

Paediatric Project ECHO

Annual Report | 2019-2020



Image: ECHO team members speaking about Paediatric Project ECHO

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A Message from the ECHO Team

Over the past three years, we have been privileged to see the growth of Paediatric Project ECHO from concept to fully fledged educational program that is well-integrated into the interprofessional landscape of Ontario.

This year we have continued to enhance our program offerings. Administratively, Paediatric Project ECHO transitioned to the Learning Institute (LI) at The Hospital for Sick Children (SickKids), in December 2019. The LI offers programs and services that support clinicians, scientists, educators, families and the broader healthcare community to create, deliver and evaluate education initiatives. Being a part of the LI has allowed us to develop online eLearning Modules to supplement the learning of the TeleECHO Clinics. Additionally, we have been able to partner with members of the LI team to create in-person education events that incorporate simulation-based learning. This type of learning received a higher status of accreditation, and had been highly requested by our participants.

Furthermore, we have introduced a new cohort model for our Pain Management ECHO, that incorporates orientation sessions to better support participants joining the program. This has fostered a supportive learning environment that creates greater engagement in sessions, as well as increased participant retention.

Research data has demonstrated that Paediatric Project ECHO supports community healthcare professionals to provide evidence-informed care to children with specialized medical needs. We also provided the first robust analysis of *when* and *how* a community of practice can be cultivated within the ECHO model. Ongoing research efforts have been key to systematically evaluating the impacts of Paediatric Project ECHO on healthcare professionals' knowledge, self-efficacy, and clinical practice. We look forward to expanding our research portfolio over the coming year.

Most importantly, being part of Paediatric Project ECHO has allowed us to build and strengthen the Ontario healthcare community, establish and improve collaborative relationships, and learn about community resources available to our patients and families. We are grateful to the Ministry of Health for their ongoing program support, as well as to our participants who take part in sessions and partner with us to improve care for children.

It is our pleasure to share our collective successes in this year's Annual Report.

On behalf of the Paediatric Project ECHO Team

Mission

Changing the world starts with community healthcare.

Paediatric Project ECHO is an educational program for healthcare providers, which aims to build a virtual community of practice, expand knowledge, and increase capacity to manage paediatric patients with specialized needs.

SickKids has partnered with Project ECHO at the University of New Mexico, the University of Toronto, and the Children's Hospital of Eastern Ontario (CHEO)* to develop ECHOs for the following four clinical populations:



Pain Management







Palliative Care* *in partnership with CHEO

ECHO is a 'Hub' and 'Spoke' model of knowledge dissemination and capacity building, which aims to exchange knowledge between academic health science centres and the frontline of community care. It relies on the flow of knowledge in multiple directions: from specialists to primary care providers; between primary care providers; and from primary care providers to specialists.

Paediatric Project ECHO has 3 program offerings:

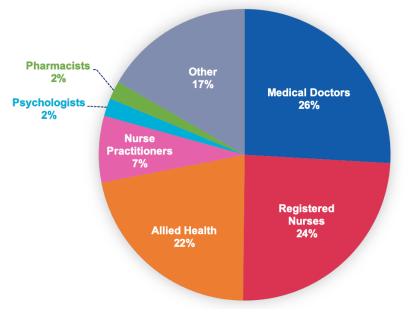
- 1. **TeleECHO Clinics**: Each TeleECHO Clinic includes a short didactic lecture and a de-identified patient case presentation, followed by discussion and recommendations from the community of practice.
- 2. **Core Competency**: Each of our ECHO specialities have developed four online eLearning Modules, to be used as a resource for developing core skills. These will be launched in 2020.
- 3. **In-Person Bootcamp**: Our Acute and Chronic Pain ECHO hosts an annual two-day in-person Bootcamp ("ECHO Education Event") to teach hands-on skills.

Paediatric Project ECHO is fully funded by the Ministry of Health - all offerings are continuing professional development (CPD) accredited, at no cost to participants.

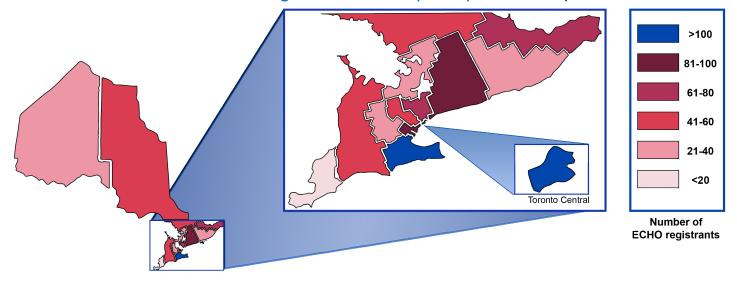
For more information, please visit our website at www.sickkids.echoontario.ca or contact Paediatric Project ECHO at project.echo@sickkids.ca.

