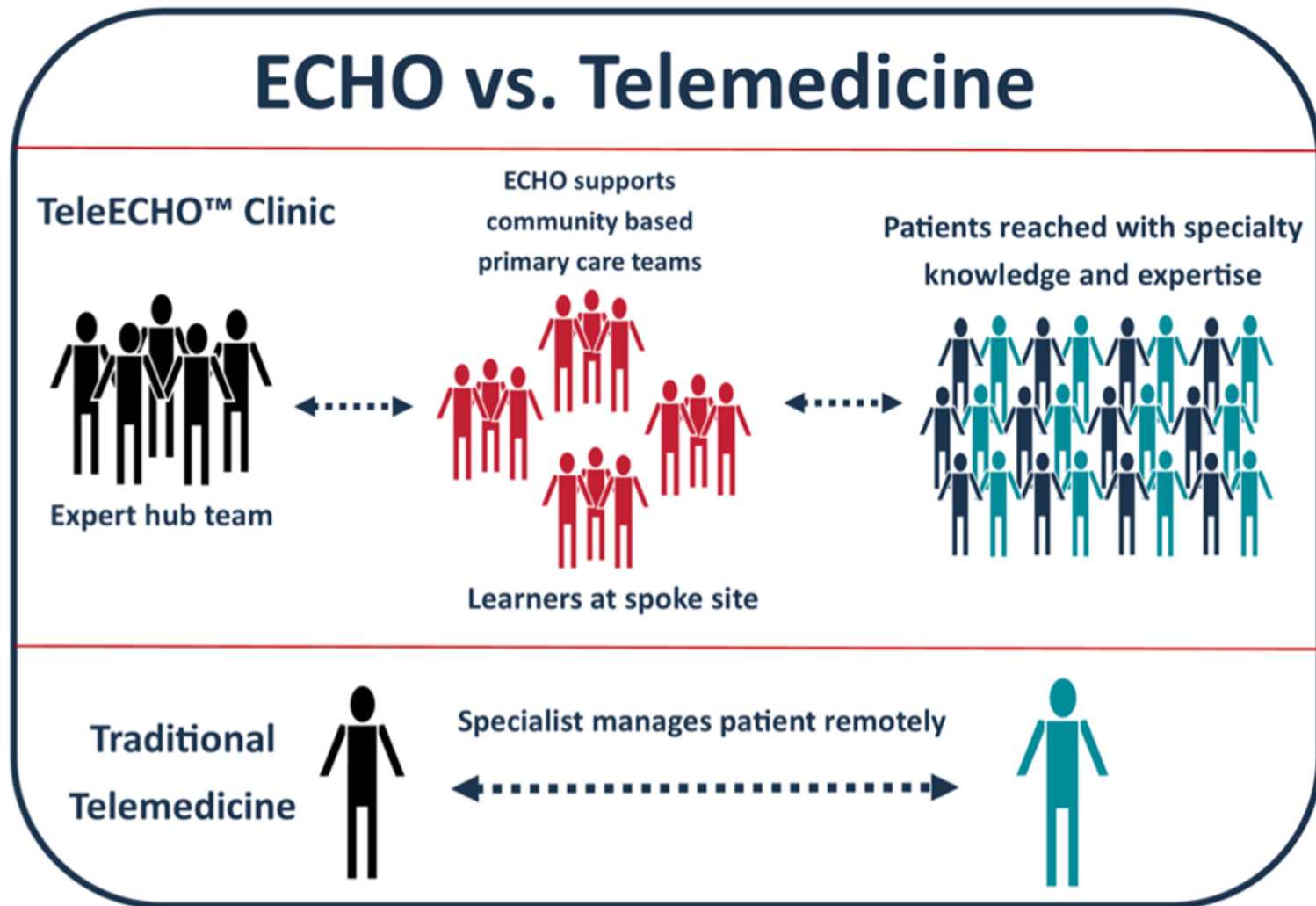


All Teach, All Learn

Hub and spoke knowledge sharing creates a learning loop:

- Community providers learn from specialists
- Community providers learn from each other
- Specialists learn from community providers as best practices emerge





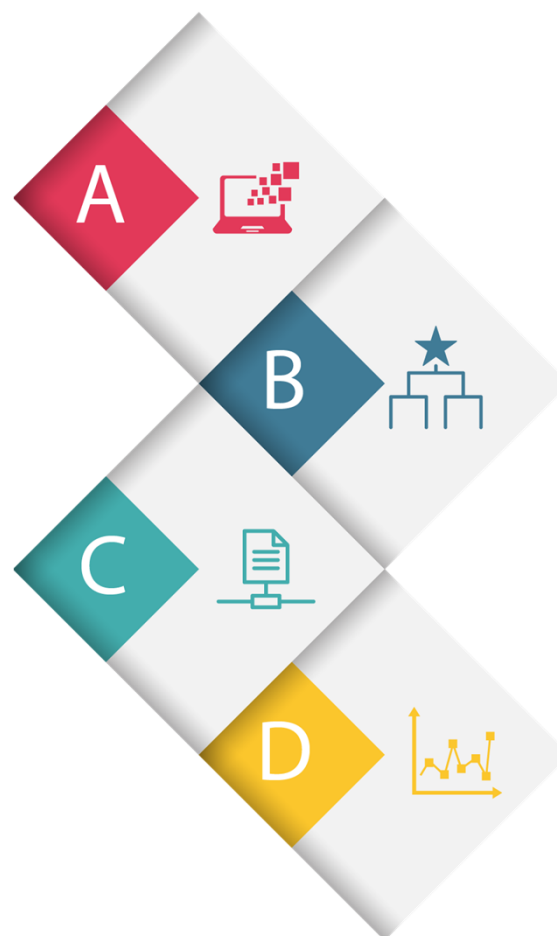
Treating provider retains responsibility for managing patient.



The ECHO Model

Amplification – Use
Technology
to leverage scarce
resources

Case Based
Learning
to master
complexity



Share **B**est
Practices to
reduce disparity

Web-based
Database to
Monitor
Outcomes





Project ECHO Hubs (Global)

Hub Locations

ECHO Countries	ECHO Hubs	ECHO Programs
32	249	575



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Project ECHO: Outcomes

Research demonstrates that Project ECHO can:

- Increase provider knowledge, competence, & confidence in treating patients with complex conditions
- Improve access to care
- Improve patient health
- Increase job satisfaction & retention



Project ECHO: Outcomes

Arora S., Thornton K., Murata G., Deming P., Kalishman S., Dion D., et al. (2011) Outcomes of treatment for hepatitis C virus infection by primary care providers. *New England Journal of Medicine* 364(23), 2199-207. Retrieved from: <http://www.ncbi.nlm.nih.gov/pubmed/21631316>

Hager, B., Hasselberg, M., Arzubi, E., Betlinski, J., Duncan, M., Richman, J., & Raney, L.E. (2018). Leveraging behavioral health expertise: Practices and potential of the Project ECHO approach to virtually integrating care in underserved areas. *Psychiatric Services*, 69(4), 366-369. <https://doi.org/10.1176/appi.ps.201700211>

Komaromy, M., Duhigg, D., Metcalf, A., Carlson, C., Kalishman, S., Hayes, L., Burke, T., Thornton, K., & Arora, S. (2016). Project ECHO (Extension for Community Healthcare Outcomes): A new model for educating primary care providers about treatment of substance use disorders. *Substance Abuse* 13(37), 20-24. doi: 10.1080/08897077.2015.1129388

Zhou C., Crawford A., Serhal .E, Kurdyak, P., Sockalingam, S. (2016). The impact of Project ECHO on participant and patient outcomes: A systematic review. *Academic Medicine* 91(10), 1439-1461. doi: 10.1097/ACM.0000000000001328



An ECHO Story in Indiana



U.S.

