



CIHR IRSC

Integrated Knowledge Translation at CIHR



PRAM *Participatory Research at McGill*

Participatory Research @ Lunch

January 11th 2008

Ian D Graham PhD

Vice President, Knowledge Translation Portfolio

Canada⁺



What is KT at CIHR and why is it important?

What is Integrated KT and how does it compare to Participatory Research (PR)?

Funding Opportunities in Knowledge Translation at CIHR



What is "Knowledge Translation"?

Knowledge translation is about:

- Making users aware of knowledge and facilitating their use of it to improve health and health care systems
- Closing the gap between what we know and what we do (reducing the know-do gap)
- Moving knowledge into action

Knowledge translation **research** (KT Science) is about:

- Studying the determinants of knowledge use and effective methods of promoting the uptake of knowledge



What do we mean by Knowledge Translation?

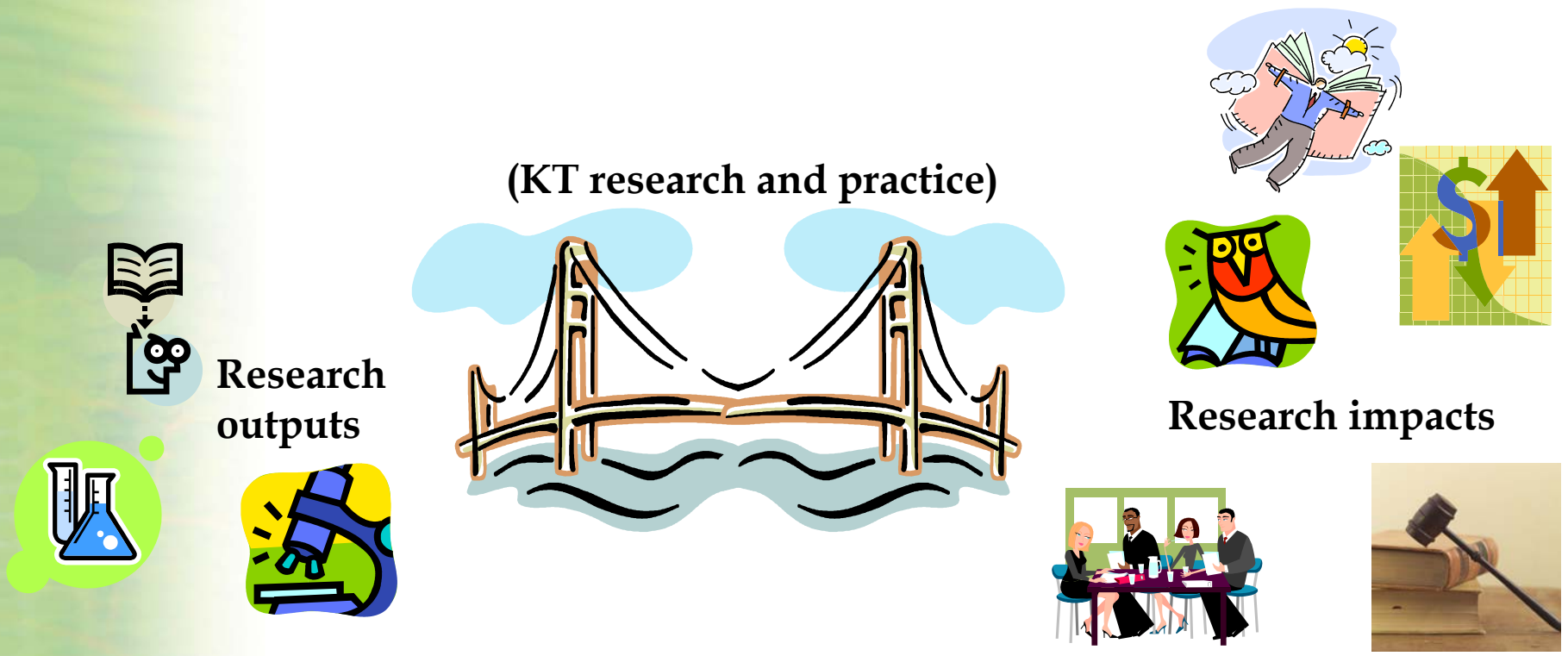
Knowledge Translation is something that most researchers are already doing, to some extent.

