McMaster University

Family Medicine

# Knowledge Translation Part I

Watch a recording of this session

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McMaster University

Family Medicine

# Knowledge Translation, part 1

## Introduction to KT and KT Planning

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# Learning Objectives

- Part 1 (today)
  - Understand foundational KT terminology
  - Recognize end-of-grant and integrated KT
  - Understand steps for creating a KT plan
- Part 2 (June 23)
  - Understand the process for evaluating KT
  - Apply KT planning document to projects

# Mentimeter

- What is your definition of Knowledge Translation?

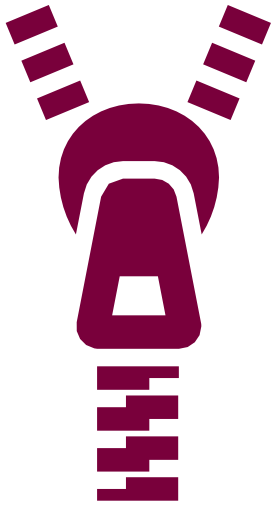
Go to www.menti.com and use the code 44 14 46

# What is Knowledge Translation

- "**Dynamic and iterative process** that includes synthesis, dissemination, exchange and ethically-sound application of knowledge"
  - CIHR Knowledge Translation Definition
- "Methods for **closing the gaps** from knowledge to practice"
  - Straus S, Tetroe J, Graham I (2010) Defining Knowledge Translation. CMAJ 181(3–4):165–168

# Two Styles of Knowledge Translation

**End-of-Grant**
Knowledge
Translation



**Integrated**
Knowledge
Translation

# End-of-Grant KT

- "A plan for making knowledge users **aware** of the knowledge that was gained during a project"
  - CIHR Knowledge Translation Two Approaches to Knowledge Translation at CIHR, End-of-Grant KT

# End-of-Grant KT

## Diffusion

Let it happen

## Dissemination

Help it happen

## Application

Make it happen

**See** CIHR 2015: Guide to Knowledge Translation Planning at CIHR: Integrated and End-of-Grant Approaches

# Diffusion

- General Approach with little tailoring for audiences

- *Academic articles*
- *Conference posters and presentations*
- *Posting findings to your website*

# Dissemination

- Tailoring the message for your audience

- *Plain language summaries*
- *Briefing for policy makers*
- *Media release*

# Application

- Iterative process of working with knowledge users to put knowledge into practice

- *Whatever researchers and knowledge users identify as a workable strategy*

# Integrated KT

"An approach to doing research that applies the principles of knowledge translation to the **entire research process**"

"**involving knowledge users as equal partners**… will lead to research that is more relevant to, and **more likely to be useful to, the knowledge users**."

From: Guide to Knowledge Translation Planning at CIHR: Integrated and End-of-Grant Approaches

# Integrated KT Factors to Consider

From: Guide to Knowledge Translation Planning at CIHR: Integrated and End-of-Grant Approaches

- **Research question**
- **Research approach**
- **Feasibility**
- **Outcomes**

# Integrated KT Factors to Consider

From: Guide to Knowledge Translation Planning at CIHR: Integrated and End-of-Grant Approaches

- **Research question**
- Research approach
- Feasibility
- Outcomes

- Are you responding to a problem or knowledge gap identified by the knowledge user?
- Is the research question targeted to the knowledge user's context, but will still benefit similar audiences?

# Integrated KT Factors to Consider

From: Guide to Knowledge Translation Planning at CIHR: Integrated and End-of-Grant Approaches

- Research question
- **Research approach**
- Feasibility
- Outcomes

- Is the overall research design appropriate and sufficiently rigorous?
- What are your strategies for engaging knowledge users throughout?
- What is the relationship with the knowledge users?

# Integrated KT Factors to Consider

From: Guide to Knowledge Translation Planning at CIHR: Integrated and End-of-Grant Approaches

- Research question
- Research approach
- **Feasibility**
- Outcomes

- What are the risks to the project's success?
- Will the knowledge user be able to act of the outcomes?
- Can the project be done in the timeframe with the available resources?

# Integrated KT Factors to Consider

From: Guide to Knowledge Translation Planning at CIHR: Integrated and End-of-Grant Approaches

- Research question
- Research approach
- Feasibility
- **Outcomes**
  - How will the project impact practice?
  - How will you evaluate your iKT process?