Rural Indiana Struggles to Contend With H.I.V. Outbreak

By ABBY GOODENOUGH JULY 1, 2018

A photograph showing several orange and white plastic containers filled with discarded syringes, part of a needle exchange program in Austin, Indiana.

Containers holding discarded syringes as part of a needle exchange program in Austin, Ind.
Aaron P. Bernstein for The New York Times

U.S.

The Washington Post

How an HIV outbreak hit rural Indiana — and why we should be paying attention

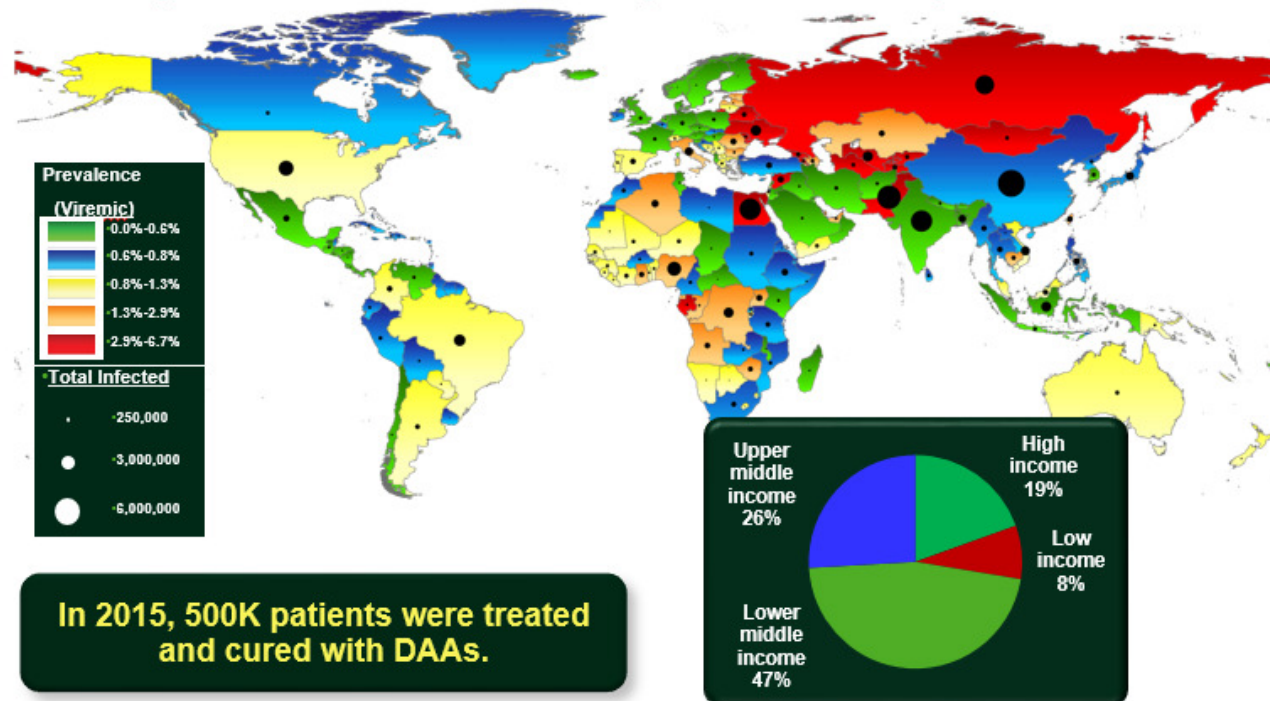
By Danielle Paquette March 30

Follow @dpaqreport

A close-up photograph of a syringe, showing the needle and the plunger. The syringe is labeled "SINGLE-USE".

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An estimated 70 million (56 million – 90 million) individuals are infected with HCV (viremic), a prevalence of 1% (0.8%-1.2%) in 2016



<http://www.polarisobservatory.com/>



Anatomy of an ECHO Clinic

- Meets virtually on a regular schedule
- Group Introductions
- ~20 Minute Didactic + Q&A
- 1-2 de-identified patient Case Presentations



Case Presentations

- 1-2 per session
- Participant will present **de-identified** case – NO PHI
- Spoke will ask clarifying questions
- Experts will ask clarifying questions
- Spoke will make recommendations and share knowledge
- Experts will make recommendations
- Written recommendations will be submitted to participant only
- Follow up presentation will be encouraged





HCV ECHO Case Presentation

General Information

- 57 yo, non-hispanic, Black, Female
- Sexual Orientation: Lesbian
- Insurance coverage: Medicaid

HCV History

- HCV, dx in 3/2012
- Genotype: 1a
- Tx w/ interferon, ribavirin in 2012, not completed (12 weeks)
- Liver biopsy in 2015, F4
- US ordered in 2/18, but patient cancelled or no showed appt several times. No results available.
- MELD Score: 6

Medical History

- Hypertension, controlled w/ meds
- Abnormal EEG 11/14. Dx complex partial seizure w/ generalization.
- HAV vaccination: Yes
- HBV vaccination: Yes
- BMI: 25.0

Mental Health History

- Depression
- PHQ-9: 15

Substance Use History

- No hx of AUD
- No hx of SUD
- Current tobacco use, has not expressed interest in quitting

Laboratory Testing

- Date of Lab draw: 4/12/2019
- HCV RNA: 1,240,000
- INR:
- Platelet Count: 345
- AST Level (IU/L): 37
- AST (Upper Limit of Normal): 36
- ALT: 58
- Bilirubin: 0.3
- Albumin: 4.2
- APRI: 0.2979

Current Medications

- amlodipine 10mg qd
- lisinopril 10mg qd
- Lexapro 10mg 1 qd
- hydroxyzine 25mg qid prn
- ibuprofen 800 mg tid prn
- ferrous sulfate 325 mg qd

Main Discussion Questions

1. Our first rx for Mavyret. (thanks for sample PA letter which worked!) Just checking to see if we have missed anything important.
2. Also, differences between FibroSure and other fibrosis blood tests. (She had FibroSure which is for NASH. We have changed to FibroTest for other pts since.)

