



# TBI-BH ECHO

Traumatic Brain Injury - Behavioral Health ECHO  
UW Medicine | Psychiatry and Behavioral Sciences



# Building Community Partnerships for ECHO

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# Agenda

1. Describe why we TBI is important to consider
2. Describe the ECHO programs
3. Questions





# TBI-BH ECHO

## Traumatic Brain Injury – Behavioral Health ECHO

### WHY a TBI-BH ECHO?

- The numbers:
  - Nationally: TBI accounts for 2.8 million emergency department visits per year
  - WA State: ~130,000 TBI-related ED visits (2016-18)
  - Nationally: TBI contributes to 1/3 of all injury related deaths
  - WA State: ~145,000 currently live with a long-term disability resulting from TBI
- The patients/survivors:
  - 1 in 3 patients continue to have impaired functioning 10 years post-TBI
  - Chronic TBI-related disabilities are largely attributable to behavioral factors (PTSD, depression, anxiety, irritability, impulsivity, anger/aggression, substance misuse, and cognitive impairment)
  - Persisting TBI symptoms → increased risk of unemployment & functional impairment/decline, AND caretaker burnout
- The treatment:
  - Successful TBI recovery can depend on access & adherence to behavioral health treatment
  - Early identification/intervention improves outcomes
  - COMPLEX! Often falls to community providers with little support or training to manage this care
  - Disproportionally affects rural providers
  - Community resources are scarce and fragmented

# What is Project ECHO?

- Project ECHO (Extension for Community Healthcare Outcomes)
- Developed at the University of New Mexico
- It started in 2003 by Dr. Sanjeev Arora
- In their own words:
  - <https://www.youtube.com/watch?v=0kPPgbjA5to&t=72s>



# About Project ECHO<sup>®</sup>

Project ECHO (Extension for Community Healthcare Outcomes) is a movement to demopolize knowledge and amplify local capacity to provide best practice care for underserved people all over the world. The ECHO model<sup>™</sup> 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.

**Project ECHO is a movement to improve the lives of people all over the world.**

## ECHO Model

### Moving Knowledge Not People

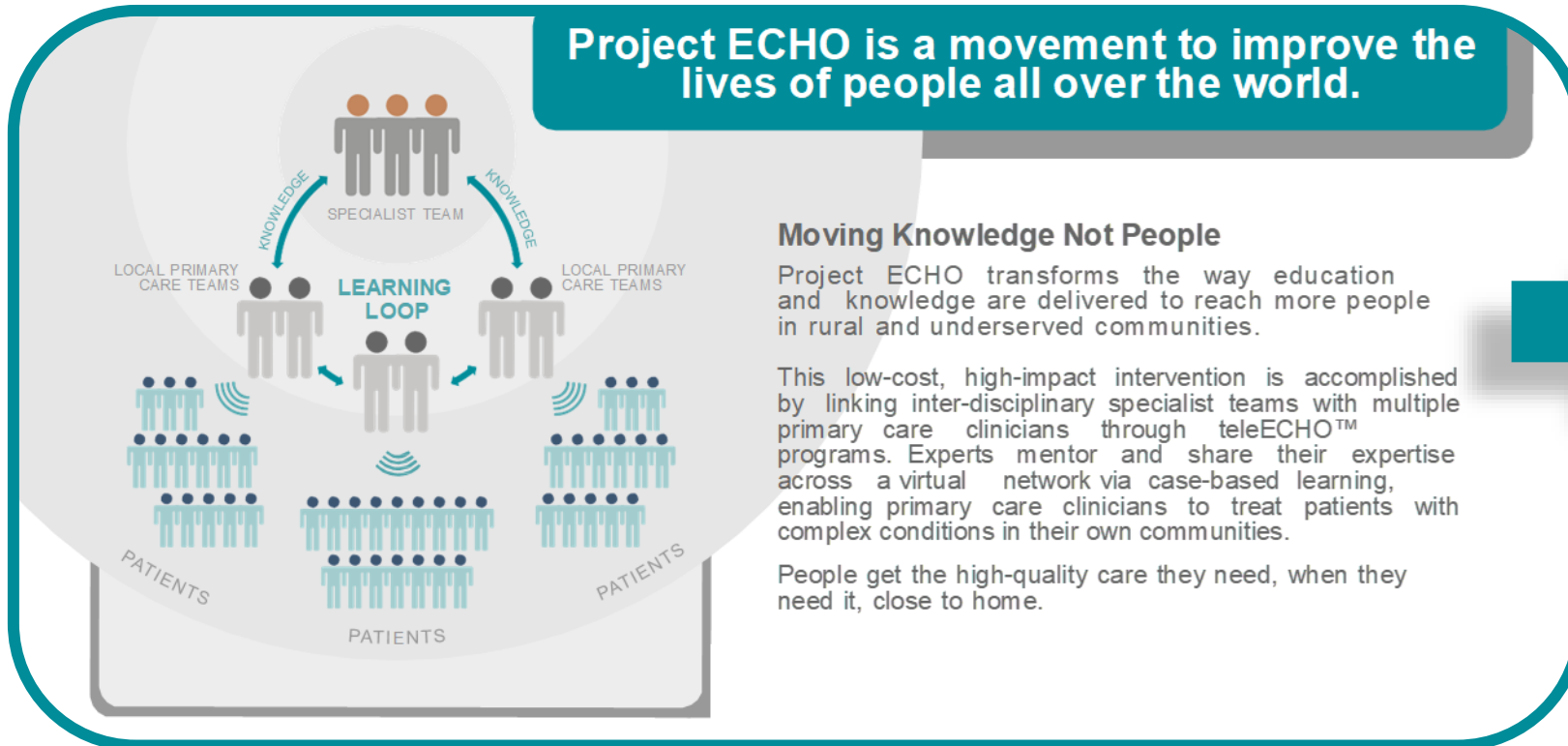
Project ECHO transforms the way education and knowledge are delivered to reach more people in rural and underserved communities.

