



Extension for Community Healthcare Outcomes (ECHO) in Manitoba

Department of Psychiatry Grand Rounds
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Acknowledgements

- Jocelyne Lemoine (Co-Ordinator/research support)
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- CAMH/ECHO Ontario team
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 - Department of Psychiatry Academic Project Grant (2021-2023, PI: Thorington)
 - Pfizer Quality Improvement Grant: Optimizing Telehealth Use in Canada (2022-2023; PI: Hensel)

What is Project ECHO™?



- ▶ ECHO (Extension for Community Healthcare Outcomes) is an educational program that uses videoconferencing technology to create communities of learning
- ▶ Core focus is specialists sharing their expertise and mentorship with community based primary providers, who can then give their patients improved care in their own communities

“ECHO moves knowledge, not patients”

History of Project ECHO



- ▶ Developed by Dr. Sanjeev Arora in 2003 in New Mexico
- ▶ Initially to address long wait list and poor outcomes seen in rural patients with Hepatitis C
- ▶ Interdisciplinary team, with participating primary care providers (PCPs)
- ▶ Outcomes showed:
 - ▶ Reduced specialist wait times
 - ▶ Increased number of patients treated
 - ▶ PCP outcomes similar to specialists



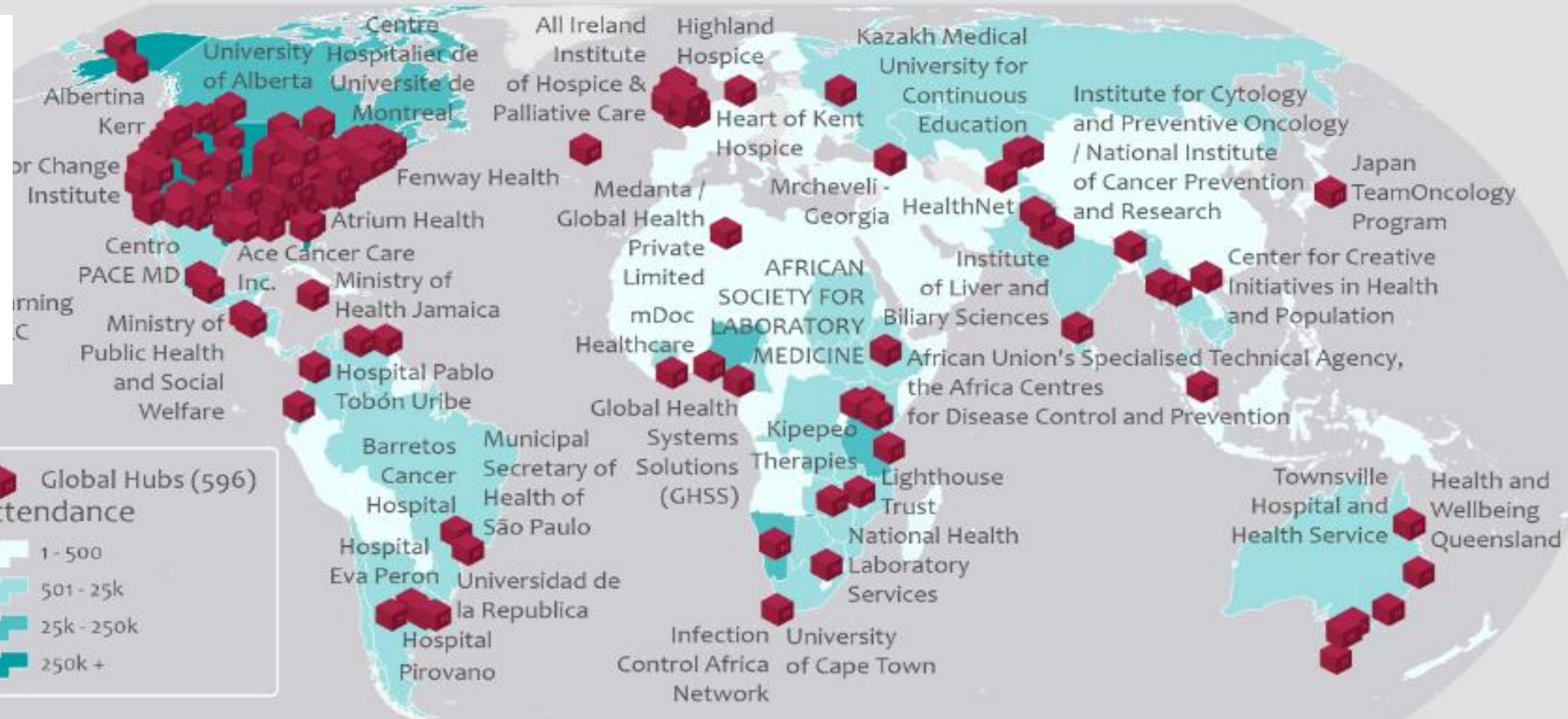
ECHO Movement

Active Today

Hubs
435

Programs
960

Countries
45



Global Hubs (596)

Attendance

- 1 - 500
- 501 - 25k
- 25k - 250k
- 250k +



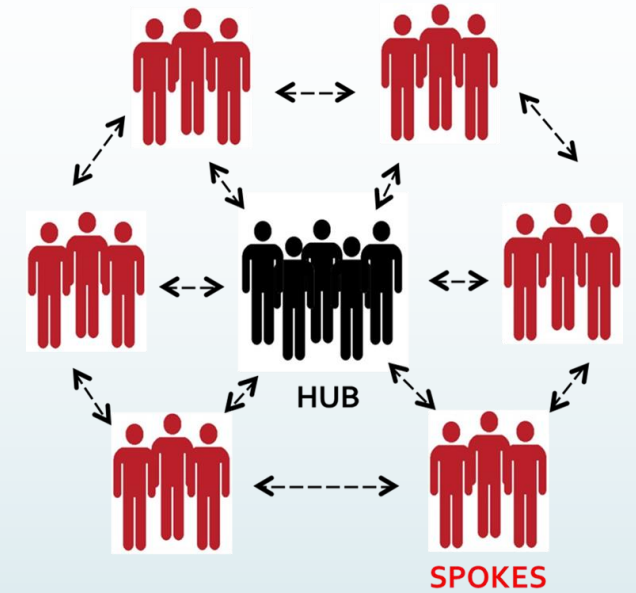
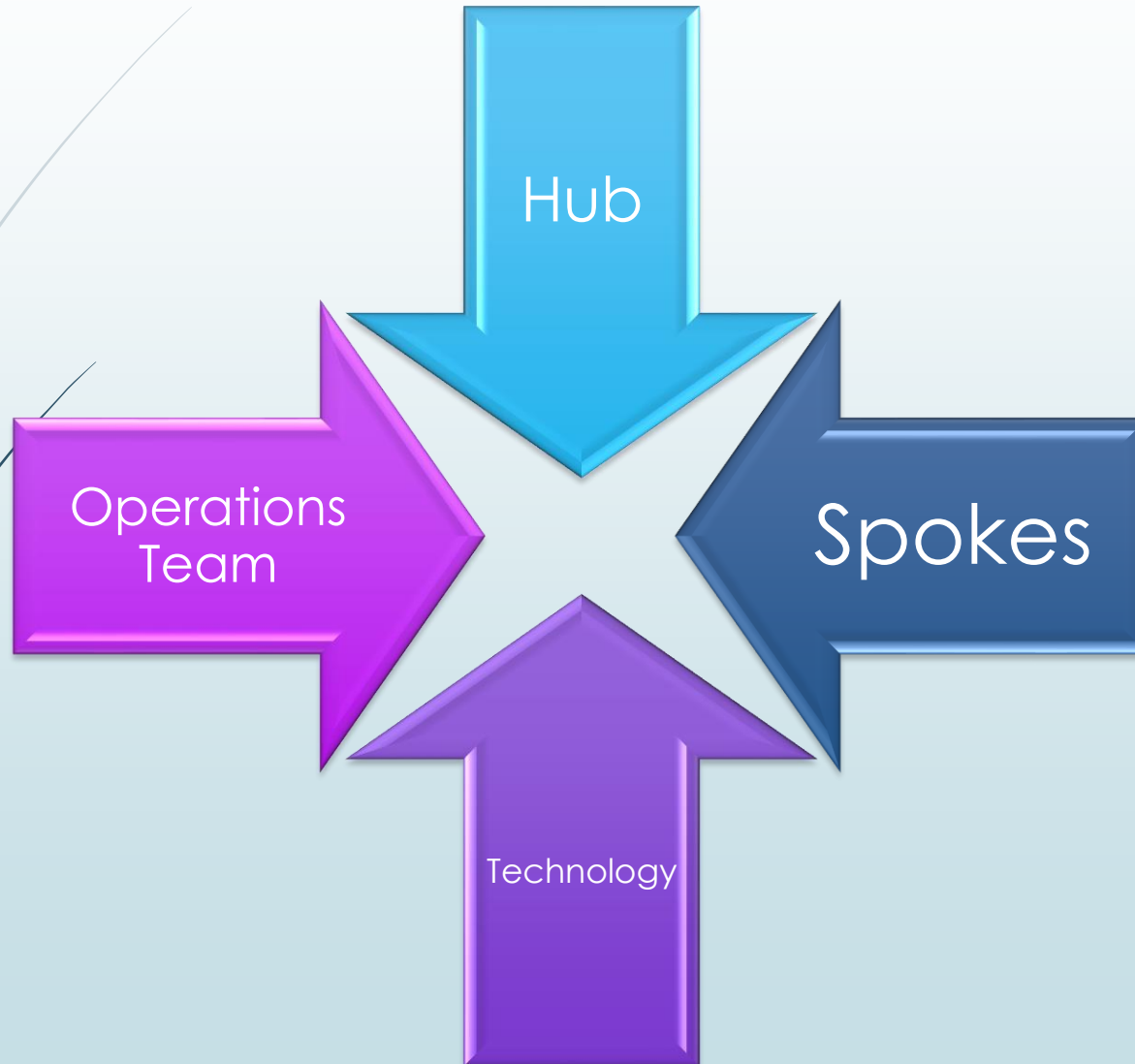
@ProjectECHO



UNMProjectECHO

echo.unm.edu

The ECHO Model



ECHO Model:
All teach
All learn

1. Leverage Technology



- Multipoint videoconferencing to co-create platforms for enhanced communication and collaboration through virtual face-to-face communities of practice and learning
 - amplify scarce human resources, both specialists and primary care
 - empower the agency of local experts and practitioners

2. Case-Based Learning

- Master complexity through collaborative management of patients and public health problems with subject matter experts at centers of excellence
- guided practice [learning by doing] via tele-mentoring



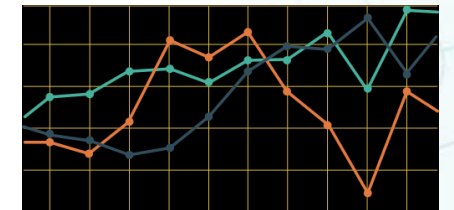
3. Sharing Best Practices



- Improve outcomes by reducing variation in processes of care
- Brief didactic presentations [10-20 min]
- Reinforcement of evidence-based guidelines, etc