Researchers who:

- publish their research findings
- tell other researchers about their work
- present their work at conferences

.....are engaged in at least one part of the process we call “knowledge translation”: disseminating the results of their work to their peers

Knowledge Translation is the bridge between discovery and impact



KT is about making a difference



Why is KT important?

Clinical research is consistently producing new findings that may contribute to effective and efficient patient care

The findings of such research will not change population outcomes unless health services and health care professionals adopt them in practice.

Ward, Grimshaw, Eccles. *Oxford Handbook of Public Health*, 2006.



Why is KT important?

Consistent evidence of failure to translate research findings into clinical practice

- 30-45% patients do not get treatments of proven effectiveness
- 20–25% patients get care that is not needed or potentially harmful

(McGlynn et al, 2003; Grol R, 2001; Schuster, McGlynn, Brook, 1998;)

Cancer outcomes could be improved by 30% with optimum application of what is currently known

10% reduction in cancer mortality with widespread use of available therapies

(CSCC 2001; Ford et al, 1990)



CIHR IRSC

Why is KT important?

Knowledge Translation is part of our mandate

2. In this Act, "Minister" means the member of the Queen's Privy Council for Canada who is designated by the Governor in Council for the purposes of this Act.

ESTABLISHMENT

3. (1) There is hereby established a corporation, to be known as the Canadian Institutes of Health Research, in this Act referred to as the "CIHR".

(2) The CIHR is an agent of Her Majesty in right of Canada.

(3) The head office of the CIHR shall be at the place in Canada that is designated by the Governor in Council.

OBJECTIVE

4. The objective of the CIHR is to excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system, by

(a) exercising leadership within the Canadian research community and fostering collaboration with the provinces and with individuals and organizations in or outside Canada that have an interest in health or

2. Dans la présente loi, « ministre » s'entend du membre du Conseil privé de la Reine pour le Canada chargé par le gouverneur en conseil de l'application de la présente loi.

CONSTITUTION

3. (1) Est constituée une personne morale appelée Instituts de recherche en santé du Canada, ci-après dénommée IRSC.

(2) IRSC est mandataire de Sa Majesté du chef du Canada.

(3) Son siège social est situé au lieu du Canada fixé par le gouverneur en conseil.

MISSION

4. IRSC a pour mission d'exceller, selon les normes internationales reconnues de l'excellence scientifique, dans la création de nouvelles connaissances et leur application en vue d'améliorer la santé de la population canadienne, d'offrir de meilleurs produits et services de santé et de renforcer le système de santé au Canada, et ce par :

a) l'exercice d'un leadership dans les milieux canadiens de la recherche et l'encouragement à la collaboration avec les provinces ainsi que les personnes et orga-

« minist

Instituts
recherch
santé du
Canada

Statut

Siège so

Mission

The revised working definition:

Knowledge translation is 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.

This process takes place within a complex system of interactions between researchers and knowledge users which may vary in intensity, complexity and level of engagement depending on the nature of the research and the findings as well as the needs of the particular knowledge user.



Knowledge Translation at CIHR

While we encourage all researchers to translate the results of their studies for the appropriate audiences, they, at the same time, need to be thoughtful about their message and the appropriate intensity of translation activities they should use.



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Two broad categories of KT at CIHR



- **Integrated KT**- KT woven into the research process
- **End of grant KT** (which could be simple **diffusion**, **dissemination** or a more intensive **application** of research findings)



What is integrated KT?

- Participatory Research is ***always*** integrated KT
- But not all Integrated KT is PR – our criteria for IKT is less stringent than the criteria for PR



What is integrated KT?

- a way of doing research
- collaborative action-oriented research, co-production of knowledge
- involves engaging and integrating knowledge users into the research process

Knowledge users can be:

- Policy makers, decision makers, research funders, the public, industry, clinicians, the media
- Investigators from different disciplines, teams, countries



What is integrated KT?

