

## Incorporating KT into your program of research

---

MSFHR requires applicants from all research disciplines to include KT activities as a component of their project proposal. KT is the broad range of activities meant to improve the use of research evidence in practice, policy or further research. As such, KT is not a separate plan but should be embedded within the full research cycle, as appropriate to the type of research, the stage the research is at, the expected research findings and target stakeholder(s).

KT activities will be evaluated as part of the standard evaluation criteria. In the case of KT science (*the study of KT as opposed to its practice as part of other research projects*) it will be evaluated with appropriate KT science criteria in addition to standard evaluation criteria.

### Why is KT important?

Health research evidence does not automatically translate into practice, policy or further research. Studies have shown only 14 percent of health research findings enter day-to-day practice, with a gap of 17 to 20 years separating discovery and implementation.<sup>1-3</sup> Consequences include sub-optimal or unnecessary care, overuse or premature adoption of certain treatments, and new research that may not address priorities. Closing the gap requires knowledge translation strategies that go beyond the provision of information by taking into account, for example, the influence of local context, relationships and interactions between researchers and research users,<sup>1</sup> and other forms of evidence (e.g. practice).

### Embedding KT activities into your research

The term knowledge translation is often interpreted to mean **ONLY** the dissemination of research results at the end of a project. ***In actuality KT can occur at different points over the course of the research project.***

Most researchers have engaged in **KT activities** as part of their current practice, sometimes without an awareness that it is KT. These activities may have included doing a presentation to an academic or non-academic audience, consultation with research-users about the direction of the research, convening an advisory committee, developing a community of practice, writing a report for decision makers, meeting with policy makers or talking to other researchers in the field about emergent findings.

---

<sup>1</sup> Research users are the target audience(s) of research evidence. Research users are experts on their needs, environment and local context. Including research users as members of the research team will ideally result in more relevant research evidence and an increased likelihood of its use for the purpose of making informed decisions about health policies, programs and/or practices. A research user may include, but is not limited to, other researchers, policy makers, health care practitioners, decision makers, health care administrators, educators, patient user group, or health charity, and the public. [Adapted from Canadian Institutes of Health Research's 'Guide to Knowledge Translation Planning at CIHR: Integrated and End-of-Grant Approaches'. [www.cihr-irsc.gc.ca/e/45321.html](http://www.cihr-irsc.gc.ca/e/45321.html). Accessed June 30, 2015

When considering appropriate KT activities to embed throughout your program of research it is important to consider the intended outcomes/impacts of individual activities towards research uptake. Examples include:

- Determining the research question with target user group(s)
- Informing future research
- Increasing knowledge and awareness of the evidence
- Changing health practices/behaviours
- Informing policy change
- Informing/changing technology
- Changing attitudes

## What are appropriate KT Activities?

KT activities should be determined based on their appropriateness given the research pillar, the research project, the stage of research and the target audience(s). For example, some research is not ready to be broadly communicated because it is exploratory or in the trial phase. When the body of evidence is not yet ready for application, conference presentations and publications in peer-reviewed journals are the most appropriate mode of communication to other researchers.<sup>4</sup>

Other research projects may be highly participatory and suitable for an [integrated knowledge translation approach](#). KT strategies and activities, in this case, will be dedicated to ensuring that research-users are collaborators at each stage of the research from the development of the research question(s) to dissemination and possibly implementation activities at the end of grant.

While KT activities that engage research users throughout the research project — and potentially beyond — are traditionally thought of as appropriate only to research pillars III and IV they can be of value across all pillars, for example, to ensure relevance of the research to the needs of the target audience. *Researchers in pillars I and II are therefore encouraged to draw on a full spectrum of KT activities, as appropriate.*

**Included below are examples of KT activities. Please note that these are only a few possibilities among many.**

### ***At the beginning of the research project***

- [Develop networks and partnerships with individuals and groups who are potential research users – these may include other researchers](#)
- Consult with stakeholders and/or research users to confirm the research question
- [Convene a community advisory group](#)
- [Create plain language communications about upcoming research](#)



***Over the course of the research project your KT strategy might include:***

- Participation of research users in the research cycle as team members
- Meeting with policy makers and other stakeholders about the progress of your research
- [Social media](#)
- [Blogging](#)
- [Café Scientifiques](#)

***At the end of your research project you might consider a:***

- Press release
- [Op/Ed](#)
- [Commercialization activity/patent](#)
- Educational material
- Tool kit
- Policy brief
- Presentation to academic/non-academic audiences

A good approach to ensuring appropriate KT is to revisit your plan for KT activities throughout and upon completion of the research and adjust, as necessary, as results evolve.

## Feasibility

Your research plan should clearly demonstrate that the researcher or researcher/research-user team has the requisite skills and resources to carry out planned KT activities. The plan should also be realistic in terms of the time it takes to complete these activities.

## KT science

KT science explores the theories, mechanisms, concepts and/or methods by which evidence is used in healthcare practice and policy. It deepens our understanding of what works when, how and with who.

KT science applications will be evaluated using additional criteria to the standard evaluation criteria. Ten key ingredients have been identified by Proctor et al.<sup>5</sup> that should be included in KT science applications:

- Clear evidence that a gap in evidence exists.
- Demonstrated evidence for the proposed services, program or treatment being implemented.
- Evidence to demonstrate the readiness of the setting for change specifically around adoption of the proposed evidence-based treatment.
- A clear conceptual framework/theory/model that will guide the research.

- An appropriate and feasible plan for engagement with research users.
- Clearly defined and conceptually justified strategies for the implementation of the intervention.
- Details of the researcher's experience with the study setting, the treatment whose implementation is being studied, and implementation processes.
- A methods section containing as much detail as possible, as well as a description of possible choice junctures and contingencies, should methods not work as planned.
- Clear descriptions of the key constructs to be measured corresponding to the overarching conceptual model or theory; a clear measurement plan for each construct including a description in the analysis section demonstrating how relationships between constructs will be tested.
- A description of how the implementation initiative aligns with policy trends that would support its sustainability.

Additionally, a description of how the program of research will add to the body of knowledge on effective KT. (e.g. new KT models and mechanisms, new questions about KT research methodology, and/or the effectiveness of processes to develop more effective KT strategies).

- 
1. Morris ZS, Wooding S, Grant J. The answer is 17 years, what is the question: Understanding time lags in translational research. *J Res Soc Med*. 2011;104:510-520.
  2. Grol R, Grimshaw J. From best evidence to best practice: effective implementation of change in patients' care. *Lancet*. 2003;362:1225-1230.
  3. Straus SE, Brouwers M, Johnson D, et al. Core competencies in the science and practice of knowledge translation: description of a Canadian strategic training initiative. *Implementation Sci*. 2011;6:127.
  4. Canadian Institutes of Health Research. Guide to Knowledge Translation Planning at CIHR: Integrated and End-of-Grant Approaches. [www.cihr-irsc.gc.ca/e/45321.html#a7](http://www.cihr-irsc.gc.ca/e/45321.html#a7). Published 2013.
  5. Proctor E, Powell B, Baunmann A, Hamilton A, Santens R. Writing implementation research grant proposals: ten key ingredients. *Implement Sci*. 2012;7:96-109.