Impact to Date

1024 registrants, encompassing the following professions:

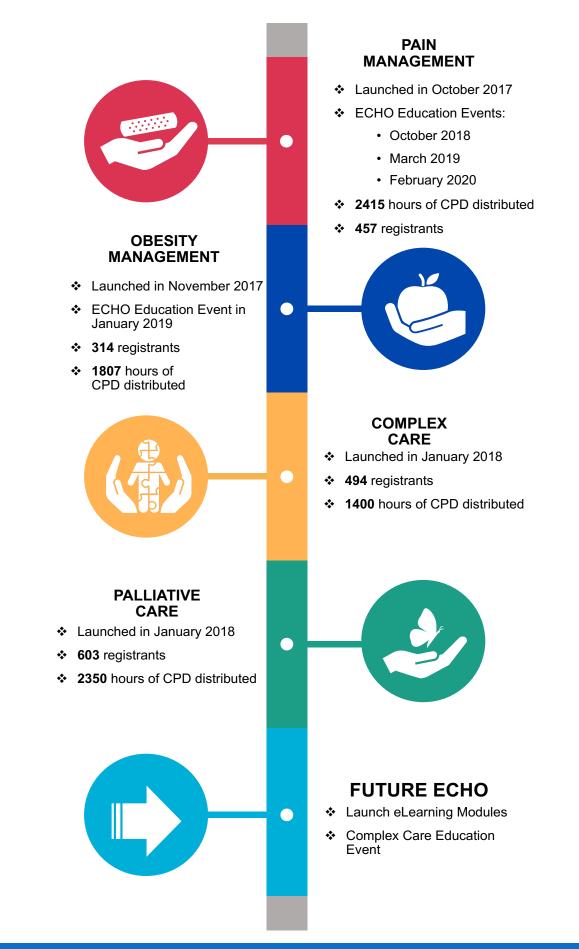


All 14 Local Health Integration Networks (LHINs) in Ontario represented:



Global reach, including: 11 provinces/territories and 6 continents

Over 7900+ hours of CPD distributed



Testimonials



Image: Participants reviewing materials on pain management strategies at the Pain 2020 Education Event

"Paediatric Project ECHO allows me to **benefit from the expertise** of my colleagues from all over the province. It is very **inspiring** to hear ideas from other centers, and the dialogue keeps me engaged. **It creates a sense of community and connection**."

- MD Paediatrician, Participant of Complex Care, Pain Management and Palliative Care

"I love the case studies as this **brings the best practice to real life**. In addition, having a **team approach** has been great to provide a vast knowledge of any one situation/diagnosis/issue." - Clinical Nurse Specialist, Participant of Complex Care, Pain Management and Palliative Care

"Honestly, I never attended an ECHO that didn't teach me something be it an area of clinical interest, connection with resources or **how to be a better educator**."

MD Paediatrician, Participant of Complex Care and Palliative Care

"It's clear that **community is at the core** of these sessions. The method of a presentation followed by a case study and discussion really helps create a solid **foundation for learning**. I was able to understand the topic and put what I learned into practice with the support of so many professionals all with different and valuable experiences. The value of the **shared experience** of so many professionals is priceless and the fact that these sessions are cost free supports the education and professional development of all who attend. **Non-judgement** is also a big component. As a student with minimal practical experience I never felt as though my contributions of questions or suggestions were ever a nuisance."

- Early Childhood Education Student, Participant of Pain Management and Palliative Care

"As a clinician practicing in a smaller community the **collaborative nature** of Project ECHO allows me to **keep up with research** and **incorporate this into evidence-based practice** and also **share strategies for providing effective care** with colleagues throughout Ontario." - Registered Dietitian, Participant of Obesity Management and Complex Care



Image: Participants taking part in an acute pain simulation at the 2020 Pain ECHO Education Event

Highlights by Specialty



Image: A participant demonstrates virtual reality technologies at the 2020 Pain ECHO Education Event

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10 TeleECHO Clinic Metrics

- 15 Bootcamp (Education Event) Metrics
- 16 Core Competency (eLearning Modules) Updates

17 OBESITY MANAGEMENT

17 TeleECHO Clinic Metrics

- 21 Core Competency (eLearning Modules) Updates
- 22 COMPLEX CARE
 - 22 TeleECHO Clinic Metrics
 - 27 Core Competency (eLearning Modules) Updates
- 28 PALLIATIVE CARE
 - 28 TeleECHO Clinic Metrics
 - 32 Core Competency (eLearning Modules) Updates

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Program Evaluation



Image: Participants take part in a simulation that involves challenging conversations with patients and families at the 2020 Pain ECHO Education Event

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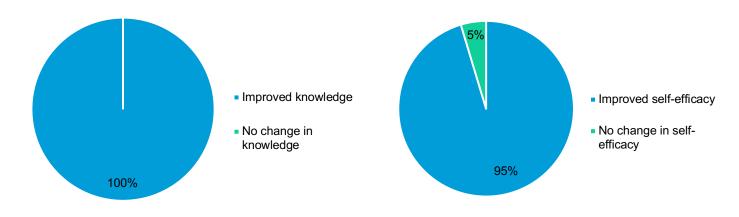
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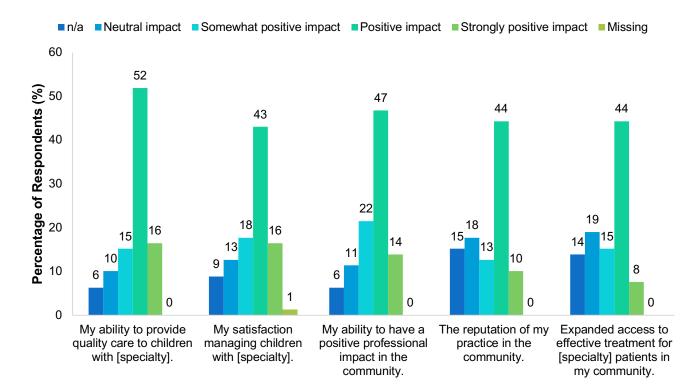
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EXECUTIVE SUMMARY

Change in Provider Knowledge and Self-Efficacy After 12 Months, n = 79

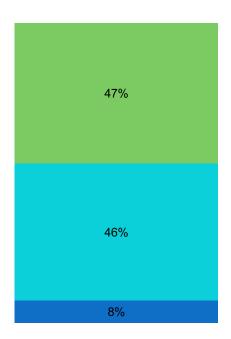


Practice Level Impact of ECHO After 12 Months, n = 79



Translation of ECHO Knowledge to Clinical Practice, n = 79

■ No change ■ Knowledge change ■ New knowledge translated into clinical practice



Key Quotes at 12 Months

"Providing palliative support locally can be challenging for a variety of reasons. However, the skills I have learned will certainly have a **positive impact** on my ability to **communicate** and **deliver care**."

