Implementation supports manual

Chronic pain assessment toolbox for children with disabilities

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Holland Bloorview

Kids Rehabilitation Hospital

Section 4.0, 2014, Version 1

Holland Bloorview
Kids Rehabilitation Hospital Foundation

Section 4.0: Implementation Supports

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Conflict of Interest Declaration

The contributing committee members have no conflict of interest to declare.

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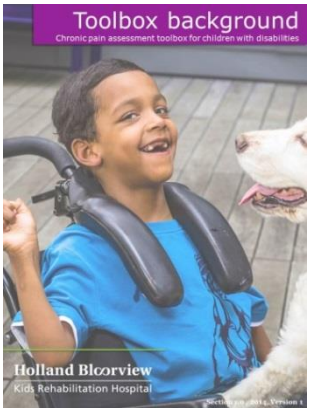
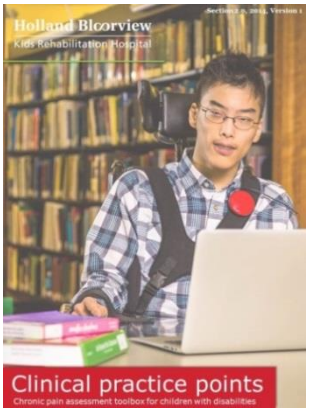
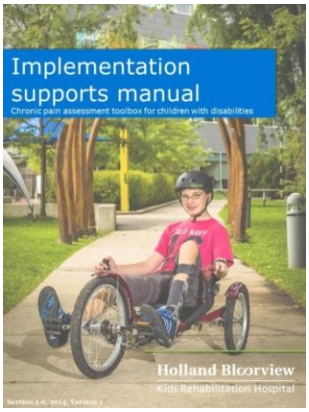


Section 1.0 Toolbox background



Section 2.0 Clinical practice points

Section 3.0 Pediatric chronic pain assessment tools



Section 4.0 Implementation supports manual

Section 4.0 Table of Contents

What is Knowledge Translation? 7

Evidence to Care 7

Benefits of a KT strategy 7

Knowledge to Action Cycle 8

Knowledge to Action Cycle - Our Project 9

Implementation at Holland Bloorview: Tailoring the Toolbox to Local Needs 10

Evaluating Implementation at the Frontlines: Our Holland Bloorview Champion……...13

Appendices……...15

Electronic Medical Record Template ……..16

Strategies for checking-in with clinicians - Huddles Discussions..... 20

References..... 21

4.0 Making it Work for You! Implementation Supports Manual

What is Knowledge Translation?

Knowledge Translation (KT) is about **bringing the right information in the right format to the right people at the right time to have an impact on decision making.**[1] More specifically, as defined by the Canadian Institutes of Health Research, KT is defined as a "dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system"[3] (para. 1).

Evidence to Care

Evidence to Care at Holland Bloorview Kids Rehabilitation Hospital considers KT a key component of the Hospital's strategy to build research and inform clinical capacity. Developing new knowledge is one piece of a puzzle in providing the best care for our clients. Taking our knowledge and research and translating this information into clinical practice is the optimal goal.[4]

