





Identifying and Maximizing the Impact of the OSSU Demonstration Projects

OSSU Research Round Table: Volume 3

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Acknowledgements and Contributors

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The Research Round Tables initiative is a collaboration between the SPOR-EA and the Ontario SPOR SUPPORT Unit (<u>OSSU</u>). The Knowledge Translation Program (<u>KTP</u>) from St. Michael's Hospital was engaged to support the development of this report.

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Introduction

The **O**ntario **S**POR (Strategy for Patient Oriented Research) **S**UPPORT (Support for People and Patient-Oriented Research and Trials) **U**nit (OSSU) (<u>1</u>,<u>2</u>) funded 17 Ontario-based health research projects designed to demonstrate a meaningful approach to Patient-Oriented Research (POR) (<u>3</u>), hereafter referred to as the 'demonstration projects' (<u>4</u>). A supplement published in the Canadian Medical Association Journal (CMAJ) in 2018, titled *Engaging Patients in Healthcare Research: The Ontario Experience,* provided an overview of the POR work being executed by the demonstration project teams (click *here* to explore the CMAJ supplement, <u>4</u>).

As these demonstration projects are now nearing completion, OSSU developed the Research Round Table initiative to provide project teams with an opportunity to showcase the overall outcomes of their demonstration projects (including projects that stemmed from the initial demonstration projects) and identify strategies to maximize the impact of their findings on healthcare research and decision-making. The Research Round Table was designed using an integrated KT approach to engage relevant stakeholders including OSSU leadership, researchers, and patient partners, and was guided by SPOR's guiding principles of mutual respect, co-building, inclusiveness, and support (<u>3</u>).

Objectives

Specifically, the objectives of the OSSU Research Round Tables are to:

- 1) Disseminate knowledge to relevant stakeholders through brief presentations by research teams about their projects.
- 2) Facilitate collaboration between the demonstration project research teams and relevant stakeholders through a guided discussion on the potential applications and impact of the demonstration projects' work, including all usable evidence, potential key messages, strategies to tailor messages and reach target audiences, and potential barriers and facilitators to dissemination and implementation.
- **3)** Use discussions to co-create case studies describing each project, their main findings, and potential avenues for impact.

March 3rd Research Round Table

The third OSSU Research Round Table occurred on March 3rd, 2020, from 12:00-3:00 pm at the Peter Gilgan Centre for Research and Learning in Toronto, Canada. Four OSSU demonstration project teams presented at the third Research Round Table (see Table 1).





Table 1. Overview of research teams at the March 3rd Research Round Table

Project title	Principal Investigator	Research Focus
PedCARE	Drs. Roger Zemek, Nick Reed, Andrée- Anne Ledoux, and Ms. Carol DeMatteo	This project focused on determining the comparative impact of early exercise versus rest on recovery outcomes in children post-concussion.
ACHWM screening and triage	Dr. Nancy Young and Mary Jo Wabano	This project focused on determining the effectiveness of a new community-embedded screening and triage process on mental health outcomes in First Nations youth.
ССКО СМС	Drs. Nora Fayed and Eyal Cohen	This project focused on evaluating the impact of the Provincial Council of Child and Maternal Health's Complex Care for Kids Ontario intervention on the care experiences of children with medical complexity and their families.
PARENT	Dr. Catherine Birken	This project focused on determining the effectiveness of an obesity prevention intervention for toddlers at risk for obesity and their families.

Knowledge User Engagement

Selected key stakeholders from relevant organizations, as well as the OSSU and SPOR Evidence Alliance (SPOR-EA) teams attended the March 3rd Research Round Table. See Table 2 for a summary of the organizations represented at the event. Please note that representative organizations will be added at a later date.

Table 2. Overview of stakeholders at the March 3rd Research Round Table

Stakeholder Group	Representative Organizations
Provincial Government	
Patient Partners	
Non-Profit Organizations	
Professional Associations	
Hospitals	
Universities	
Research Networks	

Methods

In partnership with the SPOR-EA, the Knowledge Translation Program (KTP) at St. Michael's Hospital (Toronto, Canada) facilitated the execution of the Research Round Table data collection and analysis activities.

Data collection

The Research Round Table meeting was facilitated by Sudha Kutty, the Interim Vice-President of Quality Improvement at Ontario Health (Quality). At the onset of the meeting, all research teams provided a brief summary of their project using a standardized presentation template (see <u>Appendix A</u> for the presentation





template). After each presentation, Ms. Kutty led a large-group discussion on the potential impact of, and suggested avenues of dissemination for the project findings. See <u>Appendix B</u> for an agenda of the Research Round Table discussion.

Development of plain language case studies

Prior to the Round Table, all research teams completed a Knowledge Sharing Template (see <u>Appendix C</u>) that outlined their project focus and their results to date. The KTP used the information from the Knowledge Sharing Templates to develop one-page, plain language case studies summarizing the demonstration projects. All case summaries were reviewed by a patient partner who was recruited and engaged by the KTP. See <u>Section 3.0</u> for the case summaries. All Research Round Table attendees received these case studies one week prior to the meeting.

Facilitated round table discussion

To capture diverse, individual and collective participant experiences (5), Ms. Kutty, an experienced facilitator selected by OSSU, used a semi-structured discussion guide developed by the KTP and OSSU and reviewed by a patient partner (see <u>Appendix D</u>). The guide was informed by the Research Round Table objectives, as well as core principles of knowledge translation (KT) and patient engagement. The guide was designed to provide an opportunity for research teams to receive feedback from attendees on the following topics:

- Potential project impacts from a patient to policy level
- Opportunities for future stakeholder engagement
- Potential target audiences, and key messages for each target audience
- Strategies to disseminate key messages to each target audience
- Potential challenges and opportunities to disseminating and/or implementing project findings

Three KTP team members with expertise in KT and qualitative methods attended the Research Round Table and took detailed notes of all demonstration project presentations and facilitated discussions. Additionally, Research Round Table presentations and discussions were audio recorded for reporting purposes only.

Data analysis

The KTP used a rapid analysis approach to analyze the Research Round Table discussion. Rapid analysis is a form of qualitative content analysis that offers a feasible and rigorous method through which to categorize qualitative data on a limited timeline (<u>6</u>). The rapid analysis approach involved the following steps:

Data management

- 1. Directly after the Research Round Table, three KTP members met to debrief, and review any points of confusion.
- 2. Each KTP member typed their notes from the Research Round Table, and then two staff members (KQL and JC) compared the transcripts and created a final consolidated version, reviewing the audio recording in the case of conflicting information.







Data analysis

A coding framework was developed by the research team a-priori (see <u>Appendix E</u>). The framework was designed to directly inform the objectives of the OSSU Research Round Table. This coding framework was then used to code the data, as described below:

- 1. Two KTP staff members (KQL and JC) independently assigned certain pieces of text to the different parent-node categories using colour-coded highlighting directly on the interview notes. Further, these sections were assigned to child-node categories within the parent node categories, where applicable, through tracking comments in the Research Round Table notes.
- 2. Two KTP staff members (KQL and JC) reviewed the coded transcripts for discrepancies, which were discussed until consensus was reached. They then inputted the coded data into a summary table, organized by node from the coding framework.

Using these coded data, two KTP staff members (KQL and JC) sorted data into common categories informed by the objectives of the Research Round Table. Once data were categorized through this approach, staff members independently identified and summarized prominent project-specific topics of discussion. This analysis did not include information that research teams shared about the specific study outcomes (e.g., clinical outcomes), and rather focused on incidental findings (e.g., lessons learned), generalizable evidence, potential impacts, anticipated challenges and potential solutions, strategies for dissemination and implementation, and strategies for sustainability and spread. Where applicable, the project-specific topics of discussion are categorized into information presented by the primary investigator versus the Research Round Table attendees. The Round Table discussions were also used to modify the plain language case study summaries and inform cross-cutting themes.

