

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.



Presenters



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

01 Background - What is Cochrane Child Health?

02 Context - What does Cochrane Child Health do and why?

03 Construction – Implementing and evaluating a KT plan; how, why and for whom?

Cochrane Child Health: A Case Study

04 Challenges and considerations – what did we learn?

05 Questions and Discussion



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.

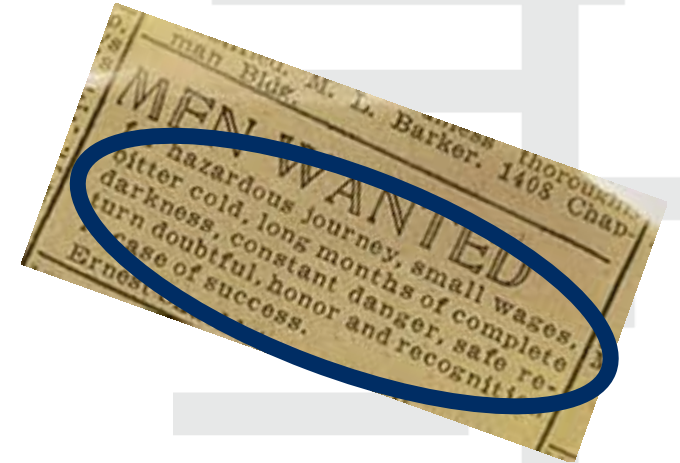


Now we entering uncharted territory.....

No dedicated funding → operating on “in-kind” funding

Limited resources → creativity needed!

Uncertain future → working towards sustainability...



Where 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

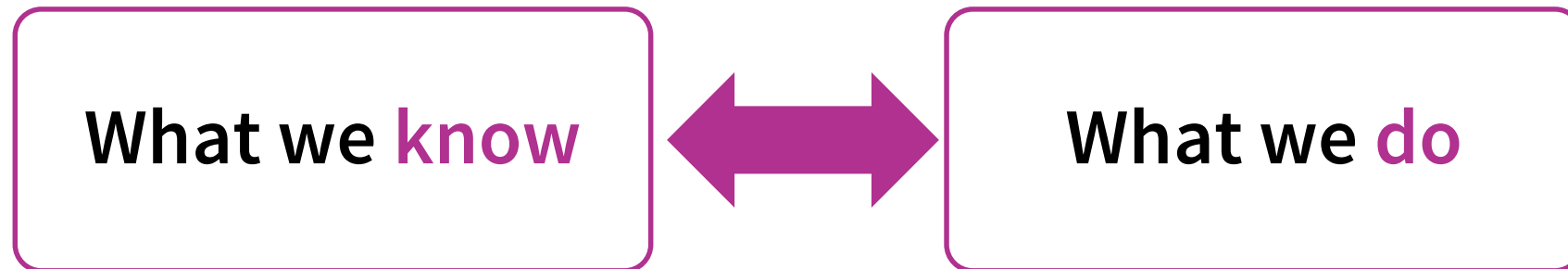
“The **synthesis, exchange, and application** of knowledge by relevant stakeholders to accelerate the benefits of global and local innovation in strengthening health systems and improving people’s health.”