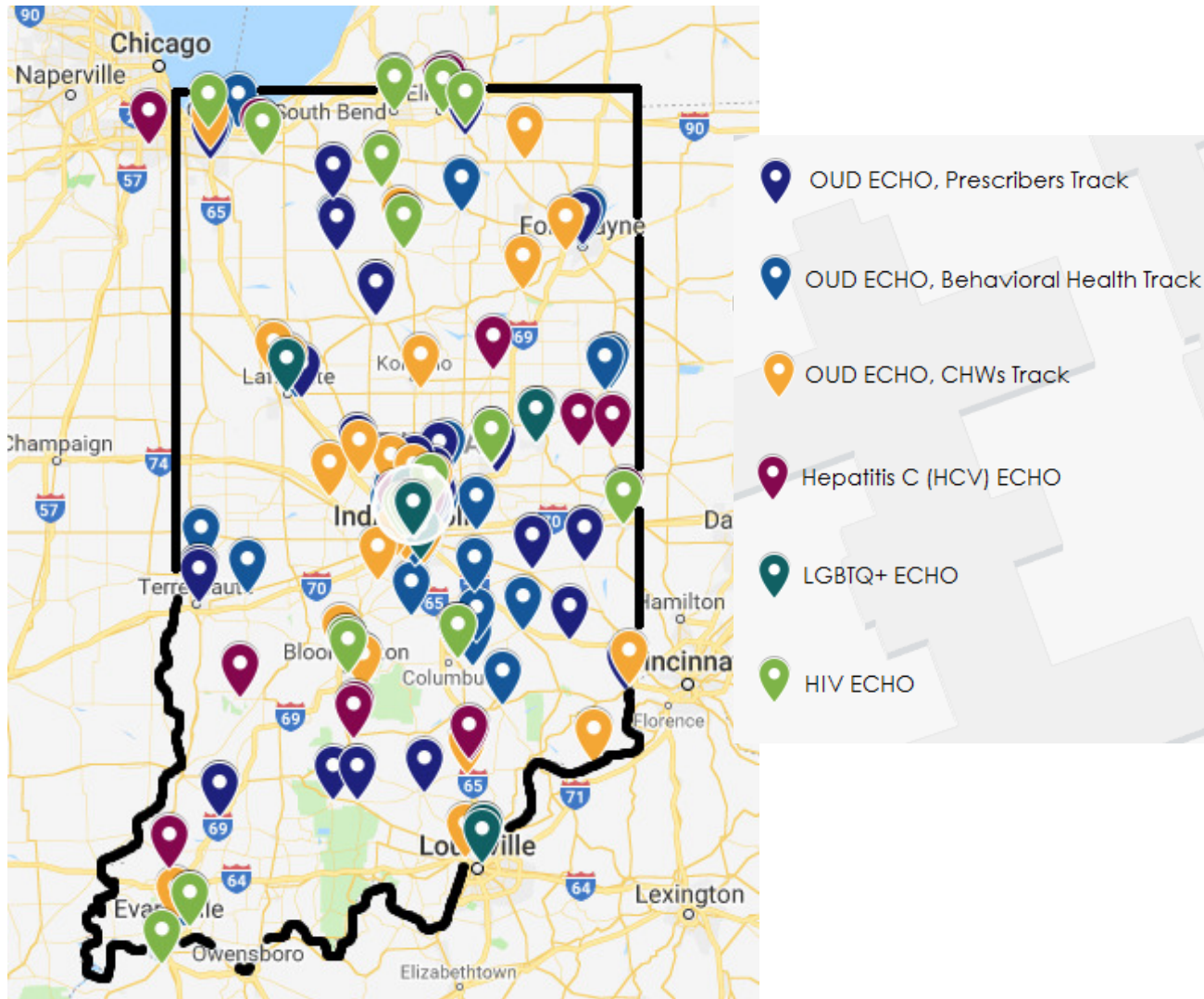


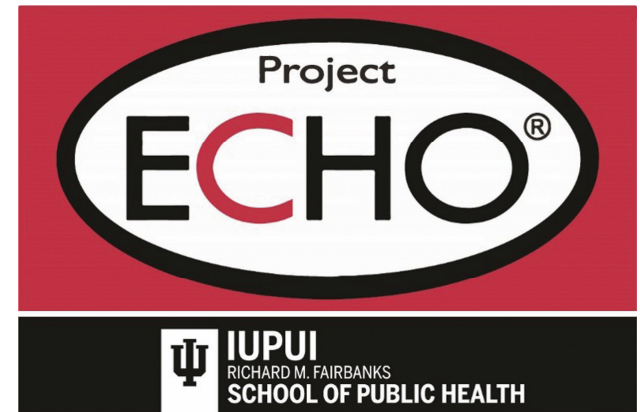
Benefits to Participants

- No cost CMEs / CEUs
- Professional interaction with colleagues with similar interest
 - Less isolation with improved recruitment and retention
- Resource sharing – access to ECHO materials
- Access to consultation with specialists
- Meets requirements for renewal of Controlled Substance Registration
- Meets requirement for ISDH loan repayment program