"In the G-tube session [it] was great hearing about the struggles families have with making a decision and supporting them with the process. I have **changed my approach** and have had some **successes** with supporting parents with the decision."

"[I have] **more self-efficacy** and **awareness** of various treatment options to discuss with family and use in my own interventions"

"Project ECHO reaffirms my knowledge, provides some **new clinical insight** and **support evidence-based practice** with real time updates."

"

REPORT OVERVIEW

This report summarizes findings from baseline, 6-month and 12-month survey data for participants attending all Paediatric Project ECHO® specialty TeleECHO sessions. Data highlights program **acceptability**, **satisfaction**, perceived changes in **participant knowledge**, **self-efficacy** and **practice impact** related to the management of paediatric patients with specialty care needs. This report also describes initial evaluation data for the third pain-specific Boot Camp, which was held in February 2020 at SickKids.

The evaluation methodology was previously described in the Paediatric Project ECHO: SickKids Hospital Annual Evaluation Report – 2018-2019 and received approval from The Hospital for Sick Children's Research Ethics Board (#1000057321).

TeleECHO CLINICS

Acceptability and Satisfaction

Program acceptability and satisfaction were assessed at six and 12 months after baseline. Participants reported moderate-to-high acceptability and satisfaction with TeleECHO clinics (**Table 14**). At six months, participants agreed that *"involvement in the Paediatric Project ECHO Program is a worthwhile experience"* (6.1 ± 0.9), they *"learned new information through the Paediatric Project ECHO Program"* (6.1 ± 0.8) and would *"recommend involvement in the Paediatric Project ECHO Program"* (6.3 ± 0.8). Similar levels of acceptability and satisfaction were observed at 12-months and for individual specialties (**Table 15, Table 16, Table 17, Table 18**).

	ltem	6 Months (n = 114)			12 Months (n = 79)		
#		Mean	SD	Min, Max	Mean	SD	Min, Max
1	Involvement in the Paediatric Project ECHO Program is a worthwhile experience for me.	6.1	0.9	2, 7	6.1	0.7	4, 7
2	I would recommend involvement in the Paediatric Project ECHO Program to my colleagues.	6.3	0.8	2, 7	6.3	0.7	4, 7
3	The Paediatric Project ECHO Program has connected me with peers and diminished my professional isolation.	5.0	1.2	1, 7	5.0	1.4	1, 7
4	Paediatric Project ECHO has created a supportive community of practice.	5.6	1.0	2, 7	5.6	1.0	2, 7
5	The Paediatric Project ECHO Program is an effective way for me to learn.	5.9	0.9	2, 7	5.9	1.0	1, 7

Table 14: Acceptability and Satisfaction with Paediatric Project ECHO® at 6 months (n = 114) and 12 months (n = 79) for respondents participating in all four specialties of the program, since January 2018.

6	I have learned new information through the Paediatric Project ECHO Program.	6.1	0.8	2, 7	6.1	0.7	4, 7
7	I have learned best practice care through the Paediatric Project ECHO Program.	5.8	0.9	2, 7	5.9	0.9	3, 7
8	I respect the knowledge of the facilitators involved in the Paediatric Project ECHO Program.	6.5	0.6	5, 7	6.4	0.6	4, 7

Table 15: Acceptability and Satisfaction with Paediatric Project ECHO® for Pain Management at 6 months (n = 17) and 12 months (n = 11) for respondents participating in program, since January 2018.

#	Item	-	lonths (n		12 Months (n = 11)			
#		Mean	SD	Min, Max	Mean	SD	Min, Max	
1	Involvement in the Paediatric Project ECHO Program is a worthwhile experience for me.	5.8	1.3	2, 7	5.9	1.0	4, 7	
2	I would recommend involvement in the Paediatric Project ECHO Program to my colleagues.	5.8	1.4	2, 7	6.2	1.1	4, 7	
3	The Paediatric Project ECHO Program has connected me with peers and diminished my professional isolation.	4.5	1.4	1, 7	5.3	1.6	2, 7	
4	Paediatric Project ECHO has created a supportive community of practice.	5.2	1.4	2, 7	5.5	1.4	2, 7	
5	The Paediatric Project ECHO Program is an effective way for me to learn.	5.7	0.8	4, 7	5.7	1.0	4, 7	
6	I have learned new information through the Paediatric Project ECHO Program.	5.9	1.3	2, 7	6.0	0.8	5, 7	
7	I have learned best practice care through the Paediatric Project ECHO Program.	5.7	1.4	2, 7	5.8	0.9	5, 7	
8	I respect the knowledge of the facilitators involved in the Paediatric Project ECHO Program.	6.5	0.5	6, 7	6.4	0.7	5, 7	

Table 16: Acceptability and Satisfaction with Paediatric Project ECHO® for Obesity Management at 6 months (n = 20) and 12 months (n = 20) for respondents participating in program, since January 2018.

	ltem	6 Months (n = 20)			12 Months (n =20)		
#		Mean	SD	Min, Max	Mean	SD	Min, Max
1	Involvement in the Paediatric Project ECHO Program is a worthwhile experience for me.	6.1	1.0	3, 7	6.1	0.8	4, 7
2	I would recommend involvement in the Paediatric Project ECHO Program to my colleagues.	6.4	0.7	5, 7	6.3	0.6	5, 7

