## **ECHO ONTARIO**

Annual Report 2017/18



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### A Message From the ECHO Ontario Superhub

ECHO Ontario Mental Health at the Centre for Addiction and Mental Health and University of Toronto partnered with ECHO Ontario at University Health Network to form a collective ECHO Ontario Superhub. The Superhub provides guidance, training and support for the replication, successful implementation and maintenance of present and future ECHO hubs while maintaining fidelity to the ECHO model.

The Superhub has had the privilege of working with 18 ECHOs delivered by 7 organizations in Ontario. In 2017/18, the ECHOs in Ontario collectively reached 864 healthcare providers and 320 organizations. Through the ECHO model, we are serving diverse primary care providers in every corner of the province, throughout all of Ontario's Local Health Integration Networks and are building a learning community to change knowledge, confidence, practice and outcomes.

We are pleased to share our accomplishments and learning for the 2017/18 fiscal year in this annual report. We would like to extend our gratitude to our funders, the Ministry of Health and Long Term Care, and express thanks to Dr. Garry Salisbury, Ms. Julie Ingo and Mr. Jake Ennis for their ongoing support. We appreciate your vision for continuous improvements within our healthcare system, and your dedication to equity of care for patients. Your funding of the ECHO project means that more healthcare providers will be empowered to provide the right care, in the right place, at the right time.

Sincerely,



**Dr. Allison Crawford, MD, PhD**Co-Chair | ECHO Ontario Superhub



**Dr. John Flannery, MD**Co-Chair | ECHO Ontario Superhub



**Eva Serhal, MBA**Director | ECHO Ontario Superhub



Rhonda Mostyn, DC Member | ECHO Ontario Superhub



## What is Project ECHO?

**Project ECHO** (Extension for Community Healthcare Outcomes) is virtual capacity building model that connects specialists at academic health science centres with healthcare providers using videoconference technology. Each ECHO session consists of a didactic presentation and case-based learning. During the case-based learning part of each session, a healthcare provider participant presents an anonymized client case to the community of practice for feedback and recommendations. In this way, healthcare providers receive mentoring and feedback from specialists, building knowledge and confidence to change their practice and ultimately improve outcomes for their patients.













7 Weekly Sessions

Low Cost

People need access to specialty care for their complex health conditions.

There aren't enough specialists to treat everyone who needs care, especially in rural and underserved communities. ECHO trains primary care clinicians to provide specialty care services. This means more people can get the care they need.

Patients get the right care when they need it, close to home. This improves outcomes and reduces costs.



## OPIOID CRISIS



Limited culturally relevant mental and physical health care for First Nations, Inuit, and Métis communities

## Aging: number of 65+ adults to double by 2041.

Pediatric Patients
priority issues include
pain, bariatric care,
palliative care

Epilepsy
Care pathways
potential to improve
treatment for more
than 90,000 Ontarians

Mental health
a high burden of
mental illness,
long wait times
and large
distances to
mental health
services

# ECHO is dedicated to Ontario's significant health care issues.

Ontarians are faced with issues of access to specialized care, an aging population, an urgent opioid crisis, limited culturally relevant care, and the list goes on.

Here's where ECHO Ontario comes in. Since launching in 2014, we've focused on addressing opioid stewardship, chronic pain, mental health and addictions, care of the elderly, complex paediatric care, epilepsy and more.

## Project ECHO in Ontario: Our Story

Ontario is home to some of the world's leading academic health science centres. These hospitals and research institutions are concentrated in urban areas, while rural and northern areas of the province are served primarily by primary care providers. Accelerating the spread of specialized knowledge from academic centers to all areas of the province represents a significant opportunity to improve access to healthcare in Ontario, particularly for underserved populations.

Project ECHO is an innovative educational model that leverages videoconferencing technology to connect specialists with primary care providers, elevating knowledge and skills, enabling primary care to manage complex challenges in their communities. Developed at the University of New Mexico, Project ECHO has rapidly expanded around the world. Successful replication of the model requires training and support from an implementation team. Until recently, training was provided exclusively by the University of New Mexico. With the movement spreading quickly, Superhub sites have been developed to train and support new ECHO projects. The ECHO Ontario Superhub, a collaboration between CAMH and UHN, serves new ECHO projects in Ontario and in Canada.

In 2017/18, 7 organizations in Ontario were delivering 18 ECHO projects on priority topics across the health system. This report summarizes the key activities for each ECHO.

"You're able to have the opinions of other specialists and other doctors without having to travel big distances or add additional costs."

- Patient of ECHO Participant

"... If [ECHO] were to disappear, it's almost like we'd be out in space again, just sort of floating. [...] It's a lifeline to education and to support."

- Physician



## Our reach.

320

Healthcare Organizations 864

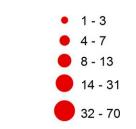
Healthcare Provider Participants 14

Local Health Integration Networks (LHINs)

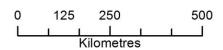
Note: there may be some duplication across ECHO organizations, as we were only able to account for duplicates within organizations.

## ECHO Ontario: Fiscal Year 17/18

### Participating ECHO Ontario Spoke Sites (#)



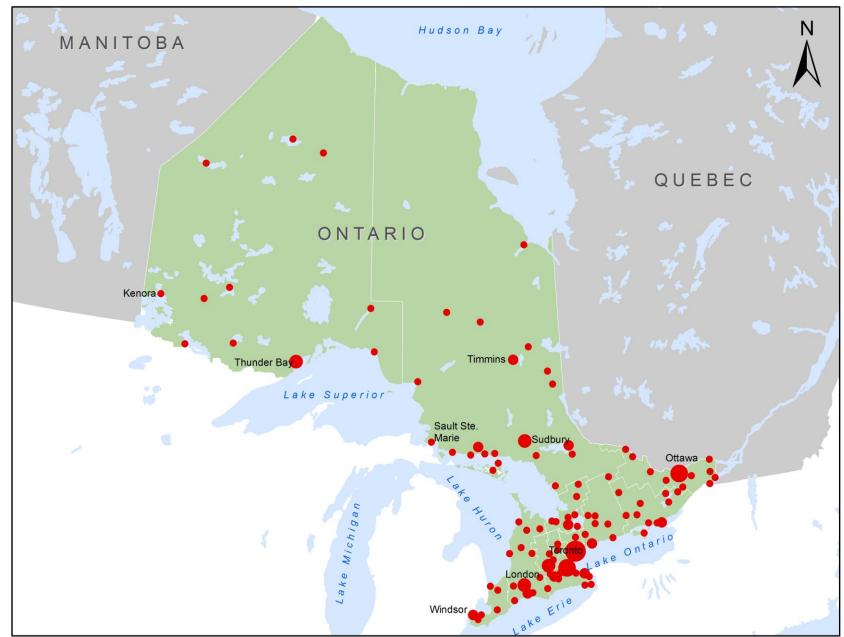
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Created July 2018
by Christine Mitchell
Centre for Addiction and Mental Health

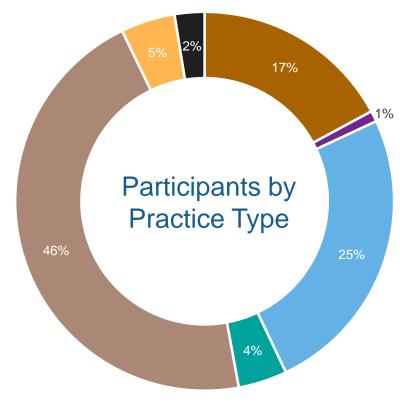


## Who is participating?



- Administrator
- Dietitian
- MD (Specialist)
- Nurse Practitioner
- Pharmacist
- Student