ECHO Participation across Indiana



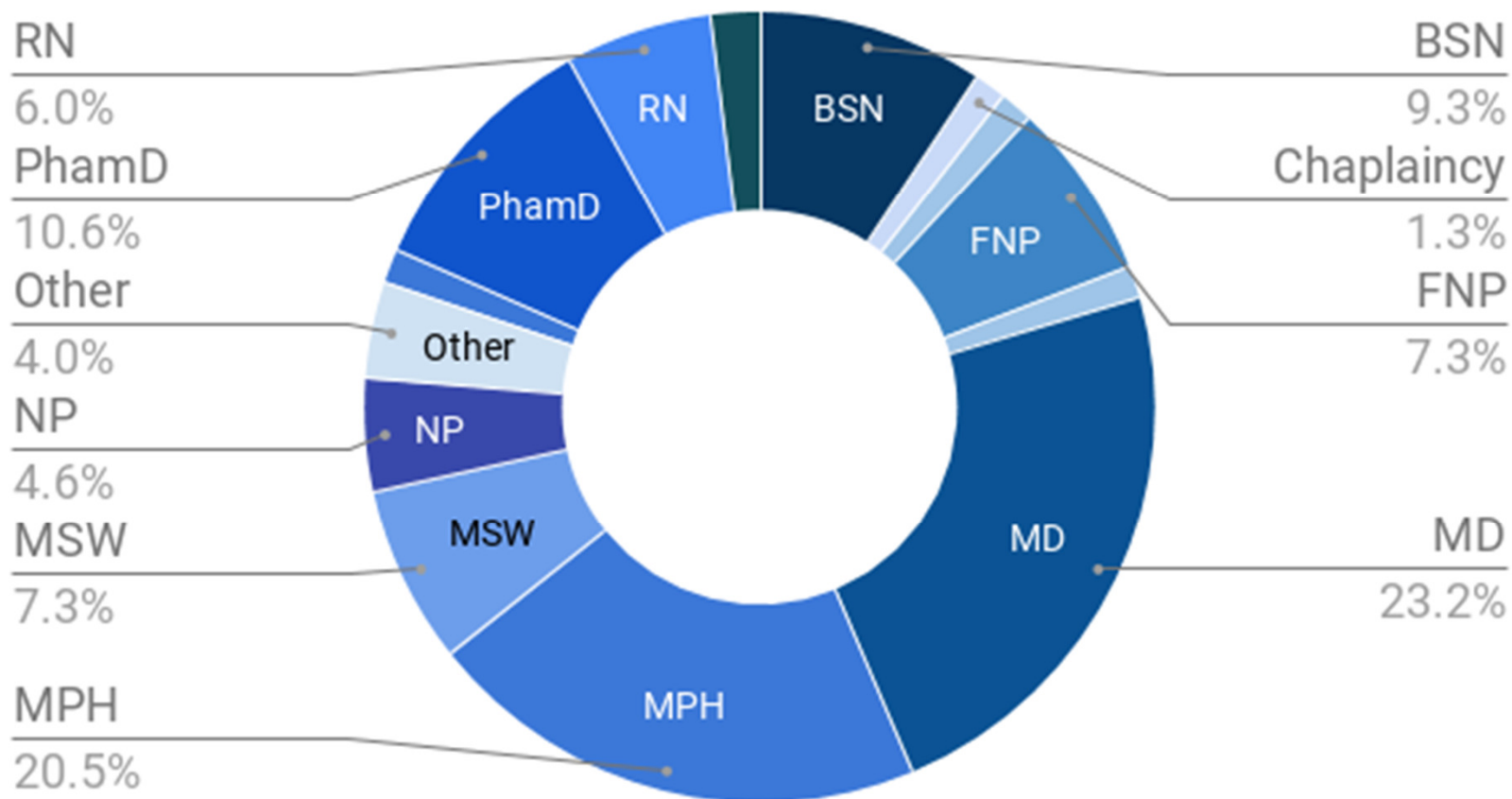


The IUPUI ECHO Center at FSPH



Who's participating in ECHO?

Credentials of FSPH ECHO Participants





HCV ECHO

1st/3rd Thursdays, 12:30-2:00 pm



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HCV ECHO Curriculum

1. HCV Epidemiology & Testing
2. Assessing Liver Disease
3. Intro to HCV Treatment
4. Most Commonly Used DAAs
5. Strategies for Detecting Decompensation in Patients with Chronic Hepatitis C
6. An In-Depth Look at Liver Imaging: Ultrasound, CT, MRI, and Transient Elastography
7. HCV and other infectious diseases
8. Tobacco considerations in patients with HCV
9. Hepatitis C Treatment Outside the Specialty Setting: A Practical Guide for Busy Clinicians
10. A Brief Introduction to Motivational Interviewing
11. HCV and Pregnancy
12. Opioid Use Disorders: An Overview
13. Extrahepatic manifestations of HCV- part 1
14. HCV and Indiana Medicaid
15. Extrahepatic manifestations of HCV- part 2
16. Navigating the Hepatitis C Medication Prior Authorization Process
17. Direct Acting Antiviral Drug Interaction Management
18. Hepatitis Elimination in Persons who Inject Drugs
19. Getting DAAs funded: Patient Assistant Programs and Grant Resources
20. HCV reinfection
21. HCV Treatment from a Patient's Perspective
22. HBV reactivation with DAAs
23. Retreating DAA failures



Expanding Access to HCV Treatment Authorizing PCPs

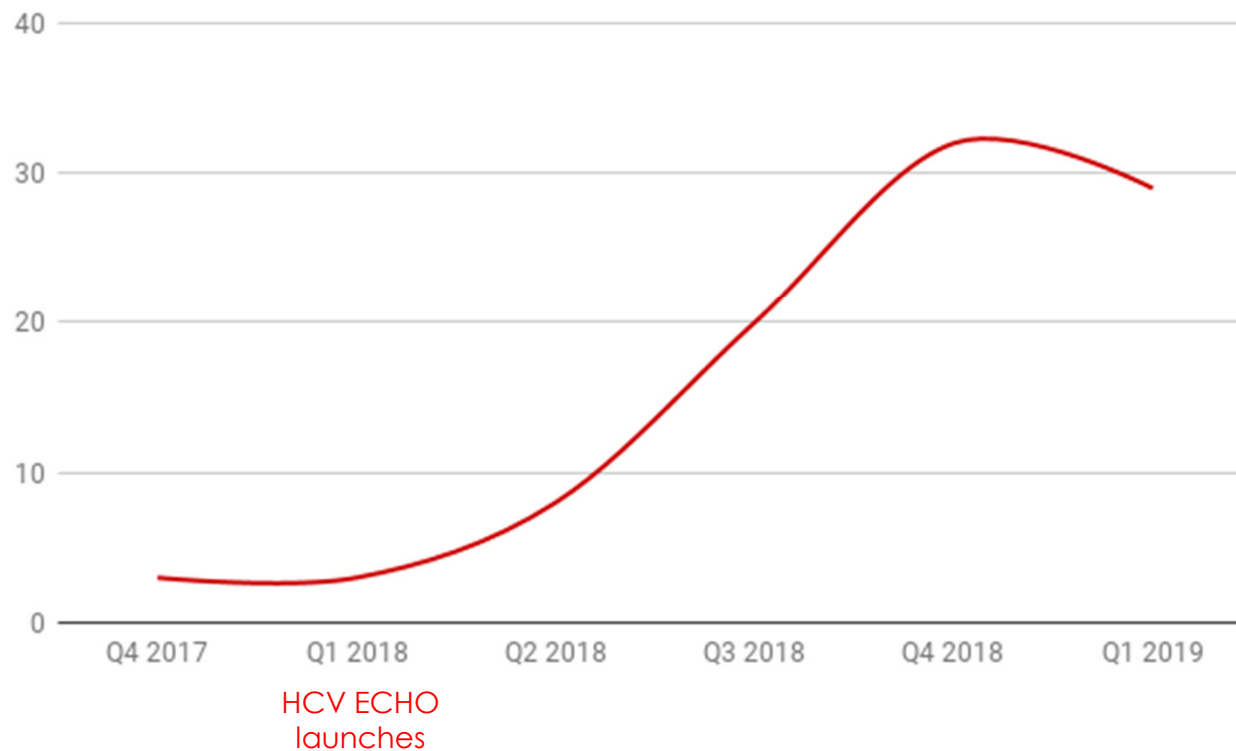
PA Requirements for ALL AGENTS (INITIAL AND RETREATMENT)