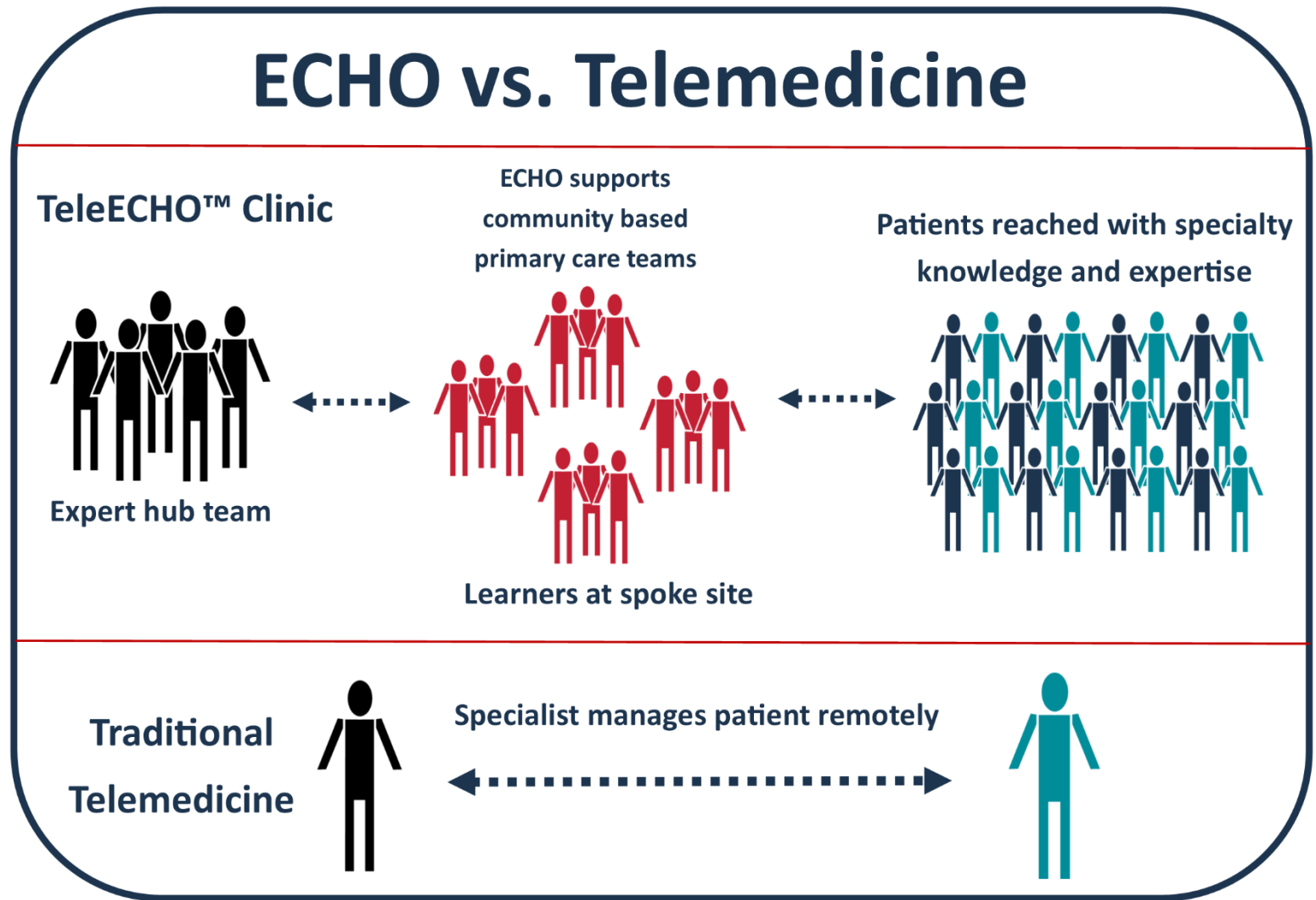
4. Monitor and Evaluate Outcomes

- to promote continuous quality improvement



The ECHO model is not telemedicine

- Develops subspecialty over time
- Democratizes specialty knowledge



Anatomy of an ECHO session

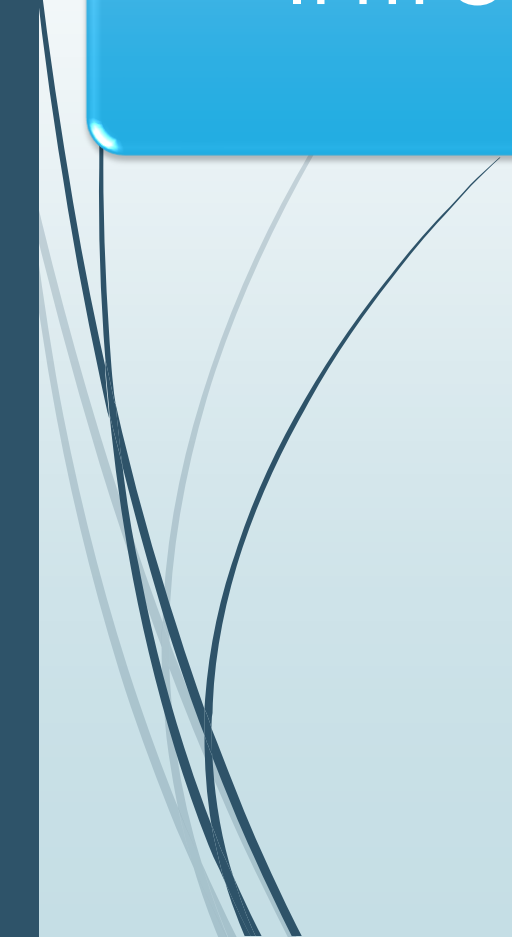
Intro

Didactic

Case Presentation

Recommendations

Structured Discussion





➔ <https://www.youtube.com/watch?v=Faz3O1cIDMU>

ECHO Outcomes

Efficacy and sustainability shown consistently in data from multiple centres, in multiple specialities

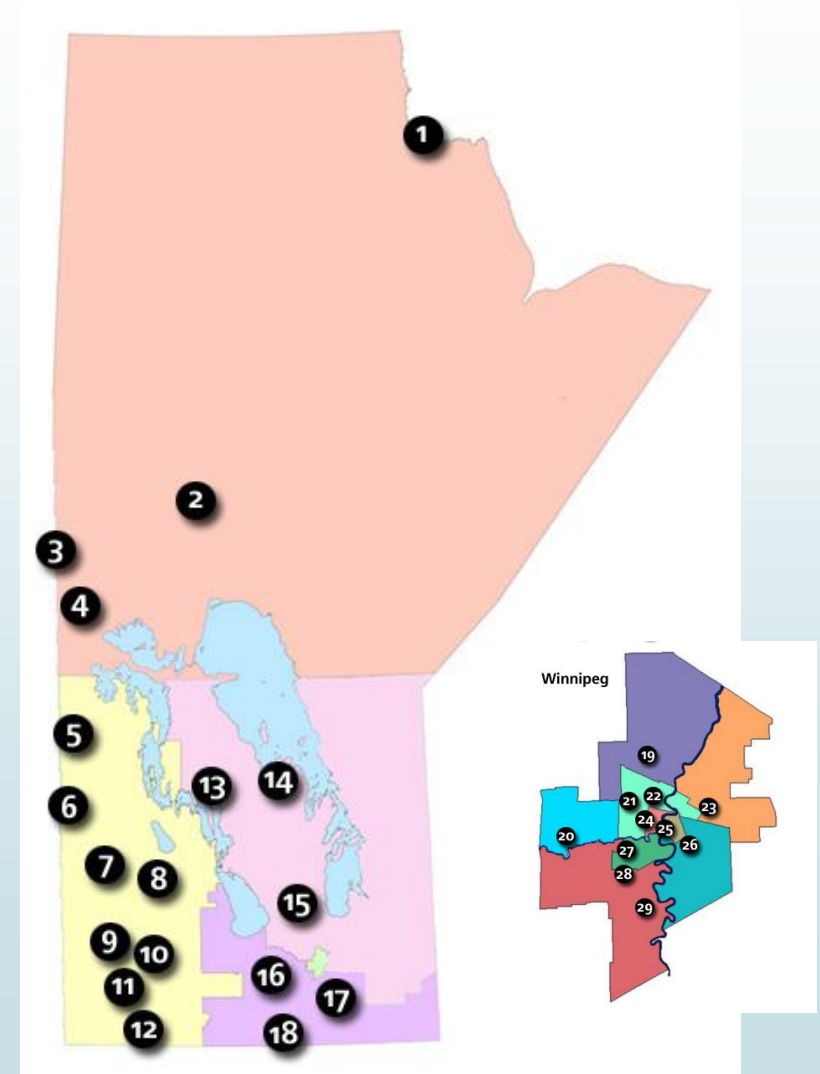
Harrison JN, Steinberg J, Wilms Floet AML, et al. Addressing Pediatric Developmental and Mental Health in Primary Care Using Tele-Education. *Clinical Pediatrics*. 2022;61(1):46-55.
doi:10.1177/00099228211059644

James B. Anderson, Stephen A. Martin, Anne Gadomski, Nicole Krupa, Daniel Mullin, Amber Cahill & Paul Jenkins (2022) Project ECHO and primary care buprenorphine treatment for opioid use disorder: Implementation and clinical outcomes, *Substance Abuse*, 43:1, 222-230, DOI: [10.1080/08897077.2021.1931633](https://doi.org/10.1080/08897077.2021.1931633)

Bernstein, Henry H. DO, MHCM, FAAP; Calabrese, Trisha MPH; Corcoran, Peter MPH; Flint, Laurence E. MD, MS, MBA, FAAP; Munoz, Flor M. MD, MSc, FAAP. The Power of Connections: AAP COVID-19 ECHO Accelerates Responses During a Public Health Emergency. *Journal of Public Health Management and Practice* 28(1):p E1-E8, January/February 2022. | DOI: 10.1097/PHH.0000000000001466

ECHO in Manitoba

- ▶ Large distribution of population throughout the province
- ▶ Geographical isolation of many health care centres and providers
- ▶ Concentration of specialist services in Winnipeg/southern regions means patients travel long distances for care





Local Development



- ▶ 2018, small team to Toronto for official ECHO immersion training (ECHO Ontario superhub)
- ▶ Contract negotiations started shortly thereafter
 - ▶ Ongoing support through this process provided by CAMH
- ▶ Additional team members attended virtual immersion training
- ▶ Support for program development continued to be provided

<https://camh.echoontario.ca/>

ECHO·ONMH

Project ECHO® Ontario Mental Health
at CAMH & The University of Toronto

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I'm interested in...