Benefits of a KT strategy

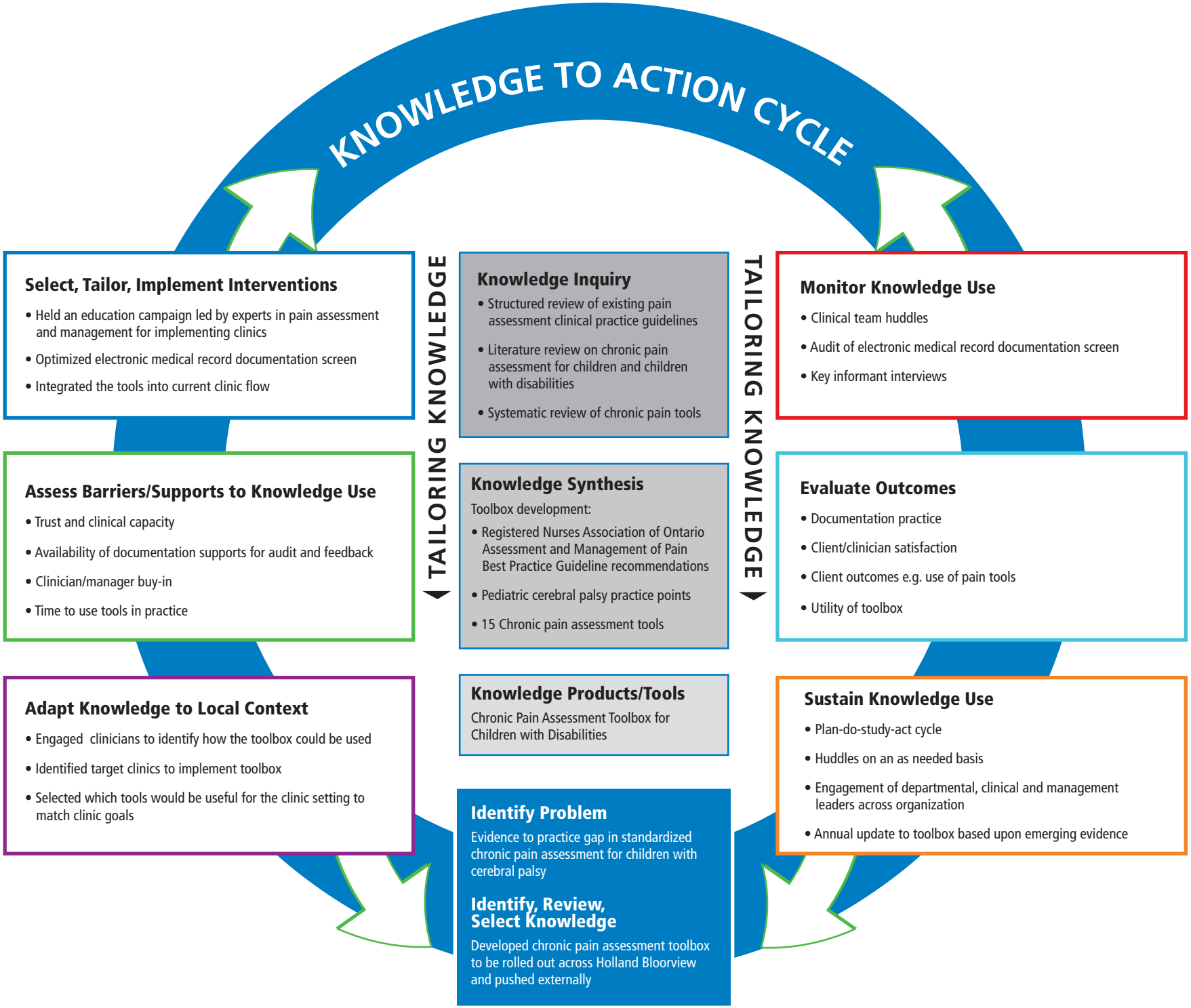
"Health care systems worldwide are faced with the challenge of improving the quality of care and decreasing the risk of adverse events. The finding that providing evidence from clinical research is necessary but not sufficient for the delivery of optimal care has created interest in KT - the scientific study of methods for closing methods for closing the knowledge-to-practice gap, and of the barriers and facilitators inherent in this process. Policy makers, funding agencies, clinicians, and researchers have recognized the need for facilitating the implementation of knowledge into practice. Where evidence is implemented, both improvements in cost and outcomes are seen"[2] (para. 1).

Developing a KT strategy, like any business strategy, delivers clear direction, goals and priorities of implementing evidence-based products for long-term success.

Knowledge to Action Cycle

The Knowledge to Action (KTA) Cycle, developed by Graham and colleagues,[5] is a stepwise framework in which evidence supported by clinical research is developed and then disseminated, adapted and implemented into the local context. As presented on the following page, the KTA cycle outlines the steps of knowledge creation, represented by the *knowledge funnel* in the centre of the cycle.[5] The outer perimeter of the *action cycle* prompts researchers and clinicians to follow seven strategic steps to transform known data into day-to-day clinical practice.[5] This Implementation Supports Manual provides a variety of resources and supports to help implement the Toolbox at your own organization. Within the forthcoming pages, you will find:

- An example of the steps within the Knowledge to Action cycle taken by Evidence to Care (EtC);
- An example of tailoring the Toolbox to the local needs of Holland Bloorview outpatient clinics for the assessment of chronic pain in children with cerebral palsy;
- Methods for spreading the message through education campaigns;
- An example of standardizing practice using electronic medical records;
- An interview with a Holland Bloorview Toolbox champion; and
- A strategy for supporting clinicians through the implementation process.