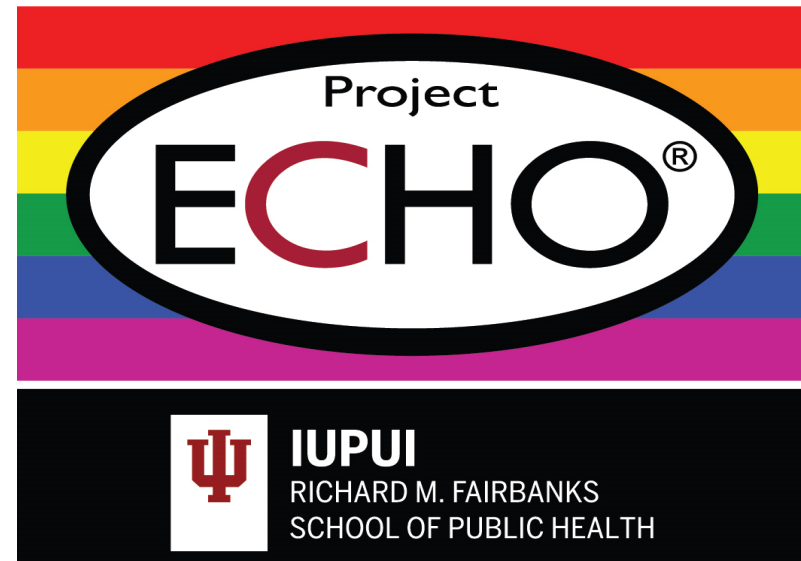
1. Member is 18 years of age or older (or 12 years of age and older for Harvoni and Sovaldi) <input type="checkbox"/> Yes <input type="checkbox"/> No
2. For women of childbearing age, patient has confirmed negative pregnancy test prior to therapy <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A (patient is male) If no, explain: _____
3. Prescription written by or in consultation with an Infectious Disease or Gastrointestinal Specialist <input type="checkbox"/> Yes (including hepatitis C ECHO Program participants) <input type="checkbox"/> No



Expanding Access to HCV Treatment

IN Medicaid: No. of Paid Claims for HCV Treatment





LGBTQ+ ECHO

2nd/4th Wednesdays, 2:30-4:00 pm



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LGBTQ+ ECHO Curriculum

1. The Importance of Language
2. Development of Gender Identity
3. HIV Prevention and PrEP
4. Gender affirming surgery and post op care
5. Insurance Tips & Pitfalls
6. Primary Care of LGBTQ+ Individuals
7. Nutrition and Abnormal Shape Concerns / Eating Disorders
8. Sexual Orientation, Sexual Health, Sexuality and Romance
9. Creating a Welcoming Office Environment
10. Gender Dysphoria, Introduction to Affirmation and Transition
11. Behavior Health Concerns in Transgender Patients
12. Masculinizing Hormones
13. Feminizing Hormones
14. Non-binary Identities
15. Voice Therapy and Surgical Options
16. Assisted Reproduction and Family Planning
17. Informed Consent For Gender Affirming Care With Coexisting Severe Mental Illness
18. Gender Diverse Youth
19. Legal Issues Facing LGBTQ+ People
20. Working With Families of Gender Diverse Youth
21. Cancer Screening
22. Transition and Homeless Youth
23. SOGI Data Collection



Transgender Health & Wellness Program Eskenazi Health

The screenshot displays the Eskenazi Health website. At the top, the Eskenazi Health logo is on the left, and navigation links for DOCTORS, LOCATIONS, HEALTH SERVICES, PROGRAMS, ABOUT, and DONATE are on the right. A search bar is also present. Below the navigation bar, a large green banner features the text "TRANSGENDER HEALTH & WELLNESS PROGRAM" and a sub-header "Gender Health Program". To the right of the text is a photo of four people: a woman in a green jacket, a man in a blue shirt, a woman in a white lab coat, and a woman in a blue jacket. Below the banner, a navigation bar includes links for Health Information, Find A Doctor, Departments & Programs, Research & Innovation, and Contact & Locations. The main content area has a large image of three young people looking at a laptop, with the text "Gender Health Program" overlaid. To the right of this image is a sidebar with a "Contact Gender Health Program" section containing the phone number 317.274.8812 and buttons for "Find A Doctor" and "Request An Appointment". Below this is a section titled "On This Page:" with links for "Doctors", "Program Forms & Resources", "Related Departments", and "For Health Professionals".

TRANSGENDER HEALTH & WELLNESS PROGRAM

Gender Health Program

Gender dysphoria is a condition in which someone's experienced gender does not match the gender other people assign to him or her. Without proper care and support, adolescents with gender dysphoria are at increased risk of depression, suicide, sexually transmitted diseases and physical, emotional and sexual abuse. The Gender Health Program at Riley at IU Health strives to prevent these problems and promotes the well-being of your child.

Contact Gender Health Program
317.274.8812

[Find A Doctor](#)
[Request An Appointment](#)

On This Page:

- [Doctors](#)
- [Program Forms & Resources](#)
- [Related Departments](#)
- [For Health Professionals](#)

PEDIATRIC AND ADOLESCENT GENDER HEALTH PROGRAM AT RILEY HOSPITAL

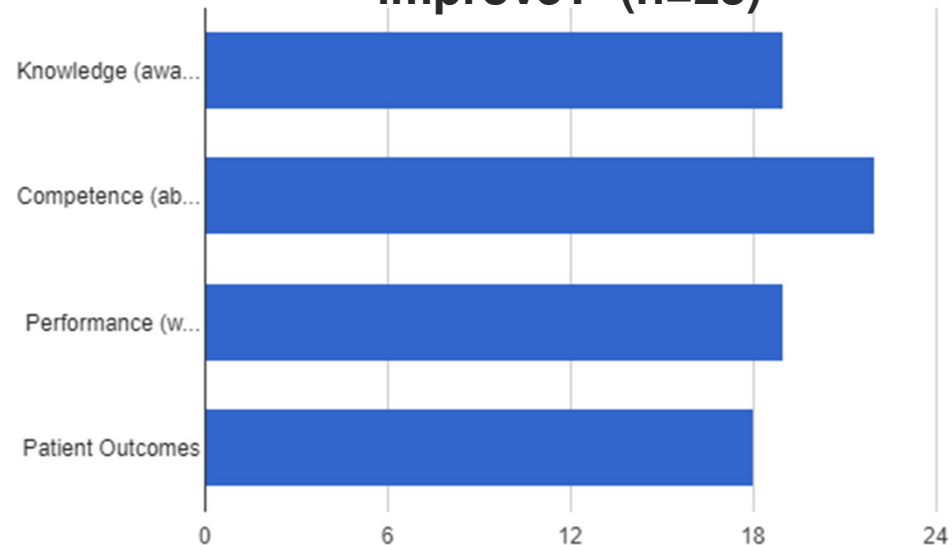


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LGBTQ+ Post-Session Evaluations

“This project is critical for optimal care of our trans clients!”