Knowledge users and researchers (knowledge creators) work together to:

- shape the research questions
- interpret the study findings and craft messaging around them
- move the research results into their practice

In our view – this is the **minimum** requirement for conducting integrated KT



What is integrated KT?

In addition, knowledge users and researchers (knowledge creators) *can* work together to:

- shape the research questions
- decide on the methodology
- help with data collection and tools development
- interpret the study findings and craft messaging around them
- move the research results into practice
- widespread dissemination and application



How does integrated KT compare to PR?

Researchers and knowledge users jointly:

- shape the research questions
- decide on the methodology
- help with data collection and tools development
- interpret the study findings and craft messaging around them
- move the research results into practice
- widespread dissemination and application

Researchers and participating community (knowledge users) negotiate:

- research goals and objectives
- methods and duration of the project
- terms of the community-researcher partnership
- degree and type of confidentiality
- strategy and content of the evaluation
- where data are filed, current interpretation of the data, future control and use of data and human biological material
- methods of resolving disagreements with collaborators
- incorporation of new collaborators into the research team
- joint dissemination of results in lay and scientific terms to communities, clinicians, administrators, scientists and funding agencies

From: Macaulay et al, BMJ, 1999, 319, 774-778

A broad spectrum of activities including:

Diffusion

- Conference presentations
- Peer reviewed publications (Open access policy)
- Non-peer reviewed publications
- Website postings



End of grant KT: Dissemination

Also includes:

Dissemination

(activities that tailor the message and medium to a specific audience)

- End of grant report to funders
- Summary/briefings to stakeholders
- Educational sessions with patients, practitioners and/or policy makers
- Engaging end users in developing & executing dissemination/implementation plan
- Commercialization efforts
- Tools creation
- Media engagement
- Use of knowledge brokers



Application

(moving research into practice in cases where the strength of evidence is sufficient)

- Understanding the context/environment where research is to be applied
- Identifying barriers to the uptake of the research findings
- Adapting knowledge, tailoring messages and interventions to promote uptake
- Evaluating the implementation process and outcomes
- Working within a conceptual framework