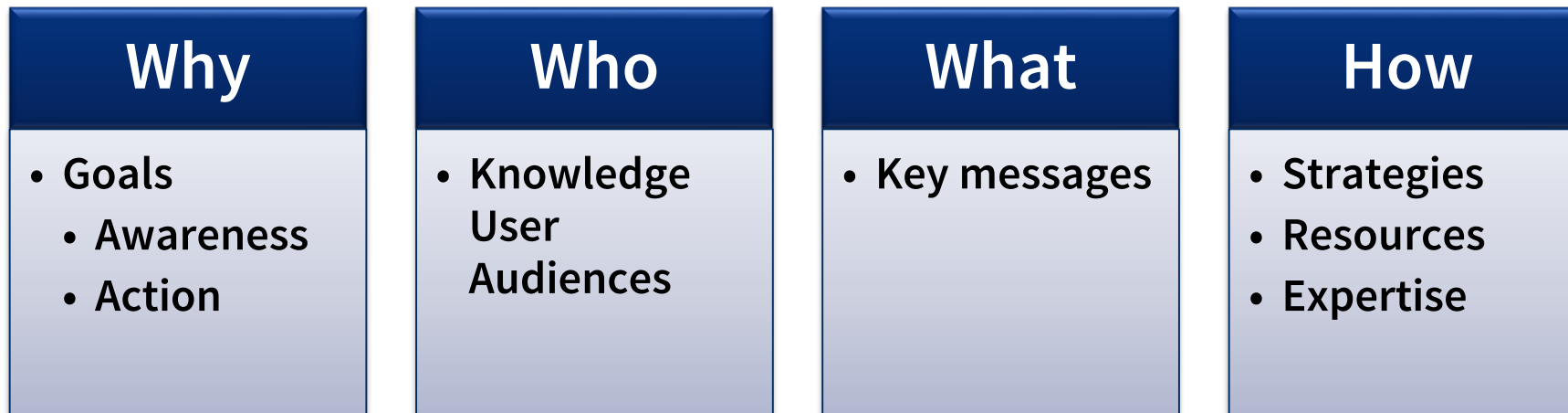
KT elevator pitch....

“...methods for closing the knowledge-to-action gaps”

(Straus et al., 2013, p. 4)



Core Elements of KT Planning



Project Management and Evaluation

What is your Goal?

Why are you doing the research?

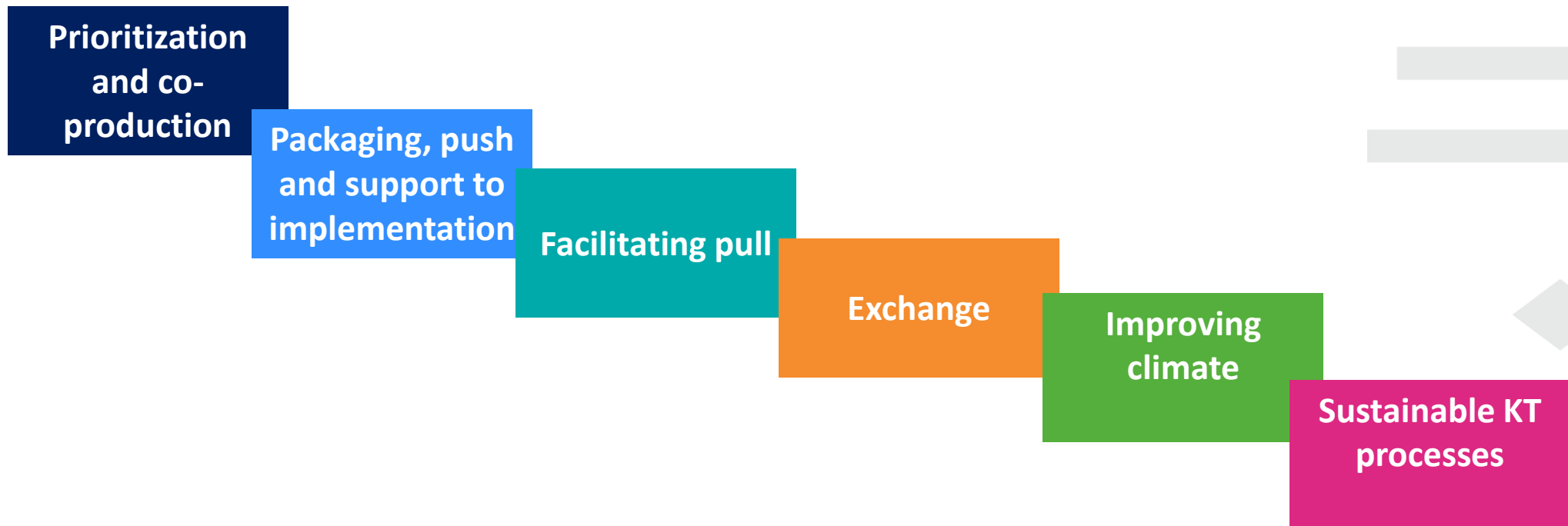
What would you like to see happen as a result of doing this research?