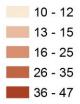
- Community Health Worker
- MD (Family Physician)
- Nurse
- Other
- Social Worker/Counsellor



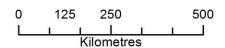
- Community Health Centre
- Family Health Group / Organization
- Family Health Team
- Nurse Practitioner Led Clinic
- Other (e.g., Hospital, Health Canada)
- Private Practice
- Solo Practitioner

## ECHO Ontario: Fiscal Year 17/18

### Participating ECHO Ontario Spoke Sites by LHIN (#)



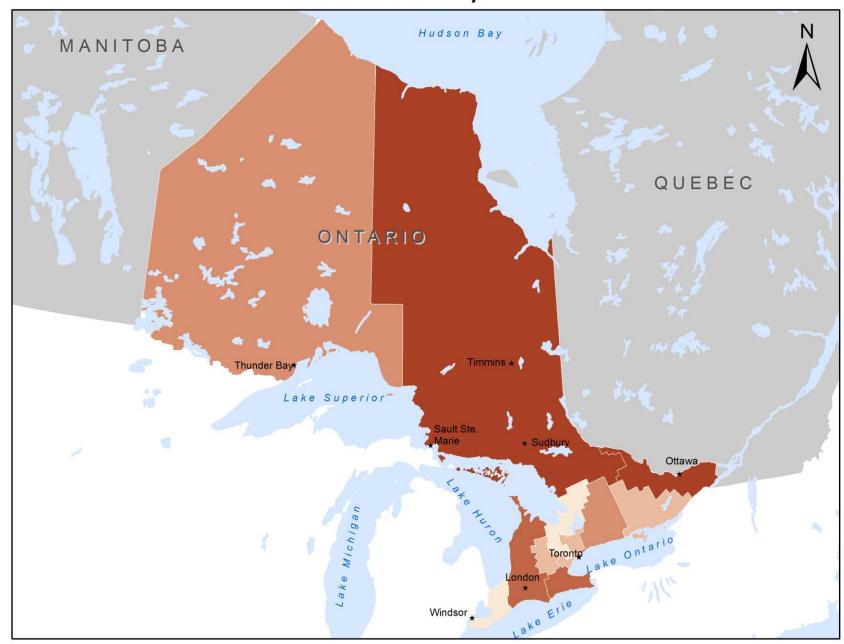
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Created July 2018
by Christine Mitchell
Centre for Addiction and Mental Health





## We move knowledge, not people

There were several ECHO programs operating in Ontario this fiscal year, reaching a total of 864 healthcare providers. The curriculum for each ECHO is designed to share rapidly changing clinical best practices. See Appendix A for a list of curriculum topics for each ECHO.

235

Sessions Held Across All Programs 336

Patient Cases Discussed 442

Hours of Medical Education Delivered

7378

Total Number of Continuing Medical Education (CME) Credits Delivered

# We're rapidly expanding access to specialized knowledge – and it's working.

"I think the opportunity for knowledge translation, knowledge mobilization is probably what really draws me to the ECHO model and having been involved in the first cycle and I've been involved in the ECHO pain as well. And no matter what I have learned over the last several decades of practicing, gathering different people together to deconstruct and reconstruct knowledge is a really great way to continue to learn."

- Social Worker

"I think you enter into a practice and you have very limited knowledge about mental health [...] It's not part of your curriculum or a very little part of your curriculum, but it is the majority of the problem. So, whether there are long-term issues or very short-term, maybe a situational crisis, patients are going to go through some kind of mental health need. So, I felt taking the course has just given me a lot more confidence, to feel [...] more prepared in dealing with mental illness."

- Physician



# More than a classroom, building a learning community.

The great thing about the ECHO model is that it's not situated in a classroom — people are situated at work, discussing practical issues related to their own practices. It's also a community that extends beyond the walls of providers' practice settings. It creates connection and an interest in teamwork and collaboration. It's an active and engaging learning experience that has been well received by our participants.

We have heard from many of our spoke partners the importance of feeling supported. This work can be challenging, and ECHO reduces the feeling of isolation that puts our workforce at risk for burnout.

"Seeing the value of all the different disciplines working together. [...] We don't have any psychiatrists in our community and it's really difficult to communicate with the doctors. To see the impact you can have on a client when everybody takes a piece and you all work together and put it all together like a puzzle, that it can be so much more effective. I think that was a pretty big impact".

Social Worker

"It's just been an incredible resource. I've actually done Project ECHO [...] twice and I'm on the third group now and it just gives incredible access to some phenomenal consultants in the area and increasing my learning."

Physician

## It's clear. Participants enjoy ECHO and what they're learning.

At the **Children's Hospital of Eastern Ontario (CHEO)**, 97% of participants agreed or strongly agreed with the statement, "I am satisfied with the ECHO program."

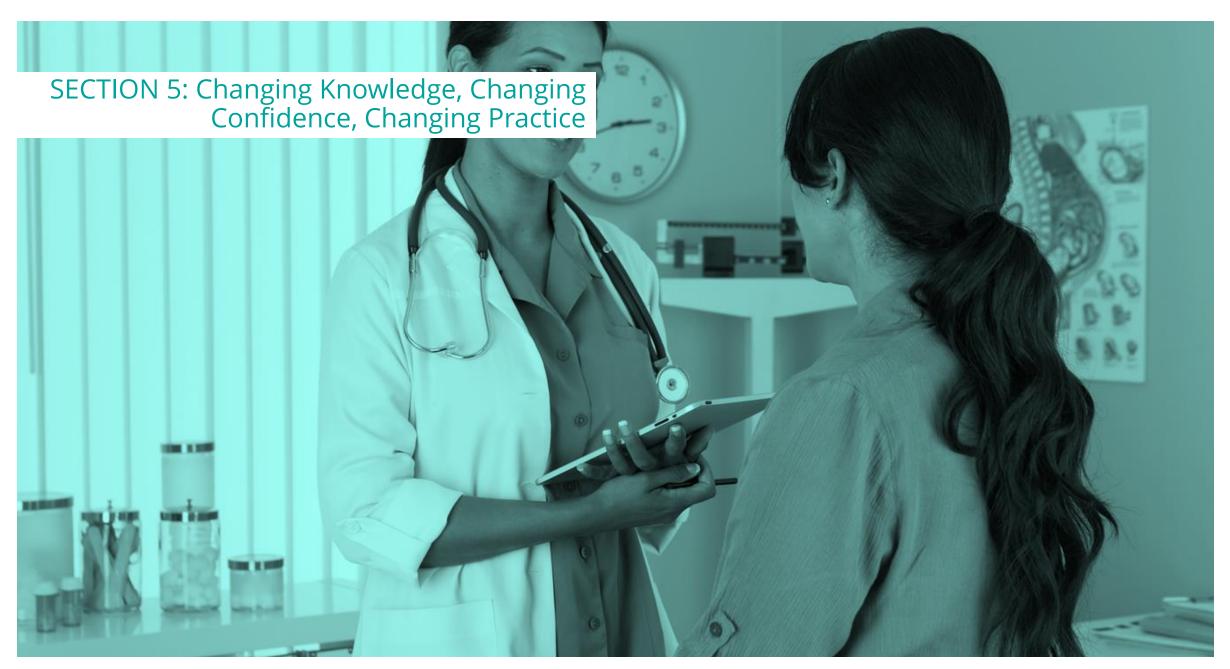
At the University Health Network and Queen's University (UHN), 100% of participants agreed that "Involvement in Project ECHO was a worthwhile experience for me.", 98% of participants agreed that they would recommend Project ECHO to their colleagues.