Individual Project Case Studies

The following four sections outline the project-specific outcomes from the Research Round Table facilitated discussion and the plain language case studies. Each section can be independently sent to each project team to assist them in **(1)** developing their plan for dissemination and/or implementation, and **(2)** making the project findings more accessible to decision-makers and the general public.







Multicentre, randomized clinical trial of pediatric concussion assessment of rest and exertion (PedCARE)

Presented by Dr. Roger Zemek

5







Introduction

The **O**ntario **S**POR (Strategy for Patient Oriented Research) **S**UPPORT (Support for People and Patient-Oriented Research and Trials) **U**nit (OSSU) funded 17 Ontario-based health research projects designed to demonstrate a meaningful approach to Patient-Oriented Research (POR), referred to as the 'demonstration projects'. Drs. Roger Zemek, Nick Reed, Andrée-Anne Ledoux, and Ms. Carol DeMatteo's research team was one of the four demonstration project teams to showcase the outcomes of their project at the March 3rd OSSU Research Round Table at the Peter Gilgan Centre for Research and Learning in Toronto, Canada.

The purpose of the OSSU Research Round Table was to **(1)** collaborate with relevant stakeholders to identify strategies for dissemination and/or implementation of project findings and, **(2)** disseminate project findings to relevant stakeholders and **(3)** make project findings more accessible to decision-makers and the general public. Patient partners, as well as key stakeholders from the provincial government (e.g., Ontario Ministry of Health and Ministry of Long-Term Care, Public Health Ontario), hospitals and health centres (e.g., SickKids, Wikwemikong Health Centre), universities (e.g., University of Toronto, Queen's University), non-profit organizations (e.g., Families Canada), and research institutions and networks (e.g., Ontario SPOR SUPPORT Unit) attended the Research Round Table.

In partnership with the SPOR Evidence Alliance, the Knowledge Translation Program (KTP) from St. Michael's Hospital attended the Research Round Table and took detailed notes on the research presentations and stakeholder discussions, capturing content relating to usable evidence and potential for impact, strategies for dissemination and/or implementation as well as spread and sustainability, and anticipated challenges and strategies to leverage. This information was then analyzed and used to **(1)** identify prominent project-specific topics of discussion relating to the potential applications and impact of the research team's project work (see <u>Research Round Table findings</u>), and **(2)** supplement information in the knowledge sharing template completed by the research team to inform the development of a 1-page project case summary (see <u>Plain Language Case Summary</u>).

The research team can leverage the pertinent stakeholder perspectives outlined in the OSSU Research Round Table findings and project case summary to inform their dissemination and implementation plan and maximize the impact of their project findings on healthcare research and decision-making.

Research Round Table findings

Usable evidence and potential for impact

The research team shared generalizable lessons that they learned through the development and execution of their pragmatic, multi-site study. The Research Round Table attendees suggested additional potential impacts of the study findings.







Identified by research team:

- 1. Proactive strategies to increase the feasibility of implementing the study intervention. The research team conducted their randomized clinical trial across three Canadian academic emergency departments (SickKids, The Children's Hospital of Eastern Ontario, and Children's Hospital London Health Sciences Centre). Use of these clinical settings encouraged the research team to ensure that their intervention could be feasibly integrated into clinical care for youth with concussion. The research team highlighted that they chose to use a self-report questionnaire to assess symptom tolerability, given that in a pragmatic setting, it would not be feasible for clinic staff to assess tolerability due to the extensive clinical care waitlists.
- 2. Approaches to analyzing and increasing the impact of a 'negative study'. Due to budget constraints, the research team was unable to recruit enough participants to conduct a superiority trial, which resulted in a 'negative study'. Despite these restrictions, the research team used analysis methods that allowed them to conduct a non-inferiority trial to determine if the intervention showed any harm compared to usual care. In addition to conducting significance tests, the research team leveraged confidence intervals to demonstrate signals of effect that the intervention showed little risk of harm, but a high chance of benefit.
- 3. Importance of tailoring messaging to discuss challenging topics with research participants and end users. Research Round Table attendees were interested in how the research team discussed challenging topics such as risk and recovery trajectories with research participants and end users. The research team shared the importance of emphasizing recovery to all youth, putting the focus instead on strategies to speed up recovery for high-risk youth.

Identified by the Research Round Table attendees:

1. Potential generalizability of study findings to adult populations. Research Round Table attendees encouraged the research team to reflect on how their study findings may be translated from pediatrics to the adult population. The research team was enthusiastic about the possibility of applying these findings to the adult realm, especially since concussion is one of the unique fields where the pediatric literature is more developed than the adult literature. The research team speculated that as children typically engage in more physical activity than adults, the intervention may have more of an impact on the adult population. The team encouraged attendees to share the information of individuals conducting this work in the adult realm.

Anticipated challenges and potential strategies to overcome challenges

Identified by research team:

The research team experienced challenges with participant adherence and attrition throughout the execution of their study:

1. Challenges with attrition and participant adherence to study protocols. Not all participants adhered to the study protocol outlined by the research team, and some participants withdrew from the study before study completion. For example, while the experimental group was instructed to wait 72 hours







before starting physical activity, the control group was only instructed to wait until full symptom resolution. However, many youth in the control group started performing physical activity within 72 hours of injury, likely before full symptom resolution would have occurred. Moving forward, the team will be looking to see if the accelerometer data validates the activity self-report, and if not, will assess how compliance may have influenced their results. Some participants' community doctors advised that they withdraw from the study, as they perceived the study to be unsafe. This highlighted the misconceptions of appropriate concussion recovery protocols that still exist in community practice, which the research team hopes to address through their study.

Strategies for dissemination and/or implementation

Identified by research team:

The research team is executing multiple strategies to increase the spread and impact of their project findings, including:

- 1. Proactive engagement of end users as a foundation for buy-in and dissemination. The research team proactively engaged a comprehensive range of key stakeholders and end users at the initiation of the study in order to assess their perceived acceptability of the study objectives and design, and/or to engage the groups to co-design the study methods and collaborate on the execution of the study. This proactive engagement increased the strength of their design and methodology and will support dissemination of trial findings. Specifically, the team engaged these groups through the following strategies:
 - **a.** They worked closely with **parents and families** to make changes to the proposed study protocol to ensure that it would be feasible for participants.
 - b. They worked collaboratively with the three Ontario pediatric emergency department sites and partnered with other relevant clinical sites for content expertise, allowing them to assess over 1,400 children for eligibility, with a mean time of study enrollment of ~3 hours.
 - **c.** They received letters of support from **sporting organizations** in advance of submitting their study to ensure that these key partners were in favor their proposed intervention.

The research team also plans to engage key **brain injury organizations** (e.g., Ontario Brain Institute) prior to study end to support dissemination of study findings.

- 2. Leveraging previously established relationships to promote dissemination. A consistent pattern in the research team's dissemination strategy was to leverage strong relationships that they had already established as effective avenues for dissemination. These avenues included:
 - a. Reaching community hospitals through the PERC network and TREKK. The Principal Investigator (Dr. Roger Zemek) is the chair of the Pediatric Emergency Research Canada (PERC) network, which works closely with TRanslating Emergency Knowledge for Kids (TREKK). Each of the PERC-associated tertiary and quaternary Emergency Departments (EDs) are associated with small and medium community hospitals to disseminate new research through TREKK. Through 'PedPack' individuals in the PERC network have a package of topics that they teach to these community hospitals. Dr. Zemek is the author of the concussion 'bottom line' in TREKK, and therefore will integrate their study results in this piece. As approximately 85% of the pediatric





population will be seen in a community hospital for emergency care, the research team is planning to leverage their pre-existing partnership with TREKK to reach these centers.

