How to develop and evaluate a knowledge translation (KT) plan: advice and experiences from Cochrane Child Health Field

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Dr. Gabrielle Zimmermann

Cochrane Learning Live Webinar
6th March, 2019

Trusted evidence.
Informed decisions.
Better health.
Dr. Sarah Elliott is the Program Manager for Cochrane Child Health. An advocate for evidence based practice, she understands the need for (and translation of) high quality evidence to improve health practices in both pediatric clinical and community settings. Combining her expertise and interests she hopes to develop accessible tools, to support the translation and uptake of evidence to clinicians and health policy makers.

Dr. Gabrielle Zimmermann is the Program Coordinator – Knowledge Translation & Implementation Science with the Alberta SPOR SUPPORT Unit Knowledge Translation Platform. She has wide-ranging experience in research and Knowledge Translation (KT) that encompasses the knowledge to action cycle; from creating and synthesizing evidence to facilitating the implementation of evidence into practice.
## Webinar Outline

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Cochrane Child Health

• Cochrane Review Group?
  – topics housed overlap with many of the disease specific Cochrane Review Groups

• Cochrane Field established 1997

• Cochrane Child Health, 2018
  • Co-directors: Lisa Hartling, Ricardo Fernandes, Katrina Williams, Denise Thomson
  • Manager: Sarah Elliott
  • Information Specialist
  • Statistician
  • Research Assistant

“bridge the gap between available clinical evidence and practice uptake within the pediatric setting, to improve evidence informed health care decisions for children and youth”
Cochrane Child Health

Performing knowledge translation (KT) since 1997…..

• **Our Vision**
  – Decision-makers (health care providers, policy-makers, parents, children/youth) concerned with child health, make evidence-informed decisions by using high quality Cochrane systematic reviews of the best available evidence

• **Our Mission:**
  – Work within the child health community to advocate for decision-making based on finding, understanding and using the best available evidence
  – Work within Cochrane to advocate for systematic reviews that reflect the particular needs of children and youth
Cochrane Child Health Initiatives

Supporting evidence-informed decisions by:
- Developing formal and informal partnerships with relevant stakeholders
- Identifying and disseminating child-relevant Cochrane reviews
- Developing and evaluating KT tools and dissemination strategies

Promoting child health activities within Cochrane by:
- Advocating for systematic reviews that reflect the needs of children and youth
- Facilitating clinically relevant and methodologically rigorous Cochrane reviews on child topics
Cochrane Child Health Initiatives

Training stakeholders in:
- Critical appraisal and the use of systematic reviews
- Production of systematic reviews and other knowledge syntheses, e.g., Overviews, Rapid Reviews

Advancing methods for knowledge creation and synthesis by:
- Conducting research to investigate and develop appropriate and novel methods for knowledge synthesis and meta-analysis in child health
- Developing guidance to enhance methods for design, conduct, and reporting of clinical trials
- Conducting research to guide methods for design, conduct, and reporting of Overviews, Scoping Reviews, Rapid Reviews
Cochrane Child Health Initiatives

Build and coordinate communication strategies to enhance dissemination and uptake of child health evidence

- **Website**: Revamped and up to date, readily accessible child health evidence

- **Cochrane Corners & Evidence 4 Clinicians**: Coordinate development of summaries that represent Cochrane systematic evidence for a clinical audience.

- **Twitter**: we maintain a Twitter account (@Cochrane_CHILD) and blog (cochranechild.wordpress.com) that profile evidence and methods relevant to child health, knowledge synthesis, and evidence-based medicine.

- **KT tools**: helping develop and evaluate tools for healthcare providers (e.g., knowledge pyramids, bottom line recommendations) and parents/consumers (e.g., e-books, infographics, whiteboard animation videos) that synthesize best evidence in child health.
Now we entering uncharted territory......

No dedicated funding → operating on “in-kind” funding
Limited resources → creativity needed!
Uncertain future → working towards sustainability...

Were do we begin?!
Mapping a new direction

1. Team meeting
   - Co-Directors and Manager
   - KT consultant

2. Development of KT Plan…..
What is Knowledge Translation?

**CIHR**

“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.”

**WHO**

“The **synthesis, exchange, and application** of knowledge by relevant stakeholders to accelerate the benefits of global and local innovation in strengthening health systems and improving people’s health.”
"…methods for closing the knowledge-to-action gaps”

What we know  What we do

(Straus et al., 2013, p. 4)
## Core Elements of KT Planning

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<td>Knowledge User Audiences</td>
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<td>Action</td>
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**Project Management and Evaluation**
What is your Goal?

**Why** are you doing the research?

What would you like to see happen as a result of doing this research?

