

# KNOWLEDGE TRANSLATION (KT) AT CIHR

## DEFINITIONS

**Knowledge Translation:** Knowledge translation (KT) is also sometimes referred to as Knowledge Mobilization (KM or KMb) by other granting agencies. CIHR defines knowledge translation as “*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*” (Guide to KT Planning at CIHR, 2012; pg. 1). CIHR recognizes two different types of KT: integrated KT (iKT) and end-of-grant KT. Some CIHR grants specifically require the use of an iKT approach in the research plan.

- 1. Integrated KT:** In integrated KT, stakeholders or potential research knowledge users are engaged in the entire research process. By doing integrated KT, researchers and research users work together to shape the research process by collaborating to determine the research questions, deciding on the methodology, being involved in data collection and tools development, interpreting the findings, and helping to disseminate the research results. This approach, also known by such terms as *collaborative research*, *action-oriented research*, and *co-production of knowledge*, should produce research findings that are more likely to be relevant to and used by the end users.
- 2. End of Grant KT:** In end of grant KT, the researcher develops and implements a plan for making knowledge users aware of knowledge that was gained during a project. Therefore, end of grant KT includes the typical dissemination and communication activities undertaken by most researchers, such as conference presentations, publications in peer-reviewed journals, books, and book chapters. End of grant KT can also involve more intensive dissemination activities that tailor the message and medium to a specific audience such as summary briefings, interactive educational sessions, and the commercialization of scientific discoveries. See **APPENDIX A** for a (non-exhaustive) list of end-of-grant KT examples.

### Other Definitions:

**Knowledge Synthesis:** CIHR defines knowledge synthesis as contextualizing and integrating research studies within the large body of knowledge on the topic.

**Dissemination:** CIHR defines dissemination as the sharing of results by identifying the appropriate audience for the research findings and tailoring the message & medium to the audience.

**Knowledge Exchange:** CIHR defines knowledge exchange as the interactions between knowledge users & researchers resulting in mutual learning.

**Ethically Sound Application of Knowledge:** This is the iterative process by which knowledge is actually considered, put into practice, or used to improve health and the health system. These activities must be consistent with ethical principles and norms, social values and legal and other regulatory frameworks.

**Knowledge Users:** CIHR defines a knowledge-user as an individual who is likely to be able to use the knowledge generated through research to make informed decisions about health policies, programs and/or practices. A knowledge-user's level of engagement in the research process may vary in intensity and complexity depending on the nature of the research and his/her information needs. A knowledge-user can be (but is not limited to) a practitioner, policy-maker, educator, decision-maker, health care administrator, community leader, or an individual in a health charity, patient group, private sector organization, or media outlet.

## INTERGRATED KT – FACTORS TO CONSIDER

**iKT Premise:** Integrated KT (iKT) is an approach to doing research that applies the principles of knowledge translation to the *entire research process*. The central premise of iKT is that involving knowledge users (KUs) as equal partners alongside researchers will lead to research that is more relevant and more likely to be useful to the KUs. Thus, each step of the research process is an opportunity for collaboration.

**The Proposal:** When applying for a CIHR grant that requires an *iKT approach*, the proposal should:

- Demonstrate that the project has been shaped by the participating KUs & responds to KUs needs; and,
- Outline how the project responds to the objectives of the specific funding opportunity.

When putting together a research proposal with an iKT approach, *four factors* should be considered:

### 1. Research Question:

- The proposal must clearly describe the intent of the research project, including its objectives & an explanation of the knowledge to be translated.
- The proposal must clearly state how the project is responding to a problem and/or a knowledge gap that has been identified by KUs.
- The research question must be targeted to the KUs but the research should be transferable enough that similar audiences will benefit.

### 2. Research Approach:

- The methodology selected should clearly address the proposed research question.
- There should be strategies for sustaining the meaningful engagement of participating KUs; proposals should specify when, how, and for what purpose the researchers & KUs will meet.
- The project should demonstrate an established relationship with the participating KUs, as well as how the KUs will be involved in developing the research question, collecting & analyzing data, interpreting results, & disseminating findings.
- An end-of-grant KT plan must be included, detailing strategies that are appropriate to the project's goals & target audiences.

### 3. Feasibility

- The proposal should include evidence of an ongoing commitment from the organizations & KUs involved in the research project.
- The proposal should include a collaborative agreement outlining such things as access to data, the timing of the release of findings and IP, etc.
- The KUs should be in a position to influence decision-making authority to integrate knowledge into practice.