- b. Leveraging partnership with ONF to integrate results into living guidelines. The research team shared that they work collaboratively with the Ontario Neurotrauma Foundation (ONF) and will leverage this partnership to integrate their results into the 'Living Guideline for Diagnosing and Managing Pediatric Concussion', and to disseminate findings to family physicians.
- c. Identifying key collaborators that could support the development of new dissemination strategies. In response to Research Round Table attendees suggestions to disseminate through the ECHO concussion group and the Canadian Society for Exercise Physiology's (CSEP) education binder, the study team shared that they had previous relationships with key stakeholders from both groups which they can leverage to pursue these strategies, including having Mark Tremblay from the CSEP as a co-author on the current study.
- **3.** Pursuing multimodal dissemination strategies to ensure results are accessible to all target audiences. The research team outlined that they are planning to leverage diverse avenues for dissemination that will reach a variety of target audiences:
 - **a.** To reach **academic audiences**, the study team will be presenting at multiple international conferences, including the International Pediatric Brain Injury Society conference.
 - b. To reach clinical audiences and ensure that study findings are being applied rapidly, the study team is leveraging dissemination avenues that target these clinical audiences. For example the 'Living Guideline for Diagnosing and Managing Pediatric Concussion' includes recommendations for healthcare professionals, as well as parents, teachers, and coaches, allowing the research team to reach a diverse audience through a single strategy. Additionally, the guideline is updated on a rolling basis, which will ensure research findings are disseminated promptly.
 - c. Further, the team will leverage the PERC PedPack to disseminate study findings to community hospitals through TREKK.

Identified by the Research Round Table attendees:

Research Round Table attendees shared additional strategies that they suggested the research team explore to maximize the spread and impact of their study findings:

- 1. Partnering with experts and expert organizations who have established connections and/or avenues for dissemination. Research Round Table attendees encouraged the study team to partner with relevant expert individuals and organizations in the field to increase the reach of their findings. These strategies included the following:
 - a. Leverage established media outlets targeted at relevant end-users. Research Round Table attendees suggested that the study team consider profiling their study findings in media outlets that target healthcare practitioners including the following: '<u>The Rounds Table</u>' (webinars and podcasts focused on discussing new medical research from academic journals, targeted primarily at physicians), Children's Healthcare Canada's '<u>Spark: Knowledge Mobilization</u>' network (webinars, a blog, and podcasts directed at the pediatric healthcare community,







including those in community settings), the '<u>Solutions for Kids in Pain (SKIP)</u>' knowledge mobilization network, the '<u>Project ECHO'</u> concussion group (an educational interactive videoconference program that pairs an expert team of clinicians with healthcare participants), and '<u>The Conversation Canada'</u> (where journalists work with scientists to disseminate data in plain language to key end-users, such as parents and coaches). The attendees highlighted that the team could consider disseminating knowledge products such as the living guideline through these avenues.

- b. Work collaboratively with individuals and organizations that are critical knowledge brokers in the field. Dr. Heather Manson (Chief of Health Promotion, Chronic Disease and Injury Prevention at Public Health Ontario) offered to work with the research team to disseminate their study findings to a public health audience in both Ontario and beyond. Attendees suggested that the team reach out to the CSEP to see if their study findings could be integrated into the child section of the society's education binder on the gold standard of exercise.
- 2. Expanding target audiences for dissemination. The Research Round Table attendees encouraged the research team to identify additional target audiences who would benefit from these study findings, including nurse practitioners.

Strategies for sustainability and spread

The Research Round Table attendees did not discuss this item.





Plain Language Case Summary

OSSU team: Dr. Roger Zemek, Dr. Nick Reed, Dr. Andrée-Anne Ledoux, Carol DeMatteo, and colleagues.

Project name: Multicentre, randomized clinical trial of pediatric concussion assessment of rest and exertion (PedCARE): A study to determine when to resume physical activities following concussion in children

What did this demonstration project focus on?

The comparative impact of early exercise versus rest on recovery outcomes in children post-concussion.

What did the team want to accomplish with their demonstration project?

The team aimed to improve treatment interventions for children with concussion by **(1)** comparing the effect of returning to physical activity three days after concussion with usual concussion care (i.e., rest until symptom free) on symptom burden and recovery prognosis using a multi-center randomized control design, and **(2)** meaningfully engaging patients throughout all project stages.

What did they accomplish?

The study team engaged patients to guide the design and execution of the study through various activities including interviews and feedback questionnaires. The study team recruited 395 children from three emergency departments to participate in the study, half of which followed the return to activity protocol after concussion. No participants experienced any harmful effects. Preliminary results found that early return to activity had no negative effects on symptom presentation and recovery trajectories.

How did/could this project have an impact on healthcare in Ontario?

Patient/public level: Patients may benefit from receiving improved evidence-based care following concussion that encourages re-engagement with activities of daily living, compared to full rest.

Healthcare provider level: Healthcare providers will be able to provide updated evidence-based concussion recovery care to their patients.

System/policy level: Evidence on the safety for children returning to activity following concussion can be used to inform program delivery and funding decisions.

What can be learned from this project?

The study team experienced challenges with participants (1) failing to adhere to activity protocols and (2) not returning the activity monitoring equipment that was provided for the study. This resulted in additional costs and limited resources. Future studies could consider providing incentives for returning study equipment. Additionally, patient engagement methods required more time and resources than anticipated. Research teams are encouraged to proactively budget for these resources.

Who should know about these findings?

Patients, families, healthcare professionals and health policy makers can all benefit from being aware of these findings to ensure the best possible care is being delivered to children post-concussion.

What is the team doing next?

The study team is conducting additional analyses on the relationship between characteristics of the activity that participants engaged in (e.g., intensity) and concussion outcomes. Additionally, they are continuing to analyze activity data to identify how non-adherence to activity protocols may be impacting the study results. They plan to continue working with patients to develop key messages and approaches to share their study findings, in addition to traditional dissemination avenues.

Identifying and Maximizing the Impact of the OSSU Demonstration Projects



Jo Wabano





The effectiveness of a new communityembedded screening and triage process on mental health outcomes in Aboriginal youth (ACHWM screening and triage) Presented by Dr. Nancy Young and Mary







Introduction

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The research team can leverage the pertinent stakeholder perspectives outlined in the OSSU Research Round Table findings and project case summary to inform their dissemination and implementation plan and maximize the impact of their project findings on healthcare research and decision-making.

Research Round Table findings

Usable evidence and potential for impact

Identified by research team:

The research team used the following strategies to increase the feasibility and impact of their community-based intervention:

1. Embedding immediate benefits to patient care into study designs to increase buy-in and impact. The intervention introduced in this study was designed to offer immediate benefits to the community while specific outcomes of interest were being assessed. Through the intervention, 169 children were







introduced to a mental health worker which is a known protective factor for mental health, and 35 atrisk children were connected to local supports for their wellness journey. Additionally, the screening and triage process focused on wellness and used a strength-based approach, which contributed to paradigm shift in the community from a traditional illness-based model of care.