- 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



Goal 1:
Producing
evidence

Prioritization and
co-production

*Producing reviews which
meet the needs of our
users*

Goal 2:
Accessible
evidence

Packaging, push
and support to
implementation

*Ensuring our users receive
and can act on our reviews
and products*

Facilitating pull

*Growing our users'
capacity to find and use
our reviews*

Goal 3:
Advocating for
evidence

Exchange

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

Improving
climate

*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?

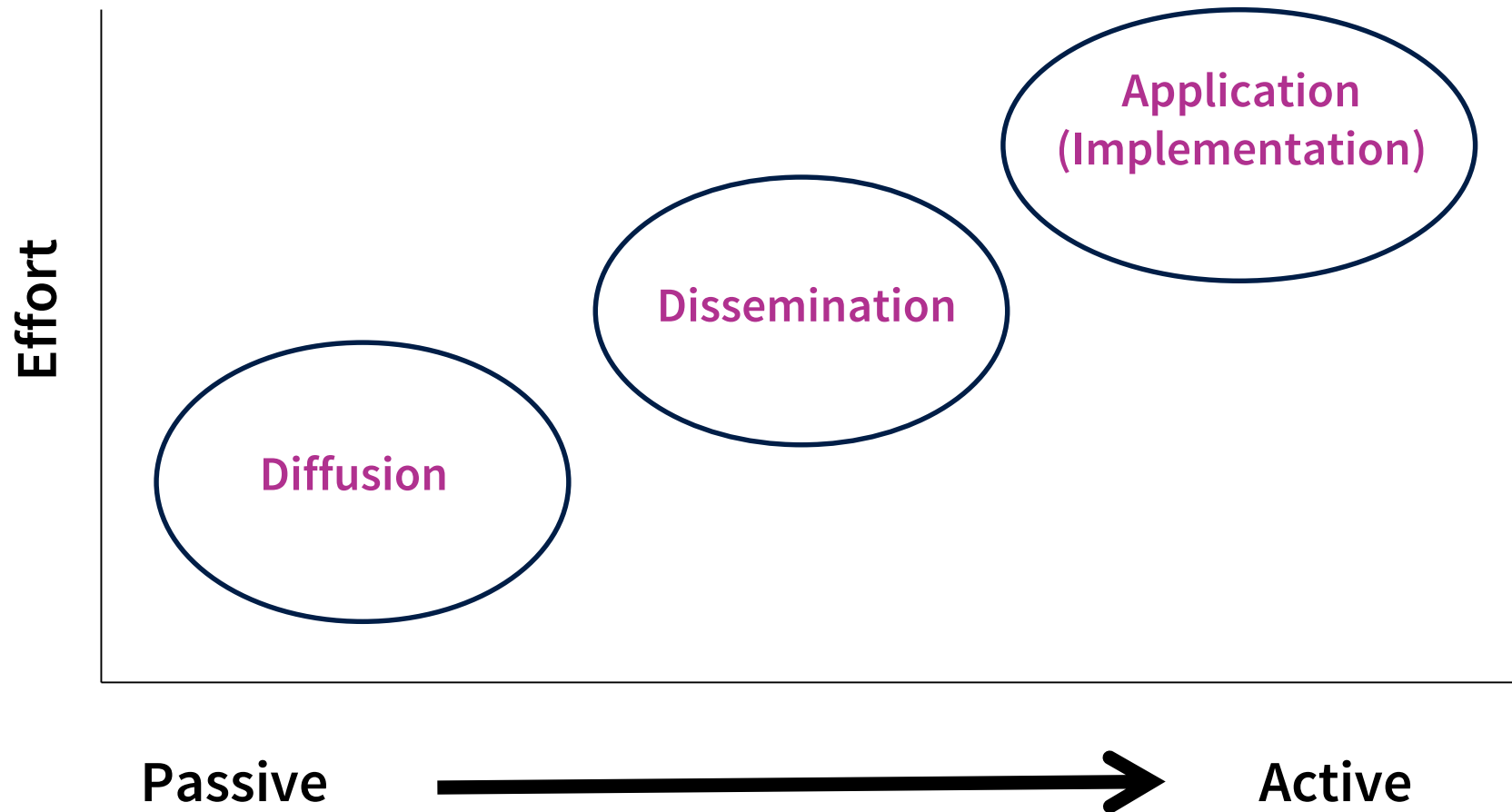
Who is the most credible messenger?