NB knowledge application is often a fundamental component of integrated KT



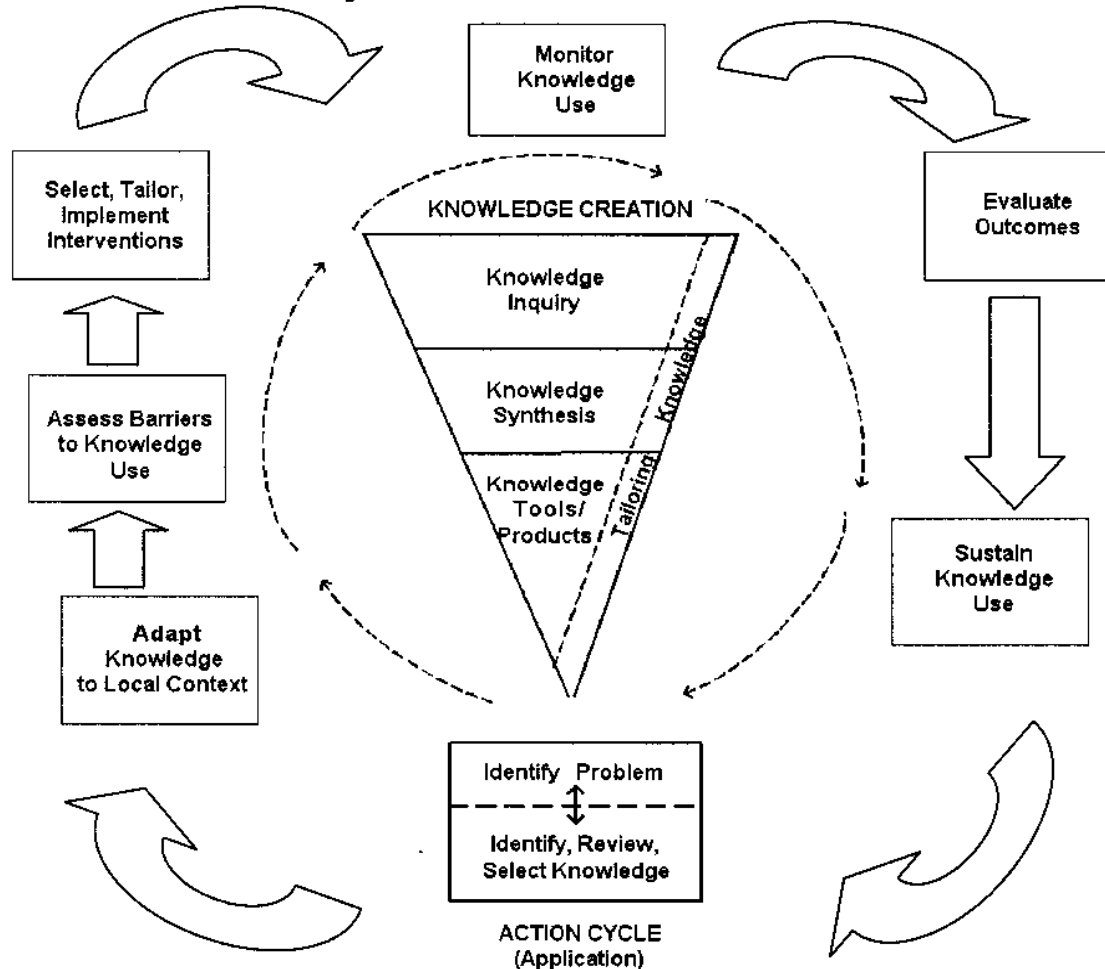
The Knowledge to Action Cycle

From :

Graham et al: Lost in Knowledge Translation: Time for a Map?

A useful tool/schematic for describing the many components of the KT process

Figure 1: KNOWLEDGE TO ACTION PROCESS



Should every researcher be involved in integrated KT and/or the application of their research findings?

NO

For many researchers, diffusion and dissemination of research results to the **appropriate** audience (this includes other researchers) is usually sufficient

The more intense knowledge translation efforts required to **apply** the results of research should only take place when there is a strong evidence base that justifies application

Not every researcher needs to be an application/implementation expert – specialists in applied research/KT can help with moving research into practice.

But every researcher needs to think about the potential **impact** of their work.

Warning: Beware of the “KT Imperative”

The “KT imperative” is the perceived need to do *everything* to encourage *everyone* to apply their research findings

Results from a single research study should be contextualized within a synthesis of global research results before **extra-ordinary** dissemination or implementation efforts are undertaken – hence the importance of synthesis

We need to bring common sense as well as academic rigour to bear on our decisions about the degree and intensity of KT activities warranted by a single research study – i.e. judicious KT



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at CIHR**



Knowledge Translation Funding Opportunities

| | |
|-----------------|---|
| KT Focus | Funding mechanisms |
| Synthesis | CIHR funds the Canadian Cochrane Network and Centre KT Synthesis Operating grants competition - reviewed by a panel of KT experts |
| Integrated KT | Partnerships in Health System Improvement (PHSI) KT Synthesis Knowledge to Action (end of grant KT) Strategic research funded through institutes Proof of Principal (POP) Meeting, Planning and Dissemination grants to develop collaborative relationships and grant proposals |
| End of Grant KT | Allowable expense as part of a grant application Knowledge to Action (integrated KT) KT Supplement Grants Proof of Principal (POP) Meeting, Planning and Dissemination grants to disseminate results |
| Science of KT | Operating grants competition- KT Panel, Strategic calls from the KSE Branch on theories and methods of KT |

Training and Personnel Awards

Knowledge Translation priority awards:

- New Investigator Award
- Fellowship Award
- Doctoral Research Award

Health Research Communications Award
Science to Business Program (S²B)



KT Supplement Grant



Up to \$25 000 for KT activities at the end of a CIHR grant when it is appropriate to disseminate the results of the research beyond the traditional scientific community and using methods supplementary to and in addition to publication in peer reviewed journals.