# Integrated KT Factors to Consider

From: Guide to Knowledge Translation Planning at CIHR: Integrated and End-of-Grant Approaches

| | |
|---|---|
| **Research question** | Are you responding to a problem or knowledge gap identified by the knowledge user?<br>Is the research question targeted to the knowledge user's context, but will still benefit similar audiences? |
| **Research approach** | Is the overall research design appropriate and sufficiently rigorous?<br>What are your strategies for engaging knowledge users throughout?<br>What is the relationship with the knowledge users? |
| **Feasibility** | What are the risks to the project's success?<br>Will the knowledge user be able to act of the outcomes?<br>Can the project be done in the timeframe with the available resources? |
| **Outcomes** | How will the project impact practice?<br>How will you evaluate your iKT process? |

# Concepts/Approaches Similar to Integrated Knowledge Translation

- Collaborative research
- Participatory action research
- Community-based participatory research
- Co-production of knowledge
- Mode 2 research

Barwick 2010, Knowledge Translation Professional Certificate. Ontario: Hospital for Sick Children

Integrate your KT

# Other KT Terminology You Might See

- Knowledge Synthesis (CIHR Knowledge Translation)
  - Contextualizing and integrating research into a larger body of knowledge
- Knowledge Exchange (CIHR Knowledge Translation)
  - Interaction between knowledge users and researchers
  - Mutual learning through planning, producing, disseminating and applying knowledge
- Knowledge Brokering (Barwick 2010, Knowledge Translation Professional Certificate. Ontario: Hospital for Sick Children)
  - Linking researchers and decision-makers together and facilitating their interaction

# Other KT Terminology You Might See

- Translational Medicine (Barwick 2010)
  - Moving research from “bench to bedside”
- Technology Transfer and Commercialization (Barwick 2010)
  - Converting research into marketable goods and services
  - Commercialization is doing this for profit
- Implementation (Barwick 2010)
  - Process of integrating evidence-based interventions, and changing practice, in a setting

# Other KT Terminology You Might See

- Knowledge Management (Barwick 2010)
  - Organization, creation, sharing and flow on knowledge within an organization

# Resources

- **General**
  - Guide to Knowledge Translation Planning at CIHR: Integrated and End-of-Grant Approaches (CIHR)
- **Integrated KT**
  - A Guide to Researcher and Knowledge-User Collaboration in Health Research (CIHR)
- **Theories, Models, Frameworks**
  - Knowledge-to-Action (Knowledge Translation in Health Care: Moving from Evidence to Practice, Section 3, CIHR)
  - How to Choose a KT Theory, Model or Framework, Masood Khan, Centre for Healthcare Innovation, University of Manitoba

# So you want to do KT?

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# Why plan for KT?

1. If we don’t plan for it, it won’t happen
2. It’s often a funding requirement
3. To reach a range of knowledge users
4. To ensure results lead to benefits
5. To demonstrate return on investment
6. To advance science and practice

Source: ©Knowledge Translation Professional Certificate. Ontario: Hospital for Sick Children

# Knowledge Translation Planning Template©

**INSTRUCTIONS**: This template was designed to assist with the development of Knowledge Translation (KT) plans for research or non-research projects. It is universally applicable to health and other disciplines. Begin with box (1) and work through to box (13) to address the essential components of the KT planning process. Two e-learning modules are available for additional support: https://bit.ly/2rh0LZo

## (1) Project Partners

**Who could benefit from this evidence?**

- ❑ Researchers
- ❑ Practitioners/service providers
- ❑ Public
- ❑ Media
- ❑ Patients/consumers
- ❑ Decision makers
- ❑ Policy makers/government
- ❑ Private sector/industry
- ❑ Research funders
- ❑ Volunteer health sector/NGO
- ❑ Other:

► _____

## (2) Partner Engagement

**When will partner or knowledge user (KU) engagement happen?**

**Integrated KT**

- ❑ From idea formulation straight through
- ❑ After idea formulation & straight through

**End of Grant**

- ❑ At point of dissemination & project end
- ❑ Beyond the project

**Note:** Not all partners will be engaged to the same extent or at the same point in time. Some will be hired for specific activities.

## (3) Partner Roles

**What will partner(s) or KUs bring to the project? How will they assist with developing, implementing or evaluating the KT plan?**

_____

_____

_____

_____

_____

_____

**Note:** Capture their specific roles in letters of support to funders, if requested.

## (4) KT Expertise

**Do you require KT expertise and how will this be accessed?**

- ❑ Scientist(s) with KT expertise
- ❑ Consultant with KT expertise
- ❑ Knowledge broker/specialist
- ❑ KT supports within the organization(s)
- ❑ KT supports within partner organization(s)
- ❑ KT supports hired for specific task(s)

**Note:** If your KT involves *implementation* for practice or behaviour change, include an implementation specialist or scientist.