### 4. Outcomes

- The proposal should demonstrate how the research will have a demonstrable & sustainable impact on practice, programs, and/or policy that could eventually lead to a change in health outcomes.

## END-OF-GRANT KT – FACTORS TO CONSIDER

**Appropriateness:** With all KT activities, the most important consideration is *appropriateness*. Each discipline, research project, and knowledge user (KU) community is different. The key to a successful plan is to ensure that there is a match between the expected research findings, the targeted KU audience, and the KT strategies selected.

A single study can represent either the culmination of a large body of work ready for application or a nascent area of research where the findings may not yet be generalizable. In the latter case, KT efforts to apply the findings could result in more harm than good. Synthesized evidence is generally more robust and mature, thus usually constitutes the best knowledge for widespread application.

**A note on publications:** Conference presentations and publications in peer-reviewed journals have often been the principal modes of communication to researchers. These forms of KT remain the best approach for research at the early stages of discovery, when the knowledge has more relevance to academics who are contributing to a body of evidence that is not yet appropriate for application. When there are potential KU audiences beyond the research community, end-of-grant KT activities should be more intensive & emphasize *non-academic modes of communication*.

**The Proposal:** When putting together a proposal with an end-of-grant KT approach, five factors should be considered:

### 1. Goals

- The proposal must clearly state & justify the proposed KT goals (raising awareness or promoting action).

### 2. Knowledge User Audience

- Applicants should identify and justify the individuals and/or groups that should know about the research findings (NB: simply mentioning clinicians, managers, policy makers, etc. is not sufficiently specific).

### 3. Strategies

- Applicants should present strategies to reach identified audiences and deliver on their KT goals (including diffusion, dissemination, & application – defined below).
- Applicants should adapt the knowledge to audience needs & context of use.

### 4. Expertise

- Applicants should demonstrate that their team includes the appropriate level of expertise to complete the end-of-grant KT plan (e.g. if web-based tools will be used, demonstrate a team member has that expertise)

### 5. Resources

- Applicant should demonstrate that the KT plan can be accomplished with the resources available.

**Diffusion:** is the communication of information using delivery mechanisms for which little customization is required to reach target audiences that typically seek out research evidence (e.g. publications).

**Dissemination:** is more tailored than diffusion, in that the communication vehicle and messaging are adapted to the specific audience and/or context in which the knowledge will be used (e.g. workshops).

**Application:** is more tailored than dissemination, as it moves knowledge into use in cases where the strength of evidence is sufficient (e.g. commercialization).

## APPENDIX A – LIST OF END-OF-GRANT KT EXAMPLES

**Diffusion** - Diffusion can involve authoring or presenting:

- Conference presentations or publications
- Peer-reviewed publication (ideally in open access journals or archives)
- Non-peer reviewed publications (e.g. articles in popular media, practitioner magazines)
- Web-based resources
  - Websites
  - Wikis
  - Blogs
  - Podcasts

**Dissemination** - Dissemination can involve creating, developing, leading, or undertaking:

- Social media activities (e.g. Facebook, Twitter)
- Patient decision support aids (e.g. paper or web-based tools that provide info about options & outcomes)
- New educational materials or sessions
- Events or courses (e.g. conferences, symposia, continuing medical education)
- Interactive small-group meetings or workshops
- Plain-language summaries
- Summary briefings to stakeholders
- Reminders (e.g. electronic reminders in patient files, pocket cards)
- Media releases or outreach campaigns
- Networks & networking (e.g. creating or presenting to relevant networks)
- Patient-mediated intervention (an intervention that actively engages patients to improve their knowledge or health behaviour)
- Performance feedback
- Engaging knowledge brokers (an individual specializing in the communication of findings to knowledge users in their context or via emerging online technologies)
- Engaging champions & opinion leaders (e.g. the inclusion of informal leaders to assist with the sharing of knowledge or evidence)
- Financial intervention or incentive
- Arts-based KT activity (e.g. the development of a music video to share research message)
- Audit & feedback (e.g. chart review to determine number of diagnostic tests ordered)
- Communities of practice (e.g. communicating with a group of practitioners that meets to share work practices)

**Application** – Application can involve working with knowledge users to:

- Adapt knowledge for use
- Commercialize
- Identify barriers / supports to the use of findings
- Tailor messages and interventions to promote use
- Monitor knowledge use
- Evaluate outcomes
- Ensure sustainability

**\*\* For links to KT tools and resources for researchers, see the [URS resources](#) website \*\***