Addiction Medicine &
Psychosocial
Interventions



Addiction Medicine &
Psychosocial
Interventions:
Hospital-Based
Addictions Care



Adult Intellectual &
Developmental
Disabilities



Critical Care &
Emergency Nurse
Well-Being



First Nations, Inuit, & Métis
Wellness



General Mental Health



Integrated Mental & Physical
Health



Obsessive Compulsive Disorder



Psychotherapy



Trans & Gender Diverse Healthcare



Staff Complement – Development Team

- ▶ RAAM Hub representatives
 - ▶ Medical co-leads
 - ▶ Provincial Coordinator
- ▶ Addictions Foundation of Manitoba: staff supports
 - ▶ Administrative
 - ▶ Knowledge Exchange
- ▶ University of Manitoba Department of Psychiatry
 - ▶ ECHO lead
- ▶ Grant funding
 - ▶ Co-ordinator/Research support

Development Process

- ▶ Collaborative development team was formed to plan and launch pilot ECHO cycles, utilizing:
 - ▶ Needs assessment surveys
 - ▶ Informal feedback from existing relationships
- ▶ Curriculum developed for 3 topics based on the above feedback
 - ▶ Addiction Care
 - ▶ Child and Adolescent Eating Disorders
 - ▶ Emergency Mental Health and Addiction Care



Staff Complement – Hub Members

- ▶ Psychiatry
- ▶ Addiction physician
- ▶ Nurse
- ▶ MH clinicians/Counsellor
- ▶ Peer support
- ▶ Pharmacist
- ▶ Indigenous health
- ▶ Social Work
- ▶ Expert (subspecialist guest panel member)

Program Evaluation



- ▶ Metrics collected:
 - ▶ Demographics (geographic area, practice background, practice type, years in practice, size of practice)
 - ▶ Professional Isolation questionnaire (baseline and post-ECHO)
 - ▶ Perceived Self Efficacy questionnaire (baseline and post-ECHO)
 - ▶ Attendance
 - ▶ Satisfaction with each session and overall program
- ▶ Data collection tools:
 - ▶ Emailed survey hosted in REDCap
 - ▶ iECHO

Mental Health and Addiction in the Crisis Setting

Extension for Community Healthcare Outcomes

PROJECT ECHO

A virtual gathering of health care providers, hosted by mental health experts. Presentations will be given by experts and attendees will participate in case-based learning on mental health across the lifespan

Invited Health Care Providers

Any rural health care provider working with individuals experiencing a mental health or addiction crisis

Learning will target non-mental health professionals working at the front-line in emergency and urgent care settings although mental health professionals are welcome to attend

Mental Health & Addiction in the Emergency/Crisis Setting



For details contact the ECHO Program

Session topics

- Suicide epidemiology and risk assessment
- Suicide risk intervention
- Working with frequent users of crisis services
- Perinatal mental health
- Substance and psychosis
- Eating Disorders

*topics may change

Rural MB Emergency Telepsychiatry Program

Launched September 2021, funded by MB Government



Service: psychiatric assessments to all rural sites in MB, 4 hours every afternoon, 7 days per week



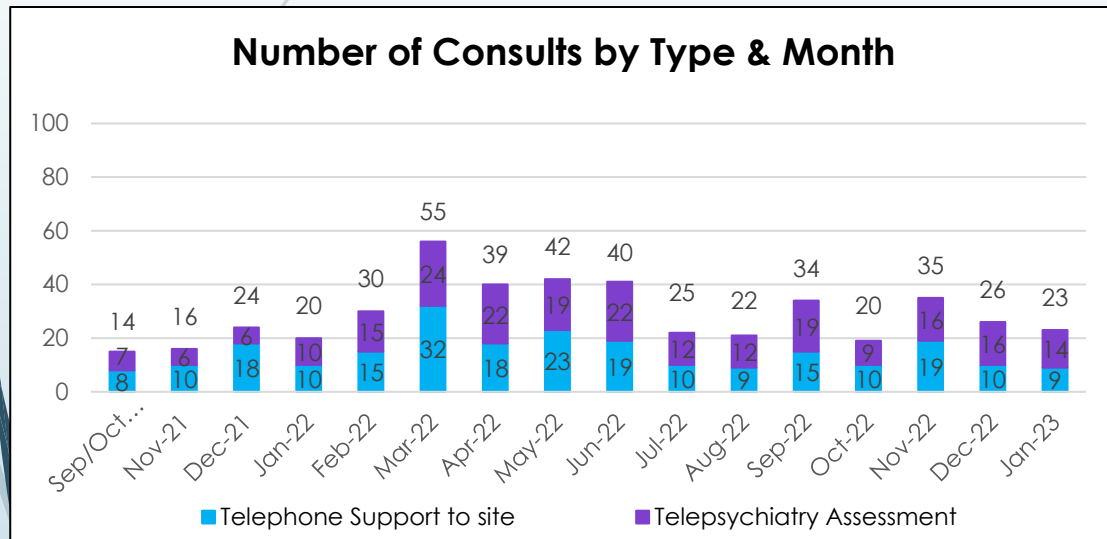
Goal: assessment and management in the rural site



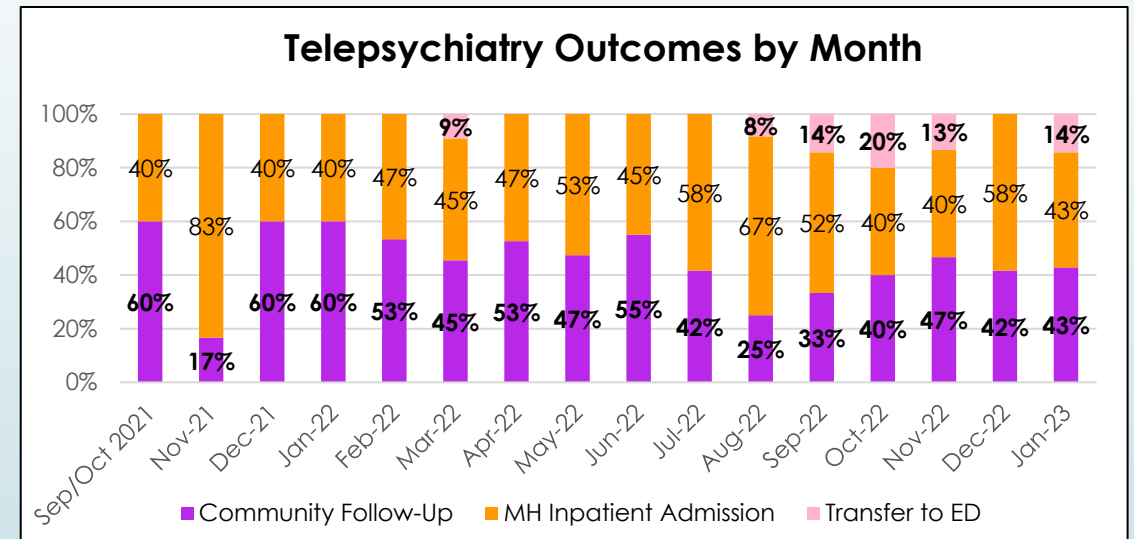
Benefits: patient remains in their home community, avoids very costly transfers, support of rural providers

RTH Impact: ACCESS and OUTCOMES

Increased Access to Emergency Psychiatry for Rural Patients



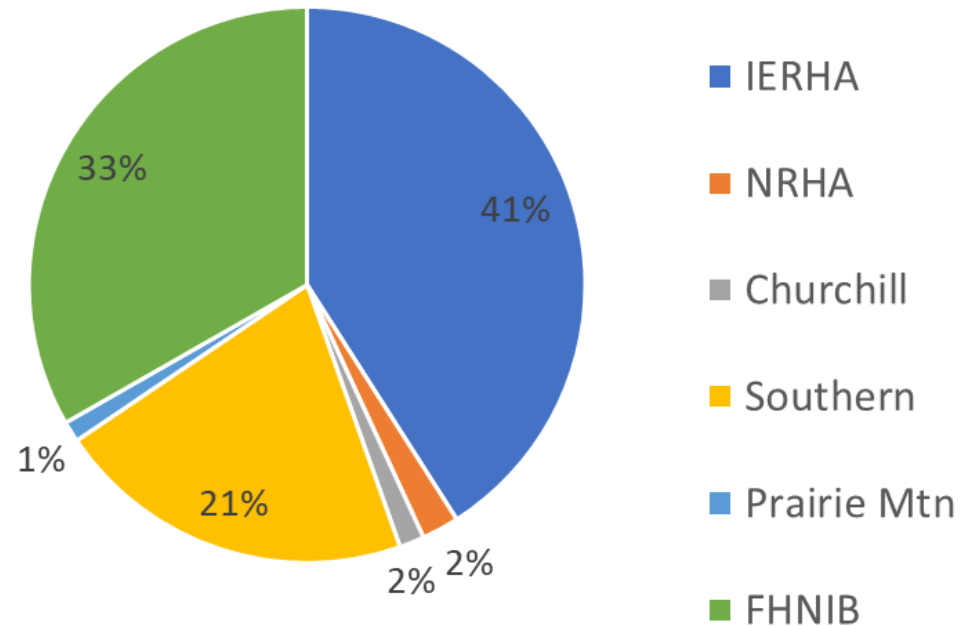
Reduced number of admissions and ED transfers



High need in rural health care settings: isolated front-line providers could benefit from capacity building and support

Approximately 40-50% of people assessed remain in community: need for ongoing local management

RTH: referring sites



- Most regions do not have established comprehensive pathways for emergency psychiatry consultation (esp to small rural sites)
 - Some regions have mobile crisis teams (eg. IERHA)
- front-line staff need skills in crisis assessment and management

ECHO – MHA in the crisis setting

Session	Cycle 1 – February 2022	Cycle 2 – September 2022	Cycle 3 – coming March 2023
1	The crisis mental health assessment and overview of resources	Update on Emergency/Crisis MHA Resources Trauma-informed Approaches to Crisis Care	Suicide epidemiology and risk assessment
2	Suicide Risk Assessment	Suicide Risk Assessment	Suicide risk intervention
3	Managing Youth Suicidal and Self-harm behaviour in the ED	Mental Health and Addiction Crises in the Perinatal Period	Working with Frequent Users of Emergency Services
4	Managing alcohol and opioid use disorders in the ED	Substance-induced Psychosis	Perinatal Mental Health Emergencies
5	Substance-induced psychosis	Managing Alcohol and Opioid Use Disorders in the ED	Substance-induced Psychosis
6	Working with frequent users of emergency services	Working with Frequent Users of Emergency Services	Eating Disorders

ECHO – MHA in the crisis setting

Cycle 1 Participants (N=50)

Regions:

- IERHA: 19 (38%)
- PMH: 14 (28%)
- Southern Health: 14 (28%)
- WRHA/Churchill: 2 (4%)
- **NRHA: 0 (0%)**
- **Indigenous community: 0 (0%)**

Discipline:

- Physician/resident: 14 (28.5%)
- Social Worker/Counsellor: 14 (28.5%)
- Nurse: 13 (26.5%)
- Other community health staff: 9 (16.5%)

Cycle 2 Participants (N=45)