- raise awareness / inform
- promote action / uptake

Goals must be appropriate - based on the nature of research findings & target audience.
Aligning CCH with Cochrane's KT plan

- Our 5 areas were then mapped to the 6 themes in Cochrane's KT framework
Producing reviews which meet the needs of our users

Packaging, push and support to implementation

Growing our users’ capacity to find and use our reviews

Engaging with our users to support their evidence-informed decision making

Advocating for evidence-informed health decision making
CCH Goals of KT plan

1) To support the development of evidence on child health topics

2) To provide accessible evidence to meet our knowledge users needs

“bridge the gap between available clinical evidence and practice uptake within the pediatric setting, to improve evidence informed health care decisions for children and youth”
CCH Knowledge Users
Who is your Knowledge User/Audiences?

**Who** needs to know about your research and why?

Who could it be important to?

Who could be *impacted*: immediately/down the road?

- Researchers
- Clinicians
- Patients

Broadly:

- Educators
- Patient Organizations
- Institutional Staff
CCH Audience/knowledge users

Immediately Impact: those making decisions about children’s healthcare
- Pediatric clinicians/emergency physicians - need evidence to make informed clinical decisions
- Parents/familial caregivers – need information to make informed care decisions
- Pediatric care centers - need evidence to update practice guidelines

Broadly impacted
- Child health researchers – broader understanding of research within child health
- Child health policy makers – broader understanding of priority areas
- Funding agencies - broader understanding of gaps in research and priority areas
What message needs to be shared?

What is it your audience needs to learn, know or do?
• Based on what your research is exploring

How might this change based on the audience?
• Is your message tailored for each audience member?

Who is the most credible messenger?
How will you share your results? What is your Strategy?

How will you share your results with each of your audiences?

What is effective in reaching them?
KT Strategies

- Diffusion
- Dissemination
- Application (Implementation)
Letting it Happen (diffusion)
- publications
- conference presentations
- web-based activities

Helping it Happen (dissemination)
- patient decision support aids
- educational materials
- clinical practice guidelines
- reminders

Making it Happen (implementation)
- KTA process model
- educational outreach
- opinion leaders
- audit & feedback

Goal 2: To provide accessible evidence to meet our knowledge users needs

**Activity:** Dissemination of Cochrane evidence

**Audience:** Clinician/researcher

**Message:** provides evidence on effectiveness of treatments, strength of evidence, use of technical language,

**Platform:** Cochrane channels – newsletters, twitter, Cochrane Corners

Academic channels – conferences, publications, presentations

Clinicians – TREKK BLRs, pediatric grand rounds, hospital e-bulletins
Goal 2: To provide accessible evidence to meet our knowledge users needs

Activity: Dissemination of Cochrane evidence

Audience: Parent/familial caregiver

Message: Summary evidence, lay language, interactive format, symptom driven

Platform: Twitter, Blogs, Whiteboard Animation Videos, Interactive Infographics

Diffusion

Dissemination

Implementation?
What may act as Barriers/Facilitators?

What could help or hinder reaching your audience?

- What might you be missing?

- Are there particular barriers or facilitators for the selected strategies?
  - Accessibility, cost, feasibility?
CCH Goal 2: To provide accessible evidence to meet our knowledge users needs

Barriers
Clinicians: open access of publications, time, Cochrane membership; overall awareness of Cochrane
Parents: access to computer, internet, English as a first language, knowledge of health systems
Cochrane Child Health: resources, time, funding

Facilitators
Clinicians: CME credits for participation in training, social media – access to publications, increases awareness of Cochrane and evidence
Parents: Pediatric Parent Advisory Group, translation of tools into different languages
Cochrane Child Health: partnerships in place with collaborations to facilitate journal production, social media posts, development of KT tools
Expertise
Knowledge User involvement CCH

Cochrane Corners: clinicians help set topics, and write commentaries
TREKK partnership: BLRs clinicians developed based on evidence repository CCH helps build.
KT tools for parents: Clinicians and Pediatric Parent Advisory Group (P-PAG)
Social Media Strategies: Health researchers, KT researchers, Clinicians and Parent input
P-PAG – collaboration with ARCHE and ECHO research programs.

To establish a parent advisory group that would provide advice, guidance and knowledge from a parent perspective to inform various health research activities.
Resources
No budget? Limited budget?

Partnerships and collaborations are paramount to the success of CCH activities!

**Goal 1:** Dissemination: partnered/worked with Editor in Chief of national journals to support production of academic articles. ARCHE/ECHO and TREKK partnerships allows the development and dissemination of BLRs and KT tools

**Goal 2:** Accessible evidence: ARCHE/ECHO partnership for the development of parent tools. Support from ABSPORU KT platform to translate and test usability of tools in three other languages

Applying for small, targeted funding for different aspects of our KT strategy

Prioritizing what we do have expertise and resources for: fine tuning our activities
Who is our audience?

