

## **Knowledge Translation**

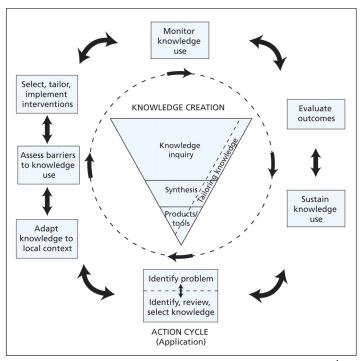


Figure 1: Knowledge to Action Cycle<sup>1</sup>

## What is Knowledge Translation?

In Canada, the terms 'knowledge transfer and exchange' and 'knowledge translation' are commonly used. KT has been adopted because it is within the mandate of the Canadian Institutes of Health Research (CIHR)<sup>2</sup>. CIHR defines KT "... the exchange, synthesis and ethically-sound application of knowledge – within a complex system of interactions among researchers and users – to accelerate the capture of the benefits of research for Canadians through improved health, more effective services and products, and a strengthened health care system"<sup>3</sup>. This definition is one of the most commonly accepted; the process of knowledge to action is illustrated in Figure 1.

KT can be thought of as the middle ground between two very different processes: research and action<sup>4</sup>. In health research, it is a process that actively moves research information to those who use it, to help people make decisions about health and health care. KT practices are those that enable people to engage in research; access, contextualize, and adopt

<sup>&</sup>lt;sup>1</sup> Straus, E., Tetroe, J., Graham, I., (2009). Defining knowledge translation. *Canadian Medical Association Journal* 181(3-4): 167.

<sup>&</sup>lt;sup>2</sup> Straus, E., Tetroe, J., Graham, I., (2009). Defining knowledge translation. *Canadian Medical Association Journal* 181(3-4): 165-168.

<sup>&</sup>lt;sup>3</sup> Canadian Institutes of Health Research. Knowledge Translation Strategy 2004-2009. <a href="http://www.cihr-irsc.gc.ca/e/26574.html#introduction">http://www.cihr-irsc.gc.ca/e/26574.html#introduction</a>

<sup>&</sup>lt;sup>4</sup> IDRC & SDC. (2008). The RM Knowledge Translation Toolkit: A Resource for Researchers. International Development Research Centre (IDRC) and the Swiss Agency for Development and Cooperation (SDC).

research evidence; help integrate it into practice and evaluate outcomes, as well as share lessons learned.

CIHR has adopted what is known as 'integrated knowledge translation'. Integrated KT is based on the foundation of community-based research principles, whereby the community/ stakeholders or potential research knowledge users are engaged throughout the entire research process. In this way, the affected stakeholders can work together with the researchers to shape the research process and ensure relevant research results. This could include collaboration on determining the research questions, deciding on the methodology, being involved in data collection and tools development, interpreting the findings, and helping disseminate the research results<sup>5</sup>. In this context, KT is considered a 'two-way street', with information/ knowledge moving from communities to researchers to help clarify context, issues and intended outcomes, in addition to cultural and other considerations specific to the community or community of practice. Information/ knowledge moves from researchers to communities or other knowledge users in terms of methodologies and considerations for applying results, as well as the results themselves.

## **Principles of Knowledge Translation:**

Effective Knowledge Translation is based on three principles:

- **Knowledge.** KT efforts at any level depend upon a robust, accessible and contextualized knowledge base.
- **Dialogue**. The relationships at the heart of KT can only be sustained through regular, two-way dialogue and exchange.
- **Capacity.** Researchers, decision-makers and other research-users require a strengthened skill-base to create and respond to KT opportunities<sup>6</sup>.

The Arctic Institute of Community-Based Research also includes the following principles in their practice for KT:

- Indigenous Knowledge: Is a central element of Aboriginal approaches to health, wellness, and healing. KT practices must therefore be grounded in the knowledge system of a particular Indigenous community to be effective.
- **OCAP:** Upholding the principles of OCAP (Ownership, Control, Access, Possession) is key for ensuring that people's rights are respected, for securing community benefits, and building research capacity.
- Participatory and Collaborative Practices: Participatory research, professional networks, communities of practice, inter-professional collaborations can help build lasting relationships, facilitate knowledge sharing, and tailor research to users' needs.
- Systematic Reviews and Other Decision Aids: Systematic reviews and other decision

<sup>&</sup>lt;sup>5</sup> Canadian Institutes of Health Research. *More About Knowledge Translation at CIHR*. <a href="http://www.cihrirsc.gc.ca/e/39033.html">http://www.cihrirsc.gc.ca/e/39033.html</a>

<sup>&</sup>lt;sup>6</sup> IDRC & SDC. (2008). The RM Knowledge Translation Toolkit: A Resource for Researchers. International Development Research Centre (IDRC) and the Swiss Agency for Development and Cooperation (SDC).

- aids are tools that provide timely, relevant, and comprehensive research information to policy makers, health practitioners, and the public at large.
- **Information Technology:** Provides an important means to disseminate and access research, connect people with one another, and facilitate knowledge sharing.
- Interaction with a Change Agent: A knowledge broker, for example, improves research utilization. These individuals can provide guidance or give support to the use of research evidence.
- **Training:** Training decision-makers in knowledge translation can enhance leadership skills and strengthen organizational or community capacity to use research more effectively.

## **Models of Knowledge Translation:**

While there are many perspectives and models for KT, the following four (as described by Lavis et al. 2006) are useful examples: push, pull, exchange and integrated<sup>7</sup>.

- **Push model:** Focus on the researcher, whose knowledge is the principal catalyst for change. Push techniques include developing attractively packaged tools (e.g. syntheses, policy briefs, videos) that make research processes and findings more accessible to decision-makers and other research-users. Push efforts are ideal for situations where decision makers may need information on a particular topic.
- **Pull model:** Focus on research-users, with their desire for more information or skills being the main driver of action. Decision-makers may seek evidence on a particular topic, conduct a review of programs or services to determine whether new evidence warrants changes, or participate in a training course on how to critically appraise evidence or on understanding how and where to use research evidence in decision-making.
- Exchange model: Focus on partnerships, with both researchers and research-users collaborating for mutual benefit. Such partnerships may be short or long-term, may occur at any point in the research or policy process, and may include such activities as priority-setting exercises, collaborative research projects, and creating knowledge systems (e.g. databases).
- Integrated model: The use of a national or regional-level institution who work to
  foster linkages and exchange between the researcher, policy, and public dialogue (e.g.
  National Collaboration Centres).

<sup>&</sup>lt;sup>7</sup> IDRC & SDC. (2008). The RM Knowledge Translation Toolkit: A Resource for Researchers. International Development Research Centre (IDRC) and the Swiss Agency for Development and Cooperation (SDC).