KNOWLEDGE TO ACTION CYCLE
Select, Tailor, Implement Interventions
• Held an education campaign led by experts in pain assessment and management for implementing clinics
• Optimized electronic medical record documentation screen
• Integrated the tools into current clinic flow
Assess Barriers/Supports to Knowledge Use
• Trust and clinical capacity
• Availability of documentation supports for audit and feedback
• Clinician/manager buy-in
• Time to use tools in practice
Adapt Knowledge to Local Context
• Engaged clinicians to identify how the toolbox could be used
• Identified target clinics to implement toolbox
• Selected which tools would be useful for the clinic setting to match clinic goals
TAILORING KNOWLEDGE
Knowledge Inquiry
• Structured review of existing pain assessment clinical practice guidelines
• Literature review on chronic pain assessment for children and children with disabilities
• Systematic review of chronic pain tools
Knowledge Synthesis
Toolbox development:
• Registered Nurses Association of Ontario Assessment and Management of Pain Best Practice Guideline recommendations
• Pediatric cerebral palsy practice points
• 15 Chronic pain assessment tools
Knowledge Products/Tools
Chronic Pain Assessment Toolbox for Children with Disabilities
Identify Problem
Evidence to practice gap in standardized chronic pain assessment for children with cerebral palsy
Identify, Review, Select Knowledge
Developed chronic pain assessment toolbox to be rolled out across Holland Bloorview and pushed externally
TAILORING KNOWLEDGE
Monitor Knowledge Use
• Clinical team huddles
• Audit of electronic medical record documentation screen
• Key informant interviews
Evaluate Outcomes
• Documentation practice
• Client/clinician satisfaction
• Client outcomes e.g. use of pain tools
• Utility of toolbox
Sustain Knowledge Use
• Plan-do-study-act cycle
• Huddles on an as needed basis
• Engagement of departmental, clinical and management leaders across organization
• Annual update to toolbox based upon emerging evidence

Implementation at Holland Bloorview: Tailoring the Toolbox to Local Needs

Evidence-informed, best practice products are only actively used within a clinical setting when tailored to local context and hold buy-in from end-users.[6,7] Using a framework like the KTA Cycle allows the process of implementation, adaption, and evaluation to be mapped out in identifiable steps, making implementation a manageable process.[5] The following section outlines the steps within the KTA Cycle taken by Evidence to Care to develop, implement, and evaluate the Toolbox. For the description below, stakeholders are those who have an interest or can provide assistance with implementing this product and may or may not directly use the product at the end of the implementation process; an end-user is a person or a group that will be using the product upon completion of the implementation process. The KTA cycle on the previous page provides an overview of said steps, with the following section providing actionable steps for other organizations to use when implementing the Toolbox.

At the bottom of the knowledge funnel, start by identifying an area of improvement within your organization. At the beginning of this project at Holland Bloorview, clinicians identified the need for standardizing chronic pain assessment for children with cerebral palsy. In your organization, some examples of areas for improvement could include: consistency of pain assessments, lack of standardization of pain assessments or the need to enhance pain assessment tailored to your local context and client population. Identifying the problem assists with the development of goals around Toolbox use and helps inform which stakeholders to engage throughout the implementation process.

Once you have your goal(s) in place, adapting the Toolbox to local context will be integral to uptake success. Identify key stakeholders and champions that represent the different areas the implementation of this product will affect. At Holland Bloorview, stakeholders from various backgrounds participated in the integrated KT strategy: leaders that oversee practice councils, family and client representation, knowledge translation, medicine, nursing, operations, occupational therapy, physiotherapy, and psychology. At your organization, consider engaging decision makers, management, information technology, clients and families, and frontline employees. It is much more effective to engage all interested and affected parties from the beginning than the end to improve buy-in and ownership over the project. The Knowledge Translation Planning Template provides a great resource for organizations to identify which stakeholders to include through integrated knowledge translation strategies. Additionally the RNAO Toolkit: Implementation of Best Practice Guideline offers a stakeholder analysis strategy used to define the supports and influences of multiple stakeholders.