At the Centre for Addiction and Mental Health and University of Toronto (CAMH),

participants agreed or strongly agreed with the statement, "I am satisfied with this session" and "ECHO has addressed my learning needs" across all 36 sessions.

#### At The Hospital for Sick Children (SickKids),

82% of participants agreed or strongly agreed with the statement, "Involvement in the Paediatric Project ECHO Program is a worthwhile experience for me".



# Changing knowledge, changing confidence, changing practice.

ECHO Ontario is fortunate to have a talented team of research staff to help us understand and document the impact of our work. Citations of findings from ECHO Ontario projects are shared in Appendix C.

We know that participants are engaged in ECHO and that they're learning, but is this enough to change their practice, and ultimately change outcomes for their patients?

## Changing Knowledge

"I am really enjoying these sessions. The didactic presentations are enriching. As well, the information and the resources provided in each presentation have helped me to provide better care to my younger population. Also, I have increased my knowledge about all the mental health services available and how to navigate the system. Our team has been incorporating many of the tools provided by Project ECHO into the daily practice which has helped a lot to screen appropriately our child and youth population."

Nurse Practitioner

"[ECHO] really helped me to be better at taking a good psychiatric history, a good mental health history, a good social history, all these kind of things that are being emphasized again today. It's really helped me to step back and say, "Oh man, I'm doing a lousy job with this; I've got to sharpen up. I've got to do more listening and less talking".

Physician

92%

At **CHEO**, 92% of participants indicated that their overall knowledge of child and youth mental health is "good" or "excellent", a 40% increase compared to pre-ECHO.



At **UHN**, participant knowledge significantly increased from 70.4% correct pre-ECHO to 77.9% correct post-ECHO (p=0.036). This is comparable to **CAMH**, who previously found a statistically significant change in knowledge pre-post ECHO (change of 12.4%, p=0.01) in the 16/17 fiscal year. See Appendix C.

## Changing Confidence

"I do have a greater sense of confidence in just being able to work with [Indigenous] patients, and just trust that this is my clinical guess or my clinical decision, and just feeling more confident in that, that I do have a lot of years behind me and that does count for something. Even if I don't have all the formulas, like the different options of treating things and the dosages, and I'm not confident with all that mixing of medications, there's still a lot I can offer. So, I think it's just kind of reinforced that."

Nurse Practitioner

"[The effect of ECHO on me is] that I'm more confident in what I do. Before, when I would be doing the opioid taper, or even changing them over to a different opioid, I would sit there and calculate, and make sure I triple check everything, I had to go back and get all the numbers again. I think with doing all these cases and everything, now I can just do it in my head, I don't even need a paper. I think that confidence the physicians can see, so they see me as an expert in opioid tapers and opioid management."

– Primary Care Provider

## Changing Practice

"The access to the experience and very high level of expertise of the hub was practice changing for me. We can do all sorts of professional development and continuing education, but it doesn't always change the way that we work, the way that we deal with patients."

Pharmacist

I'm treating my own Hepatitis C patients which is brand new; I wasn't doing that before. Second thing is we're screening a lot more patients for Hepatitis C so we're actually screening everyone based on age cohort screening to try to pick up any latent cases of Hepatitis C in our practice."

Physician

21%	reduction in number of visits to healthcare provider.
25%	increase in discussion around pain interference with the patient's function status (mood, sleep, etc.).
33%	tapered opioids post-ECHO (decrease dose or eliminated altogether).
25%	reduction in dangerous polypharmacy (benzodiazepine + opioids, CNS depressants + opioids).
25%	increase in Urine Drug Screening in opioid-related management.
25%	increase in recommendation to stay active (walking, gym membership etc.).

At **UHN**, patient chart reviews were conducted in northern and southern Ontario to examine the impact of participant practice for chronic pain patients.

Twelve clinicians from six clinics consented to participate and 24 charts were reviewed. Data was collected for one year before the clinician attended their first session of ECHO and one year after they attended their first ECHO session.

There were many positive results, including tapered opioids and reduction in number of visits to health care providers.

## Changing Patient Outcomes

At **UHN** and **CAMH**, patients who have been presented at ECHO are completing questionnaires and being interviewed.

Here are some results from **UHN**:

#### Pain Severity Scores Decreased

- •The Brief Pain Inventory is widely used to assess pain severity.
- •The average BPI score for ECHO patients at Time 1 was 6.4. The average score at Time 2 was 6.2, which suggests a decrease in the severity of pain severity over time.
- •Time 3 is yet to be collected.

### **Depression Severity Scores Decreased**

- •The Patient Health Questionnaire-9 (PHQ-9) is widely used in primary care to assess the severity of depression symptoms.
- •The average PHQ-9 score for ECHO patients at Time 1 was 14.5. The average score at Time 2 was 13.5, which suggests a decrease in the severity of depressive symptoms over time.
- •Time 3 is yet to be collected.

"I like the program, truly. It opened it up so that somebody like me on a fixed income or inability to have a lot of access to transportation and stuff is, you know, you're able to have the opinions of other specialists and other doctors without having to travel big distances or add additional costs.

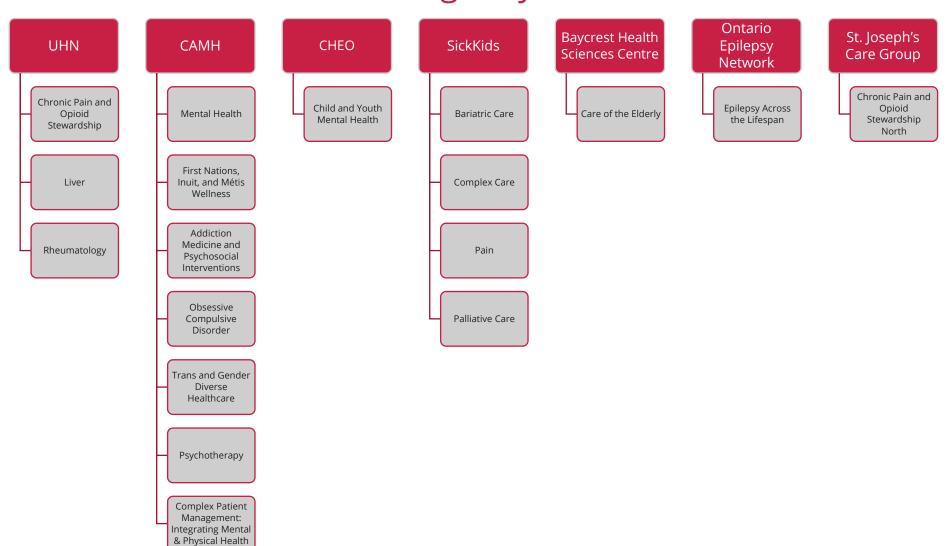
And that came back to my doctor, like, all that information came back and allowed her to try something new. Because she was getting stuck with what was going on too. It opened some doors for her and for us to try some different stuff, to look at it differently, or see maybe something she was missing.

So, overall, I think the program helped me a lot that way. [ECHO has] allowed me to gather enough information so that I can try to manage my pain at home, do the exercises I ... You know, I went out and bought some equipment to have here to do on a daily basis so that I can keep things moving, which is about all I can do."