This low-cost, high-impact intervention is accomplished by linking inter-disciplinary specialist teams with multiple primary care clinicians through teleECHO<sup>™</sup> programs. Experts mentor and share their expertise across a virtual network via case-based learning, enabling primary care clinicians to treat patients with complex conditions in their own communities.

People get the high-quality care they need, when they need it, close to home.

1. Use Technology to leverage scarce resources
2. Share “best practices” to reduce disparities
3. Apply case-based learning to master complexity
4. Evaluate and monitor outcomes

For more information on Project ECHO visit [echo.unm.edu](http://echo.unm.edu)



# Principles



# Literature on ECHO

400+ references

[https://digitalrepository.unm.edu/hsc\\_echo\\_bibliography/index.2.html](https://digitalrepository.unm.edu/hsc_echo_bibliography/index.2.html)

Home > HSC > Research > HSC Centers > HSC\_ECHO > HSC\_ECHO\_BIBLIOGRAPHY



## PROJECT ECHO BIBLIOGRAPHY

The articles are linked to their place of origin. As long as the HSC Library has a current subscription, the article will be available. Otherwise, please use the reference information to find out more specific details.

Follow

Jump to:

2021

Submissions from 2021

- [Link](#) [Spreading addiction care across Oregon's rural and community hospitals: mixed-methods evaluation of an interprofessional telementoring ECHO program](#), Honora Englander, Alisa Patten, Rachel Lockard, Matthew Muller, and Jessica Gregg
- [Link](#) [Strengthening Digital Health Technology Capacity in Navajo Communities to Help Counter the COVID-19 Pandemic](#), Melissa Begay, Monika Kakol, Akshay Sood, and Dona Upson
- [Link](#) [Telemedicine and ethics: opportunities in India](#), Jitender Aneja and Sonam Arora
- [Link](#) [The impact of project ECHO on physician preparedness to treat opioid use disorder: a systematic review](#), Hunter M. Puckett, Jenney S. Bossaller, and Lincoln R. Sheets
- [Link](#) [The Palliative Care—Promoting Access and Improvement of the Cancer Experience \(PC-PAICE\) Project in India: A Multisite International Quality Improvement Collaborative](#), Karl A. Lorenz, Jake Mickelsen, Nandini Vallath, Sushma Bhatnagar, Odette Spruyt, Michael Rabow, Meera Agar,



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# ECHO Model Considerations

- Educational series – CME considerations
- Case consultation – No assuming care
  - Local hospital legal teams for group running ECHO, should be contacted
  - Our initial said no consults from outside the state
  - Now consult are ok but prohibited for 1 to 2 locations



# Why apply this model to TBI

“all teach, all learn”

- Much of TBI management has a limited evidence base but best practices are evolving.
- Community strategies can be just as effective as academically based for some issues.
- TBI is a common cause of disability in the US
- TBI can touch every facet of healthcare



# Needs Assessment

- ECHO has an educational component to it.
- Therefore a curriculum development model is needed
- IE a needs assessment is helpful to establish learning gaps in communities, identify additional needs, and assess educational impact.
- We use contacts for grant application projects to disseminate our short needs assessment survey.
- Through our contacts and needs assessment, we discovered additional potential key trainee groups. (In our case Department of Corrections).



# Needs assessment - Example

Topic	How important is this topic? 1-10 (1- not important, 10 - extremely important)	How often is management of this a concern in your practice? 1-10 (1- not important, 10 - extremely important)
TBI Identification		
Post-TBI Depression		
Post-TBI Anxiety		
Post-TBI SUD		
TBI & Sleep disturbances		
TBI & Anger/irritability		
TBI & Headache/Pain management		
TBI & Cognitive Impairment		
TBI & Bipolar/Psychosis		
TBI & PTSD		