How will you share your results? What is your Strategy?

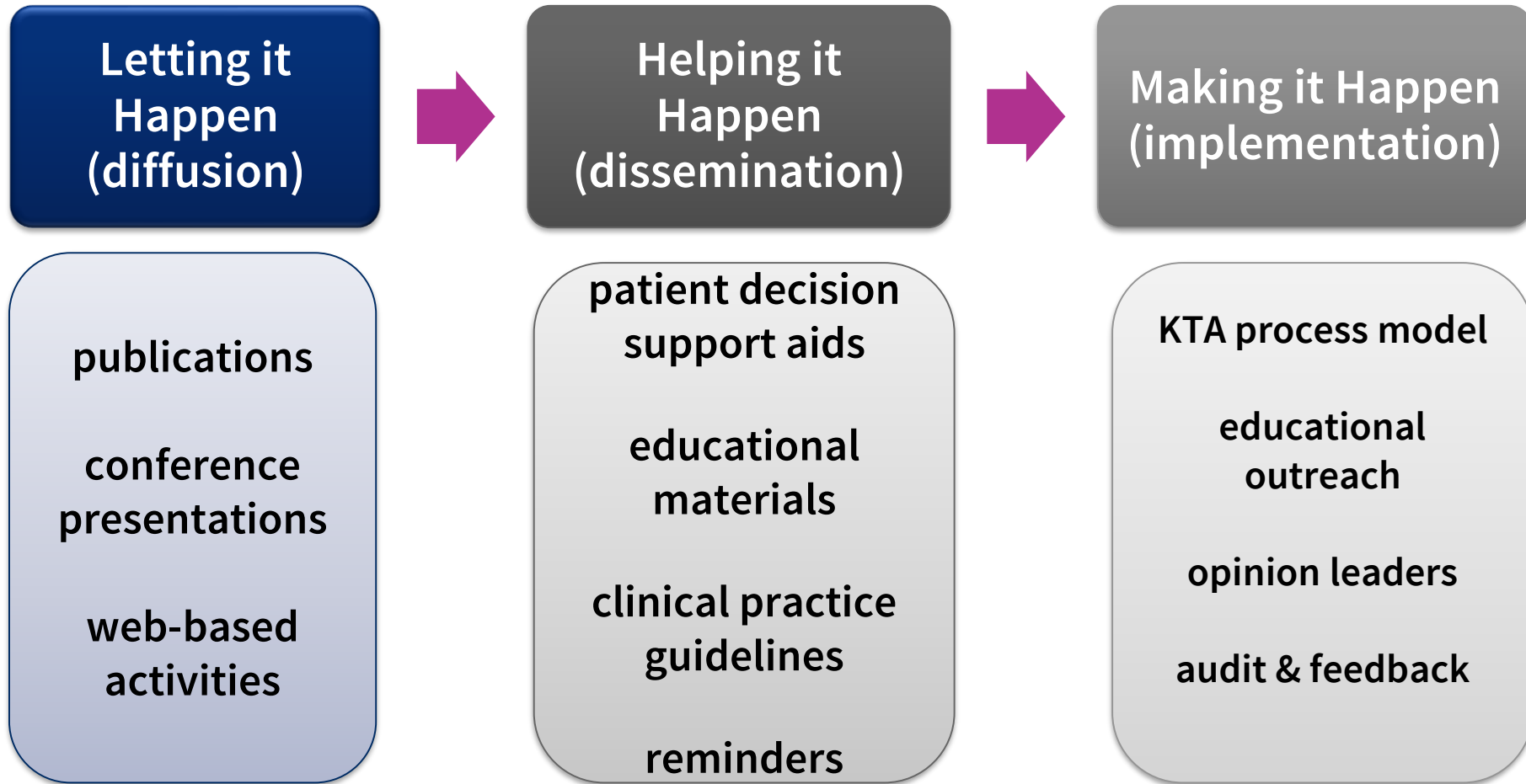
How will you share your results with each of your audiences?