- Patient of ECHO Participant



## ECHOs in Ontario, Chronologically



Each ECHO in Ontario is dedicated to addressing Ontario's most significant health care issues.

Here are our stories for 2017/18.

## University Health Network and Queen's University

### Chronic Pain and Opioid Stewardship; Rheumatology; Liver

Millions of Canadians suffer needlessly waiting for specialist care, especially in rural and remote areas. Yet the majority of patient care is managed by frontline primary care providers, who often feel inadequately trained and under-resourced. Leveraging technology to share best practices, Project ECHO at UHN aims to support these providers in complex disease management. Since the launch of ECHO Chronic Pain and Opioid Stewardship in June 2014, we have since expanded to provide education in Liver Diseases and Rheumatology as well. In the words of a chronic pain patient who was presented at ECHO:

"I like the program, truly. It opened it up so that somebody like me on a fixed income or inability to have a lot of access to transportation and stuff is, you know, you're able to have the opinions of other specialists and other doctors without having to travel big distances or add additional costs. And that came back to my doctor, like, all that information came back and allowed her to

try something new. Because she was getting stuck with what was going on too. It opened some doors for her and for us to try some different stuff, to look at it differently, or see maybe something she was missing."

Here's a snapshot of our accomplishments in 2017/18:

- •3 active programs: Chronic Pain and Opioid Stewardship, Liver Diseases, and Rheumatology
- •Offered 119 sessions to 175 organizations and 304 healthcare providers
- •4,800+ hours of Continuing Professional Development provided
- •Held a 2-day hands-on workshop attended by 50 healthcare providers
- •Traveled to rural and underserved communities to present talks and recruit participants



175

Healthcare Organizations

304

Healthcare Provider Participants

# Centre for Addiction and Mental Health and University of Toronto

### Mental Health; First Nations, Inuit and Métis Wellness

The landscape of mental health is changing. Research in the field, stories throughout media and our hospitals, and our personal experience all highlight the same fact; the burden of mental illness is high. We have an opportunity to help strengthen the mental health system in Ontario, and we believe that ECHO Ontario Mental Health at CAMH and UofT (ECHO ONMH) is an important part of that picture.

In rural and underserved areas, complex mental illness and addiction issues are often managed in a primary care setting, with many providers feeling underresourced and isolated. As our participants explain, management of mental illness is part of primary care, but training in this area was non-existent or insufficient.

"When I think about all I didn't learn in school and all that there is to add to that knowledge base, there's just so much to learn and so much to keep up on and that's where I think the ECHO program really augments that learning and that we need that and we need those resources. "-Nurse Practitioner ECHO ONMH provides an accessible and affordable opportunity for providers to gain the skills and confidence they need to provide the best care possible for their patients. Our network of providers connect on a weekly basis to discuss best practice care for their patients.

Here's a snapshot of our progress in 2017/18:

- •2 active programs
- •Offered 45 sessions to 233 healthcare providers from 71 organizations, and delivered 1904 CME credits
- •Launching 5 additional programs in 2018/19.
  - ECHO Ontario Addictions Medicine and Psychosocial Interventions
  - ECHO Ontario Complex Patient Management: Integrating Mental and Physical Health
  - ECHO Ontario Obsessive Compulsive Disorder
  - ECHO Ontario Psychotherapy
  - ECHO Ontario Trans and Gender Diverse Healthcare
- •Held a 2-day bootcamp attended by 24 health care providers



**71** 

Healthcare Organizations

233

Healthcare Provider Participants

## Children's Hospital of Eastern Ontario

### Child and Youth Mental Health

Many Ontario children and youth live in remote or otherwise underserved communities. Eighteen percent of Ontarians live in rural areas, where only 2% of the province's child psychiatrists live. Through Project ECHO Ontario Child and Youth Mental Health (CYMH), our specialists and participants work together to share experiences, expertise, and resources in all areas of the province in order to care more effectively for children and adolescents with mental health problems. The mission of Project ECHO Ontario CYMH is to change the diagnostic, referral, and treatment practices of child and youth mental health problems in primary care settings.

In 2017/2018, we worked with 122 participants from 69 sites in 51 different geographic locations (including 12 of the 14 LHINs). Our program enrolls medical providers and includes many disciplines: Nurse Practitioners (32%), Family Physicians (22%), Pediatricians (19%), Allied Health Professionals (15%), Registered Nurses (11%), and a Physician Assistant (1%).

In our ECHO sessions, we presented current knowledge on 52 clinical problems and discussed 85 new and 2 follow-up cases. We have held 52 sessions and two Special Interest Clinics. Most of these were 90-minute sessions with two case presentations, but we have also pilot tested a 60-minute session with one case presentation.

Participants received 1812 Continuing Medical Education (CME) or Continuing Professional Development (CPD) credits. Participants have high attendance at our sessions and they report substantial gains in clinical knowledge and confidence in treating child and youth mental health problems. Importantly, they report that they use what they learn in their sessions and share it with their co-workers.

Here's a short video that summarizes Project ECHO Ontario CYMH's second year: <a href="https://cheo.echoontario.ca/wp-content/uploads/2018/06/ECHO-CYMH-2017-2018-Annual-Report.mp4">https://cheo.echoontario.ca/wp-content/uploads/2018/06/ECHO-CYMH-2017-2018-Annual-Report.mp4</a>



69

Healthcare Organizations

122

Healthcare Provider Participants

## The Hospital for Sick Children (SickKids)

### Pain, Bariatric Care, Complex Care, Palliative Care

*Paediatric Project ECHO* has the potential to change care delivery for children with complicated medical needs by improving access and supporting providers in the following four areas:

Pain: One in five children experience chronic pain, of whom 5% have severe pain-related disability including impact on sleep, enjoyment, movement, ability to attend school, and socializing with peers. Access to specialized pain care from a multidisciplinary team is the gold standard for people with debilitating pain; however, many live too far from a specialized chronic pain clinic and wait times are often >1 year to be seen by specialized teams. Project ECHO provides healthcare providers across Ontario with access to the knowledge and support required to manage children and teens living with chronic pain.

**Bariatric Care:** Obesity prevalence has increased during the past decades in children and adolescents, leading to significant current and future health burden.

Prevention and intervention should begin at the earliest age possible to prevent the tracking of obesity and comorbidities into adulthood. The current healthcare system is not equipped to manage the rapid increase in obesity rates among children and youth. Project ECHO connects healthcare practitioners (e.g., physicians, nurses, dietitians, and psychologists) to fill educational gaps and provide support to manage patients in their own communities. Project ECHO also leverages the existing Ontario Pediatric Bariatric Network to support providers locally.

**Complex Care:** Children with medical complexity have multiple chronic health care needs. Increasingly there is a focus on delivering accessible care, yet providing care closer to home for these medically fragile children can be challenging. Developing expertise and empowering community providers can help them to deliver care locally. We have the opportunity to enhance care — [next page]



12

Average Healthcare Organizations

23

Average Healthcare Provider Participants [continued from previous page] – delivery that meets the needs of these children and their families by developing a community of practice and building capacity among community providers through Project ECHO.

Palliative Care (in partnership with CHEO): Patients and families prefer to get care in their local community but find it difficult to access providers willing to provide that care. Many providers are uncomfortable delivering pediatric palliative care and generally lack knowledge and mentorship in this area. From a healthcare system perspective, there is cost savings when patients receive end of life care in the community. This allows for beds to be more appropriately and strategically used for patients who require acute care. Project ECHO builds capacity and comfort among community providers to deliver pediatric palliative care, so that families have access to willing providers with access to a supportive network of specialists.