- 2. Integrating opportunities to assess and report on the impact of community supports in communitybased interventions. The research team assessed the effectiveness of mental health workers in First Nations Communities in addition to their clinical outcomes of interest. The team gained an understanding of the positive impact of these workers on the mental well-being of First Nations youth, and therefore the importance of investing in these workers. This evidence can now be used by health decision makers to support future funding requests and program development. Assessing the effectiveness of these mental health workers was especially important to the research team as the workers in these communities are not licensed professionals, and therefore the team needed effectiveness data to assess and advocate for their important role.
- **3.** Strategies for reducing stigma and increasing participant comfort in community-based mental health research. The research team applied various strategies to ensure that their study intervention would be accessible to participants in the community without increasing stigma. These strategies included the following:
 - a. Use of a tablet-based survey allowed for a non-judgmental and efficient data collection process, as participants did not need to reveal their responses directly to a mental health worker, and the survey application generated median scores automatically. Additionally, the tablet had a text-to-speech survey option which allowed children with lower literacy levels to participate.
 - **b.** All children who participated in the study met with a mental health worker once they completed the survey, therefore members of the community were not aware of which participants were flagged as being at-risk for mental health issues.
 - c. The survey used a strength-based approach, which acknowledged where participants' strengths laid in the questionnaire scores. The survey also included spirituality as a core assessment component, which was a part of wellness that participants were familiar and comfortable with.

Anticipated challenges and potential strategies to overcome challenges

Identified by research team:

The research team shared that individuals from First Nations communities have a lack of access to mental health training, which is a challenge to the sustainability of their intervention:

1. Lack of access to mental health training. The research team shared that a lack of access to mental health support training programs for members of First Nations communities was one of the main barriers to having sufficient mental health workers in First Nations communities. They highlighted that First Nations individuals interested in pursuing the role of a mental health worker living in communities may experience various challenges inhibiting them from being able to leave the community to receive a college education (e.g., familial responsibilities), therefore there is a need for mental health training that is accessible to this group, such as distance learning options. Additionally, the team shared that not all stakeholders are comfortable supporting un-licensed practitioners, despite the importance of these





community-based practitioners in fostering meaningful community engagement and establishing trust among youth seeking support. While the study team has faced some resistance from government stakeholders on the external investment in un-licensed mental health practitioners and their training, they have received support from others (such as the Ontario Telemedicine Network).

Identified by the Research Round Table attendees:

The Research Round Table attendees identified potential avenues that the team can explore to mitigate training gaps:

- 1. Potential use of partnerships to increase access to education and training opportunities for First Nations mental health workers. Research Round Table attendees suggested that the research team explore partnering with expert organizations to deliver mental health training to individuals in First Nations communities through the following approaches:
 - a. Partnering with Ontario Indigenous Institutes (see <u>here</u>) to deliver training. These institutes are experts in delivering training in a variety of disciplines, including mental health. The research team was supportive of this suggestion and highlighted that they have an educational institute on Manitoulin Island that they work with.
 - b. Exploring distance education options. A Research Round Table attendee outlined that they had success delivering distance education on concussion through a partnership between the University of Calgary and the Université Laval. This course was free and included many educational videos on concussion-related topics. They suggested that the ACHWM research team use a similar model to reach a wide audience with their mental health worker training. Additionally, an attendee suggested that the team speak to the Centre for Addiction and Mental Health (CAMH) to discuss the option of implementing distance-learning programs where individuals can receive the same level of support and education within their communities. The research team was supportive of this option and shared that they were already in conversation with key stakeholders at CAMH about this.

Strategies for dissemination and/or implementation

Identified by research team:

The research team outlined that they were executing the following overarching strategies to encourage the dissemination and implementation of their project findings:

- Pursuing diverse dissemination strategies to reach multiple target audiences. The team is using diverse
 strategies to disseminate and implement their research findings to a wide audience. Strategies for
 dissemination include publishing academic papers (see <u>here</u>, <u>here</u>, and <u>here</u>) and conducting education
 sessions about the screening and triage process with mental health workers in the community.
 Additionally, the team has added new ACHWM-related fields to community Electronic Medical Records
 (EMR).
- 2. Proactive engagement of end users as a foundation for tailoring and buy-in. The research team engaged with a variety of key stakeholders in the communities they were working with to co-design the







study, guide its execution, and ensure that these key partners were supportive of the proposed intervention. Specifically, this team received support from the Ministry of Child and Youth Services and the Ontario Child Health Support Unit and worked with children, elders, chiefs, and council members in First Nations communities through advisory committees. The team also engaged mental health workers to identify which ACHWM survey items should flag the need for follow-up care. Proactively securing buy-in and engagement from these groups was critical to executing the study and disseminating and implementing study findings.

Strategies for sustainability and spread

Identified by research team:

The research team developed multiple strategies to promote the sustainability, scale-up, and spread of their screening and triage intervention:

- 1. Leveraging existing medical infrastructure to support sustainability and spread. The researchers discussed using existing EMR infrastructure to assist in scaling their intervention to additional communities. The team has placed new fields from the ACHWM into the EMR which will facilitate the spread of their screening and triage process, as they are 1 of 14 communities that use the same EMR solution.
- 2. Promoting the independence of the intervention. To support their plans to spread the intervention, the research team received funding from OSSU to disseminate the ACHWM screening and triage process on their website. This will allow communities to have the resources to execute the intervention independent of the research team. The team has also received a pathway grant from CIHR to spread this intervention nationally over the next five years.

Identified by the Research Round Table attendees:

The Research Round Table attendees suggested additional avenues that could be leveraged to promote the scale up and spread of the team's intervention:

1. Leveraging existing training infrastructure to enhance scale up and spread to mental health workers. The Research Round Table attendees suggested that the research team leverage existing training initiatives, including those focused on training for First Nations populations, to increase the number of mental health workers that were training in the ACHWM screening and triage process. These included the two avenues identified by the Research Round Table attendees outlined in 'Anticipated challenges and potential strategies to overcome challenges'.





Plain Language Case Summary

OSSU team: Dr. Nancy Young, Mary Jo Wabano and colleagues.

Project name: Comparing the effectiveness of a new screening and triage process versus standard practice in matching mental health services to needs among Aboriginal youth living on-reserve.

What did this demonstration project focus on?

The effectiveness of a new community-embedded screening and triage process (CESTP) on mental health outcomes in Aboriginal youth.

What did the team want to accomplish with their demonstration project?

The team aimed to improve pediatric screening processes in low-resource health settings by determining **(1)** the impact of implementing a CESTP using the Aaniish Naa Gegii (Aboriginal Children's Health and Well-being Measure (ACHWM)) to identify mental health needs in Aboriginal youth compared to standard referral procedures and **(2)** impact of the CESTP on mental health outcomes.

What did they accomplish?

The team engaged 227 Aboriginal youth living on-reserve to participate in the prospective cohort study. All youth completed the ACHWM survey and met with a mental healthcare worker (MHW). Youth were flagged as being at-risk based on their responses to the survey. The team found that use of the CESTP provided similar outcomes to standard referral processes, both in the timing of identifying youth's mental health needs, and in youth's emotional recovery trajectory. Additionally, there were associations between use of the CESTP and a reduced number of treatment sessions needed compared to those referred through the standard process.

How did/could this project have an impact on healthcare in Ontario?

Patient/public level: Use of the CESTP identified youth who needed support and introduced them to a MHW, which is a protective factor for the future health of both the individual youth and their peers.

Healthcare provider level: The study provided MHWs an opportunity to gain experience using a new clinical tool which may encourage safe and open conversations with youth.

System/policy level: Through developing evidence for the effectiveness of the CESTP, key stakeholders involved in policy development have data to substantiate the work being done by community programs.

What can be learned from this project?

As many youth living on-reserve move seasonally, data collection over the one-year study period was very challenging. The use of Electronic Medical Records (EMRs) including fields for ACHWM data alleviated this challenge. Additionally, the team is finding the lack of strong support training programs for unregistered MHWs in Indigenous communities a challenge.

Who should know about these findings?