Will run three times a year:
February 1 June 2 and October 1,

Some examples of eligible activities:

- Dissemination of research results through specialized publications
- Maintenance/updating of websites
- Production and distribution of written materials in various formats
- Travel costs for series of meetings/presentations (linkage and exchange)
- Hiring of a knowledge broker or implementation facilitator/change agent
- Development of plain language summaries
- Development of knowledge exchange tools e.g. educational CD ROMs, decision support tools



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CIHR's KT Website

For information about KT at CIHR and relevant references please refer to

<http://www.cihr-irsc.gc.ca/e/29418.html>



CIHR IRSC



Thank you

igraham@cihr-irsc.gc.ca



CIHR Open Access Policy

All research papers – funded in whole or in part by CIHR – must be freely accessible through the Publisher's website, the PubMed Central, or an institutional repository as soon as possible, and in any event within six months of the official date of publication

Grant recipients are reminded that sharing publication-related materials with others where allowable and reasonable, is considered good research practice.

Grant recipients must deposit bioinformatics, atomic, and molecular coordinate data into the appropriate public database immediately upon publication of research results

Retain original data sets for a minimum of five years

Acknowledge CIHR funding reference number (FRN) in publications

How Can Grantees Make Publications Open Access?

Route 1

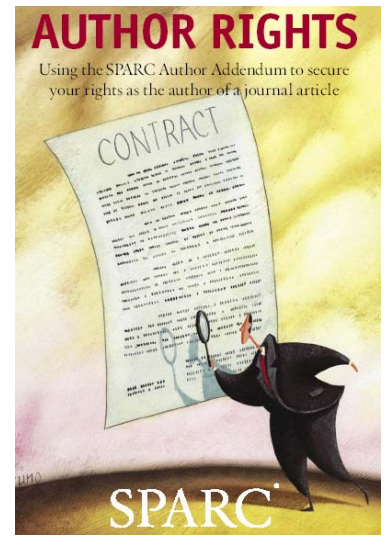
- Publish in Open Access/hybrid journal

Route 2

- Publish anywhere - but archive the peer-reviewed manuscript (not the publisher's version, but the author's final peer-reviewed version) and deposit in PMC or an institutional repository within 6 months

If the publisher does not offer these routes then

- Author can make a revision to the journals copyright statement (using language prepared by CIHR) or attach an author addendum to see if the publisher will allow archiving
- Still no. This is a valid reason for not being able to adhere with the policy that must be stated in the Final Report.



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Research Reporting System

CIHR has an advisory committee and a working group developing end of grant reporting requirements

We have not had a systematic method for collecting, synthesizing and reporting health research results and their impact

The following process questions are still being considered

- who will be required to submit a report (e.g. all types of grants?)
- when the report should be submitted (e.g. 6, 12 or 18 months after end of the grant)
- what processes and policies will be required to ensure that researchers do submit complete reports in a timely fashion

Plan is to collect information on:

1. Nominated Principal Investigator (NPI) Profile
2. Basic grant information (including other sources of funding)
3. Research and KT Practices
4. Research Results
5. Research Capacity and Training
6. Advancing Knowledge
7. Informing Decision Making

Currently being pilot tested

A Guide for Assessing Health Research Knowledge Translation Plans

(Goering, Ross, Jacobson and Butterill Report commissioned in 2005 by CIHR and 3 other agencies)

SickKids Knowledge Transfer Assessment Tool for Scientists

(Barwick, Butterill, Lockett, Buckley & Goering (2005) The Hospital of Sick Children/ Centre for Addiction and Mental Health, Toronto, Ontario, Canada)

Two Knowledge Translation Planning Tools for Stroke Research Teams

(Landry, Lyons, Amara, Warner, Ziam, Halilem, Kéroack)

<http://kuuc.chair.ulaval.ca/ctci/>

From Research to Practice: A Knowledge Transfer Planning Guide

(Reardon, Lavis, Gibson)

http://www.iwh.on.ca/assets/pdf/IWH_kte_workbook.pdf

Implementing Research: A guideline for health researchers

(Health Research Council of New Zealand)

<http://www.hrc.govt.nz/assets/pdfs/publications/HRC%20Implementing%20guidelines%20FINAL%20.pdf>