To date, we have provided over 900 hours of CME-accredited credits to almost 200 healthcare providers, discussed over 30 patient cases, and engaged directly with 60 community-based sites. The Paediatric Project ECHO program has also attracted many out-of-province and international participants (Italy, Mexico, Uganda, Egypt).

#### **Testimonials:**

"I enjoyed the learning and understanding that I gained from participating in the cases and using pertinent information to support children that I work with."

"I believe I have a better understanding of resources and services available for children with chronic pain and a desire to implement programs to support."

"A community physician who presented a case in our ECHO had referred the patient to our Complex Care clinic, but the patient had not yet been seen in our clinic at the time of his case presentation. The patient was seen this week in clinic and the family mentioned that they have been following some of the recommendations that the community physician received from the TeleECHO session (the physician had informed the family that he discussed the patient at our session). In particular, the family mentioned that one of the recommendations reduced his vomiting and siallorhea significantly and in fact they reported that he is the most stable he has been in while!"

## Baycrest Health Sciences Centre

in partnership with North East Specialized Geriatric Centre

#### Care of the Elderly

In Ontario, the population of adults over 65 is projected to double from 2.1 million in 2013 to 4.1 million by 2041. There are only about 120 geriatric specialists and 80 geriatric psychiatrists in Ontario, primarily practicing in urban centres. This significantly affects access to geriatric specialists by older adults.

ECHO Care of the Elderly led by Baycrest Health Sciences, in partnership with North East Specialized Geriatric Centre (NESGC) fills this practice gap by increasing primary care capacity to meet the demand for providing care to Ontario's aging population. Partnering with NESGC in the North East allows for greater exposure of ECHO COE across North Eastern Ontario. Both our specialist Hub teams and participants reflect the interprofessional care teams require for geriatric care.

Project ECHO COE provides an accessible and affordable opportunity for healthcare providers to gain the knowledge and confidence they need to provide the best care possible to older adults. Here's a snapshot of our progress in 2017/18:

- Implemented ECHO COE 10 week cycle Pilot
- Attendance from 10/14 LHINs
- 34 participants across 23 organizations
- 41% participants were physicians
- Participants generally satisfied with their experience
- Participants had improved knowledge and self-efficacy
- Engagement and change in knowledge were better among physicians compared to other health professionals



Baycrest Ontario



23

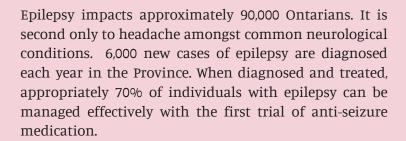
Healthcare Organizations

34

Healthcare Provider Participants

## Project ECHO: Ontario Epilepsy Network

#### **Epilepsy Across the Lifespan**



Appropriately diagnosing and treating epilepsy early in the patient pathway (in a community setting) not only avoids unnecessary emergency department visits and referrals to see specialists, it can optimize neurodevelopmental potential in children, increase the quality of life for patients with epilepsy and their families, and reduce epilepsy related disability and injury at all ages.

Project ECHO Ontario: Epilepsy Across the Lifespan endeavors to improve health outcomes for people living with epilepsy.

Project ECHO Epilepsy Hub teams provide support to primary care providers in a Community of Practice to manage patients with less complex epilepsy within their practice and to facilitate specialist management of more complicated cases with epilepsy health resources in their region.

Each Project ECHO Epilepsy Hub includes a Neurologist with expertise in Epilepsy, an Epilepsy Nurse, Pharmacist, Social Worker and Epilepsy Agency Representative & Community Navigator.

"It's awesome! I love the expertise round the table, a wealth of it, and yet nice informal feeling to the whole event. I am really learning lots."

- Community Paediatrician in HNHB LHIN



10

Hub Sites Across the Province

**32** 

Paediatric Organizations Participating This program is structured as a "Shared Services" model, which means one administrative team (located at SickKids) supports the delivery of ten individual Project ECHO hub teams across the Province. This decentralized approach ensures that community providers in each Community of Practice learn the same evidence-based guidelines for management and treatment of epilepsy through standardized provincial curricula, while also accommodating for unique local needs when designing patient care plans.

This program builds on an existing provincial epilepsy system, which serves as a model worldwide for effective, best-practice epilepsy care.

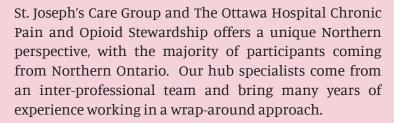
#### **Progress Snapshot**

- •Paediatric TeleECHO sessions kicked-off in May 2018 hosted by hubs in Ottawa, London and Toronto. Adult sessions will be offered in Fall 2018 hosted by hubs in Hamilton, Kingston, London and Toronto.
- •Current participants report a high degree of knowledge enhancement after each session, including:
  - Enhanced understanding of the features of epilepsy
  - Increased level of comfort with diagnosing, managing and treating epilepsy within a primary care practice
  - Willingness to start the first trial of medication to treat epilepsy for a paediatric patient

Location	Paediatric Team Site	Adult Team Site	
Hamilton, ON	Hamilton Health Sciences	McMaster Children's Hospital	
Kingston, ON		Kingston General Hospital	
London, ON	The Children's Hospital	London Health Sciences Centre	
Ottawa, ON	Children's Hospital of Eastern Ontario	The Ottawa Hospital	
Thunder Bay, ON		Thunder Bay Regional Health Sciences Centre	
Toronto, ON	SickKids	University Health Network	

## St. Joseph's Care Group and the Ottawa Hospital

#### Chronic Pain and Opioid Stewardship - North



Our ECHO has unique challenges, with the hub and participants focusing on resources and capacity available in the North. We average 40 participants per session from 15 organizations, and believe that having full teams join is a success, as it maximizes the impact on patients and communities. To date, we have held 8 sessions and will be engaging participants to find out their learning needs to better serve the communities that attend in the future. We are partnering with Sick Kids to host a Northern Bootcamp in October 2018 that will cover the life span of Chronic Pain.





## We're collaborating provincially to have a collective impact on the lives of Ontarians.

The ECHO Ontario Superhub provides support to new and potential ECHOs in Ontario. It also promotes strategic alignment and collaboration to reach common goals. Together, we are maximizing our impact.

How do we foster collaboration?

ECHO Ontario Collaborative	Research Collaborative	Project Manager's Working Group	Annual ECHO Ontario Conference
Meets Monthly	Meets Biweekly	Meets Monthly	Meets Annually

# We're sharing our successes with our partners for health.

The ECHO Ontario Superhub delivers ongoing training throughout the year. On Tuesday, December 12th, 2017, the ECHO Ontario Superhub held 2 training sessions for those interested in launching their own ECHO: Orientation (1 day) and Immersion (2 days).

**Orientation (1 Day)** 

Orientation aims to give a high level overview about ECHO to those looking for information about ECHO.

The agenda touched on evaluation, education, replication, implementation, and showcased a live ECHO session.

#### **Immersion Training (2 Days)**

Immersion training aims to provide indepth, practical information about how to launch an ECHO.

The agenda included discussion about evaluation, education, replication, implementation, IT, data and privacy, and facilitation.