3	The Paediatric Project ECHO Program has connected me with peers and diminished my professional isolation.	5.6	0.9	4, 7	5.2	1.1	3, 7
4	Paediatric Project ECHO has created a supportive community of practice.	5.8	0.6	5, 7	5.8	0.9	4, 7
5	The Paediatric Project ECHO Program is an effective way for me to learn.	5.8	1.3	2, 7	6.0	0.8	4, 7
6	I have learned new information through the Paediatric Project ECHO Program.	6.2	0.8	4, 7	6.1	0.7	4, 7
7	I have learned best practice care through the Paediatric Project ECHO Program.	6.0	0.8	4, 7	6.0	0.7	4, 7
8	I respect the knowledge of the facilitators involved in the Paediatric Project ECHO Program.	6.6	0.6	5, 7	6.4	0.7	4, 7

Table 17: Acceptability and Satisfaction with Paediatric Project ECHO® for Complex Care at 6 months (n = 30) and 12 months (n = 17) for respondents participating in program, since January 2018.

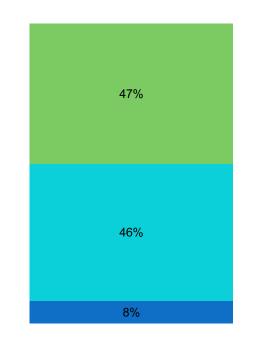
	s (n - n) for respondents participating in progra	6 Months (n = 30)			12 Months (n = 17)		
#	Item	Mean	SD	Min, Max	Mean	SD	Min, Max
1	Involvement in the Paediatric Project ECHO Program is a worthwhile experience for me.	6.2	0.7	5, 7	6.1	0.6	5, 7
2	I would recommend involvement in the Paediatric Project ECHO Program to my colleagues.	6.4	0.6	5, 7	6.4	0.5	6, 7
3	The Paediatric Project ECHO Program has connected me with peers and diminished my professional isolation.	5.0	1.1	3, 7	5.2	1.4	2, 7
4	Paediatric Project ECHO has created a supportive community of practice.	5.7	0.9	4, 7	5.9	0.7	4, 7
5	The Paediatric Project ECHO Program is an effective way for me to learn.	5.8	0.6	5, 7	5.8	1.0	3, 7
6	I have learned new information through the Paediatric Project ECHO Program.	6.1	0.6	5, 7	6.2	0.5	5, 7
7	I have learned best practice care through the Paediatric Project ECHO Program.	5.8	0.7	4, 7	5.9	0.7	4, 7
8	I respect the knowledge of the facilitators involved in the Paediatric Project ECHO Program.	6.4	0.6	5, 7	6.4	0.6	5, 7

Table 18: Acceptability and Satisfaction with Paediatric Project ECHO® for Palliative Care at 6 months (n = 47) and 12 months (n = 31) for respondents participating in program, since January 2018.

	s (11 – 51) for respondents participating in progra		6 Months (n = 47)			12 Months (n = 31)			
#	Item	Mean	SD	Min, Max	Mean	SD	Min, Max		
1	Involvement in the Paediatric Project ECHO Program is a worthwhile experience for me.	6.1	0.8	4, 7	6.2	0.7	5, 7		
2	I would recommend involvement in the Paediatric Project ECHO Program to my colleagues.	6.4	0.7	4, 7	6.4	0.6	5, 7		
3	The Paediatric Project ECHO Program has connected me with peers and diminished my professional isolation.	5.0	1.2	2, 7	4.5	1.5	1, 7		
4	Paediatric Project ECHO has created a supportive community of practice.	5.6	1.0	4, 7	5.5	0.9	4, 7		
5	The Paediatric Project ECHO Program is an effective way for me to learn.	6.0	0.8	4, 7	5.9	1.1	1, 7		
6	I have learned new information through the Paediatric Project ECHO Program.	6.0	0.8	4, 7	6.2	0.8	4, 7		
7	I have learned best practice care through the Paediatric Project ECHO Program.	5.8	0.8	4, 7	5.9	1.1	3, 7		
8	I respect the knowledge of the facilitators involved in the Paediatric Project ECHO Program.	6.5	0.6	5, 7	6.5	0.6	5, 7		

Knowledge

Participant knowledge levels related to different aspects of managing specialty paediatric patients are surveyed at baseline and re-assessed at six and 12 months. In addition, perceived global changes in knowledge and the translation of knowledge to clinical practice are evaluated at six and 12 months. Given the anticipated time needed to translate ECHO knowledge into clinical practice, these changes are reported at 12 months. Seventy-three participants (93%) indicated a change in knowledge due to participation in Paediatric Project ECHO and 37 participants (47%) reported that this new knowledge had translated into changes in their clinical practice (**Figure 1**). Data indicate that there were improvements in knowledge levels across all specialty curricula topics (**Figure 2**, **Figure 3**, **Figure 4**, **Figure 5**).



No change Knowledge change New knowledge translated into clinical practice

Figure 1: Translation of Knowledge into Clinical Practice at 12 months (n = 79).