Indigenous health workers, educators, and youth mental health practitioners including school counselors, social workers and psychiatrists, as well as federal and provincial governmental agencies working in areas of Indigenous health and wellness could benefit from knowledge of the study findings.

What is the team doing next?

The team has secured funding to scale up and spread CESTP nationally and are currently engaged with more than 50 communities to disseminate the CESTP. They are focused on educating MHWs about this process and embedding the CESTP in community EMRs.

Identifying and Maximizing the Impact of the OSSU Demonstration Projects







Comparing the Complex Care for Kids Ontario province-wide integrated care intervention for children with medical complexity to waitlist controls using a patient-engaged evaluation framework and mixed method design (CCKO CMC) Presented by Dr. Nora Fayed and Nasra Smith







Introduction

The **O**ntario **S**POR (Strategy for Patient Oriented Research) **S**UPPORT (Support for People and Patient-Oriented Research and Trials) **U**nit (OSSU) funded 17 Ontario-based health research projects designed to demonstrate a meaningful approach to Patient-Oriented Research (POR), referred to as the 'demonstration projects'. Dr. Nora Fayed's research team was one of the four demonstration project teams invited to showcase the outcomes of their project at the March 3rd OSSU Research Round Table at the Peter Gilgan Centre for Research and Learning in Toronto, Canada.

The purpose of the OSSU Research Round Table was to **(1)** collaborate with relevant stakeholders to identify strategies for dissemination and/or implementation of project findings and, **(2)** disseminate project findings to relevant stakeholders and **(3)** make project findings more accessible to decision-makers and the general public. Patient partners, as well as key stakeholders from the provincial government (e.g., Ontario Ministry of Health and Ministry of Long-Term Care, Public Health Ontario), hospitals and health centres (e.g., The Children's Hospital of Eastern Ontario, Wikwemikong Health Centre), universities (e.g., University of Toronto, Laurentian University), non-profit organizations (e.g., Families Canada), and research institutions and networks (e.g., Ontario SPOR SUPPORT Unit) attended the Research Round Table.

In partnership with the SPOR Evidence Alliance, the Knowledge Translation Program (KTP) from St. Michael's Hospital attended the Research Round Table and took detailed notes on the research presentations and stakeholder discussions, capturing content relating to usable evidence and potential for impact, strategies for dissemination and/or implementation as well as spread and sustainability, and anticipated challenges and strategies to leverage. This information was then analyzed and used to **(1)** identify prominent project-specific topics of discussion relating to the potential applications and impact of the research team's project work (see <u>Research Round Table findings</u>), and **(2)** supplement information in the knowledge sharing template completed by the research team to inform the development of a 1-page project case summary (see <u>Plain Language Case</u> <u>Summary</u>).

The research team can leverage the pertinent stakeholder perspectives outlined in the OSSU Research Round Table findings and project case summary to inform their dissemination and implementation plan and maximize the impact of their project findings on healthcare research and decision-making.

Research Round Table findings

Usable evidence and potential for impact

Identified by research team:

The research team highlighted beneficial strategies that they leveraged as part of their collaborative and pragmatic approach to intervention design and evaluation, which included:

1. Fostering collaborative partnerships to execute initiatives that directly address pre-identified pressing gaps in the field. This study was collaborative and interdisciplinary in nature, with the research team comprised of health care providers, clinical researchers, patients and families, and policymakers. Gaining







buy-in through these partnerships was critical, since the children with medical complexity (CMC) community is relatively small. By collaborating with the government and key players involved in the care of CMC (e.g., tertiary health centres), the research team was able to design an intervention that directly addressed the pressing need for a more standardized and systematic approach to care for CMC that would ensure that care was more proactive and coordinated. The team received funding from the Ontario Ministry of Health and Long-Term Care to pilot the Complex Care for Kids Ontario (CCKO) mission, which involved providing access to consistent integrated care and coordination for children and youth who persistently demonstrate the most complex medical care needs.

- 2. Strategies for increasing the feasibility of health system interventions. Through implementation of the CCKO systems intervention, the team learned that their 'hub and spoke' intervention model was advantageous as it offered the sites the flexibility to tailor the intervention to their setting, while maintaining the core components of the intervention to ensure fidelity.
- **3.** Leveraging methodological challenges to impact the literature. The research team did not identify robust outcome measures to appropriately assess the outcomes of CMC, specifically for the outcomes of physical pain and experiences with technology. The research team leveraged this challenge as an opportunity to make an additional contribution to the literature by developing these measures to ensure there was a holistic suite of research tools to validate the care of CMC. Two tools have been developed and translated into French: "Experience with medical technology at home" and "Experience of feeding your child with medical complexity". These tools are currently being pilot tested.
- 4. Partnering with key end users to co-produce research and increase its relevance and impact. The collaborative, interdisciplinary nature of this project allowed the team to ensure that their intervention directly addressed the priorities of the CMC population. Throughout the study, the team continued to partner with key end users to co-design and execute the CCKO intervention and evaluation study, increasing its relevance to the target end users, and therefore increasing its impact. For example, the Provincial Council for Maternal and Child Health (PCMCH) supported the study team with early protocol design and engagement of stakeholders, including families. Additionally, families and front-line providers co-selected a variety of outcome measures spanning the individual patient/family level, the provider level, as well as the health systems level (e.g., care experience of child and patient, system efficacy, economic impact) through a systematic process (prioritization survey to identify high priority outcomes) which they published in Developmental Medicine & Child Neurology (here) and CMAJ (here). This allowed the research team to determine what families with CMC value; for example, the families wanted to know if their child's health and emotional wellbeing were maintained. This early engagement also ensured that the research team did not have to make substantial changes when they were executing their pragmatic evaluation, which one of the Research Round Table attendees highlighted is typically guite common. Additionally, the collaborative nature of their funded project led to the development of increased research capacity among all of their partners including healthcare institutions and government (e.g., trained mothers with CMC to conduct interviews for the study evaluation), and the initiation of additional research for the CMC population (e.g., focus on care in Northern Ontario for CMC).

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Identified by Research Round Table attendees:

Research Round Table attendees encouraged the research team to consider how their findings could be generalized to improve care:

1. Potential generalizability of study findings to other complex care issues. Research Round Table attendees encouraged the study team to consider if their findings may be transferrable to other study populations requiring complex care. The study team was supportive of the idea, and reported that other organizations, such as ErinoakKids' Special Needs Strategy, were interested in the intervention. The team is hopeful that what they learn through this evaluation will be transferrable to other populations.

Anticipated challenges and opportunities to leverage and strategies for sustainability and spread *Identified by research team:*

Research Round Table attendees were concerned about potential challenges to the sustainability of the CCKO intervention and network. In response to these concerns, the research team shared the following anticipated challenges and mitigation strategies:

1. Challenges to and strategies for sustaining government support of health system interventions. The research team shared that researchers, providers, and government officials are enthusiastic about the intervention, which they hope will help with sustainability. The team sought OSSU funding to evaluate the existing CCKO health systems intervention (which was already implemented in Ontario) in order to have data to support funding renewals from PCMCH for the spread and sustainability of the intervention in Ontario. The team has also now identified areas where the CCKO model can be adapted (e.g., supplementing the original nurse practitioner model with additional allied health staff) in order to increase its sustainability.

Identified by the Research Round Table attendees:

1. Benefit of leveraging existing infrastructure to conduct comprehensive and impactful clinical research. A Research Round Table attendee highlighted that this evaluation study demonstrates how leveraging pre-existing networks to conduct research facilitates rapid, rigorous research.

Strategies for dissemination and/or implementation

The Research Round Table attendees did not discuss this item.







Plain Language Case Summary

OSSU team: Dr. Nora Fayed, Dr. Eyal Cohen, and colleagues.