# Project Partners

- Who could benefit from this evidence?
- When partner engagement happen?
  (integrated or end-of-grant)
- What role will your partners have?

- Note: partners and knowledge users may overlap but are different

Source: ©Knowledge Translation Professional Certificate. Ontario: Hospital for Sick Children

# Knowledge Users

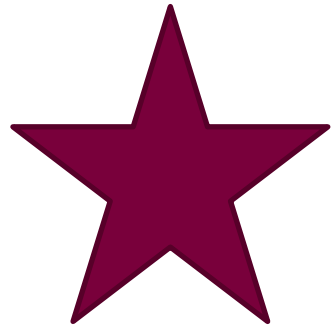
Who needs to hear your message?

Who is going to be interested in your findings?

- How well do you know your audience
  - What are the barriers for knowledge uptake
  - What are their preferred format and channels of communication?

Source: ©Knowledge Translation Professional Certificate. Ontario: Hospital for Sick Children

# Best Practice:
# Include knowledge users on your project team



- Improves the relevance of your research questions, methods, interpretation and knowledge translation
- Be clear about:
  - How you will engage KUs
  - What role they will play in research / KT

Source: Module 2: How to Prepare a KT Plan. Ontario: Hospital for Sick Children

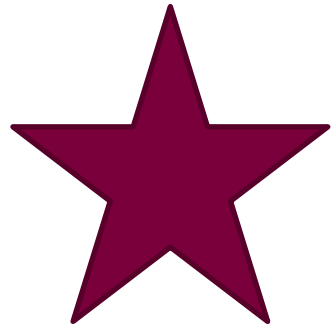
# Main Messages

- A clear concise, audience-focused set of statements that form ideas
- Not just data or findings but rather:
  - What the research results mean
  - Why are they important
  - What action should be taken as a result
- Tailored to the preferences and context of the knowledge user

- Note: depending on the stage of your research, you might not know your main messages when developing your KT plan

Source: ©Knowledge Translation Professional Certificate. Ontario: Hospital for Sick Children

# Best Practice:
# Tailor your main message



- Frame the findings with tailored messaging to address each knowledge user group's unique needs
- Know and understand your KUs perspectives and knowledge needs

Source: Module 2: How to Prepare a KT Plan. Ontario: Hospital for Sick Children

# KT goals

Source: ©Knowledge Translation Professional Certificate. Ontario: Hospital for Sick Children

# Mentimeter

- What do you need to know before deciding on appropriate KT strategies?

Go to www.menti.com and use the code 44 14 46

# KT Strategies

Generate awareness & interest

Share knowledge

Inform decision-making

**Role-based**

- Knowledge brokers
- Champions / opinion leaders
- Consultants
- Leadership
- Collaboration / partnership

**Educational**

- Materials (guides, toolkits, pamphlets)
- Policy brief
- Grey literature
- Publications

- Workshops, including webinars
- Conferences
- Professional development
- In service training
- Networks, communities
- Media

**Technological**

- Social media

**Arts-based KT**

Source: ©Knowledge Translation Professional Certificate. Ontario: Hospital for Sick Children

# KT Strategies

Inform research

**Role-based**

- Science collaboration
- Network

**Educational**

- Peer reviewed publication
- Conference
- Workshop
- Synthesis document
- Other document

**Technological**

- Social media

Source: ©Knowledge Translation Professional Certificate. Ontario: Hospital for Sick Children

# KT Strategies

Facilitate policy change

**Role-based**

- Collaboration / partnership
- Science policy fellowship, placement
- Knowledge broker

**Educational**

- Peer reviewed publications
- Grey literature
- Meeting dialogue

- Policy brief
- Evidence brief/synthesis
- Stakeholder position paper
- Rapid response synthesis

Source: ©Knowledge Translation Professional Certificate. Ontario: Hospital for Sick Children