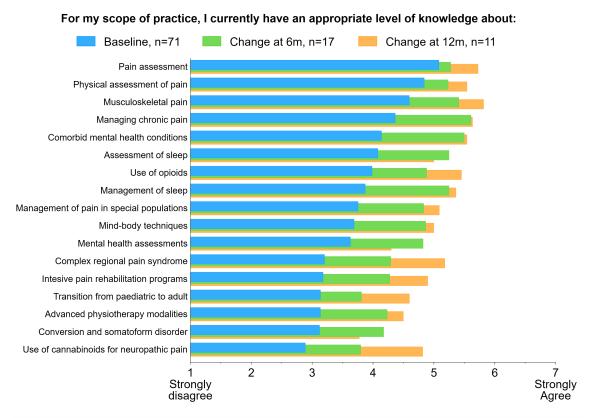


Figure 2: Perceived changes in participant knowledge related to Pain Management at 6 months (n = 17) and 12 months (n = 11).

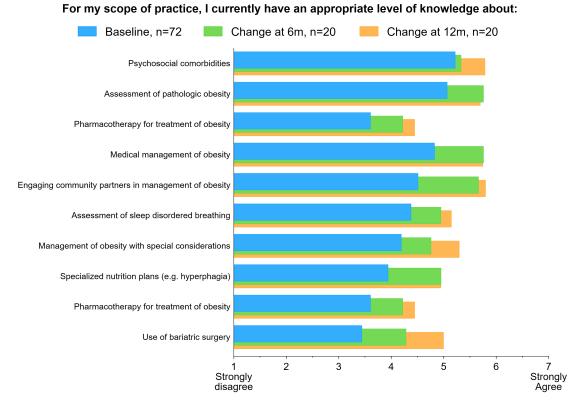


Figure 3: Perceived changes in participant knowledge related to Obesity Management at 6 months (n = 20) and 12 months (n = 20).

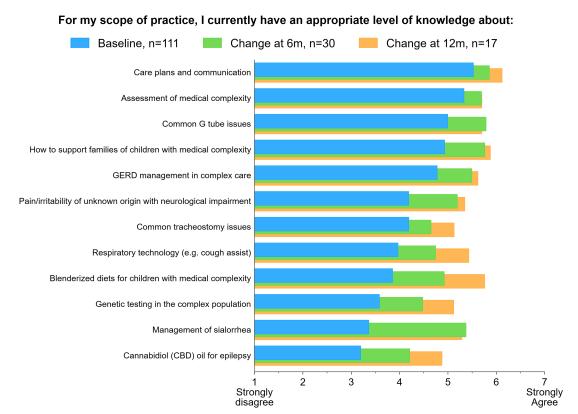


Figure 4: Perceived changes in participant knowledge related to Complex Care at 6 months (n = 30) and 12 months (n = 17).

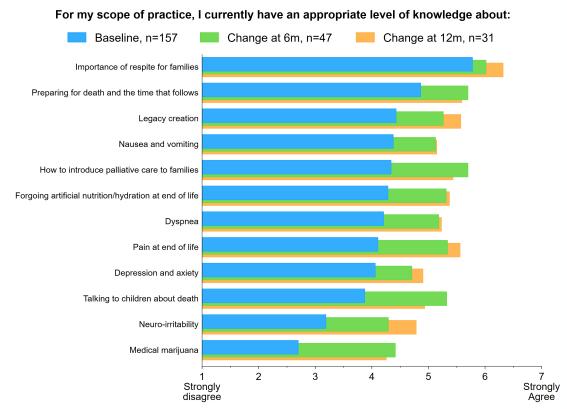


Figure 5: Perceived changes in participant knowledge related to Palliative Care at 6 months (n = 47) and 12 months (n = 31).

Self-Efficacy

Baseline surveys were administered to participants in all four specialty TeleECHO clinics to ascertain their level of self-efficacy (confidence) related to the management of specialty care needs of paediatric patients. Levels of self-efficacy were re-assessed at six and 12 months and data indicate improvements in participants' reported confidence in managing patients with specialty care needs (**Figure 6**, **Figure 7**, **Figure 8**, **Figure 9**).

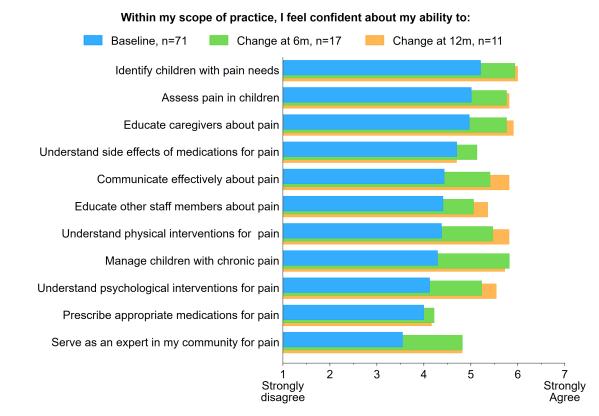


Figure 6: Perceived changes in provider self-efficacy for Pain Management at 6 months (n = 17) and 12 months (n = 11).

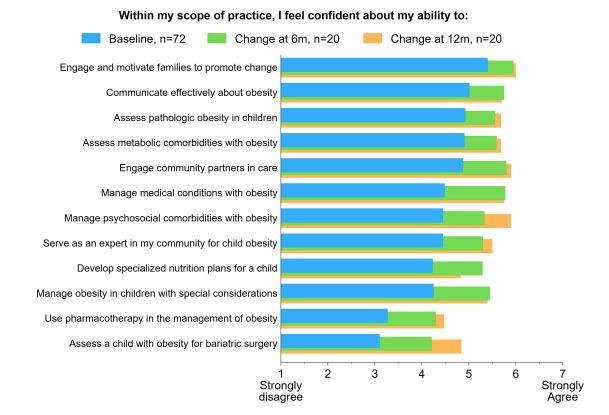


Figure 7: Perceived changes in provider self-efficacy for Obesity Management at 6 months (n = 20) and 12 months (n = 20).