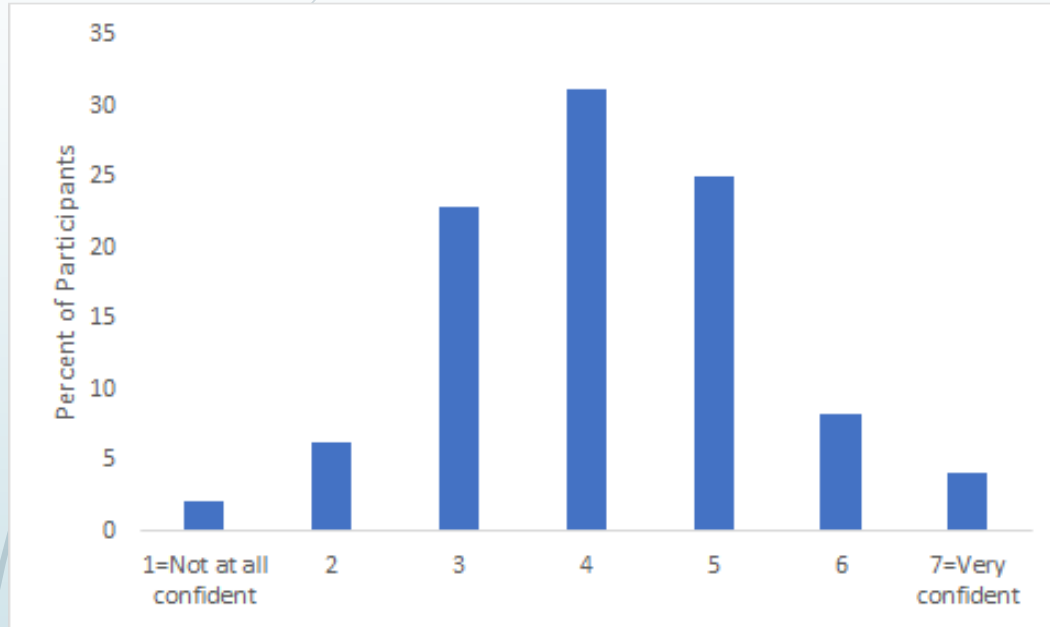
Regions:

- IERHA: 16 (36%)
- PMH: 17 (38%)
- Southern Health: 5 (11%)
- WRHA/Churchill: 3 (7%)
- Indigenous Community: 4 (9%)
- **NRHA: 0 (0%)**

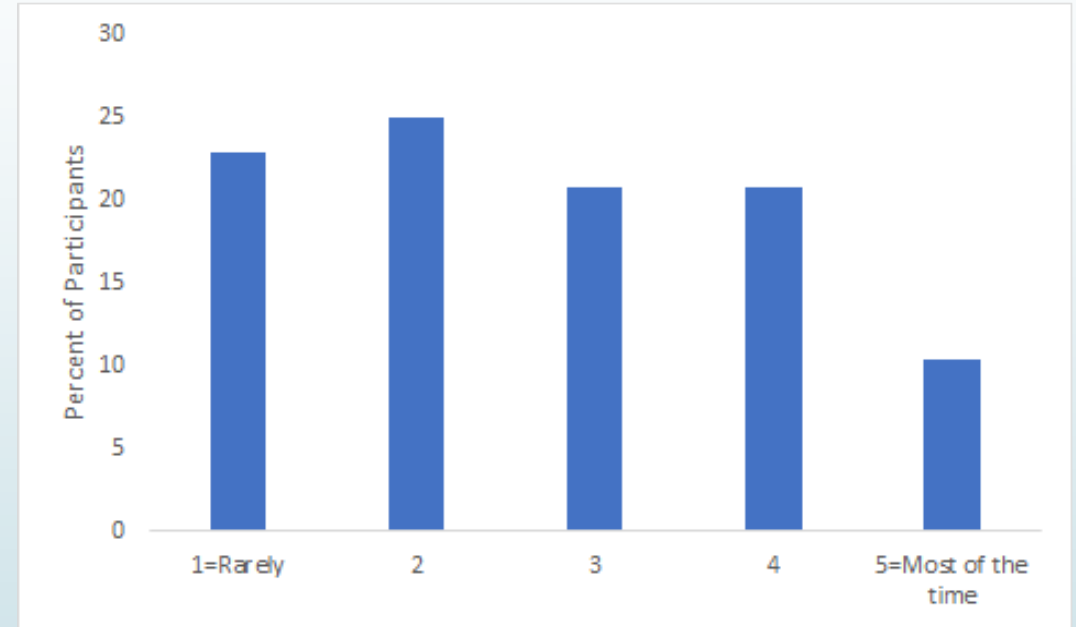
Discipline:

- Nurse: 30 (44%)
- Social worker/MH clinician/counsellor: 5 (11%)
- Mental health worker/ mental health manager or coordinator: 8 (18%)
- Other: 2 (4%)

Participants at baseline



Perceived Self-Efficacy: *How confident are you in managing the mental health or addiction emergencies/crises of the people you care for?*



Professional Isolation: *I feel left out on activities and meetings that could enhance my career.*

*data shown for cycle 1 participants only



Benefits of ECHO for Service Planning

- ▶ Co-ordination with Rural Emergency Telepsychiatry Service
 - ▶ Case presented in Cycle 2 seen next day by RTH psychiatrist
- ▶ Collaborations with rural MH services
 - ▶ Cycles 2 and 3 have a hub member from IERHA
- ▶ Identification of areas of need to inform service planning efforts
 - ▶ Provincial bed management
 - ▶ Lack of MH supports for medical inpatients where the MH issue is impeding recovery/discharge
 - ▶ Lack of community MH housing/activity programs
 - ▶ Need for frequent user support
 - ▶ Not all regions have mobile crisis teams - these models could be particularly useful for supporting frequent users
 - ▶ Potential role for a provincial consultant re: service/system planning and/or regional case managers

Attendance

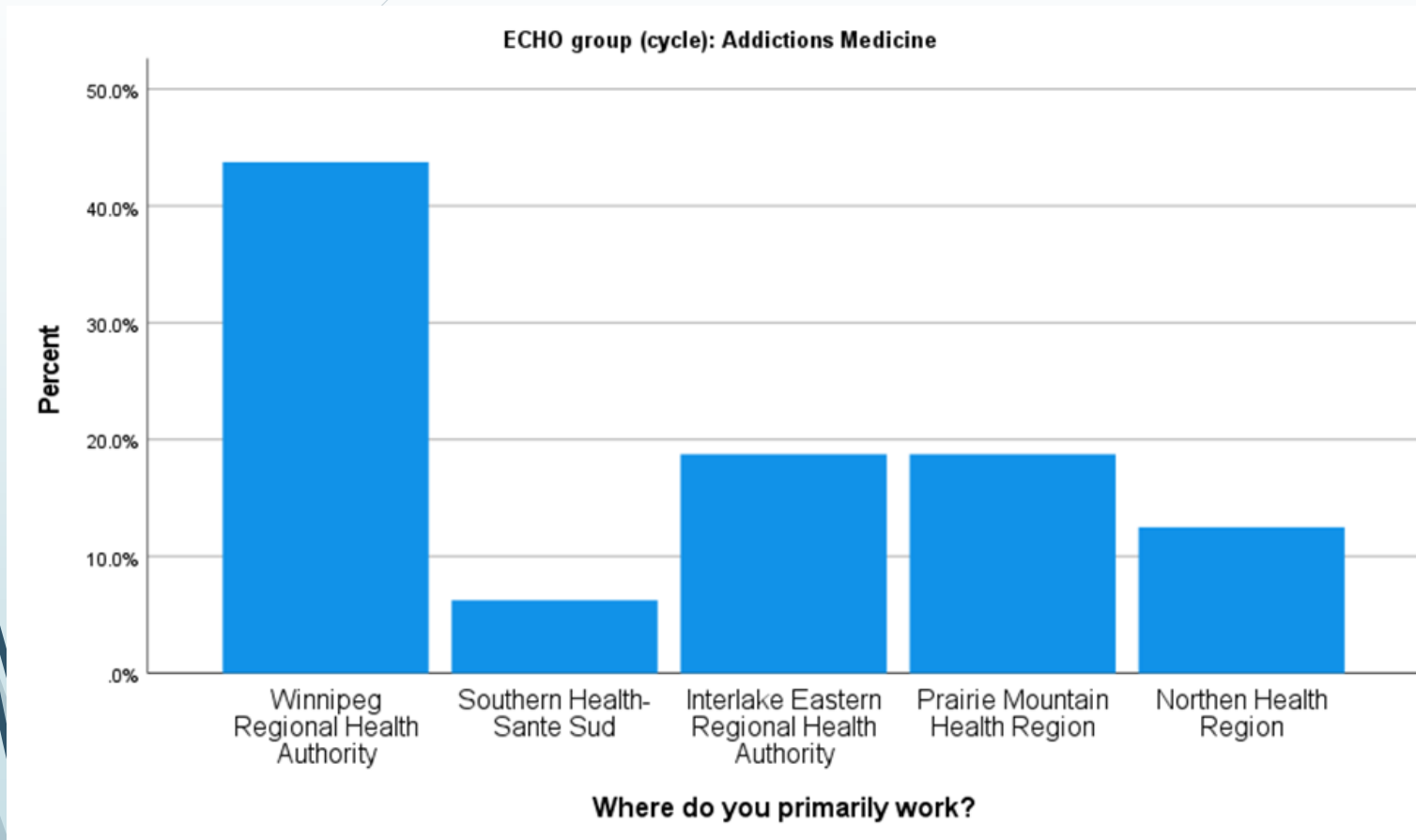




Addiction Medicine

- ▶ RAAM clinics launched in 2018
 - ▶ Low-barrier access to addiction assessment and stabilization
 - ▶ Long-term sustainability of RAAM requires partnership with primary care and community for long-term follow-up
- ▶ Needs assessment survey distributed broadly through Primary Care networks and informally through communities of practice/networks
 - ▶ 200 responses, across all 5 RHAs
 - ▶ 28% physicians, 9% NPs, 33% nurses, 13% counselors
 - ▶ 67% of respondents reported fears/concerns about treating people with substance use disorders
 - ▶ Limited access to services
 - ▶ Lack of resources
 - ▶ Lack of expertise
 - ▶ 92% of respondents were interested in an online community of practice

Practice Location



Note. N=30 (88.2% response rate)

WRHA (n=1)

SH (n=4)

IERHA (n=7)