# KT Strategies

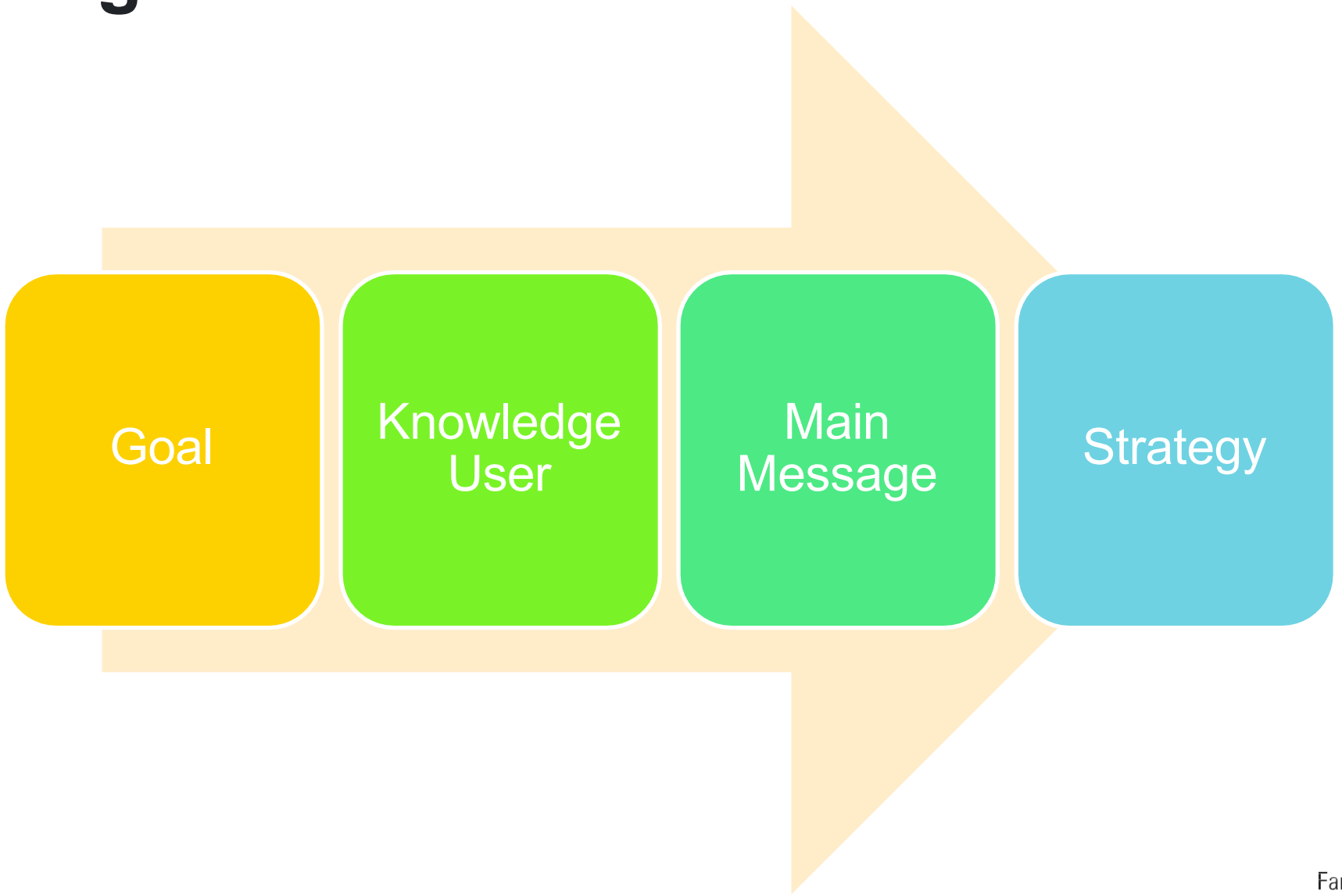
Facilitate practice change

Facilitate behaviour change

- If your KT goal includes practice or behaviour change you should begin with dissemination goals (share, inform) to set the stage and create buy-in
- Follow with an **implementation plan**

Source: ©Knowledge Translation Professional Certificate. Ontario: Hospital for Sick Children