Based on your participation in the program, which do you expect to improve? (n=23)



HIV ECHO

2nd Thursdays, 8:30-10:00 am

4th Thursdays, 12:30-2:00 pm



HIV ECHO Curriculum

1. Intro to ECHO & HIV 101
2. HIV Yesterday & Today
3. Introduction to Antiretroviral Therapy
4. Communication to Lessen HIV Stigma
5. Pre Exposure Prophylaxis (PrEP)
6. Importance of Adherence
7. Post Exposure Prophylaxis (PEP)
8. Diagnosing, Treating and Preventing Common Opportunistic Infections
9. Sexually Transmitted Infections and HIV
10. Substance Use and HIV
11. Common Drug Interactions
12. Immunization of Adults with HIV
13. HIV Case Management
14. Switching or Simplifying an Antiretroviral Regimen
15. Managing HIV in Pregnancy
16. Hepatitis C and HIV
17. Refugees and HIV
18. Role of Pharmacist in HIV Care
19. Ending the Epidemic
20. Cervical and Anal Cancer Screening
21. Motivational Interviewing
22. Corrections and HIV
23. Drug Resistance



Learner Information

Accreditation Statement



In support of improving patient care, Indiana University School of Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Nurses

Indiana University School of Medicine designates this activity for a maximum of 1.5 *ANCC contact hours*. Nurses should claim only the credit commensurate with the extent of their participation in the activity.

Pharmacists

Indiana University School of Medicine designates this activity for (ACPE UAN JA4008178-0000-19-004-L01-P) 1.5 ACPE contact hours. Pharmacists should only claim credit commensurate with the extent of their participation in the activity. Credit will be provided to NABP CPE Monitor within 60 days after the activity completion.

Physicians

Indiana University School of Medicine designates this live activity for a maximum of 1.5 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Social Workers

Indiana University School of Medicine has been approved by the Indiana Social Worker, Marriage and Family Therapist and Mental Health Counselor Board to provide Category I Continuing Education program. This activity qualifies for 1.5 *Category I CEU* as outlined by the Indiana Behavioral Health and Human Services Licensing Board.



SCHOOL OF MEDICINE

INDIANA UNIVERSITY

American Academy of Family Physicians Live Prescribed CME Credits

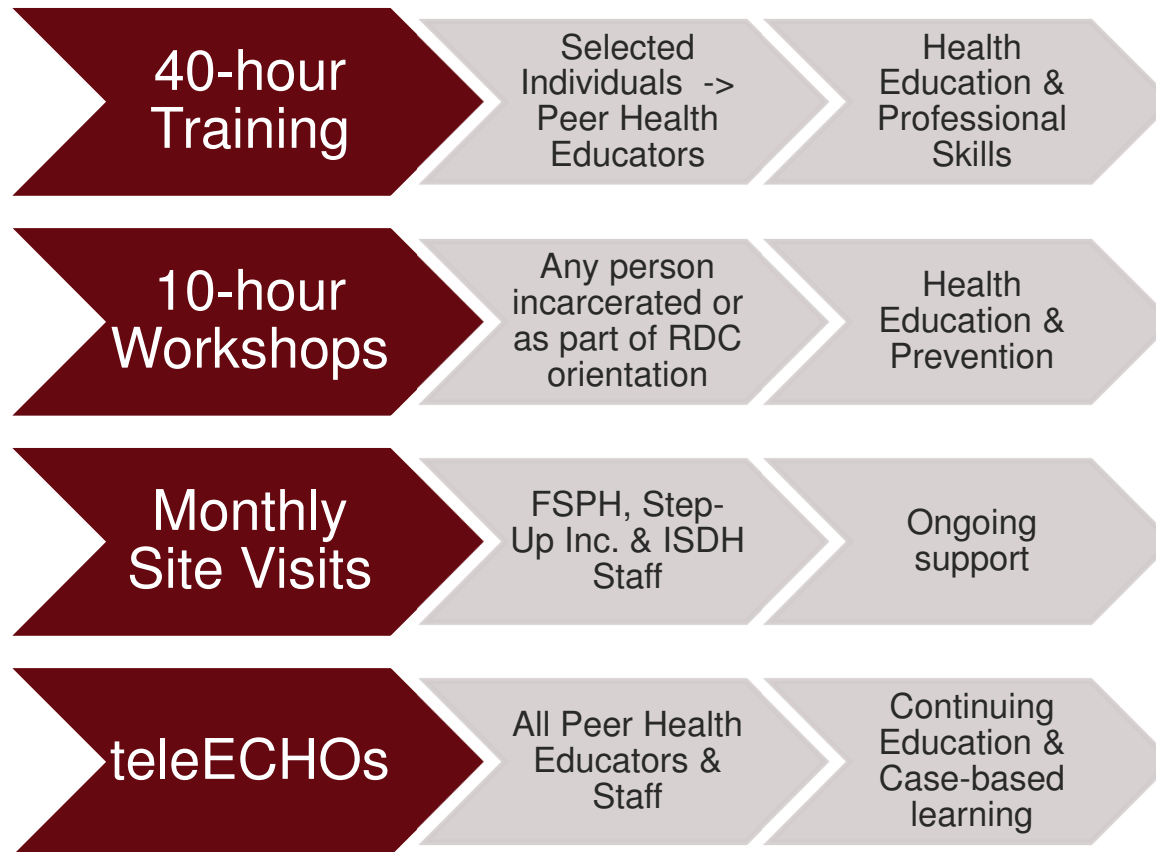


INDIANA ACADEMY OF
FAMILY PHYSICIANS

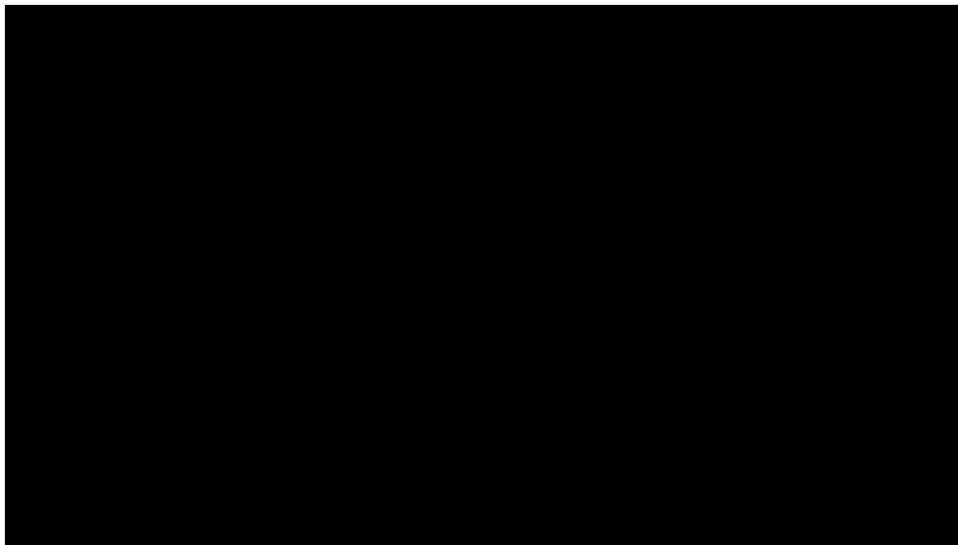


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Indiana Peer Education Program (INPEP) ECHO



Indiana Peer Education Program (INPEP) ECHO



Indiana OUD ECHO

1. Partnership between community-based providers and Indiana University-led team of specialists to improve treatment of OUD in rural and other underserved areas
2. Supported by IN Family & Social Services Administration contract as part of state 21st Century Cures Act funding
 - Awarded Fall 2017, Renewed spring 2019 through Sept 2020
 - Funds expert panels, 1.5 FTE coordinator, marketing, administration



Barriers to Treating Complex Medical Conditions



Patients are reluctant to engage in evidence-based treatment due to messaging based on stigma around treatment in the community.