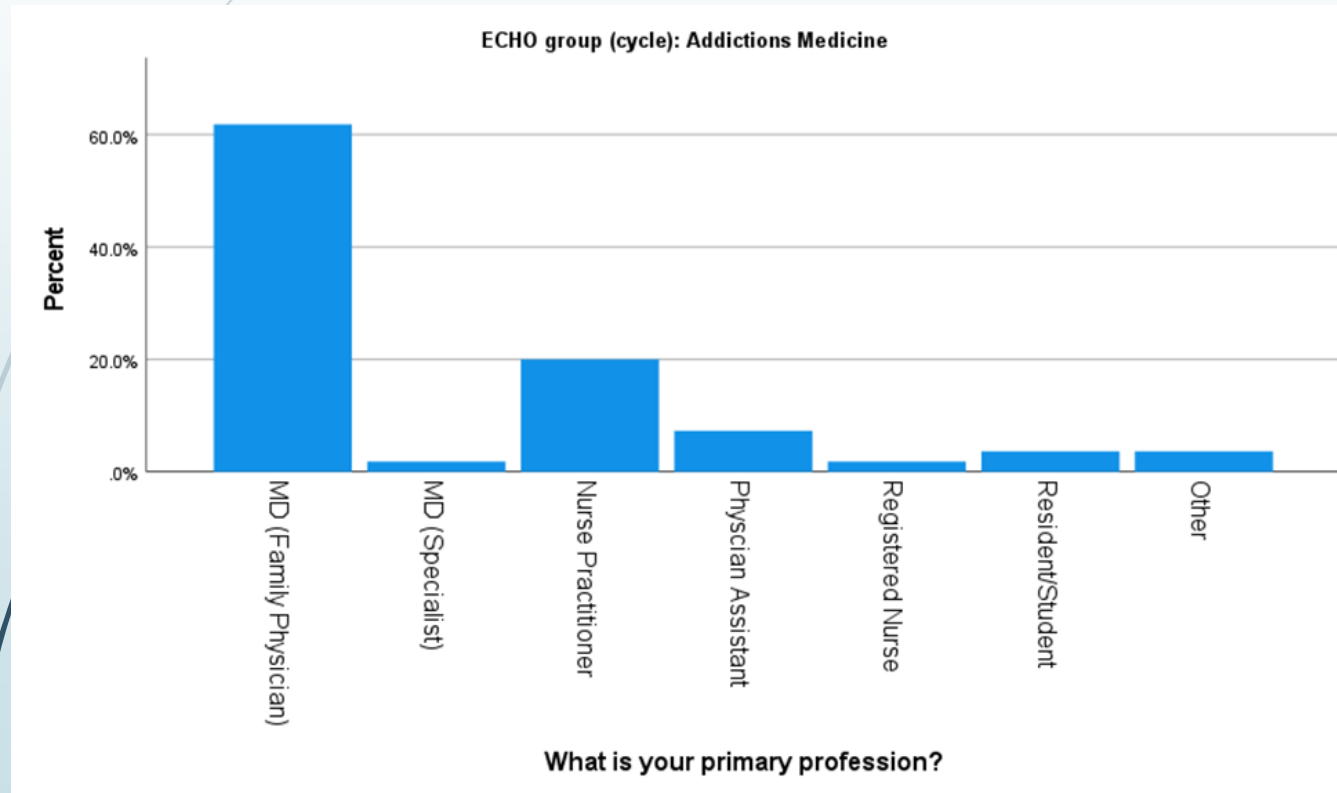
PMH (n=12)

NHR (n=5)

Indigenous community (n=0)

Other (n=1)

Practice Discipline



Note. N=55 (100% response rate)

MD Family Physician (n=34)

MD Specialist (n=1)

Nurse Practitioner (n=11)

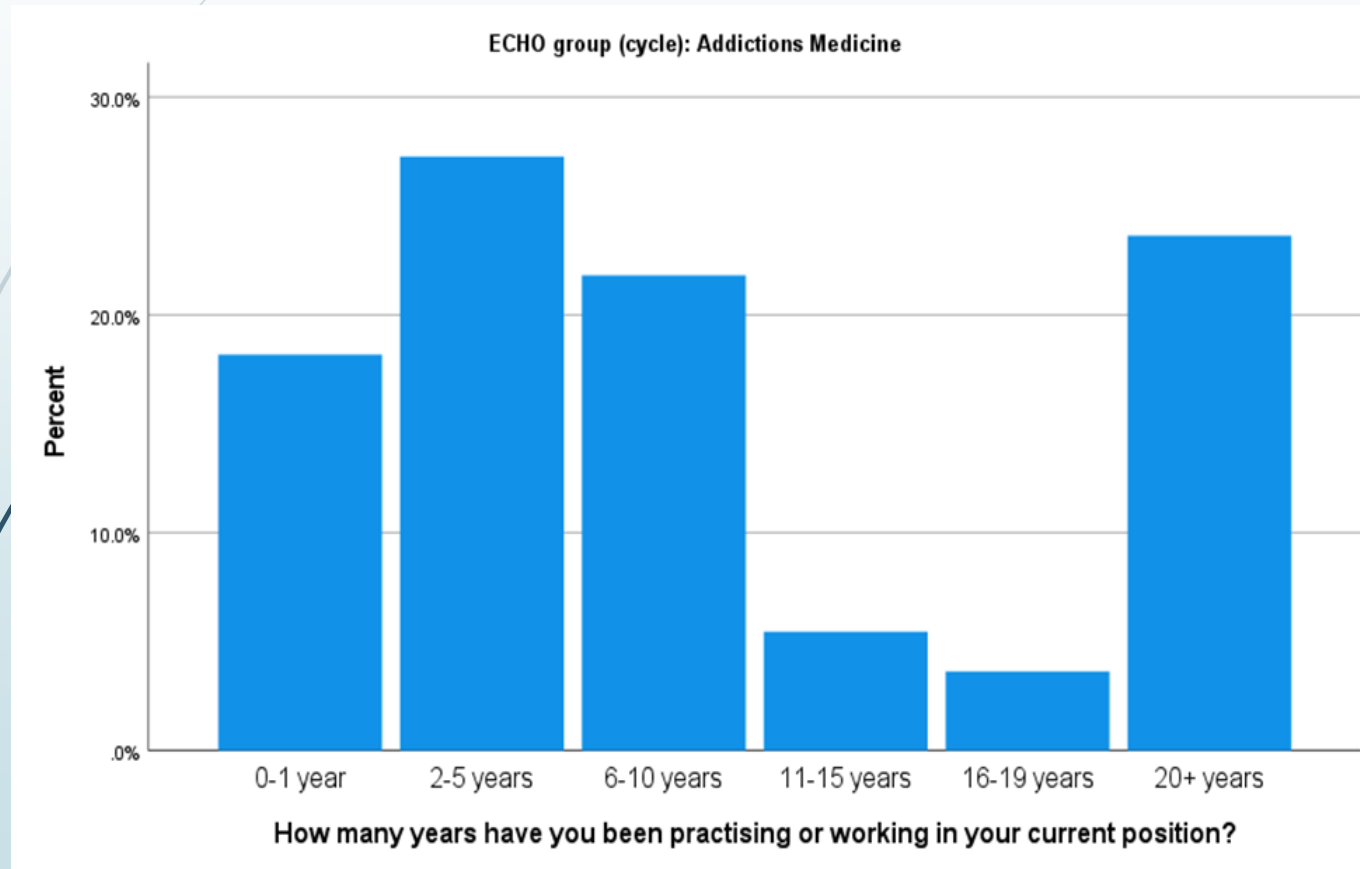
Physician Assistant (n=4)

Registered Nurse (n=1)

Resident/Student (n=2)

Other (n=2)

Years in Practice



Note. N=55 (100% response rate)

0-1 year (n=10)

2-5 years (n=15)

6-10 years (n=12)

11-15 years (n=3)

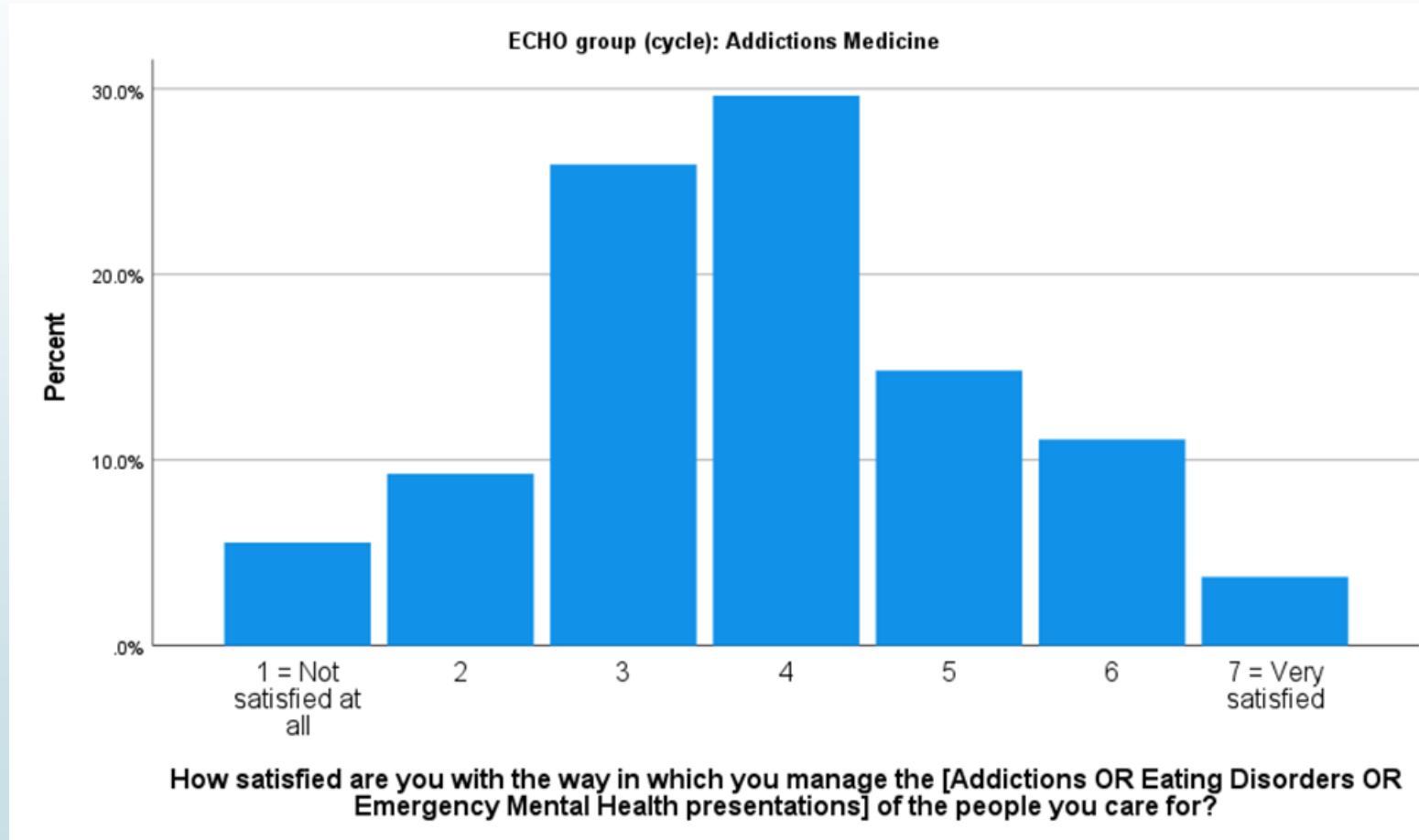
16-19 years (n=2)

20+ years (n=13)

