Knowledge Translation Case study:

Cochrane Child Health and TREKK: Improving the emergency care of Canadian children

This case study highlights the experience of Cochrane Child Health partnering with a national network of clinicians and researchers with expertise in pediatric emergency medicine to inform a knowledge mobilization initiative. TREKK (Translating Emergency Knowledge for Kids) and Cochrane Child Health have been working in partnership since 2011 to identify, synthesize and translate knowledge into useable KT tools that meet the needs of both emergency clinicians (frontline staff) and parents across Canada.

The beginning – a clear need – seven degrees of separation

Our partnership with TREKK was formalized when Dr. Lisa Hartling (current Director, Cochrane Child Health, at the Alberta Research Centre for Health Evidence (ARCHE)) was approached to collaborate on an application for funding through the Networks of Centres of Excellence (NCE) in Knowledge Mobilization program. TREKK, headed by Dr. Terry Klassen (former Director of Cochrane Child Health), is a pan-Canadian initiative aimed at ensuring the latest research in pediatric emergency medicine is applied within general emergency departments (ED) across Canada.

Through a number of previously successful collaborations, Cochrane Child Health already had a working relationship with Dr. Klassen. In 2006, a CIHR team grant in Pediatric Emergency Medicine was awarded to Dr. Klassen (and others including Dr. Hartling) which lead to the development of multiple projects to advance the evidence base in pediatric emergency medicine, including a project specifically focused on developing and evaluating innovative evidence-based KT tools for parents. Another member of the team grant was Dr. Shannon Scott (former postdoc with Dr. Klassen) who brought expertise in knowledge translation in child health. These working relationships and complementary skill sets resulted in many new initiatives and complemented TREKK’s mission, “to be the trusted source for easy access to the latest evidence, best practices, user-friendly resources and discussions in pediatric emergency care”.

Our partnership aims to embed Cochrane evidence (where available) into the development of KT tools, created for and shared amongst general emergency department practitioners, as well as KT tools tailored to meet the needs and preferences of parents.

Working towards success

TREKK built upon the work, which had begun a registry of child-relevant systematic reviews. This registry was used as the foundation to create an online evidence repository in areas relevant to the management of children seeking care in the ED setting. Under the direction of Dr. Hartling (also TREKK Co-Director, Knowledge Synthesis) Cochrane Child Health is able to identify existing high quality clinical guidelines, systematic reviews (both Cochrane and non-Cochrane), and randomized trials, and synthesize this evidence into useable KT tools that meet the needs of ED clinicians. This has led to the creation of bottom line recommendations for use by healthcare providers in Canadian ED.

Additionally, through collaboration with Dr. Scott (also TREKK Co-Director Knowledge Translation), Cochrane Child Heath has helped embed Cochrane evidence into, and develop parent friendly KT tools (whiteboard animation videos, ebooks, infographics) on acute pediatric emergency topics that were identified as priorities from a national needs assessment (e.g. fever, bronchiolitis, croup, acute otitis
media). By creating KT tools which are tailored to parents' needs and preferences, we are empowering families to make informed pediatric health care decisions.

Working alongside ARCHE (Dr. Hartling’s research centre) and ECHO (Evidence in Child Health to Advance Outcomes; Dr. Scott’s research program), the partnership between Cochrane Child Health and TREKK has helped develop a model for knowledge synthesis and knowledge translation that puts the needs of parents and their children at the forefront of care.

**Mutual benefits**

- Development of evidence pyramids and bottom line recommendations: When available, Cochrane evidence was embedded into these resources and TREKK housed the resources on their website.
- Development of KT tools for parents on acute pediatric conditions: When available, Cochrane evidence was embedded into these resources and TREKK housed the resources on their website.
- Assembly of evidence on corresponding pediatric topics to inform tool development: produced systematic reviews detailing care provider, patient experiences and parent needs.
- Conducted parent workshops to share resources and highlight parent KT tools: exposure for TREKK and Cochrane Child Health.
- Presented at local and national conferences about the research partnership: exposure for TREKK and Cochrane Child Health, as well as great networking opportunities for future collaborations.
- Through partnering with TREKK we have gained access to a network of clinicians. Many of whom we have established a great working relationship with, and subsequently are available to provide clinical advice and feedback on the resources developed.
- Connections established during the partnership with TREKK has helped us leverage funding from various local and national sources to continue our research initiatives.
- Increased awareness around utility of Cochrane evidence and systematic review methodology within TREKK. This has created training opportunities for Cochrane Child Health in evidence synthesis.

**Turning points in the development of the partnership**
The original NCE application secured TREKK’s funding for only four years. As TREKK was a multi-stage initiative, this forced the group to make a number of intentional decisions around work priorities and goals. It was decided that the first set of KT tools developed would be targeted at front-line health care providers (e.g., emergency physicians). With funding renewal application (a further 3 years) a purposeful proposal to expand the target audience for the KT tools to parents was submitted. This helped the group re-think their approach and strategy for developing these tools, as well as the resources needed to target this different audience.

**Continuing success**

Formed by personal connections, and kick started by a targeted grant call, the complimentary partnership evolved naturally. We really value the partnership with TREKK, and the opportunities it has provided for Cochrane Child Health. This reciprocal relationship has helped disseminate and communicate our work, which has benefited both TREKK and Cochrane Child Health.

Our collaborative work with ECHO and ARCHE has enabled the development of a model for integrative KT through patient engagement, knowledge synthesis and translation of evidence to meet our end user needs.

Linkages between Cochrane Child Health and TREKK, are strengthened by Dr. Hartling and Dr. Scott’s ongoing leadership roles within TREKK. Additionally, having a clear understanding of our role and
Responsibilities within TREKK helps Cochrane Child Health provide the necessary support to ensure a successful partnership.

**What next?**
While the current funding source is limited, a sustainability committee has been established and is looking at how best to maintain TREKK’s key activities. We continue to support the maintenance of the online evidence repository through services provided in-kind to TREKK.

We will also continue to work with the ECHO and ARCHE research groups to develop parent friendly KT tools. We have leveraged funding from local and national agencies to support this work, and are currently looking to partner with the local children’s hospital foundation to support our continued involvement with TREKK.

**Tips and lessons learned**
It’s a two-way street

- Demonstrate value to each other - the relationship needs to be mutually beneficial to succeed.
- Strategically try to align your goals with their goals (and vice versa).
- Be clear on what your group can provide to the partnership and being realistic about the limitations.
- Need to be creative and flexible to adapt to end user needs and funding opportunities.
- Need clearly defined roles and responsibilities so you can work well alongside one another.
- Need clearly defined governance and reporting structure.
- Strategic plan should be developed in collaboration with one another. This will help capitalize on each group’s strengths and weaknesses.
- Both groups need to be scanning for funding opportunities - it can’t only be the responsibility of one group.
- Strategically provide in-kind services to support one another’s activities. This will help leverage additional funding to maintain the partnership.

_Sarah Elliott, Cochrane Child Health Field Manager_

_The Knowledge Translation Partnerships Working Group has developed work-in-progress guidance to help Cochrane Groups develop, strengthen and maintain meaningful partnerships._

_If you have examples of your Knowledge Translation work that you would like to share, please contact Karen Head at khead@cochrane.org_