36

Attended Orientation

28

Attended Immersion

# We've also been busy exchanging innovative ideas and new information with each other.

On February 9, 2018, ECHO Ontario hosted a conference. This conference aimed to discuss how ECHO can be used to enhance quality patient care, the complexities of integrating ECHO into our healthcare system, patient and participant experiences with ECHO, and working collaboratively to solve common ECHO challenges.

#### Participants:

- Felt inspired by the New Mexico Peer Program and having the opportunity to network with other ECHO programs.
- Liked that a small group of people can make huge changes.
- Felt that it provided an opportunity to learn and meet others in the Project ECHO field.
- Enjoyed sharing ideas and tips for engaging learners.





Project ECHO aims to touch 1 billion lives by 2025. This year, we've been busy sharing our ECHO experience and its successes with healthcare providers, policy-makers, and decision-makers to show its value and that it works.

### Here's how we got the word out about ECHO in 2017/18:

5 Published findings in 5 peer reviewed academic journals (see Appendix C).

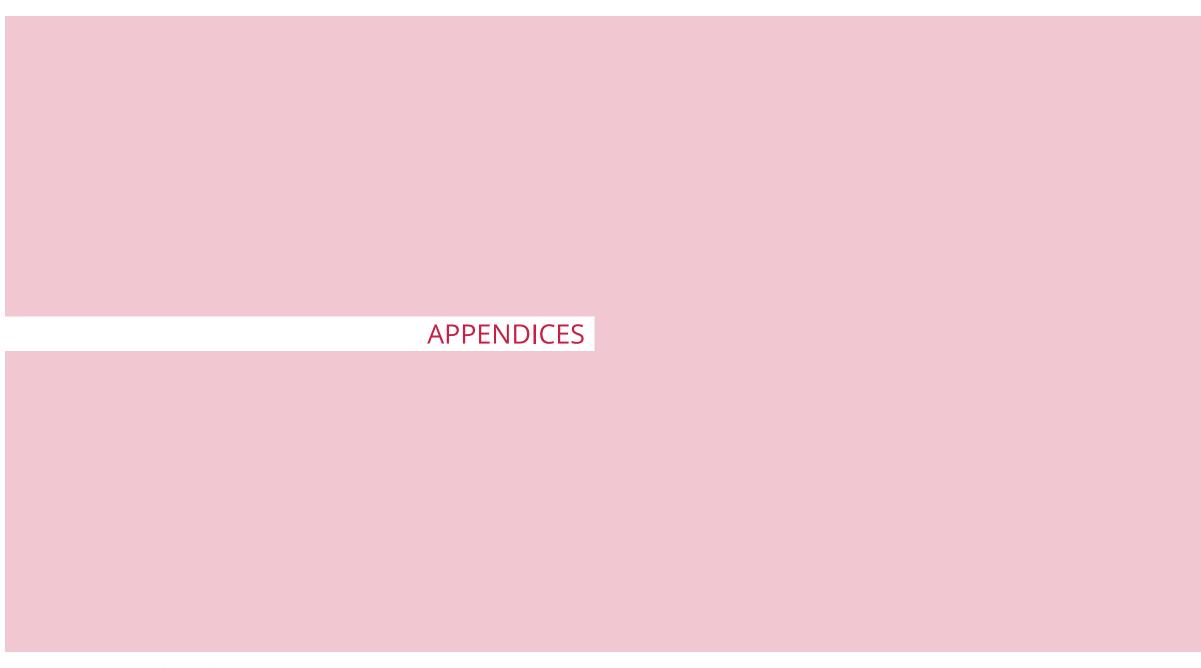
Gave 81 presentations at over 70 national and 16 international conferences.

Having endless conversations with anyone willing to hear about ECHO.



Changing the World. Fast.

http://echoontario.ca @ECHOOntario



## University Health Network and Queen's University

#### Chronic Pain and Opioid Stewardship

- •Aberrant Behaviours
- •Cannabis in Canada Its Role in Chronic Pain Management?
- •Choosing Wisely when your Patient has Chronic Pain
- •Clinical Interview and Qualitative Sensory Exam
- •Common comorbidities of Chronic Pain
- •Dealing with Your Most Challenging Patients
- •Fibromyalgia
- •Headache Challenges in Primary Care
- •Interventional Treatments
- •Low Back Pain
- Movement and Physical Modalities
- •Myofascial Pain
- •Neuropathic Pains
- •Non-Opioid Medications
- •Opioid Guidelines
- Patient Motivation and Goal Setting
- •Pelvic Pain
- •Preventing Immunization Pain
- •Putting it All Together: Creating a Comprehensive Plan for both the Team and the Chronic Pain Patient
- •Screening for Psychosocial and Psychiatric Comorbidities
- •Self-Management and Mindfulness
- •Switching Opioids
- •Tapering and Stopping Opioids
- •The Five Pillars of Chronic Pain: A Rational Approach to Pain Recovery
- •Urine Drug Screening

#### Liver

- •Introduction to the Hepatitis C Virus and ECHO Hepatitis C
- •Epidemiology of Hepatitis C in Canada
- •Natural History, Screening and Diagnosis
- •Initial Assessment, Data Gathering
- •Cirrhosis and Complications
- •Treatment Decision Making, Readiness and Principles
- •Best Practices in The Management of Genotype 1-6 (5 sessions)
- •Tools to aid with Treatment HepMD
- •Getting Hepatitis C Therapy Approved in Ontario EAP Tips
- •After Hepatitis C Therapy: Long Term Monitoring
- •Open Session: Participant Selected Topic

#### Rheumatology

- •Approach to the patient with peripheral joint pain
- •Approach to the Patient with Back Pain
- •Expanding Your Differential Diagnosis
- •When Everything Hurts: Fibromyalgia?
- •Rationalizing Lab Testing: How Not to go bANAnas
- •Joint Exam and Injection Techniques
- •Imaging: What, When, Where, Why
- •"Time is Joint": Collaboration in early Inflammatory Arthritis Management
- •Methotrexate and Conventional Disease Modifying Agents
- •Biologic Disease-Modifying Agents
- •Pharmacotherapeutic Considerations in Pregnancy, Lactation and in Patients Trying to Conceive
- •Non-Pharmacologic Aspects of Management
- •Managing Co-Morbidities of Inflammatory Arthritis
- •Participant Selected Topic

## Centre for Addiction and Mental Health and University of Toronto

#### Mental Health

- Addictions 101
- Alcohol Use Disorders
- Assessment and Diagnosis of Anxiety Disorders
- Assessment and Diagnosis of Major Depressive Disorder
- Assessment and Diagnosis of Personality Disorders: Focus on Cluster B
- Assessment and Diagnosis of Psychosis
- Assessment and Diagnosis of Trauma and PTSD
- Assessment and Management of ADHD
- Assessment of Bipolar Disorder
- Attachment
- Benzodiazepine Use Disorders
- CBT Essentials
- Collaborating Around Adherence to Medications
- Eating Disorders
- ECHO Basics: Aims, Principles, and Practical Tips for Participating in ECHO
- Examination and Assessment of Psychiatric Patients
- Gambling and Technology
- H.O.P.E. and its Role in Mental Health Care
- Introduction to DSM 5
- Management of Anxiety Disorders
- Management of Bipolar Disorder
- Management of Major Depressive Disorder

- Management of Psychosis
- Management of Trauma and PTSD
- Medical Marijuana: Current Guidance
- Motivational Interviewing
- Opioid Use Disorders
- Psychopharmacology 101 and Novel Treatments of Psychiatric Conditions
- Rational Polypharmacy
- Safety Assessment
- Screening for Dementia
- Sleep: A Psychiatric Vital Sign