Assess barriers and supports to knowledge use by engaging your team of stakeholders to decide where, when, why and how the Toolbox can be used. This includes all aspects of processes in your context from upper management's endorsement of the Toolbox, time constraints, and clinic flow to documentation and data management capacities. At Holland Bloorview, Evidence to Care worked with all levels of management, information technology, and the implementing clinicians to assess and understand all of the supports and barriers to use. For example, working with information technology, we were better able to understand what type of documentation could be built into the hospitals' electronic infrastructure, which in turn dictated documentation practices in the electronic medical record and what Evidence to Care could pull for audit and feedback to assess uptake of the toolbox.

Additionally, it is beneficial to build in extra supports to ensure that all of the end-users of the Toolbox are working from the same knowledge base.[6] Developing an education campaign and resources can provide a consistent and supportive introduction to this product.[8] Consider including information such as: the definition of the various types of pain, details regarding the impact of chronic pain, a discussion of current pain assessment practices in your organization, and an overview of the Toolbox as outlined in this document. Support the end-users with education about pain, pain assessment, documentation processes, and other considerations that apply to your context.

Through consultation with your stakeholders, set an implementation strategy considering the recommendations, practice points and tools most relevant to the location (e.g. culture of the clinic, time constraints, population of clients and families). There is a diversity of recommendations, practice points and tools within the Toolbox and not all information may be applicable to your local context. At Holland Bloorview, the Clinical Practice Points were specifically developed to address chronic pain in children with cerebral palsy. Work with end-users, clinicians, families and clients, to customize the right tool(s) for the right job(s) to ensure goals of the implementation strategy are met.

Once the Toolbox is live in your system, it is important to monitor knowledge use for uptake and impact using audit and feedback techniques. Audit and feedback techniques can include any procedures that provide a summary of "clinical performance over a specified period of time aimed at providing information to health professionals to allow them to assess and adjust their performance"[9] (pg. iv). Using a combination of the audit and feedback techniques can improve uptake and Toolbox utility.[8] At Holland Bloorview, knowledge use was monitored through: tracking

documentation of the Electronic Documentation Screen and conducting regular huddles, which are further described below.

Depending on the documentation processes at your organization, creating an electronic documentation screen is an effective method to track uptake and practice change over time.[10] An example of the electronic documentation screen used for the Toolbox at Holland Bloorview is included in the Appendices for your reference.

Additionally, to track uptake, manage challenges and make changes to the project in real-time, a huddle strategy can be employed for the implementation of the Toolbox. A huddle is a focused gathering of a functional group.[10] It is used to increase operational and teamwork benefits, as well as improve health care quality and patient safety.[8] In the case of Holland Bloorview's project, the huddles included clinicians who used the tools, the clinic manager and manager of patient safety, collaborative practice leaders and the project team members leading the implementation. These meetings were short, guided by key questions and occurred in a communal location in the clinic on a weekly basis. The frequency of the huddles was scaled back as clinicians became more confident in using the Toolbox over time (see sample guide in the Appendices).

Once the Toolbox has been established within your organization clinical settings, it is important to evaluate the outcomes to determine changes to practice, client outcomes and satisfaction. Methods that Holland Bloorview used to evaluate the piloting of this Toolbox included: evaluation of practice change using audits of the Electronic Medical Record, interviews with a representation of all stakeholders, document review of huddle notes, a client and family satisfaction survey and an assessment of other context internal and external to the hospital where this product can be used.

To sustain knowledge use, a rapid evaluative framework like the Plan - Do - Study - Act cycle[11]can assist with testing the changes to the implementation process more often than a single large scale evaluation and make modifications to the process as needed.[13] Implementing a product like this Toolbox should be a sustainable practice change. Embedding performance metrics will ensure there are varying levels of accountability to the outcomes of implementing the Toolbox. Lastly, ensuring that end-users are supported during the whole process makes for a smooth transition from piloting the Toolbox to 'just how things are done.'