Project name: Comparing the Complex Care for Kids Ontario (CCKO) province-wide integrated care intervention for children with medical complexity (CMC) to waitlist controls using a patient-engaged evaluation framework and mixed method design

What did this demonstration project focus on?

Impact of the Provincial Council of Child and Maternal Health (PCMCH) CCKO care intervention.

What did the team want to accomplish with their demonstration project?

The PCMHCH CCKO care intervention aims to improve care for CMC by increasing collaboration across CMCs' medical providers to create one integrated care plan. The team aimed to **(1)** establish complex care clinics for CMC using a 'hub and spoke' model across the province and; **(2)** evaluate the utility and sustainability of these clinics using outcome measures chosen by parents of CMC.

What did they accomplish?

The team is currently evaluating the utility and sustainability of the CCKO care intervention, using metrics and tools that were identified by and designed with families of CMC. Preliminary results suggest that institutions are increasing their capacity to coordinate care, and families using the CCKO care clinics have an improved care experience compared with families who received usual care.

How did/could this project have an impact on healthcare in Ontario?

Patient/public level: Patient families may benefit from receiving an evidence-based care intervention that has the potential to improve the care experience and decrease burden (e.g., financial) for families.

Healthcare provider level: Healthcare providers (HCPs) will be able to provide improved care to CMC and their families using the CCKO model. The evaluation suggests that HCPs may be better able to define their roles within their organization using the CCKO model.

System/policy level: This multidisciplinary project has (1) improved collaboration between researchers and CCKO care providers, and (2) created a catalyst for the initiation of a series of follow-up projects. The cost-effectiveness of the CCKO model compared to usual care is being evaluated.

What can be learned from this project?

Researchers can achieve greater impact by engaging with HCPs, families, and government partners in their research projects. Researchers can consider offering flexible methods of engagement (e.g., remote participation options) to increase the ability of the CMC population to participate. A 'hub and spoke' model of program delivery can allow regions the flexibility to tailor the program to meet local needs.

Who should know about these findings?

Families of CMC, pediatric HCPs, and government partners, especially those in the Ministry of Health and Long-Term Care, may benefit from knowing about the study findings.

What is the team doing next?

The team is continuing to collect and analyze data on all of their outcome measures of interest. Additional projects are being initiated with the objectives of expanding and evaluating care in Northern Ontario for CMC, improving home care for this population, and developing methods to integrate the perspective of CMC in research and care.

Identifying and Maximizing the Impact of the OSSU Demonstration Projects







Addressing obesity in toddlers at risk: A pragmatic randomized controlled trial comparing usual care to group-based parenting and home visits in primary care (PARENT)

Presented by Dr. Catherine Birken







Introduction

The **O**ntario **S**POR (Strategy for Patient Oriented Research) **S**UPPORT (Support for People and Patient-Oriented Research and Trials) **U**nit (OSSU) funded 17 Ontario-based health research projects designed to demonstrate a meaningful approach to Patient-Oriented Research (POR), referred to as the 'demonstration projects'. Dr. Catherine Birkin's research team was one of the four demonstration project teams invited to showcase the outcomes of their project at the March 3rd OSSU Research Round Table at the Peter Gilgan Centre for Research and Learning in Toronto, Canada.

The purpose of the OSSU Research Round Table was to **(1)** collaborate with relevant stakeholders to identify strategies for dissemination and/or implementation of project findings and, **(2)** disseminate project findings to relevant stakeholders and **(3)** make project findings more accessible to decision-makers and the general public. Patient partners, as well as key stakeholders from the provincial government (e.g., Ontario Ministry of Health and Ministry of Long-Term Care, Public Health Ontario), hospitals and health centres (e.g., The Children's Hospital of Eastern Ontario, Wikwemikong Health Centre), universities (e.g., University of Toronto, Laurentian University), non-profit organizations (e.g., Families Canada), and research institutions and networks (e.g., Ontario SPOR SUPPORT Unit) attended the Research Round Table.

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The research team can leverage the pertinent stakeholder perspectives outlined in the OSSU Research Round Table findings and project case summary to inform their dissemination and implementation plan and maximize the impact of their project findings on healthcare research and decision-making.

Research Round Table findings

Usable evidence and potential for impact *Identified by research team:*

1. Strategies to pro-actively establish partnerships with end users and key experts/organizations to codesign research and increase its potential for impact. The research team engaged a diverse group of relevant stakeholders to guide the development and delivery of their intervention including parents, primary care clinics, frontline clinicians, knowledge translation experts, child health researchers, early childhood educators, and public health practitioners and leadership. They have invested in building







research capacity and developing partnerships through ongoing meetings with these key stakeholders. Specifically, the research team is holding ongoing Parent Panels to solicit feedback from parents on the intervention design and methods. The first Parent Panel was conducted in 2019 before the first PARENT trial cohort was enrolled. Through this panel, parents shared feedback that shaped the study protocol to increase the feasibility and relevance of the trial. For example, parents shared that in order for them to feel comfortable with the study intervention, the research team would need share clear information about what a home visit would involve. Additionally, parents encouraged the research team to use multiple communication methods for recruitment, as emails often get lost in the many research-related communications they may receive. Proactively engaging these partners was critical to ensuring that their intervention fit the process, priorities, and needs of all of their key stakeholders.

- 2. Proactive strategies for increasing the feasibility of pragmatic trials and resulting findings. The study team consciously designed their pragmatic trial to leverage existing resources and materials being used in public health settings and by public health nurses in the community. This ensured feasibility of implementing the study intervention in primary care settings, and therefore increased the feasibility of intervention spread and scale.
- 3. Benefit of leveraging existing infrastructure to conduct comprehensive and impactful clinical research. The research team leveraged The Applied Research Group for Kids (TARGet Kids!) Network to conduct this pragmatic trial. Many children and their families were already enrolled in the TARGet Kids! Network and therefore had expressed interested in hearing about trials embedded within the network (such as the PARENT Trial). This preexisting pool of interested potential participants facilitated an efficient recruitment process. Additionally, data routinely collected by the TARGet Kids! Network during wellchild visits overlapped with some PARENT trial outcome measures, which streamlined the data collection process.

Anticipated challenges and opportunities to leverage

Identified by research team:

The research team found that collaborative partnerships with key stakeholders allowed them to create an adaptive program that could mitigate challenges with participation and system changes:

1. Leveraging established partnerships to tailor intervention design as a means to address barriers to engagement and participation. The research team discussed the importance of tailoring the intervention to the parent population they wanted to recruit in order to mitigate challenges with engagement and participation. For example, the team experienced challenges with compliance to attending the group sessions. To overcome this, it was essential that the team worked with parents to identify the best setting and time of day for these sessions, as well as the supports that needed to be in place (e.g., childcare). The team also tailored the number of group sessions that they were proposing to ensure the amount was perceived to be feasible for families. Additionally, the research team found that working closely with Toronto Public Health (TPH) allowed their program to be adaptable to change. For example, as they were beginning their intervention, TPH changed their parent program, however the





research team was able to adapt their program to align with the new TPH programmatic focus and branding.

Strategies for dissemination and/or implementation

Identified by research team:

The research team identified the following avenues to disseminate their research findings:

- 1. Establish consistent check-ins with key stakeholders to promote dissemination of research findings in a timely manner. The researchers highlighted the importance of being able to communicate their study findings to key stakeholders including parents, health professionals, and other researchers throughout the trial period. The team will be maintaining this consistent community through biweekly meetings with the full research team and quarterly meetings with the clinical and family teams, as well as by attending meetings and conferences.
- 2. Proactive engagement of decision makers. The research team is planning to engage policy makers early in the execution of their trial to ensure that the trial outcomes are scalable and useful from a health policy perspective.