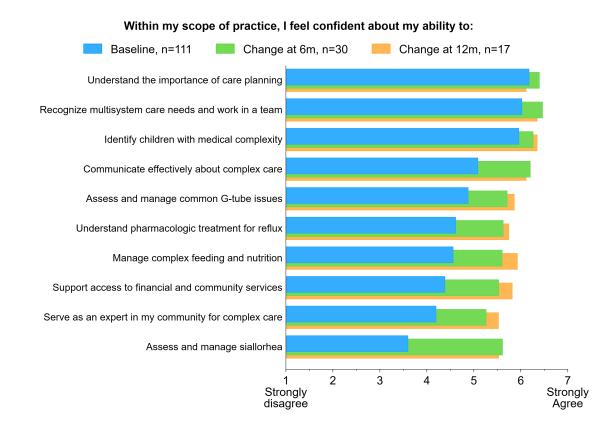


Figure 8: Perceived changes in provider self-efficacy for Complex Care at 6 months (n = 30) and 12 months (n = 17).

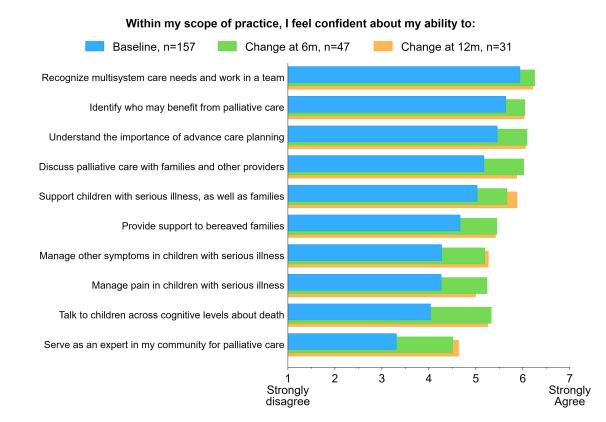


Figure 9: Perceived changes in provider self-efficacy for Palliative Care at 6 months (n = 47) and 12 months (n = 31).

Practice Level Impact

Practice-level impact was evaluated at six and 12 months. Results to date indicate that participants perceived a positive or strongly positive impact on their clinical practice as a result of involvement in Paediatric Project ECHO (Figure 10, Figure 11, Figure 12, Figure 13, Figure 14, Figure 15, Figure 16, Figure 17). Qualitative semi-structured interviews further evaluating the impact of Paediatric Project ECHO® on providers' clinical practice are currently being conducted and findings, once available, will be included in subsequent annual reports.

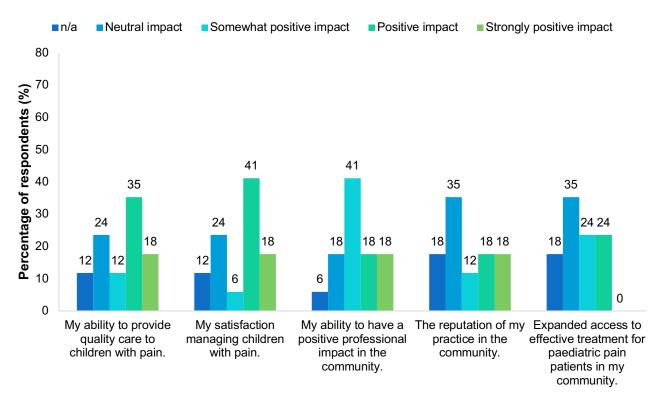


Figure 10: Perceived practice level impact at 6 months for respondents (n = 17) participating in Paediatric Project ECHO Pain Management. Response options ranged from "Strongly negative impact" to "Strongly positive impact", only endorsed responses are shown.

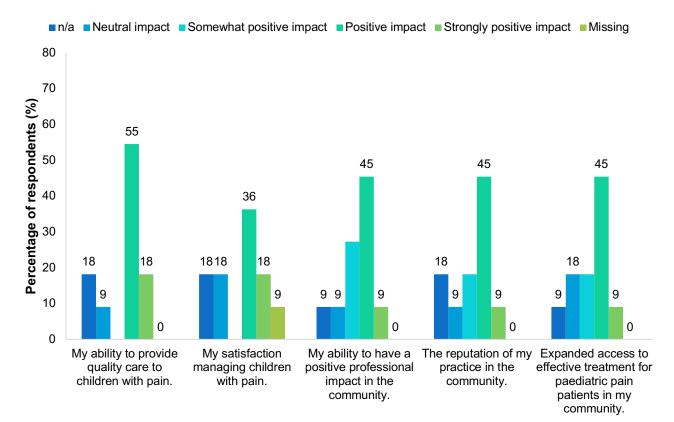


Figure 11: Perceived practice level impact at 12 months for respondents (n = 11) participating in Paediatric Project ECHO Pain Management. Response options ranged from "Strongly negative impact" to "Strongly positive impact", only endorsed responses are shown.