Overall, customizing the Toolbox and implementation process for your organization is an involved process that requires time, attention to detail, patience, and strategic thinking. Based on the project experience at Holland Bloorview, the end result will have better uptake and end-user buy-in following a framework like the KTA Cycle.[5] For additional resources, we encourage you to reference the RNAO Implementation Toolkit available at RNAO.ca.

Evidence to Practice Daily

Since 2011

Bringing the Right Information to the Right People at the Right Time

NO CHILD SHOULD LIVE WITH CHRONIC PAIN

No child should be in pain.

It is a common misconception that children are not able to express pain and therefore cannot be accurately assessed. In reality, all children, regardless of communication or cognitive ability can feel pain and have their pain assessed.

A recent study conducted here at Holland Bloorview found that 25% of children with cerebral palsy experienced pain that affected their participation in everyday activities.

Evidence to Care (EtC), and the Centre for Leadership in Childhood Development are working together to make pain a priority. January kicked off the launch of a chronic pain assessment toolbox for children with cerebral palsy (CP) in three outpatient clinics.

The toolbox is a combination of pain assessment recommendations from the 2013 Registered Nurses Association (RNAO) Best Practice Guideline which serve as the basis for pain assessment, CP specific practice points developed by experts at Holland Bloorview and 8 assessment tools to look at pain interference on a child's everyday activities

EtC spoke with one of our clinician champions, physical therapist Katie Symes about this pilot project.

This pilot project continues to run and will be then the toolbox will be assessed for potential rollout across other clinics at the hospital.

Interview with Katie Symes:

EtC: Hi Katie! Thanks for joining me today to talk about the Chronic Pain Assessment Toolbox for Children with Disabilities.

EtC: In your experience, what types of pain do children with cerebral palsy experience and how does pain affect their everyday lives?

Katie: The children we see in the Hypertonia Clinic can have acute pain, chronic pain, or a combination. There can be more than one source of pain, such as altered muscle tone or abnormal postures, which can make it complex to assess and manage.

Children with cerebral palsy may also need to undergo interventions such as orthopedic surgery, and pain can be a significant issue after these procedures in some cases.

Pain can have a significant impact on a child's quality of life. Children experiencing pain may have difficulty participating in their daily activities and may avoid certain activities that they would like to participate in. Pain can impact important areas of life such as school, recreation, socializing with friends, and time with family. Sleep may also be disrupted by pain, which can result in fatigue and other consequences like increased seizures. Children can also have pain during caregiving activities like bathing, toileting, and dressing, making it challenging for both the parent and the child.

EtC: Why is screening for pain important?

Katie: We need to have a good understanding of whether a child is experiencing pain, its characteristics, and its impact on quality of life, for us to work with the family to effectively manage it. Screening is especially important in children with cerebral palsy for several reasons:

- For children who are nonverbal or have limited verbal communication, it is critical that we find ways to effectively determine if they are experiencing pain.
- For children of different ages and cognitive levels, we need to adapt our screening as well, to ensure that we are accurately capturing pain information.
- For children with chronic pain, the presence of pain can unfortunately become a typical part of some children's lives and therefore they might not always mention it unless they are asked about it explicitly.

EtC: The Toolbox Pilot Project began its roll-out in the Hypertonia clinic this month. How will these standardized assessments impact your work with children with CP?

Katie: Asking about pain and its impact on the child and family has always been a key part of our assessment. However, the development and implementation of the chronic pain toolbox will allow us to do this in a more standardized way, using tools that are reliable and sensitive to change.

The toolbox includes a number of tools that would be appropriate for different types of clients with a range of pain issues. For example, one tool allows us to look for signs of pain in nonverbal clients and another tool guides the client to indicate the impact of pain on activities that are important to them.

Having a full understanding of a child's pain and its impact helps guide our decision-making in clinic around intervention and management.

Using standardized tools allows us to then reassess pain after the intervention to determine if there's been a significant reduction in pain.

EtC: It's only been a few weeks since the start of the pilot; do you have any early successes to share from using the toolbox?