# Create Alignment



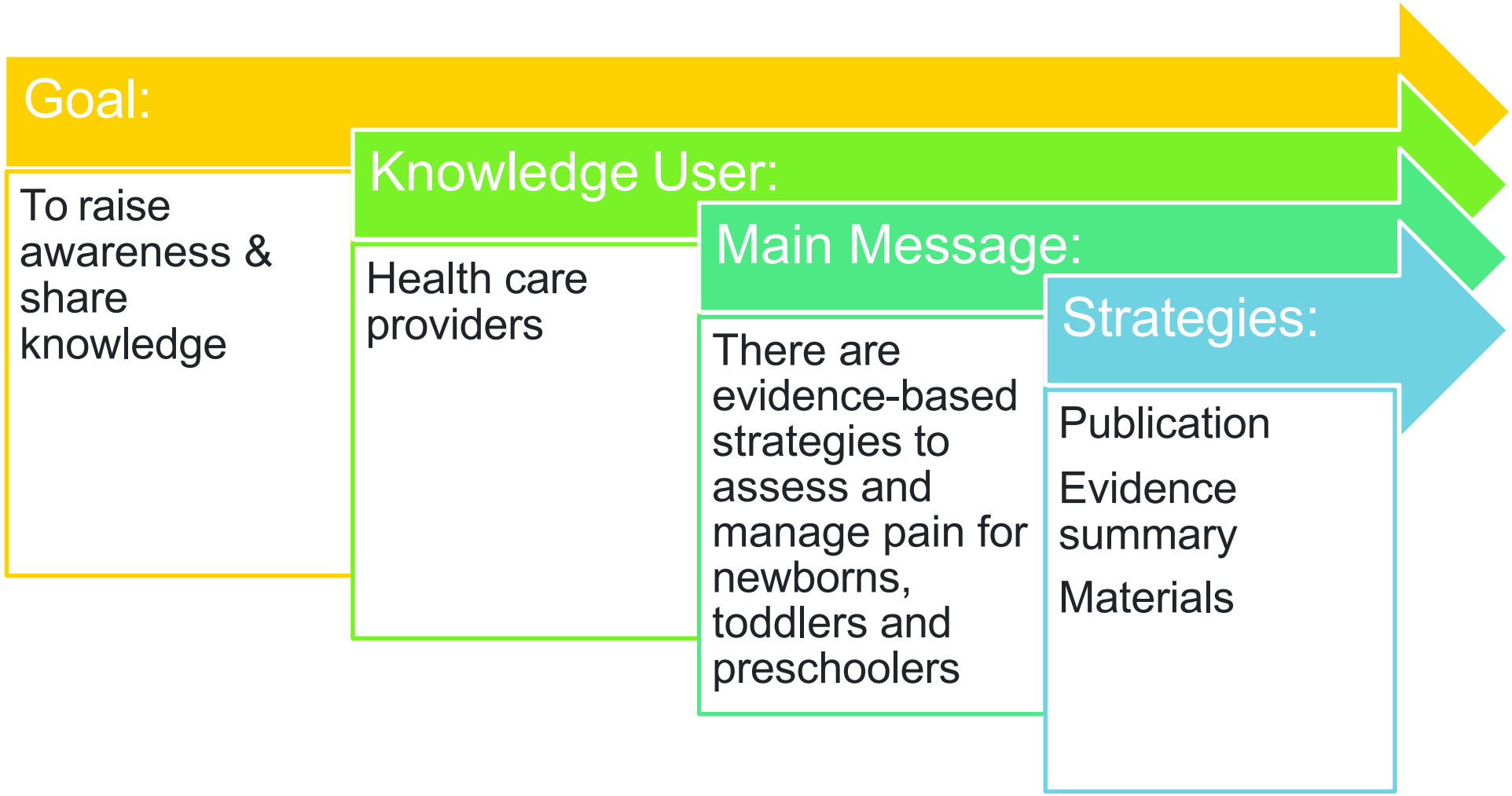
# Example

Your research team has completed a systematic review of pain assessment and management strategies for newborns, toddlers and preschoolers.

You know these evidence-based strategies are not currently used in practice in most hospitals.