Identified by Research Round Table attendees:

- 1. Leverage the networks of organizational partners to support wide dissemination. Research Round Table attendees encouraged the research team to collaborate with relevant organizations to expand the reach and impact of their project findings; suggested organizations included:
 - **a.** <u>Yummy Mummy Club.</u> A Research Round Table attendee from Solutions for Kids in Pain shared that they were able to achieve strong parent engagement through partnering with this group.
 - **b.** <u>Families Canada</u>. Kelly Stone, CEO of Families Canada, shared their interest in, and support of, the PARENT trial and encouraged the research team to consider how this work can be scaled up to benefit all families across the country. The research team shared that they would be very interested in working together to learn from and leverage their large network to scale up their intervention.
 - c. <u>Public Health Ontario</u>. Dr. Heather Manson (Chief of Health Promotion, Chronic Disease and Injury Prevention at Public Health Ontario) highlighted the strength of the research team's parent engagement strategies and shared that Public Health Ontario would be happy to assist with disseminating their study findings.

Strategies for sustainability and spread

The Research Round Table attendees did not discuss this item.







Plain Language Case Summary

OSSU team: Dr. Catherine Birken and colleagues.

Project name: Addressing obesity in toddlers at risk: A pragmatic randomized controlled trial (RCT) comparing usual care to group-based parenting and home visits in primary care (PARENT)

What did this demonstration project focus on?

The effectiveness of an obesity prevention intervention for toddlers at risk for obesity and their families.

What did the team want to accomplish with their demonstration project?

The team aimed to (1) compare the effect of an integrated primary care and public health obesity prevention intervention with usual care on health outcomes (e.g., Body Mass Index, nutritional status) for toddlers at risk for obesity using an RCT, (2) assess the quality of implementation of this novel approach in pediatric primary care clinics as well as barriers and facilitators to implementation through feedback sessions with parents, and (3) determine the cost-effectiveness of the intervention.

What did they accomplish?

The research team developed a long-term relationship with Toronto Public Health (TPH) as well as with Early Childhood Educators to assist in delivery of this RCT. To date, the research team has recruited approximately 50 participants enrolled in The Applied Research Group for Kids (TARGet Kids!) network to the PARENT RCT through two primary care practices. The study team has completed one out of two feedback sessions with parents and have updated the trial design and methods based on this feedback.

How did/could this project have an impact on healthcare in Ontario?

Patient/public level: Parents of RCT participants found the intervention to be helpful in their daily lives.

Healthcare provider level: Pediatric primary care and public health practitioners have collaborated to develop an integrated model of care for this RCT, which allows both groups to work towards their goals.

System/policy level: If successful, the intervention could provide a bridge between primary care and public health programming designed to promote healthy lifestyles and prevent obesity.

What can be learned from this project?

Due to staff turnover within the public health department, it was necessary to create a system of checks to ensure that fidelity of the intervention delivery was maintained throughout the project. The research team experienced challenges to parent participation in the public health workshops. The team found it useful to provide parents with multiple avenues to access the intervention components (i.e. in-person and teleconference attendance options). The team benefited from ensuring their program aligned with the models of care and programs delivered by primary care and public health practitioners. To ensure alignment, the program had to be adapted based on system changes to TPH.

Who should know about these findings?

Researchers, parents, governmental organizations (e.g., Public Health Ontario), and agencies delivering services for parents and children would all benefit from learning about the outcomes of this RCT.

What is the team doing next?

The research team is continuing to recruit participants for the trial at all 16 TARGet Kids! sites. Another round of feedback on the feasibility and acceptance of the intervention for parents is planned. The study team will adapt the RCT based on this feedback. They plan to publish the study protocol in 2020.

Identifying and Maximizing the Impact of the OSSU Demonstration Projects





Common Usable Evidence, Potential Impacts, and Suggested Strategies across Project Discussions

Three prominent themes related to usable evidence, potential for impact, and strategies for dissemination/ implementation and sustainability/spread emerged from the four project discussions. Research teams can consider how the content of these themes may be applied in their projects to increase its potential impact.

- Strategies for increasing the feasibility of executing healthcare research and related changes to health systems and practices. Three of the four research teams (*PedCARE, CCKO CMC, and PARENT*) outlined the benefits of using a pragmatic design for their study and/or health systems intervention; such designs reduce study burden, cost, and can be used to support rapid implementation of effective interventions. For example, the *PedCARE* team opted for a self-reported measure of tolerability instead of a clinical measure due to the typical wait-times for clinical care.
- 2. Collaboration with key end users to increase the applicability and impact of study findings. All four research teams worked very collaboratively with end users to co-design the study, and developed partnerships that will facilitate the dissemination of the study findings (known as integrated knowledge translation). These partnerships allowed teams to make meaningful changes to their study design to increase its feasibility and applicability to end users. Strategies to engage these stakeholder groups included inviting families and healthcare providers to participate in formal consensus processes to prioritize outcome measures, and eliciting input on proposed study design and methods. Research teams can leverage the strategies outlined in this report to engage stakeholders relevant to their project work.
- **3.** Value of OSSU's investment in patient-oriented research. Three out of four research teams (*PedCARE*, *CCKO CMC*, *and PARENT*) cited that OSSU funding was a critical catalyst for advancing the impact that their study was able to have even beyond the initial scope of their OSSU grant as it allowed them to secure new project funding to address additional research questions (*PedCARE*), evaluate a health systems intervention to increase its potential sustainability (*CCKO CMC*), and collaborate meaningfully with key project partners to design a pragmatic trial, also resulting in securing additional funding (*PARENT*). Policy- and decision- makers, such as research funders, should consider investing in patient-oriented research to maximize the impact of health research initiatives.

Conclusion

Overall, all four project teams identified results from their studies that have potential to impact future healthcare research, patient outcomes, as well as healthcare provision and policy in Canada. Each team also identified several strategies for disseminating this impactful information to target groups, and most teams discussed potential solutions to anticipated challenges to implementation. The participation of representatives from a variety of stakeholders involved in Canadian healthcare provided the project teams with an opportunity to draw on a wealth of experience and expertise to tailor their plans for dissemination and maximize project impact.







References

- CIHR. SPOR SUPPORT units. Available from: <u>http://www.cihr-irsc.gc.ca/e/45859.html</u>. [Accessed 8 Aug 2019].
- CIHR. Strategy for patient-oriented research. Available from: <u>http://www.cihr-irsc.gc.ca/e/41204.html</u>. [Accessed 8 Aug 2019].
- 3. CIHR. *Strategy for patient-oriented research patient engagement framework*. Available from: <u>http://www.cihr-irsc.gc.ca/e/48413.html</u>. [Accessed 8 Aug 2019].
- 4. Engaging patients in health research: the Ontario experience. CMAJ. 2018;190(Suppl 1): S1-S56.
- 5. Lambert S, Loiselle CG. Combining individual interviews and focus groups to enhance data richness. J Adv Nurs. 2008; 62(2), 228-237.
- Taylor B, Henshall C, Kenyon S, Litchfield I, Greenfield S. Can rapid approaches to qualitative analysis deliver timely, valid findings to clinical leaders? A mixed methods study comparing rapid and thematic analysis. BMJ Open. 2018;8(e019993): 1-13.





Appendix A: Presentation Template

OSSU Research Round Table Presentation Template

In a 15 minute presentation, PIs/Co-Is should address the following items in a presentation to the roundtables, prioritizing the items in bold. Slides are recommended, but not required.