Katie: A child recently came into the Hypertonia Clinic with complaints of leg pain occurring at the end of the day. Prior to the use of the chronic pain toolbox, I would have asked a number of questions, including whether there are any particular activities that are painful or any activities that are impacted or limited by the pain. When asked, this child was unable to identify any activities.

I then decided to use one of the tools to try to gain further information about this child's pain and its impact. When I showed the child the CALI (Child Activity Limitations Interview), which lists 21 activities that pain may impact, this provided concrete examples which helped the child to realize that, in fact, the leg pain was impacting some important activities. For this child, it turned out that the pain was distracting during homework, reading and music practice in the evenings. The child went on to elaborate that it was difficult to focus on these activities with pain on their mind.

Because of this particular tool, the child was able to express their pain experience more accurately and the team realized that the child's pain was having a significant impact on important activities in a way that we may not have initially expected.

Appendices

Holland Bloorview
Kids Rehabilitation Hospital

Appendices, 2014, Version 1

Consent documented ☐ **Yes** ☐ **No**	**Age at time of appointment:** _____
Date client seen: _____	**Visit type:** ☐ New Referral ☐ Follow-up ☐ Phone Call
Confirmed Diagnosis of Cerebral Palsy	☐ Yes ☐ No Comment:
Pain Present?	☐ Yes ☐ No
If pain present, formal pain assessment completed	☐ Yes ☐ No _____ See Pain Assessment Recommendations and Practice Points
If no, reason for not formally assessing pain	
If pain present, pain assessment tool used	☐ Yes ☐ No
If no, reason for not using a pain assessment tool	
Type of Pain	☐ Acute(Intensity) ☐ Chronic(Interference) ☐ Phantom Sensation ☐ Environmental ☐ Procedural ☐ Phantom Pain ☐ Other

Pain Intensity	Pain Intensity Scale Used	☐ NRS ☐ Faces ☐ INRS ☐ FLACC ☐ Word
		View Protocol for guidelines for use of scales.
	Pain Score	
	Pain Intensity Comment	

Pain Interference	Pain Interference Scale Used	☐ Pediatric Pain Profile ☐ CALI - Proxy Version ☐ CALI - Self - Repot Version ☐ PROMIS - Proxy Version ☐ PROMIS - Self - Repot Version ☐ Body Diagram - Proxy Version ☐ Body Diagram - Self - Report version ☐ Other
	Other Pain Intensity Scale Used:	
	Pain Score	
	PPP Score	_____ PPP=Pediatric Pain profile mild= 10-19 moderate= 20-29 severe =30-39 very severe =40 and over
	Monitoring Time Frame PPP	
	CALI (Proxy) Score	

		CALI = Child Activity Limitations Interview
	CALI (Self-report) Score	CALI = Child Activity Limitations Interview
	Activities that are Difficult due to Pain	Give Score
	Importance of the Above activities	
	PROMIS (Proxy) Raw Score	PROMIS = Patient Reported Outcomes Measurement Information Sytem
	PROMIS (Proxy) T-Score	PROMIS = Patient Reported Outcomes Measurement Information Sytem
	PROMIS (Self-Report) Raw Score	PROMIS = Patient Reported Outcomes Measurement Information Sytem
	PROMIS (Self-Report) T-Score	PROMIS = Patient Reported Outcomes Measurement Information Sytem
	Body Diagram	Indicate pain location - Proxy and Self-Report
	Pain Comment	

Analysis of Pain Assessment	Comment on the source of the pain
Overall Pain Comment	
Pain Intervention Strategy	

Did the practice points assist you with the pain assessment?	☐ Yes ☐ No Comment:

Name and Professional Designation	Only required for Occupational Therapist, Speech Language Pathologist, Orthotics, Prosthetics, Psychology.

Evidence to Care: Cerebral Palsy Chronic Pain Pilot Project Huddle Field Notes	
Date:	
Attendance:	
Communication with Others (via email, phone, meeting):	
Themes Discussed Related to the CP Chronic Pain Toolbox	
Issues Discussed:	
What is working well (successes)?:	*Areas for Improvement?*
What is not working well (challenges, barriers)?:	*Potential Solutions Identified?*
Other Items? (e.g. documentation, tool utility, etc.):	

Next Steps		
Action Items	*Action Owner*	*Timeline*

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