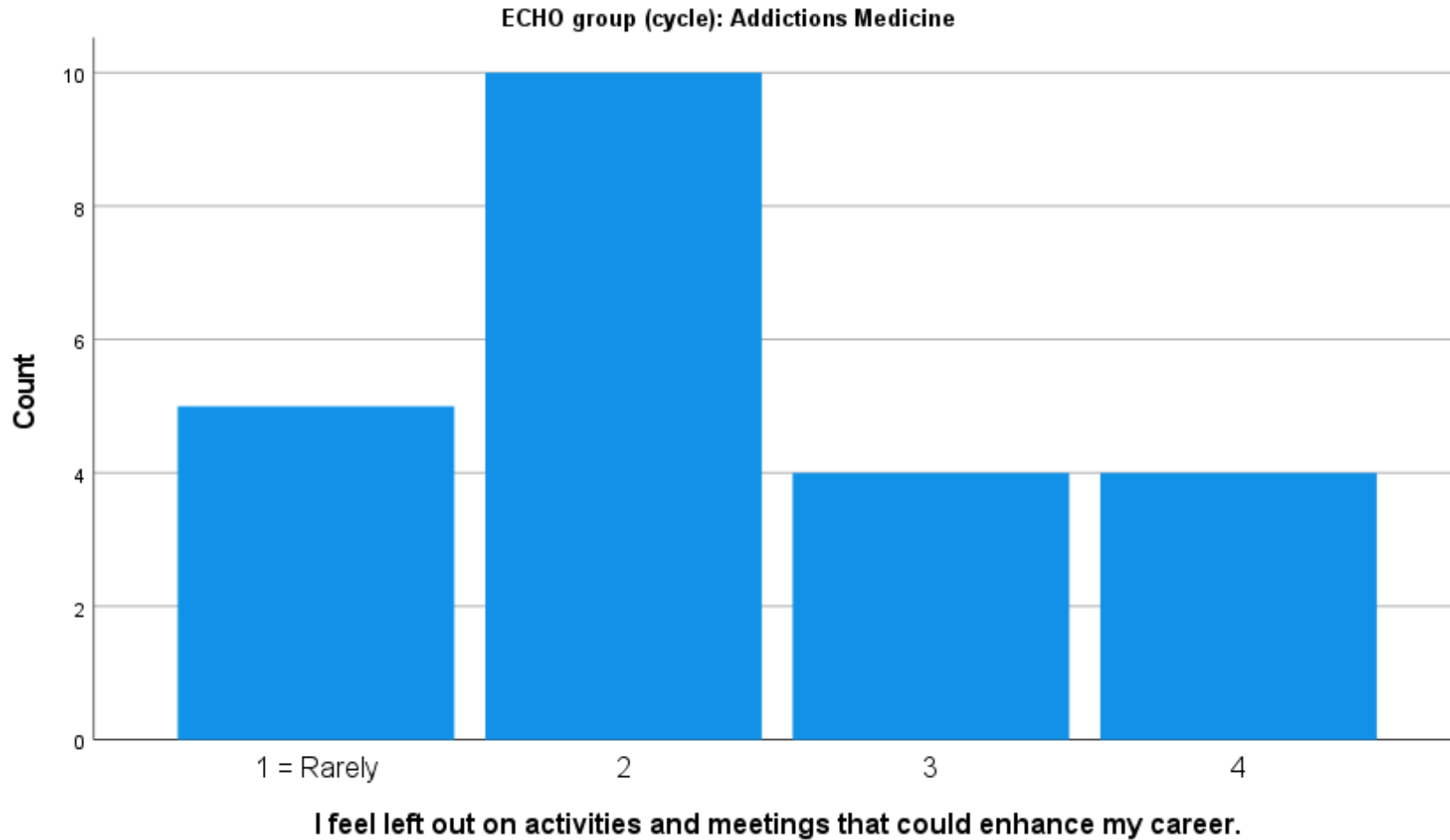
Curriculum

Cycle 1 – January-March 2022	Cycle 2 – October-December 2022
Introduction to ECHO Overview of RAAM	Introduction to ECHO
Alcohol	Alcohol
Benzodiazepines and Stimulants	Benzodiazepines and Stimulants
Opioids	Opioids
Harm Reduction & Indigenous Healing Modalities	Harm Reduction & Indigenous Healing Modalities
Emergency/Urgent Care Management of Substance Use	Emergency/Urgent Care Management of Substance Use

Self Efficacy - baseline



Professional Isolation - baseline



Attendance



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Child and Adolescent Eating Disorders

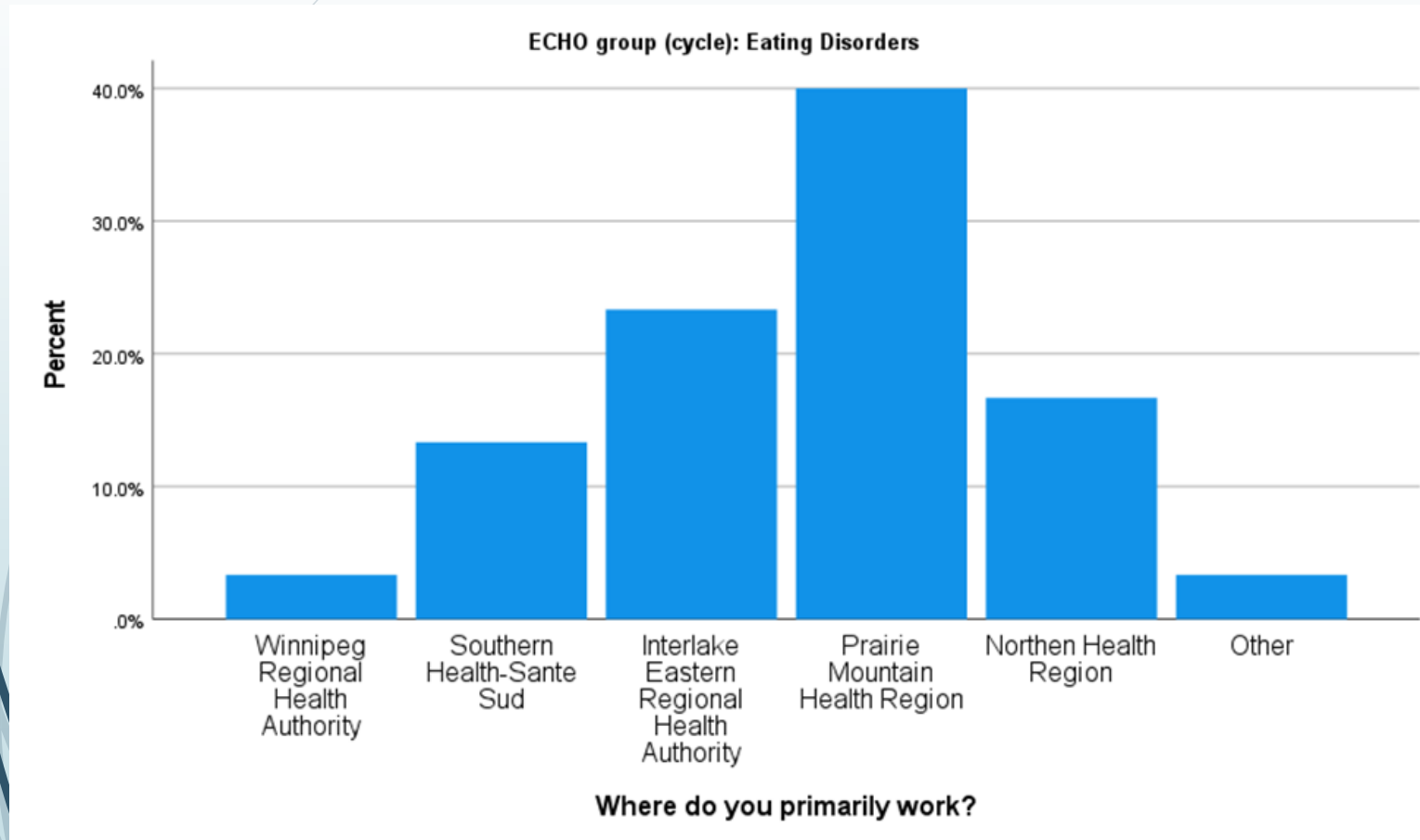
- Significant growth in waitlist, volume of referrals over past 2 years
- Many referrals from rural sites in Manitoba
- Limited capacity of community care providers to manage these disorders in the C&A population
- Recruitment from referral sources, pre-existing relationships with community care providers, word of mouth (second cycle)

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- Many referrals from rural sites in Manitoba
- Limited capacity of community care providers to manage these disorders in the C&A population
- Recruitment from referral sources, pre-existing relationships with community care providers, word of mouth (second cycle)

Practice Location



Note. N=16 (29.1% response rate)

WRHA (n=7)

SH (n=1)

IERHA (n=3)

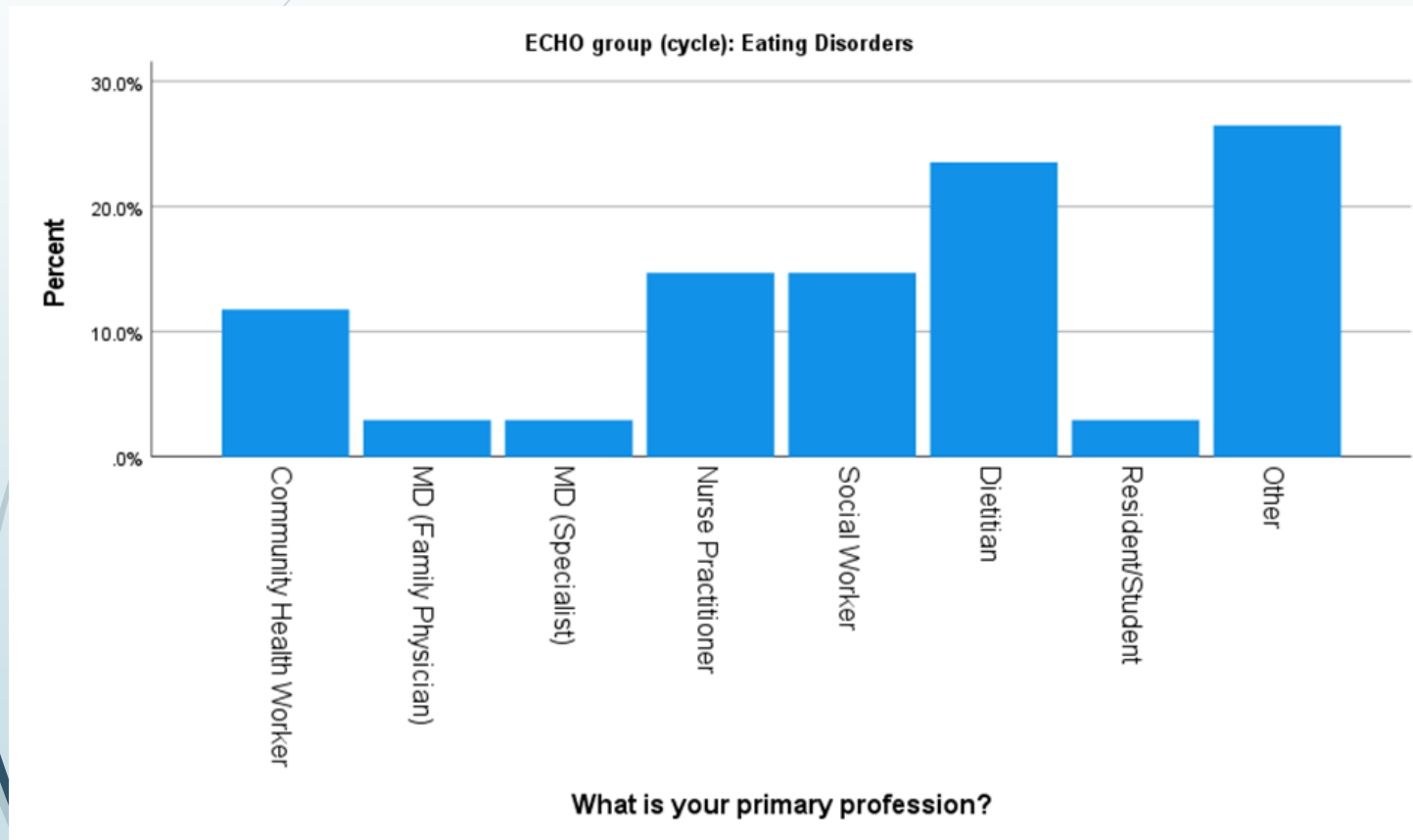
PMH (n=3)