- **1** Study objectives, goals
- 2 Study participants
- **3** Description of the research, implementation team (including patient partners)
- 4 Very brief overview of research methods
- **5** Usable evidence from the project consider:
 - a) Process outcomes and implementation quality outcomes (e.g., fidelity to intervention)
 - b) Short term outcomes: improved knowledge, improved self-efficacy
 - c) Long term outcomes: changes in behavior
 - d) Impact
 - i. At the patient level
 - ii. Health care provider level
 - iii. Systems or organizational level
 - iv. Policy level

6 Plan for dissemination

- a) Who are the target audiences?
- b) What are the key messages to each target audience?
- c) What strategies will you use to engage target audience (including the appropriate dissemination avenues and tools for each?)
- d) What are some contextual considerations to be mindful of when developing your dissemination strategy?

7 Plan for project next steps





Appendix B: Research Round Table Agenda – March 3rd 2020

Ontario SPOR SUPPORT Unit

Research Round Table Tuesday, March 3, 2020

Agenda

- **12:00 12:15** Lunch, Welcome and Introduction NOTE: Lunch will be available starting at 11:45 am
- 12:15 12:50 Dr. Roger Zemek Associate Professor, Dept of Pediatrics and Emergency Medicine, Clinical Research Chair in Pediatric Concussion, University of Ottawa

Multicentre, Randomized Clinical Trial of Pediatric Concussion Assessment of Rest and Exertion (PedCARE): A Study to Determine When to Resume Physical Activities Following Concussion in Children

12:50 - 1:25 Dr. Nancy L. Young

Director, School of Rural and Northern Health Canada Research Chair in Rural and Northern Children's Health Laurentian University

Comparing the Effectiveness of a New Screening and Triage Process vs Standard Practice in Matching Mental Health Services to Needs among Aboriginal Youth Living On-Reserve

1:25 - 1:40 BREAK

1:40 - 2:15 Dr. Nora Fayed

Assistant Professor, Faculty of Health Sciences, School of Rehabilitation Therapy Queen's University

Comparing the Complex Care for Kids Ontario (CCKO) Province-Wide Integrated Care Intervention for Children with Medical Complexity (CMC) to Waitlist Controls using a Patient-Engaged Evaluation Framework and Mixed Method Design

2:15 – 2:50 Dr. Catherine S. Birken

Associate Scientist, Child Health Evaluative Sciences, SickKids Research Institute Associate Professor, Department of Paediatrics, University of Toronto

Addressing obesity in toddlers at risk: a pragmatic randomized controlled trial comparing usual care to group-based parenting and home visits in primary care

2:50 - 3:00 Concluding remarks





Appendix C: Knowledge Sharing Template

OSSU Round Tables - Phase 1 Knowledge Sharing Template

OSSU has funded <u>17 demonstration projects across Ontario</u> designed to showcase meaningful patient engagement in the research enterprise. OSSU would like to bring together research partners involved in these 17 demonstration projects by means of three separate, half-day roundtable discussions to identify all usable evidence, dissemination goals and key messages for each of the 17 OSSU projects.

In preparation for the roundtable discussion, please fill out the template below with information about your project. The information you share will be used to inform a structured discussion with relevant stakeholders (e.g., researchers, patient partners, health system decision-makers, research funders, Ontario government representatives, and other knowledge users) who will be invited to participate in the roundtable discussion. This discussion will be an opportunity to highlight your project (e.g., successes, challenges, findings etc.) and receive feedback from meeting attendees on certain topics (e.g., potential for impact, strategies for uptake, new areas of research, etc.).

OSS	J Research Round Table Knowledge Sharing Template		
1.	Project Name		
2.	Project Team Members		
3.	What were the objectives of this project? (describe the goals of your project in a short paragraph)		
4.	What are the results of the project? (describe the study findings in relation to the objectives described above in a short paragraph)		
5.	How did this project make a difference? (describe the potential/actual impact of the study in a short paragraph, per level)	 At a patient/public level? At a healthcare provider le At a system/policy level? Other? 	vel?
6.	What are some lessons learned from this project? (describe any challenges encountered, how they were/could have been mitigated in a short paragraph)		
7.	What are next steps for this work? (describe ongoing work or future work in a short paragraph)		
8.	Who would benefit from learning about this project? (describe target audiences/end users of the research who will be interested in knowing the results of this project in a short paragraph)		
9.	Please use this space to share any additional information about this project. (Describe additional information that may be of interest to the roundtable discussion audience and/or any questions you would like to discuss with the group/get feedback on).		





Appendix D: Facilitation Guide

Context: The OSSU Research Round Table facilitator will guide the audience through the following discussion questions after **each** research team gives a 15-minute presentation of their work.

Facilitation Questions:

The facilitator will guide the participants to answer the following questions related to the project:

- **1.** Are there any additional audiences that you think would benefit from knowing about the project research findings?
- 2. How should key messages be disseminated to each of the audience groups identified in Question 1 (e.g., identify dissemination strategies and avenues/messages to patients versus healthcare providers versus managers versus policy makers)?
- **3.** What impact do you anticipate the project will have on:
 - a. Patient care
 - **b.** Health provider outcomes
 - **c.** Systems outcomes
 - d. Policy outcomes
 - e. Patient oriented research
- **4.** Are there any probable barriers the team might face when trying to disseminate, implement and sustain their project?
 - **a.** Probe: How might these barriers differ depending on the target audience (e.g. patients in a rural vs. urban setting)
 - b. Probe: How might the team overcome these barriers?







Appendix E: Analysis Coding Framework

Parent Node	Parent Node Description	Child Nodes
Overview of research project	Captures descriptions of each demonstration project, including the project objectives,	Study objectives and goals
	participants, study team, methods, and next steps	Study participants
		Description of research & implementation team
		Research methods
		Project next steps
Usable evidence from research project Captures information about all possible usable evidence resulting from each demonstration project, including process, clinical, and system outcomes This includes both the usable evidence that the		Process and implementation quality outcomes
	research teams highlight in their presentations, as well as the audience-identified usable evidence (capture if identified usable evidence came from researcher or panel when possible). Impacts of the usable evidence on various groups	Clinical outcomes
	will be captured in the Anticipated Project Impacts/Significance node	System outcomes (e.g., cost, efficiency)
		Other
Dissemination strategy – Researcher identified	Captures descriptions strategies for dissemination of the project presented by the researchers, including type of strategy, target audience(s), and any resources that may need to be acquired or developed	Target Audience(s)
		Type of Strategy (<i>capture target audience</i>)
		Avenues for dissemination (capture target audience)
		Strategies for tailoring (capture target audience)
		Resources required
Dissemination strategy –	Captures descriptions of strategies for	Target Audience(s)
Panel identified	dissemination of the project suggested by panel members, including type of strategy, target audience(s), and any resources that may be required	Type of Strategy (capture target audience)
		Avenues for dissemination (capture target audience)
		Strategies for tailoring (capture target audience)
		Resources required
		Patient Care







Anticipated projectCaptures details of anticipated impacts of the project and where these impact is likely to be found This captures both the impacts that the research teams highlight in their presentations, as well as the audience-identified impacts (capture if identified impacts came from researcher or panel when possible).	Captures details of anticipated impacts of the project and where these impact is likely to be	Healthcare Provider Practice
	Healthcare System	
	Healthcare Policies	
	identified impacts came from researcher or panel when possible).	Patient Oriented Research
Challenges and opportunities for discomination	Captures details surrounding discussion of potential barriers/facilitators for dissemination of the project within specific target groups, including the barrier/facilitator identified, the groups it may be found in and suggestions to mitigate the impact of barrier(s)	Barrier Identified (capture target audience)
uissemination		Facilitator identified (i.e., potential opportunities to increase impact) (capture target audience)
		Suggestions to mitigate barrier(s)