#### First Nations, Inuit, and Métis Wellness

- Alcohol Use and Physical Complications
- Cancer
- Comfort and Safety Planning
- Depression
- HIV/HCV
- Integrated Care
- Opioid Use Disorders
- Personal Care and Resilience of Health Providers
- Trauma 1: Community, Family, and Creation Stories
- Trauma 2: Individual and Forgiveness Ceremonies
- Type 2 Diabetes: Guidelines and Management

#### Children's Hospital of Eastern Ontario

#### Child and Youth Mental Health

- •"He doesn't pay attention and is so impulsive": Diagnosing and Treating ADHD
- •"I just can't stop." How to Help Your Patients with OCD.
- •ASD and Medication Interventions
- •Assessing and Managing Self-Harm in Children and Teens
- •Autism: From Early Flags to Diagnosis and Behavioural Intervention
- •Brief CBT in Primary Care
- •Didactic on Demand: Eating Issues
- •Didactic on Demand: Identifying and Treating Eating Problems in Primary Care Practice
- •Didactic on Demand: School Refusal/School Avoidance
- •Didactic on Demand: Somatization or Medically Unexplained Symptoms in Children and Adolescent: Primary Care Identification and Management
- •Enhancing your Delivery of Mental Health Care for Patients
- •Getting "Unstuck" with Patients and Parents using Motivational Interviewing
- •How to Help Anxious Adolescents
- •How to Work with a Sad Child
- •Improving Health Care Outcomes by Strengthening Parent-Child Relationships
- •Learning Disabilities: A Brief Primer for Primary Care Providers
- •Managing the Depressed Older Child and Teen

- My Child is So Angry What Do I do?
- •Myth Busting: Talking to Patients about Cannabis
- •Primary Care Recognition and Management of Paediatric PTSD
- •Sleep in Children and Teens: Supporting Skills and Behaviours
- •The Aggressive Older Child and Adolescent: When to Intervene and How
- •The Common and Uncommon Substances: Effects on Mental Health
- •Time for Bed? Primary Care Management of Sleep Problems in Kids and Adolescents
- •Understanding Pathways to Child and Youth Mental Health Care in Ontario
- •What to do with Anxious Toddlers and Children?

#### SickKids

#### **Bariatric Care**

- •Management of dyslipidemia in the child with obesity
- •Orthopedic considerations in the obese child
- Red flags of pathologic obesity

#### **Complex Care**

- Children with medical complexity
- Pain and irritability of unknown origin in children with neurological impairment
- Sibling and family support

#### Pain

- Overview of physical health assessment
- Neuropathic pain and cannabinoids
- Mind-body techniques

#### Palliative Care

- •How to introduce PPC
- Neuro-irritability
- •Preparing for death and the time that follows

#### Baycrest Health Sciences Centre

#### Care of the Elderly

- •Dementia: Screening and Assessment
- •Effective Management of the Elderly Chronic Pain Patient
- •Falls in Older Adults
- Frailty
- •Incontinence: The Aging Bladder
- Mood Disorders
- •Polypharmacy and Deprescribing
- •Responsive Behaviours
- •Sleep Disorders in Older Adults
- •Substance Use Disorders in Older Adults

#### University Health Network and Queen's University

#### Chronic Pain and Opioid Stewardship

- •Amy Robidas, Registered Nurse •Andrea Furlan, Pain Medicine Physician, ECHO Co-Chair
- •Andrew Smith, Neurologist and Addictions Specialist
- •Bonita Rubin, Pharmacist
- •Carlo Ammendolia, Chiropractor
- •David Clark, Occupational Therapist
- •Jessica Babineau, Librarian
- •John Flannery, Physiatrist
- •Laura Murphy, Pharmacist
- •Lucy Ruggiero, Social Worker
- •Mandy McGlynn, Physical Therapist, Advanced Practice Leader
- •Maria Zhang, Pharmacist
- •Orit Zamir, Psychiatry
- •Patrice dePeiza, Occupational Therapist
- •Paul Taenzer, Psychologist
- •Pearl Isaac, Pharmacist
- •Roshina Babaei-Rad, Pharmacist
- •Ruth Dubin, Family Medicine, ECHO Co-Chair
- •Sarah Sheffee, Occupational Therapist

#### Liver

- •Craig Kuhn, Family Medicine
- •Hemant Shah, Hepatologist, Medical Co-Lead
- •Jordan Feld, Hepatologist, Medical Co-Lead
- •Magdalena Kuczynski, Registered Nurse
- •Ruifen Su, Pharmacist

#### Rheumatology

- •Amanda Steiman, Rheumatologist, Medical Co-Lead
- •Anne Cymet, Registered Nurse
- •Arthur Karasik, Community Rheumatologist
- •Carolyn Dittmar Borstein, Pharmacist
- •Carolyn Whiskin, Pharmacist
- •Claire Bombardier, Rheumatologist, Medical Co-Lead
- Jadie Lo, Pharmacist
- •Mandy McGlynn, Physical Therapist, Advanced Clinician Practitioner in Arthritis Care

## Centre for Addiction and Mental Health and University of Toronto

#### Leadership

- Allison Crawford, Co-Chair, Psychiatrist
- Eva Serhal, Director
- Linda Mohri, Co-Chair
- Sanjeev Sockalingam, Co-Chair, Psychiatrist

#### Mental Health

- Allison Crawford, Co-Chair, Psychiatrist,
- Anne Kirvan, Social Worker
- Fiona Ingis, Librarian
- Francesca Di Paola, Addiction Medicine Physician
- Greg Lodenguai, Child and Adolescent Psychiatrist
- Javed Aloo, Family Physician
- Sanjeev Sockalingam, Co-Chair, Psychiatrist

#### First Nations, Inuit, and Métis Wellness

- Allison Crawford, Co-Chair, Psychiatrist
- Lisa Richardson, Co-Chair, Internal Medicine Physician
- Andrew Smith, Addiction Medicine Physician
- Cynthia White, Elder
- Diane Longboat, Elder
- Jonathan Bertram, Addiction Medicine Physician
- Pamela Stewart, Psychiatrist
- Renee Linklater, Director, Aboriginal Engagement and Outreach
- Terri Rodak, Librarian
- Walter Lindstone, Social Worker

#### Children's Hospital of Eastern Ontario

#### Leadership

- Josée Blackburn, Manager
- Kathleen Pajer, Co-Director, Psychiatrist
- William Gardner, Co-Director

#### Child and Youth Mental Health

- Allison Kennedy, Psychologist
- Cindy Dawson, System Navigator
- Ghyslaine Paquette, System Navigator
- Hayley Masterson, Social Worker
- Hazen Gandy, Psychiatrist
- Kathleen Pajer, Co-Director, Psychiatrist
- Michael Cheng, Psychiatrist
- Simone Kortstee, Psychologist

#### SickKids

#### Leadership

- A. Jiwan, Project Manager
- A. McKillop, Program Manager
- A. Rapoport, Medical Director, Co-Medical Lead
- C. Lalloo, Research Lead
- C. Vadeboncoeur, Staff Palliative Care Physician, Co-Medical Lead
- E. Cohen, MD Paediatrician, Co-Medical Lead
- F. Campbell, Staff Anesthesiologist, Co-Medical Lead
- J. Hamilton, Paediatric Endocrinologist, Medical Lead
- J. Orkin, MD Paediatrician, Co-Medical Lead
- J. Stinson, Project Lead
- J. Tyrrell, Clinical Nurse Specialist, Co-Medical Lead
- K. Weingarten, Staff Physician, Co-Medical Lead