NHR (n=2)

Indigenous community (n=0)

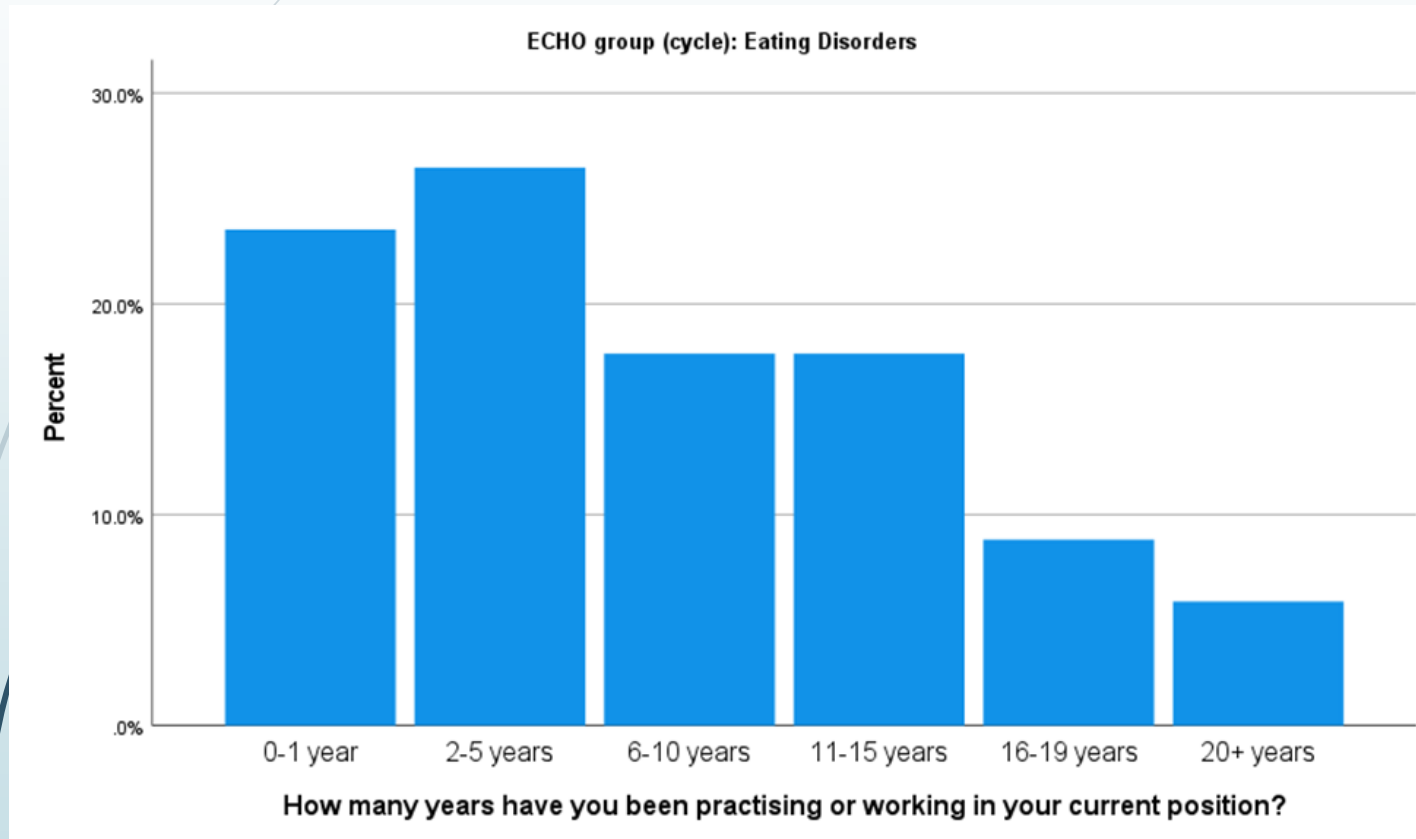
Other (n=0)

Practice Discipline



Note. N=34 (100%)
Community health worker(n=4)
MD Family Physician (n=1)
MD Specialist (n=1)
Nurse Practitioner (n=5)
Social worker (n=5)
Dietitian (n=8)
Resident/Student (n=1)
Other (n=9)

Years in Practice



Note. N=34 (100% response rate)

0-1 year (n=8)

2-5 years (n=9)

6-10 years (n=6)

11-15 years (n=6)

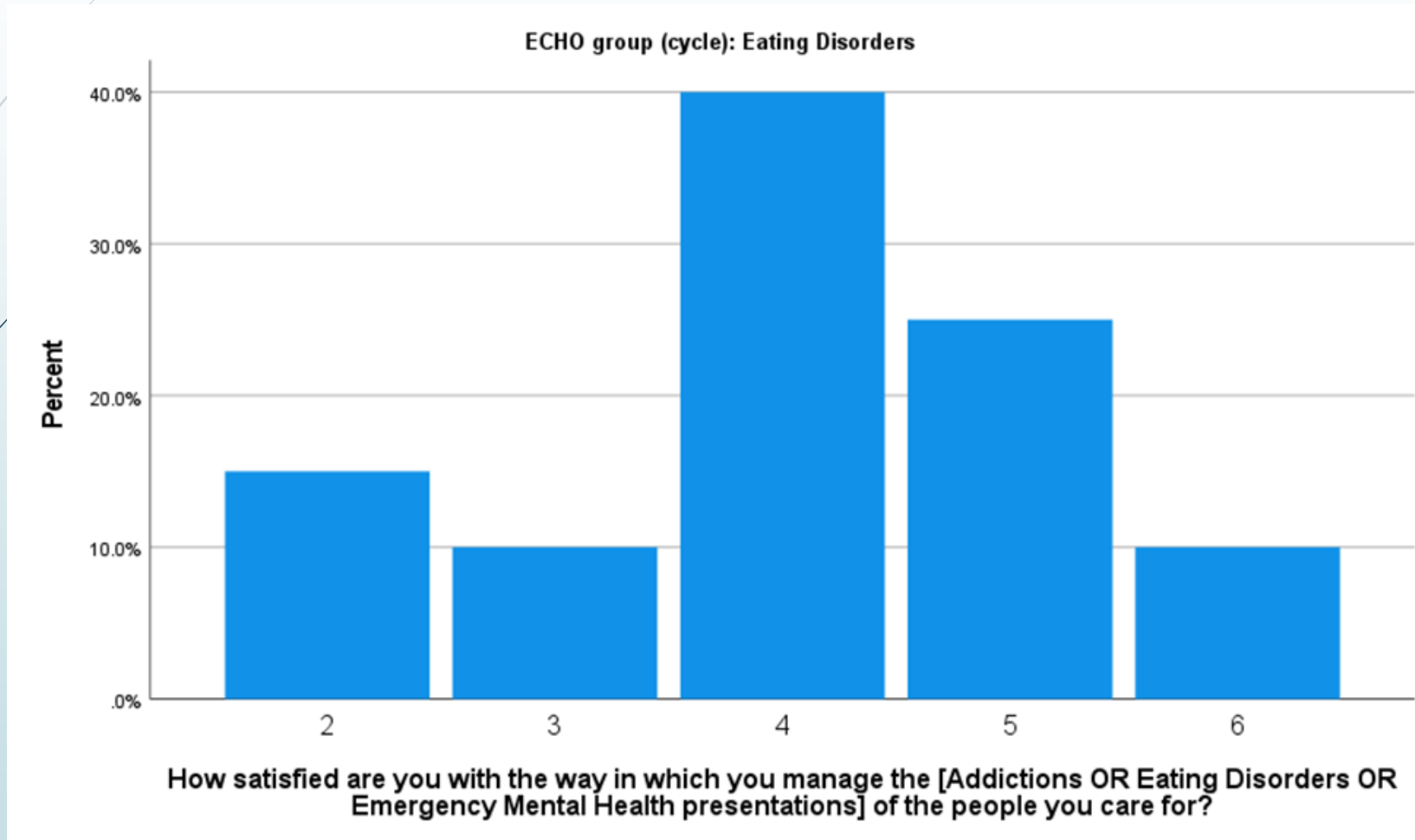
16-19 years (n=3)

20+ years (n=2)