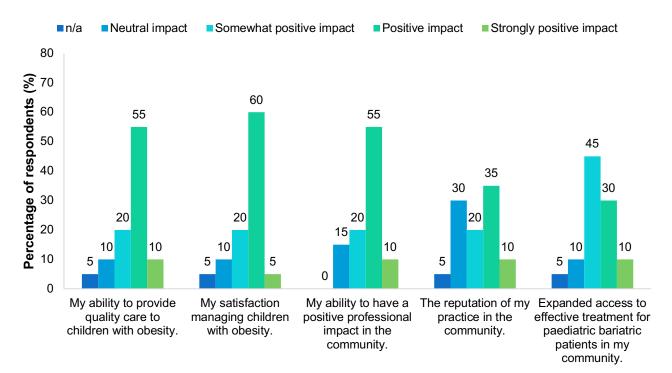
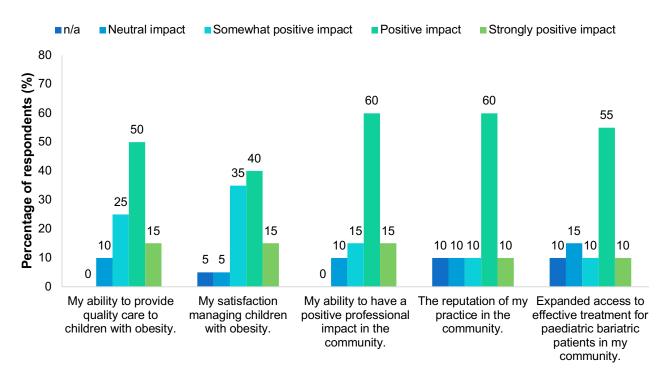
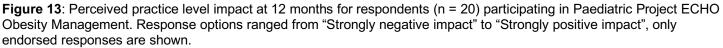


Figure 12: Perceived practice level impact at 6 months for respondents (n = 20) participating in Paediatric Project ECHO Obesity Management. Response options ranged from "Strongly negative impact" to "Strongly positive impact", only endorsed responses are shown.





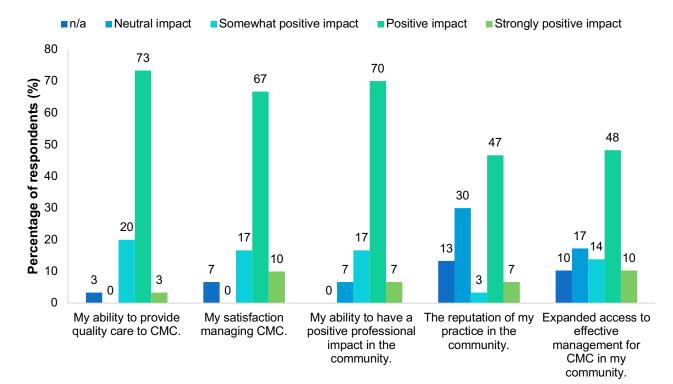


Figure 14: Perceived practice level impact at 6 months for respondents (n = 30) participating in Paediatric Project ECHO Complex Care. Response options ranged from "Strongly negative impact" to "Strongly positive impact", only endorsed responses are shown.

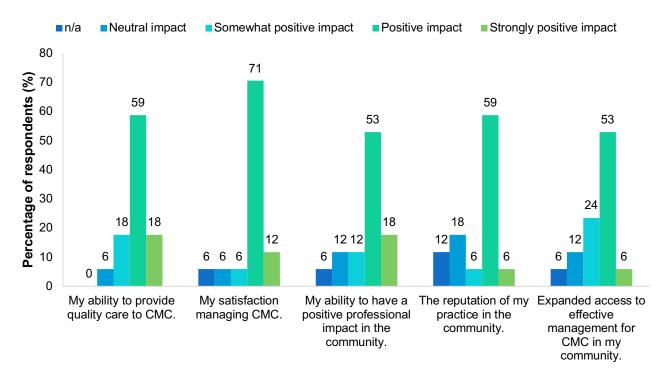


Figure 15: Perceived practice level impact at 12 months for respondents (n = 17) participating in Paediatric Project ECHO Complex Care. Response options ranged from "Strongly negative impact" to "Strongly positive impact", only endorsed responses are shown.

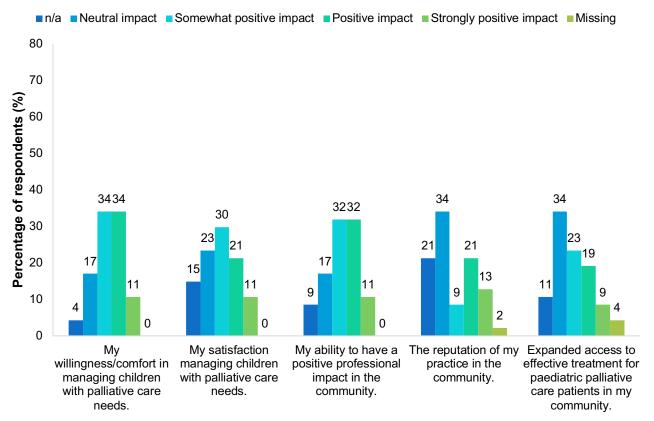


Figure 16: Perceived practice level impact at 6 months for respondents (n = 47) participating in Paediatric Project ECHO Palliative Care. Response options ranged from "Strongly negative impact" to "Strongly positive impact", only endorsed responses are shown.

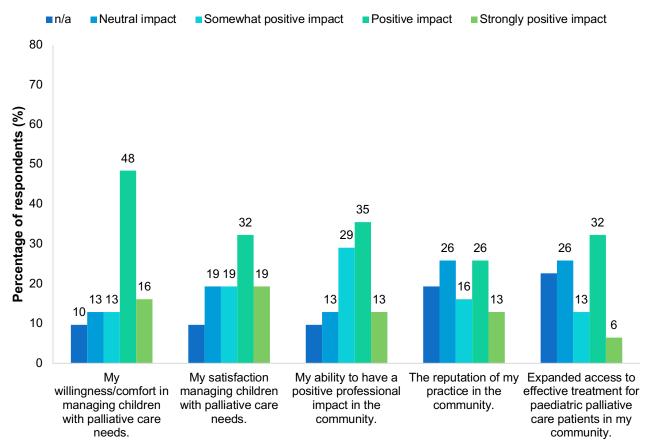


Figure 17: Perceived practice level impact at 12 months for respondents (n = 31) participating in Paediatric Project ECHO Palliative Care. Response options ranged from "Strongly negative impact" to "Strongly positive impact", only endorsed responses are shown.