#### **Bariatric Care**

- A. Bar-Dayan, Dietitian
- A. Chalmers, Nurse Practitioner
- A. Leyser, Registered Nurse
- A. Lougheed, Exercise Therapist
- A. Regina, Psychologist
- A. Steinberg, Dietitian
- A. Toulany, Staff Physician
- E. Dettmer, Psychologist
- J. Hamilton, Paediatric Endocrinologist, Medical Lead
- K. Gallagher, Dietitian
- M. Gelfand, Social Worker
- R. Noseworthy, Dietitian, Clinical Research Project Manager
- S. Patel-Modi, Physiotherapist

#### **Complex Care**

- A. Edwards, Social Worker
- C. Daniels, Nurse Practitioner
- E. Cohen, MD Paediatrician, Co-Medical Lead
- J. Lee, Nurse Practitioner
- J. Orkin, MD Paediatrician, Co-Medical Lead
- J. Tjon, Clinical Pharmacist
- J. Zhao, Clinical Pharmacist
- K. Netten, Social Worker
- L. Vresk, Dietitian
- M. Ho. Nurse Practitioner
- S. Adams, Nurse Practitioner

#### Pain

- A. Ayling Campos, Physiotherapist
- A. Brotherwood, Social Worker
- C. Munns, Psychologist
- D. Ruskin, Psychologist
- F. Campbell, Staff Anesthesiologist, Co-Medical Lead
- G. Mesaroli, Physiotherapist
- J. Tyrrell, Clinical Nurse Specialist, Co-Medical Lead
- J. Zao, Clinical Pharmacist
- L. D'Alessandro, Clinical Nurse Specialist

#### Pain (Continued)

- •L. Isaac, Staff Anesthesiologist
- •L. Pendergast, Director of Perioperative Services
- •M. Brouwers, Occupational Therapist
- •M. De Guzman, Clinical Pharmacist
- •N. Sun, Clinical Associate
- •S. Brown, Staff Anesthesiologist
- •S. Klein, Physiotherapist
- •S. Kronenberg, Staff Psychiatrist

#### Palliative Care

- A. Rapoport, Medical Director, Co-Medical Lead
- B. Allahyani, N/A
- C. Bennett, Clinical Nurse Specialist
- C. Chevalier, Social Worker
- C. De Castro, Clinical Pharmacist
- C. Vadeboncoeur, Staff Palliative Care Physician, Co-Medical Lead
- D. Scarlett, Recreation Therapist
- F. Macapagal, Clinical Nurse Specialist
- J. Humphreys, Staff Physician
- K. Brooks, Recreation Therapist
- K. Milne, N/A
- K. Nelson, Fellow
- K. Weingarten, Staff Physician, Co-Medical Lead
- L. Grandmaison-Dummond, Nurse Practitioner
- L. Ives-Baine, Grief Support Coordinator
- M. Doherty, Staff Palliative Care Physician
- M. Mullen, Bioethicist
- N. Shaughnessy, Grief Support Coordinator
- R. Williams, Nurse Practitioner

#### Baycrest Health Sciences Centre

#### Care of the Elderly

- •Andrea Moser, Care of the Elderly Family Physician
- •Aysha Bandali, Nurse Practitioner
- •Cindy Grief, Geriatric Psychiatrist
- •Diana Markova, Project Coordinator
- •David Conn, Geriatric Psychiatrist
- •Faith Boutcher, Registered Nurse
- •James Chau, Care of the Elderly Family Physician
- •Lisa Sokoloff, Speech Language Pathologist
- •Salma Shaikh, Medical Graduate
- ${\color{red} \bullet Shaen\ Gingrich, Physiotherapist/Geriatric\ Knowledge\ Translator}$
- •Sid Feldman, Care of the Elderly Family Physician
- •Tonya Mahar, Librarian

#### Ontario Epilepsy Network

#### Leadership

- Carter Snead, Co-Lead
- Elizabeth Donner, Co-Lead
- Jorge Burneo, Co-Lead
- Kirk Nylen, Co-Lead

#### Epilepsy Across the Lifespan

- Andrea Andrade, London Children's Hospital
- •Ayman Hassan, Thunder Bay Regional Health Sciences Centre
- •Carter Snead, SickKids
- •Danielle Andrade, University Health Network
- •Elizabeth Donner, SickKids
- •Esther Bui, University Health Network
- •Jorge Burneo, London Health Sciences Centre
- •Lysa Boisse-Lomax, Kingston Health Sciences Centre
- •Michelle Shapiro, Hamilton Health Sciences Centre
- •Rajesh Ramachandrannair, McMaster Children's Hospital
- •Sharon Whiting, Children's Hospital of Eastern Ontario
- •Tadeu Fantaneanu, The Ottawa Hospital

For a more detailed list of all Hub members, please visit:

www.oen.echoontario.ca

## St. Joseph's Care Group and the Ottawa Hospital

#### Chronic Pain and Opioid Stewardship North

- Andrew Koscielniak, R. Kin, CSEP CEP
- Bryan MacLeod, MD, CCFP, FCFP
- Catherine Smyth, MD, PhD, FRCPC (Anesthesiology)
- Jennifer McDonald, MD, FRCPC, CSCN Diplomate (EMG)
- Lisa Bromley, MD, FCFP
- Patricia Poulin, PhD, C.Psych
- •Jennifer Dumond, Librarian
- •Julie Besse, Dietitian
- •Karen Holroyd, Pharmacist
- •Karen St. Jacques, Physiotherapist
- •Kerri-Lynn Capulak Andrychuk, M.A. C. Psych Assoc.
- •Kim Forshaw, Occupational Therapist
- •Mark Halabecki, MSW
- •Tracy Rowe, Leisure Life Skills Instructor

## Appendix C: Publications (Published in 2017/18)

- Babineau, J., Zhao, J., Dubin, R., Taenzer, P., Flannery, J., & Furlan, A.D. (2018). The Embedded Librarian in a Telehealth Continuing Medical Education Program. Journal of Hospital Librarianship, 18(1), 1-14.
- Carlin, L.E., Zhao, J., Dubin, R., Taenzer, P., Sidrak, H., & Furlan, A.D. (2017). Project ECHO Telementoring Intervention for Managing Chronic Pain in Primary Care: Insights from a Qualitative Study. Pain Medicine. 1-7.
- Furlan, A.D., Zhao, J., Hassan, S., Voth, J., Dubin, R., Stinson, J., Jaglal, S., Fabico, R., Smith, A., Taenzer, P., & Flannery, J. (In Press). Evaluation of an Innovative Tele-education Intervention in Chronic Pain Management for Primary Care Clinicians Practicing in Underserved Areas. Journal of Telemedicine and Telecare.
- Serhal, E., Arena, A., Sockalingam, S., Mohri, L., & Crawford, A. (2018). Adapting the Consolidated Framework for Implementation Research to Create Organizational Readiness and Implementation Tools for Project ECHO. The Journal of Continuing Education in the Health Professions, 38(2), 145-151.
- Sockalingam, S., Arena, A., Serhal, E., Mohri, L., Alloo, J., & Crawford, A. (2017). Building Provincial Mental Health Capacity in Primary Care: An Evaluation of a Project ECHO Mental Health Program. Academic Psychiatry, 1-7, Epub.