What are we doing?

What are we hoping to achieve?
## Goal 1: Producing evidence

### KT Theme: Prioritization and co-production

### Examples:

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<tr>
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<th>Project /Activity</th>
<th>Product</th>
<th>Goal of KT output</th>
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<tbody>
<tr>
<td>Researchers, Stakeholders, Funding Agencies, Cochrane Review Groups</td>
<td>Priority Setting → Overview of topics</td>
<td>List of parent priority topics in child health, List of youth priority topics in child health</td>
<td>Increased awareness of priority topics for children and youth. Increased awareness of Cochrane evidence on priority topics. Behaviour change: funding agencies set calls for these priority topics, research design projects around these priority topics</td>
</tr>
<tr>
<td>Researchers, Clinicians</td>
<td>Cochrane Standard Author Training, KS Workshops</td>
<td>seminars, workshops, internship, studentship</td>
<td>Increased awareness of how Cochrane evidence is synthesised Increased awareness of Cochrane and available resources Behaviour change: increased production in Cochrane SR, increased use of Cochrane evidence in practice, increase use and uptake of high quality evidence in practice and guideline development</td>
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<tr>
<td>Parents, caregivers</td>
<td>P-PAG</td>
<td>Development of KT tools</td>
<td>Increased awareness of Cochrane and resources Increased awareness of tools available to parents Increased awareness of how treatment recommendations in child health are developed Behaviour change: parents use tools to help make informed decisions about child healthcare treatments. Behaviour change: best practices around engaging with consumer groups</td>
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### Goal 2: Accessible evidence

#### KT Theme: Packaging, push and support to implementation

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<td>Clinicians</td>
<td>Dissemination of Cochrane Evidence</td>
<td>Cochrane Corners, Evidence for Clinicians</td>
<td>Increased awareness of Cochrane evidence and application in clinical practice [Behaviour change: clinicians change practice based on new knowledge]</td>
</tr>
<tr>
<td>Clinicians</td>
<td>TREKK Partnership</td>
<td>Evidence repositories</td>
<td>Behaviour change: use of BLRs in practice</td>
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<tr>
<td>Parents, caregivers</td>
<td>TREKK Partnership, Student project</td>
<td>Development of KT Tools for parents</td>
<td>Increased awareness of tools available to parents [Increased awareness of how treatment recommendations in child health are developed] [Behaviour change: parents use tools to help make informed decisions about child healthcare treatments.]</td>
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<td>Parents, caregivers</td>
<td>Student project</td>
<td>KT Summary Products</td>
<td>Increased awareness of Cochrane evidence</td>
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**Examples:**
Flow on effect.....

...help produce accessible evidence in an effective and sustainable manner which meets the needs of our stakeholders.
How will you know if you achieved your KT goals? Consider indicators for:

- Reach
- Usefulness
- Use
- Partnership/collaboration
- Practice change
- Policy
- Knowledge change

Where do you want to have an impact?

- Healthcare/well-being outcomes
- Clinical practice
- Policies/systems
- Research & knowledge

*from The Hospital for Sick Children KT Planning Template
Evaluation of a KT strategy

1. What impact do you want your KT activities to have?
   - Link back to our KT objectives – research/knowledge, clinical practice
   - Behavior change, increased awareness

2. How will you know if this impact was achieved?
   - Reach – Increase in followers, number of SR and BLRs downloaded
   - Use - increased use of Cochrane evidence in treatment guidelines or BLR in clinical practice
   - Practice change - Less visits to ED for common acute pediatric conditions

3. How will you obtain this information?
   - E.g. Clinician practice behaviors: PERFECT TOOL’ for qualitative measures
   - E.g. Online social media and google analytics

4. How will the KT evaluation results be used?
   - Refine KT strategy
   - Understand what works and what doesn’t and why

Reflections and future considerations

Blurred lines
- Where do the boundaries between where KT of Cochrane evidence, specifically, and KT of SRs/evidence-based practice in general overlap?

Resourcefulness
- Capitalize on existing partnerships, smaller more “fundable” pieces

Our experience was retrospective – wanted to fit within current Cochrane K
- *Wanted* to fit in with current Cochrane KT framework
- What would a Field look like if it were designed from scratch using this approach?
- What are a Field’s priorities *meant* to be now? Do we act as “knowledge brokers”?

Be the change you want to see in the world!
- Focus on what you want to achieve and work backwards…
Watch this space.....

- Development and implementation of a KT evaluation plan
Questions?

Comments?

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