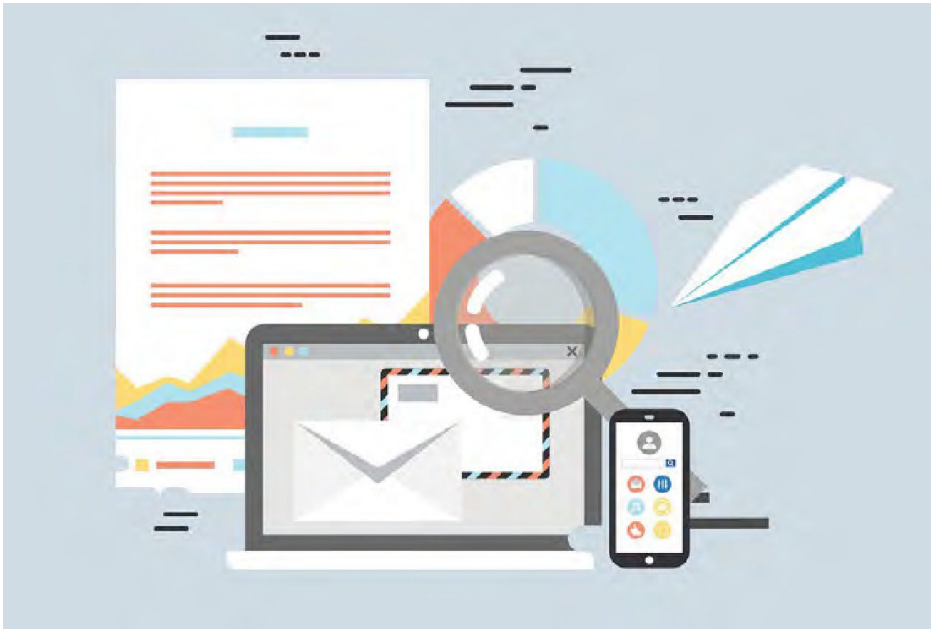
*What is your KT plan?*

# Example


Goal:
To raise awareness & share knowledge
Knowledge User:
Health care providers
Main Message:
There are evidence-based strategies to assess and manage pain for newborns, toddlers and preschoolers
Strategies:
Publication
Evidence summary
Materials

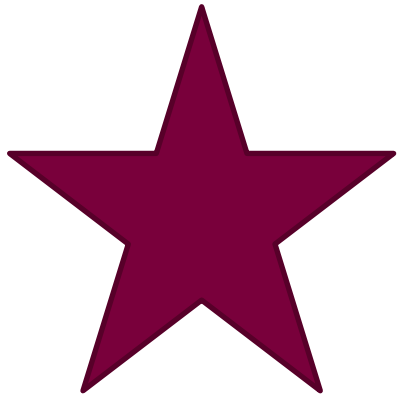
# Considerations for KT outputs

- Consider what type of information you're sharing
- Consider all communication channels and their relevance
- Make it a "sticky" idea
- Consider layering your KT deliverables



Source: ©Knowledge Translation Professional Certificate. Ontario: Hospital for Sick Children

# Best Practice:
# Assess how your knowledge users prefer to receive information



- Web
- Face-to-face, personal contact
- Listening to opinion leaders
- Reading publications

- Consider barriers to accessing information

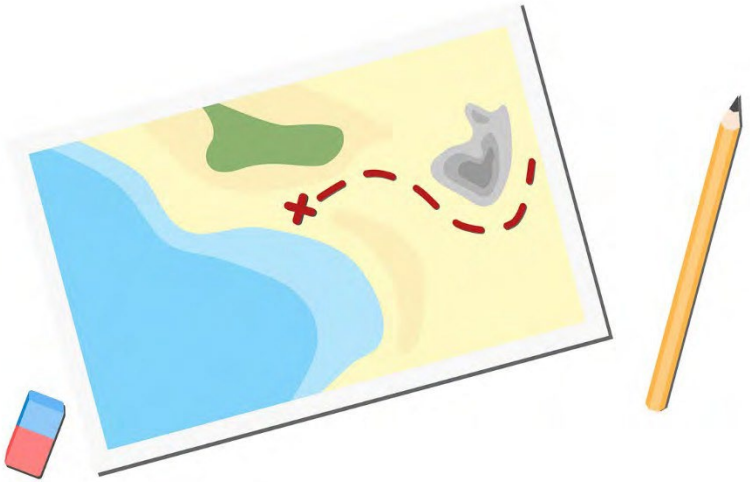
Source: Module 2: How to Prepare a KT Plan. Ontario: Hospital for Sick Children

# Other considerations

- KT expertise (step 4)
- Map out your process & procedures (steps 9 & 13)
- Evaluation (step 10) (coming in part II)
- Resources (step 11)
- Budget (step 12)

# How to use the KTPT

- The KTPT can be used as a discussion guide and map for building the KT plan
- In grant proposals
  - Helps to think through all potential partners & KUs before starting
- Before dissemination
  - Refine key messages & KT strategies based on results
- Best done as a team
- The KT Game



# Resources

- SickKids Knowledge Translation Planning Template

  Also stored in dfmresearch:\Training and Resources\Knowledge Translation

- SickKids Learning Institute Knowledge Translation Program

  Module 1: What is Knowledge Translation

  Module 2: How to Prepare a Knowledge Translation Plan

# Next time…

- Evaluating a KT plan
- Applying the steps to a scenario

# Questions?

- Mentimeter

Go to www.menti.com and use the code 44 14 46

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