BOOTCAMP – PAIN MANAGEMENT

A recent Pain Bootcamp, held at SickKids on February 6th and 7th, incorporated simulation-based learning to enhance clinical skills of community-based healthcare providers. Healthcare providers participated in three contextual paediatric simulation scenarios in order to strengthen skills in pain assessment, development of interdisciplinary care plans, and management of procedural pain. Simulations were facilitated by simulation educators, with patients and caregivers represented by actors and a high-fidelity infant mannequin. Attendees participated in 15-minute scenarios followed by a 45-minute structured debrief.

Program evaluation sought to assess changes in healthcare provider knowledge and self-efficacy, as well as provider acceptability and satisfaction with simulation-based learning. Participants completed surveys at baseline and post-program. Six-month and 12-month follow-up data will be collected in August 2020 and February 2021.

Most participants were registered nurses or nurse practitioners (n = 21, 75%) and were affiliated with academic hospitals (**Table 19**). Participants expected to expand their knowledge on pain-related topics and increase their confidence in managing patients with pain (**Figure 18**). Perceived changes in knowledge and self-efficacy were assessed post-program and will be re-assessed at six and 12-months post-program. Data from the six and 12-month assessment will be presented in the next annual report.

Characteristic	Participant, n = 28 (%)
Discipline/Profession	
Early child specialist/educator	2 (7.1)
Nurse practitioner	7 (25.0)
Physician	3 (10.7)
Physiotherapist	1 (3.6)
Registered Nurse	14 (50.0)
Research volunteer	1 (3.6)
Practice setting	
Academic hospital	21 (75.0)
Academic institution (University)	1 (3.6)
Central East LHIN	2 (7.1)
Home care	1 (3.6)
Hospice facilities	3 (10.7)

 Table 19: Profession and practice setting information for participants (n = 28) of the Paediatric Project ECHO® Pain Bootcamp.

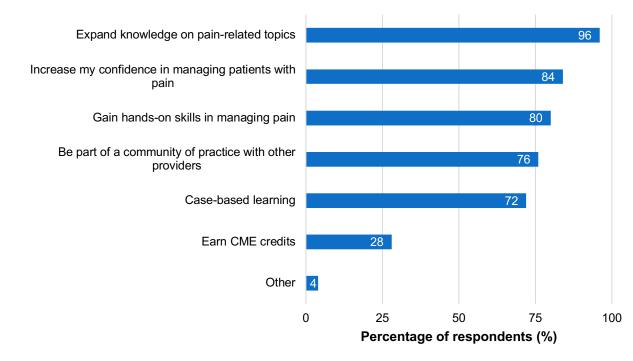


Figure 18: Expectations of healthcare providers participating in the Paediatric Project ECHO® Pain Bootcamp.

There was a high level of agreement with simulation-based survey items. Notably, participants (n = 19) agreed that simulations were an effective way to develop communication and teamwork skills (average score = $6.2, \pm 1.2$) and that they received feedback that was applicable to their clinical practice (average = $6.1, \pm 1.0$) (**Table 20**). Qualitative data indicated that for most respondents (n = 13, 76.5%) the debriefs were the most effective part of the simulation-based learning. For example, a community-based paediatrician mentioned that the debriefs were well directed and a registered nurse voiced how they "felt very anxious and stressed doing the sim but after it was done, [they] got some positive feedback from the actors that validated what they wanted". All respondents (n = 20) would recommend colleagues attend a paediatric simulation-based training session if offered in the future.

Table 20: Assessment of acceptability and satisfaction with simulation-based learning for the Paediatric Project ECHO® Pain Bootcamp (n = 19), using a 7-point Likert scale where 1 = "strongly disagree" and 7 = "strongly agree".

#	Item	Mean	SD	Min, Max
	Simulations allowed for the practice of assessing pain for a			
1	complex patient in a comfortable and non-judgmental environment	6.1	1.0	3, 7
	Simulations allowed for the practice of creating a pain care			
2	plan with an interdisciplinary team in a comfortable and non-judgmental environment	5.8	0.8	4, 7
	Simulations allowed for the practice of managing acute			
3	procedural pain and sedation in a comfortable and non- judgmental environment	6.1	0.9	4, 7
4	Simulations were an effective way to develop communication and teamwork skills	6.2	1.3	2, 7

5	Simulations incorporated a range of clinical variation and difficulty	5.8	1.5	2, 7
6	Simulations were relevant for my clinical practice	5.6	1.3	3, 7
7	I received feedback from simulation facilitators, which is applicable for my clinical practice	6.1	1.0	3, 7

I was very anxious going into the sims. I saw it on the calendar and my guard was up initially... it was a nice **applicable way** to **apply the knowledge** that we

learned.

- Registered nurse participant

I don't know how to **advocate any more strongly** for the continuing of this, probably quite expensive education, which is **probably more effective** than going to a course and listening to a bunch of lectures.

- Physician participant

"

I've been to a number of conferences out-of-pocket and this is probably one of the better ones I've been to. I've **taken a lot away from it** and had I not been supported financially; I probably would not have been able to come so I think this will be **super beneficial**.

- Registered nurse participant

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