What is effective in reaching them?

KT Strategies



KT Strategies



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

Activity: Dissemination of Cochrane evidence

Diffusion

Audience: Clinician/researcher

Dissemination

Implementation?

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

Diffusion

Audience: Parent/familial caregiver

Dissemination

Implementation?

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

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



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:

Audience	Project /Activity	Product	Goal of KT output
Researchers, Stakeholders, Funding Agencies, Cochrane Review Groups	Priority Setting → Overview of topics	List of parent priority topics in child health	Increased awareness of priority topics for children and youth. Increased awareness of Cochrane evidence on priority topics.
		List of youth priority topics in child health	Behaviour change: funding agencies set calls for these priority topics, research design projects around these priority topics
Researchers, Clinicians	Cochrane Standard Author Training, KS Workshops	seminars, workshops, internship, studentship	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
Parents, caregivers	P-PAG	Development of KT tools	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

Goal 2: Accessible evidence

KT Theme: Packaging, push and support to implementation

Examples:

Audience	Project /Activity	Product	Goal of KT output
Clinicians	Dissemination of Cochrane Evidence	Cochrane Corners, Evidence for Clinicians	<p>Increased awareness of Cochrane evidence and application in clinical practice</p> <p>Behaviour change: clinicians change practice based on new knowledge</p>
Clinicians	TREKK Partnership	Evidence repositories	Behaviour change: use of BLRs in practice
Parents, caregivers	TREKK Partnership, Student project	Development of KT Tools for parents	<p>Increased awareness of tools available to parents</p> <p>Increased awareness of how treatment recommendations in child health are developed</p> <p>Behaviour change: parents use tools to help make informed decisions about child healthcare treatments.</p> <p>Behaviour change: best practices around engaging with consumer groups</p>
Parents, caregivers	Student project	KT Summary Products	Increased awareness of Cochrane evidence

Flow on effect.....



Network Building	Building Demand / Advocacy	Knowledge Translation Outputs	Stakeholder Engagement
01 Connect stakeholders in a given area to create a global network, including those involved in: <ul style="list-style-type: none"> • Production; • Dissemination; and • Implementation of evidence-based practice. This should be integrated with and facilitated by Cochrane Membership.	02 <ul style="list-style-type: none"> • Advocate for Cochrane or other EBM to be used in decision making in the field • Promote evidence-based practice • Promote Cochrane Evidence • Provide education and training on the methods and application of Cochrane Evidence for stakeholders • Linked to this is a role in internal promotion/advocacy to emphasise the external stakeholder needs to those within Cochrane. 	03 This is the outward communication of Cochrane evidence through activities such as: <ul style="list-style-type: none"> • Re-packaging content; • Producing summaries; and • Disseminating to targeted stakeholders Precise activities will be recommended in the Cochrane Knowledge Translation Strategy and a Field will then prioritise based on the needs of their stakeholders.	04 The KT strategy will emphasise the bidirectional nature of KT in Cochrane. Stakeholder feedback can inform: <ul style="list-style-type: none"> • Outcome priorities • Review topic priorities • Cochrane methodological research Opportunities for collaboration and commissioned work will also flow through these channels as we understand the needs of our stakeholders.
	This maps to the knowledge translation strategy Themes 3 and 5	This maps to the knowledge translation strategy Theme 2	This maps to the knowledge translation strategy Themes 1 and 4

...help produce accessible evidence in an effective and sustainable manner which meets the needs of our stakeholders

KT Impact and Evaluation*

Where do you want to have an impact?

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

How will you know if you achieved your KT goals? Consider indicators for:

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

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

**“REACH FOR
THE SKY”**

WOODY
TOY STORY



Questions?

Comments?

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