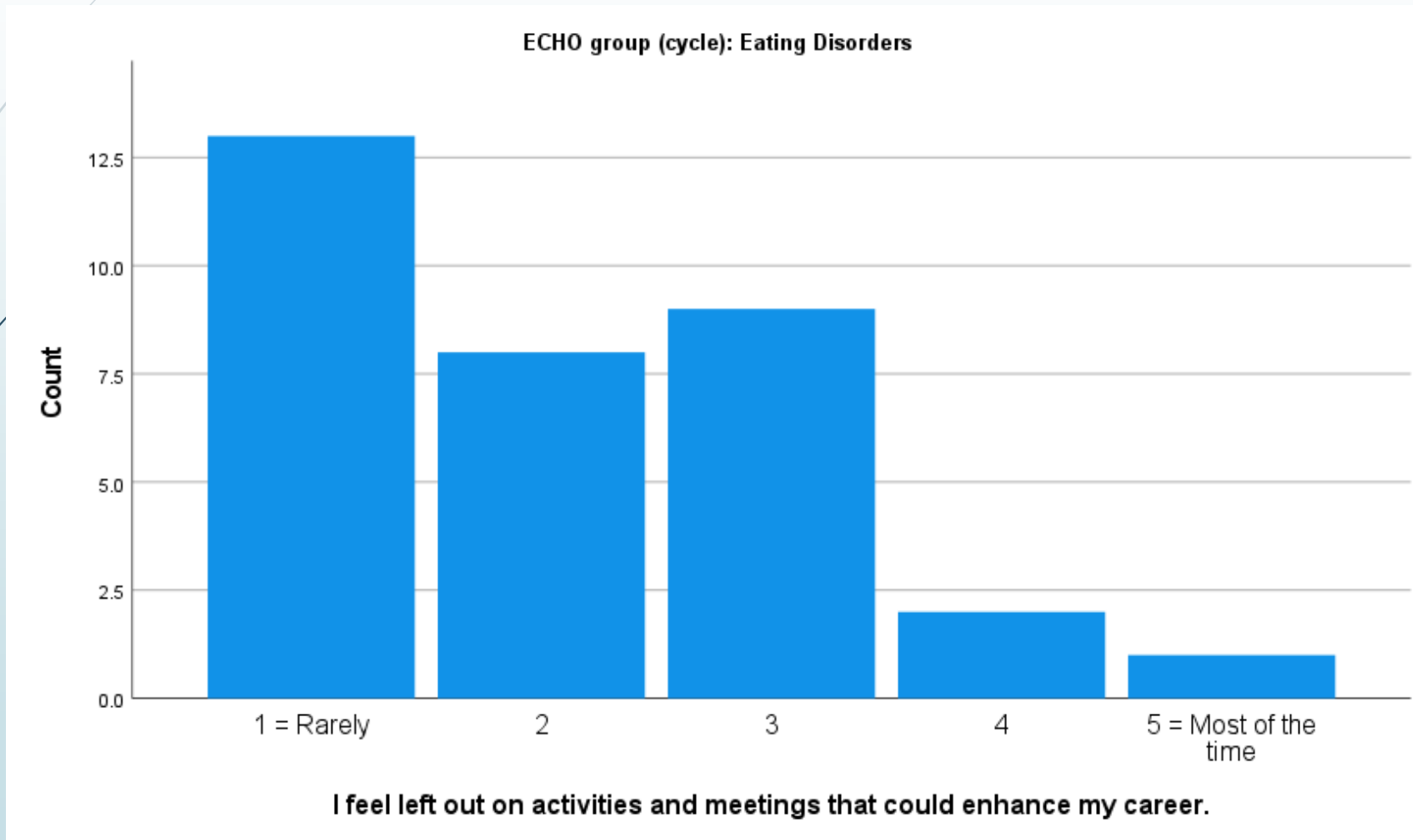
Curriculum

Cycle 1 – Nov/Dec 2021	Cycle 2 – May/June 2022	Cycle 3 – May/June 2023
Introduction to Eating Disorders, diagnosis and screening	Introduction to Eating Disorders, diagnosis and screening	Introduction to Eating Disorders, diagnosis and screening
Medical Considerations in Eating Disorders	Medical Considerations in Eating Disorders	Medical Considerations in Eating Disorders
Psychiatric Comorbidities	Psychiatric Comorbidities	Psychiatric Comorbidities
Nutritional Support and approach to treatment	Nutritional Support and approach to treatment	Nutritional Support and approach to treatment
Family Based Treatment (FBT)	Family Based Treatment (FBT)	Family Based Treatment (FBT)
		Special considerations and clinical pearls

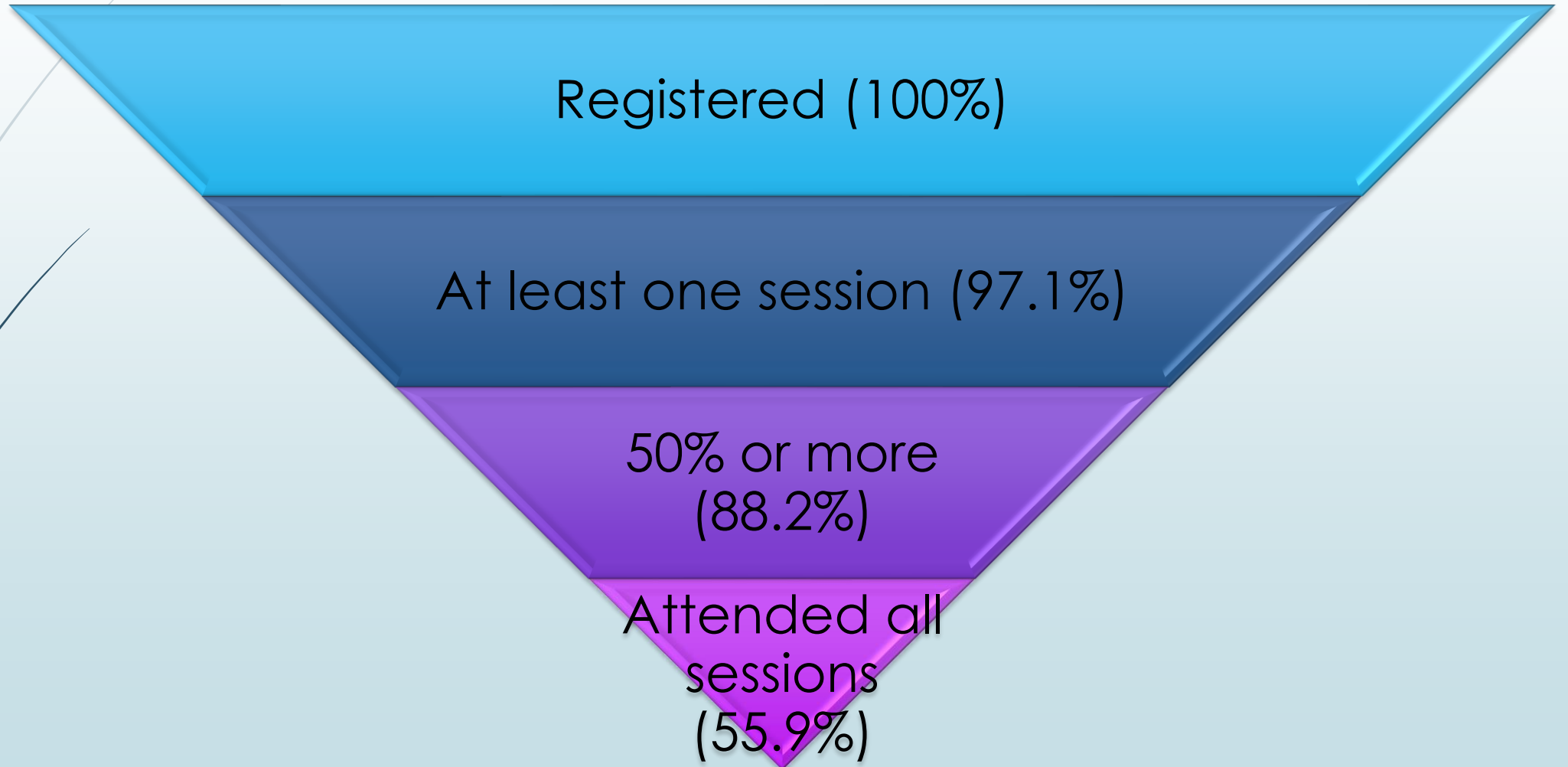
Self Efficacy – baseline



Professional Isolation – baseline

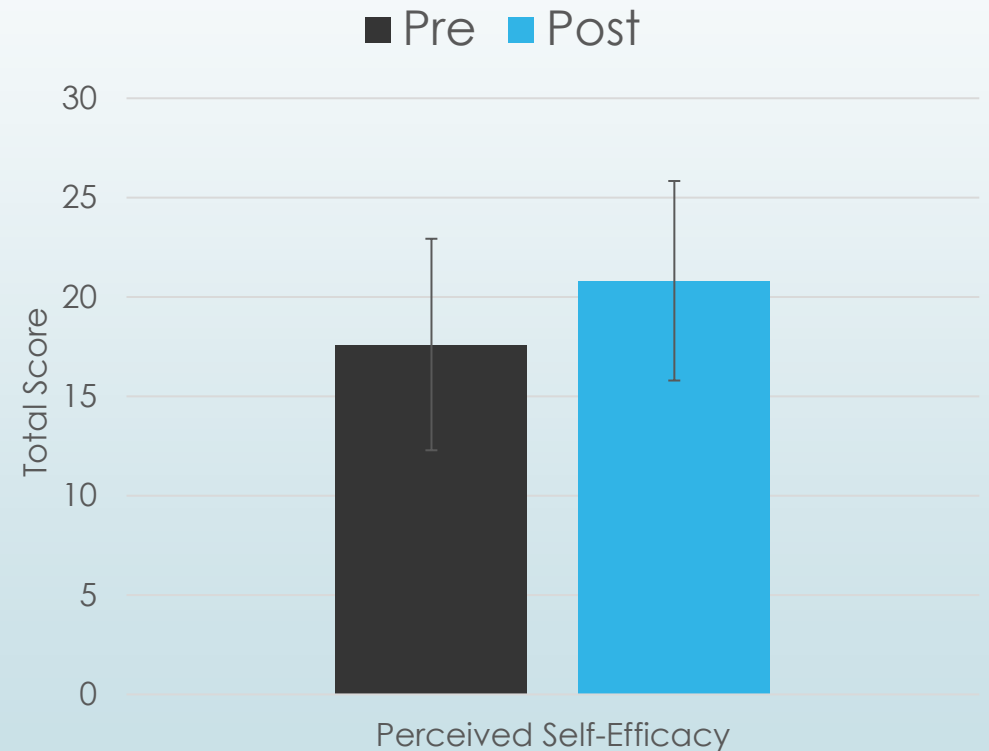


Attendance



Impact on Perceived Self-Efficacy

- All ECHO cycles combined
- Self-efficacy measure is specific to the topic covered
- Higher score = more self-efficacy
- N= 60 completed both pre- and post-test (34% of registrants)
- Mean change = 3.2, $SD=5.9$
- Paired t-test: $t(59)=4.212, P < .001$





Participant Feedback

- ▶ Overwhelmingly positive:
 - ▶ 93.8% respondents would take an ECHO program again
 - ▶ 76.6% reported enhanced professional satisfaction
 - ▶ 62.5% felt they gained knowledge immediately applicable to their practice
 - ▶ 57.8% felt the program enhanced care for patients/clients in their community

Participant Feedback



“I enjoyed the multidisciplinary round table approach to cases.”

“Nice to hear from other practitioners and realize they have the same challenges as me.”

“I really appreciated the knowledge provided during the lectures.”

“Everything about the program was excellent. It provided an opportunity to network and was so well put together.”

“Case studies and interprofessional collaboration were the best parts of the program.”



Participant Feedback

“Recordings of the sessions for those who were registered who were unable to attend.”

“Difficult to manage attendance while involved with clinical duties”

“I wish there was more time to talk to the guest speakers”



Reflections - successes

- Recruitment was successful – high ratio of invitation to registration
- All had waitlists, indicating high interest from care providers
- Completion rates >90%
- In-session participation/engagement level high
- Community connections formed
- Information sharing regarding resources between participants and hub members



Reflections - challenges

- ▶ Closed vs. open group
- ▶ Timing of sessions to increase attendance
- ▶ Compensation for expert panel
- ▶ Dedicated administrative support
- ▶ Balance of session length for learning vs clinical obligations of participants
- ▶ Working to increase ability to encourage multidisciplinary learning environment



Next Steps

- Ongoing support for established ECHO cycles, each running 2x/year
- Currently exploring clinical needs/interests for future cycle topics, including:
 - OAT specific
 - Neurodevelopmental
 - Psychotherapy
 - Indigenous Mental Health
 -and others!

Doing More for More Patients



PATIENT

- Right Care
- Right Place
- Right Time



PROVIDER

- Acquire New Knowledge
- Treat More Patients
- Build Community of Practice



COMMUNITY

- Reduce Disparities
- Retain Providers
- Keep Patients Local



SYSTEM

- Increase Access
- Improve Quality
- Reduce Cost