Lack of coverage for many treatment and supportive services that are known to improve outcomes for opioid use disorder.



Community stigma against people with opioid use disorder and evidence-based treatment.



Lack of transportation makes treatment participation difficult.



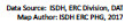
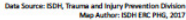
Lack of collaboration between providers in many communities.

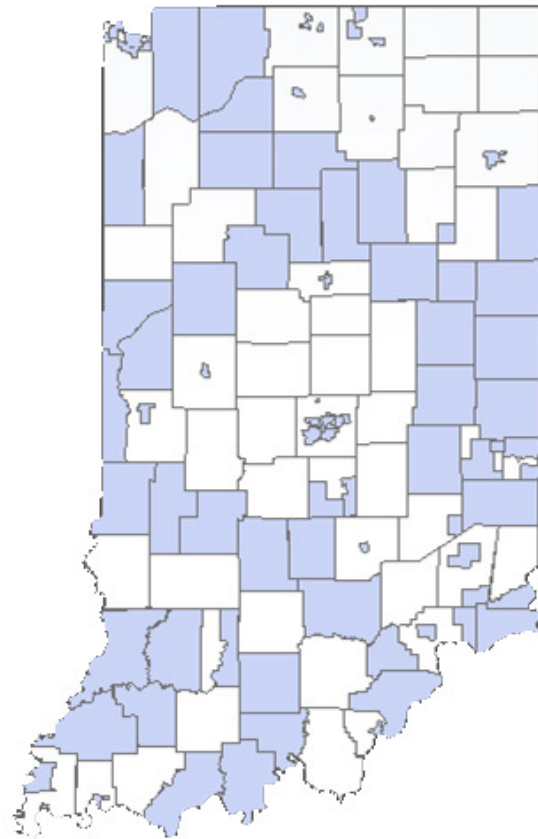


Inadequate funding for treatment and supportive services.

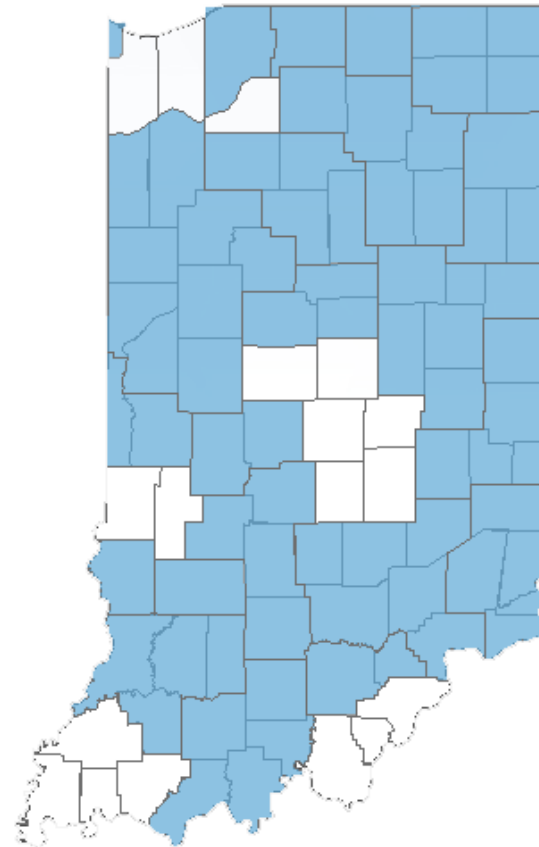


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Medically Underserved Areas
and Populations (MUA/P)



Mental Health Professional
Shortage Areas



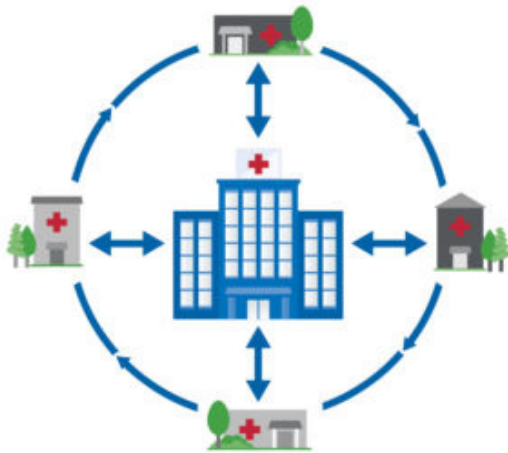


Opioid Use Disorder Series

Every Wednesday, noon-1:30 pm through May 2020



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Hub Panel Expertise

Medical-legal partnerships

Psychosocial interventions for OUD

Peer recovery support

Addiction psychiatry, adolescents

**Outpatient, inpatient psychiatric
pharmacy**

Addiction psychiatry, adults & children

Internal medicine, MAT

Social work and case management



Learning Objectives for OUD ECHO

Participants of this new ECHO should be able to:

1. Describe the physiology and neurobiology of opioid use disorder
2. Assess and diagnose OUD
3. Evaluate and identify risk and protective factors for OUD, treatment outcome
4. Use current clinical practice guidelines in managing patients with OUD in community clinic & ED settings
5. Communicate the balance of benefits and risks with various treatments
6. Individualize treatment decisions through shared decision making
7. Monitor OUD treatment for adherence, tolerance, and effectiveness
8. Coordinate with other health care providers and systems of care to deliver best practice OUD treatment for all aspects of the patients, including social and legal.