# Outreach Identified Additional Curriculum Topics

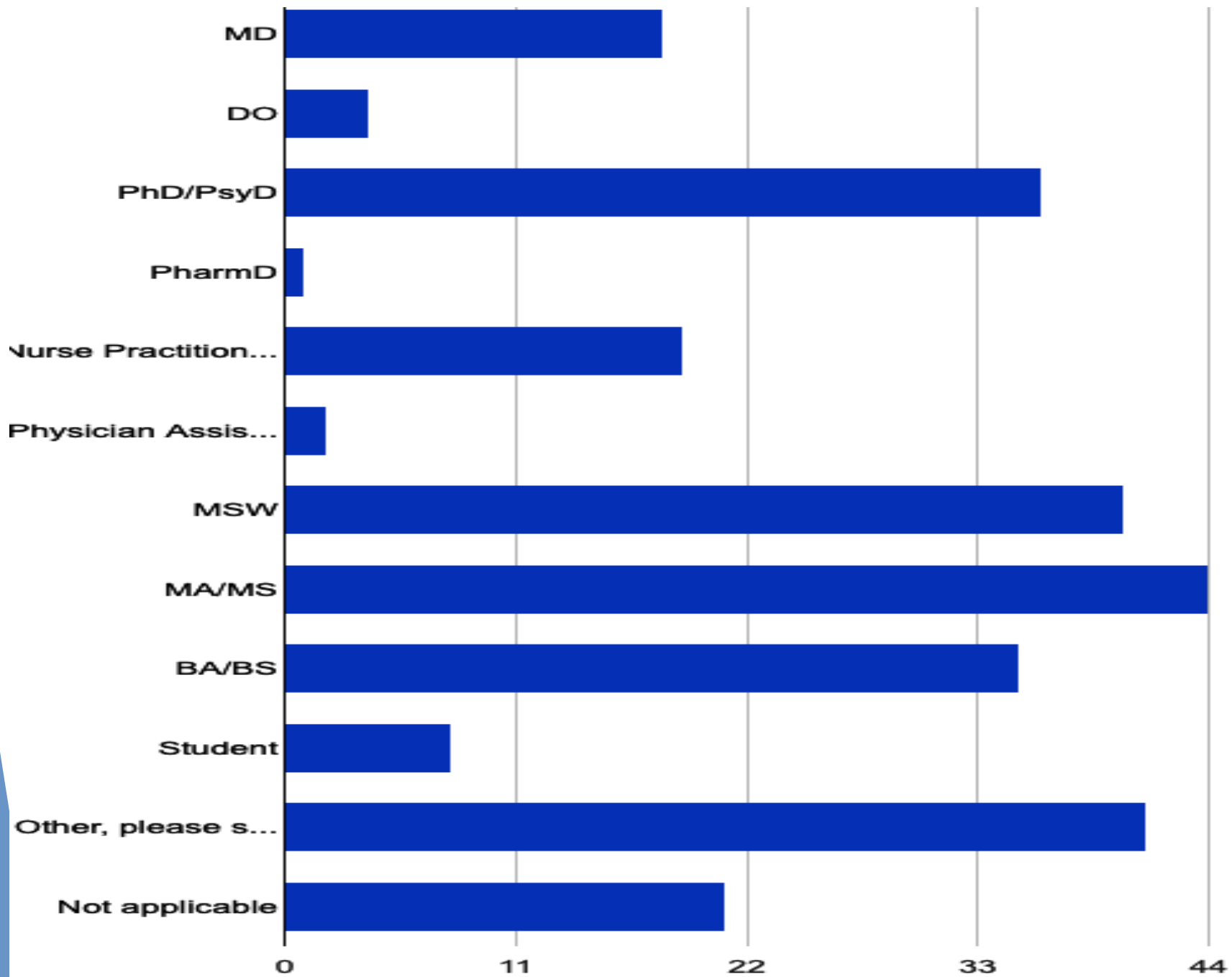
## Planned Sessions

TBI Identification  
Persistent symptoms after concussion  
Post-TBI Depression  
Post-TBI Anxiety  
TBI & PTSD  
Post-TBI AUD  
TBI & Bipolar/Psychosis  
TBI & Sleep disturbance  
TBI & Cognitive impairment  
TBI & CTE/Neurodegenerative d/os  
TBI & Anger/irritability  
TBI & Headache/Pain management

## NEW DISCOVERED NEEDS

Apathy, Fatigue & TBI  
Movement disorder after TBI  
Treating seizures & psychiatric symptoms  
TBI & Stimulants  
TBI & Cannabis  
Chronic post-TBI pain  
Sexuality after TBI  
Grief/Sitting  
Cognitive Rehab  
TBI as a chronic condition  
TBI & Tele & Apps  
TBI & Suicide  
Return to work  
Return to driving





# ECHO Structure

- 1st & 3rd Friday of the month for 1.5 hrs
- Multi-disciplinary panelists
- Case Consultation Available
- CME-accredited
- Goal to support providers treating and managing post-TBI-related Behavioral Health Issues
- Standard ECHO HUB
  - Content experts
  - Facilitator
  - Support Staff



# References

- <https://hsc.unm.edu/echo/>
- <https://tbi-bh-echo.psychiatry.uw.edu>



Questions?



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