Curriculum Schedule for OUD Series

May 29, 2019	Overview of MAT & Data Waiver
June 5, 2019	Assessment of OUD
June 12, 2019	Induction of MAT
June 19, 2019	Drug Testing/Patient agreement/Non-compliance
June 26, 2019	How OUD & MAT affect the brain
July 3, 2019	CANCEL
July 10, 2019	Stigma Reduction
July 17, 2019	Legal Issues Related to OUD
July 24, 2019	Peer Recovery Support
July 31, 2019	Adolescents with SUD
August 7, 2019	Motivational Interviewing
August 14, 2019	Harm Reduction Strategies
August 21, 2019	OUD in Pregnancy
August 28, 2019	Pain Management
September 4, 2019	Behavioral Interventions
September 11, 2019	Co-occurring mental health conditions
September 18, 2019	Elective

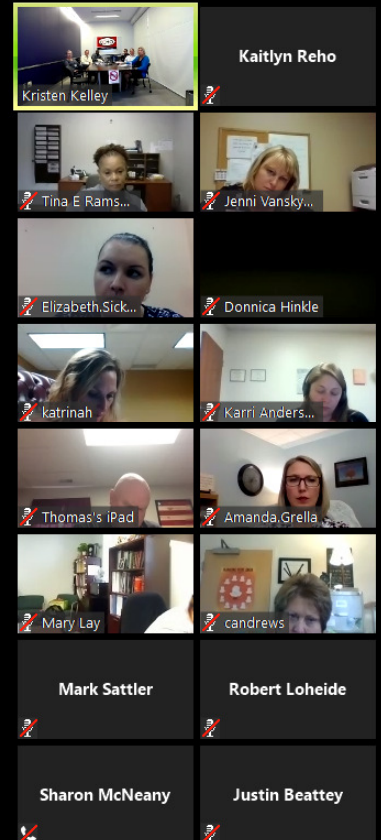




Medical co-occurring disorders (caused by opioid Addiction):

Pharmacologic:

Gastrointestinal Motility decrease/irregularity
Respiratory Depression (lethal overdose)
near lethal overdose



Continuing Education - FREE

- **Community Health Worker and Peer Recovery** – each session has been approved for 1.5 hours of Continuing Education by ICAADA and Mental Health America of Northeast Indiana for Community Health Workers. Please note that a maximum of 7 CEU can be obtained from Project ECHO for CHW recertification.
- **Behavioral Health** – each session has been approved for 1.5 Category I Continuing Education Units for Social Workers, Clinical Social Workers, Marriage and Family Therapists, Marriage and Family Therapy Associates, Mental Health Counselors, Mental Health Counselor Associates, Addiction Counselors, and Clinical Addiction Counselors as outlined by the Indiana Behavioral Health and Human Services Licensing Board pursuant to Indiana Code 25-1-4-0.2
- **Prescriber** - this activity has been approved for AMA PRA Category 1.5 Credit(s)TM by Indiana University School of Medicine.



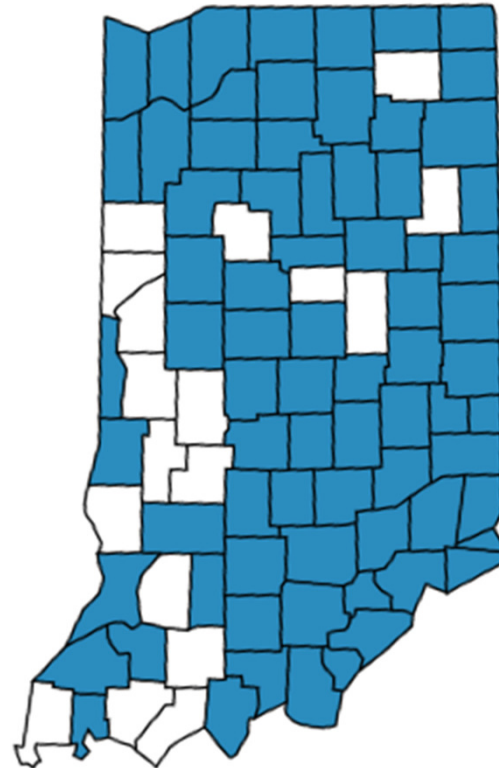
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Track	Participants	Sessions
Prescriber*	113	36
Behavioral Health	75	23
Community Health Worker	65	12
Early Home Visitor	122	3
Adolescent	47	7
Emergency Dept.	43	3
Medical Complications	Coming Soon!	
Jail Based MAT	Coming Soon!	
*Includes management of OUD in pregnant and parenting women		

By the Numbers

- 465 total participants
- 84 sessions completed
- Average 25 participants*
- 74 counties represented

* Exception of First Steps



Preliminary Outcomes

1. Prescriber Cohort 1 (n = 43)

- Generally experienced providers (mean = 11.5 years of practice)
- Greater **confidence** in ability to manage OUD
- **Most helpful aspects** of IN OUD ECHO (sample responses):
 - “Developing a network of other providers”
 - “I learned a lot about the disorder, treatment options, and patient support groups.”
 - “Getting the panel to weigh in on difficult cases was helpful”
 - “The didactic sessions and suggestions were very informative and helpful”





What Participants are Saying about OUD ECHO

- “Feel more comfortable listening to patients without pressuring them to change”.
- “I am going to be more conscious of my language. We have been discussing this at length in my classes and this presentation really brought home the importance of reducing stigma. It is a cycle that affects people from the way they are viewed to the way they are treated (physically, mentally, emotionally, and medically). Thank you!
- Feeling less personally about treatment failures.
- Better understanding of how to transition patients from one substance to another.
- I have a better understanding of how to meet the needs of a patient getting acute care while having a substance use history and how to manage their pain accordingly.
- Very helpful in helping us to build a network of resources and in identifying resources that we had overlooked.



LOUD ECHO Testimonials:

“From the case I presented, it connected us with people from WeCare as well as Regenstrief Institute. They came to the office last Friday and we met for about an hour and they are going to be connecting with the young lady for whom the case related. This is a resource we wouldn't have known about, and thank you!”

– Client Care Coordinator from Lebanon, IN

“The ECHO program has been a godsend for me. Being in a small rural community it has made medical education accessible and relatively painless. It has brought to my community improved diagnosis and treatment of an undertreated disease, opiate use disorder. The professional expertise has been enlightening. I'm looking forward to other presentations.”

– Primary Care Physician from Pulaski County



Funding Acknowledgements

- Indiana Family and Social Services Administration—21st Century Cures
- IU Addictions Grand Challenge
- Indiana State Department of Health (ISDH)
- Richard M. Fairbanks School of Public Health
- IU School of Medicine Department of Psychiatry
- Centers for Disease Control and Prevention (CDC)
- Greater Health Foundation of Indianapolis
- HCV ECHO is supported by MediIQ through educational grants from AbbVie, INC and Gilead Sciences, INC. The funding has no role in the development of any part of this initiative.





ECHO

ECHO (Extension for Community Healthcare Outcomes) is a movement to connect local primary care teams with inter-disciplinary specialist teams to improve treatment for complex and chronic health conditions. ECHO uses technology to facilitate mentoring and knowledge sharing, enabling local primary care clinicians to provide best practice care for patients when they need it, close to home.



Experts at Indiana University School of Medicine and the Fairbanks School of Public Health are leading ECHO clinics that are freely available to all providers. Visit the individual project sites below to learn more about ECHO clinics and how to participate:

Hepatitis C ECHO

[Visit](#)

HIV ECHO

[Visit](#)

LGBTQ+ ECHO

[Visit](#)

Opioid Use Disorders ECHO

[Visit](#)

FULFILLING *the* PROMISE



Thank you!



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