

# How are Canadian Health Researchers Promoting the Uptake of their Findings?



*Ian Graham, PhD,  
School of Nursing, UOttawa;  
Clinical Epidemiology Program, OHRI*

# Acknowledgements

## The Team

- Jeremy Grimshaw
- Jacqueline Tetroe
- Nicole Robinson

## Funding

- CIHR grant # 95999

# Introduction

- Substantial resources are invested in health research to improve the health and well being of Canadians
- Their health and well being cannot improve if research results are not transferred to the appropriate audience(s)

## Objectives

1. Determine what knowledge translation activities Canadian health researchers use to promote their findings and the extent to which researchers engage in these activities.
2. Identify gaps in target audiences whom researchers report need to know about their findings but do not.

# Methods

## **Study design:**

- Cross-sectional self-administered mail survey of 368 Canadian health services and population health researchers

## **Population studied:**

- Applied health researchers funded by: CHSRF, NHRDP, MRC, CIHR
  - Grants awarded between 1995 and 2001 and completed by 2004

# Results: Response Rate

- **368 surveyed**  
55 ineligible (44 ongoing at time of survey)
- **313 eligible grants**  
228 completed surveys (73% response rate)

# Results: Grant Demographics

(n=228)		Percentage
<b>Language</b>	English	82%
	French	18%
<b>Year granted</b>	1995-96	26%
	1997-98	39%
	1999-2000	28%
	2001	7%
<b>Agency</b>	CHSRF	11%
	NHRDP	43%
	MRC	32%
	CIHR	14%

# Results: Researcher Demographics

		Frequency	Percent
<b>Gender</b>	Male	118	53%
	Female	105	47%
<b>Academic Position</b>	Full Professor	106	47%
<b>Professional training</b>	Social Scientist	77	34%
	Epidemiologist	72	32%
	Specialist Physician	56	25%
	Other	36	16%
	Other Health Professional	22	10%
	Biostatistician/Methodologist	22	10%
	Nurse	18	8%
	Primary Care Physician	17	8%
<b>Number of peer-reviewed grants in past 5 years as PI</b>		Mean = 5.5	

# How important are your research results in terms of: (CIHR mandate)

Question	Percentage
Creating new knowledge (n=228)	80% Quite/very important
Potential to improve the health of Canadians (n=226)	46% Quite a lot/great deal of potential
Potential to create more effective health services (n=226)	57% Quite a lot/great deal of potential
Potential to create products to improve health (n=223)	19% Quite a lot/great deal of potential

# Usefulness of study's findings to:

	<b>Percentage Quite/very useful</b>
Decision makers	75%
Health care practitioners	68%
The Canadian public	49%

# Types of Diffusion Activities Done

Diffusion activity	Percentage
Conference presentation	86%
Peer reviewed pub	80%
Final report to funders	53%
Summary to agency	45%
Non-peer reviewed pub	36%
Website posting	23%
Purchasing reprints	16%
<b>Mean # of diffusion activities</b>	<b>3.4</b>
<b>% doing at least 1 activity</b>	<b>96%</b>

# Publication activity (n=228)

- **Journal articles: 421 (375 published, 46 accepted)**  
another 75 submitted
- **Books/chapters: 42**
- **Reports/manuals/guides: 83**
- **Letters/editorials/commentaries/ newspaper articles: 32**
- **Thesis: 10**
- **Abstracts/presentations: 539**

# Types of Dissemination Activities Done

<b>Dissemination activity</b>	<b>Percentage</b>
Summary to policy makers	25%
Summary to practitioners	21%
Press releases	18%
Summary to patients/consumers	16%
Newsletter	15%
Targeted mailings/e-mails	13%
<b>Mean # dissemination activities</b>	<b>1</b>
<b>% doing at least 1 activity</b>	<b>48%</b>

# Types of Implementation Activities Done

Implementation activity	Percentage
Educational sessions w/ practitioners	43%
Stakeholder involvement	41%
Media involvement	23%
Tools creation	21%
Educational sessions w/ policy makers	19%
Educational sessions w/ patients	15%
Involving consumers in KT activities	15%
Use of knowledge brokers	9%
<b>Mean # implementation activities</b>	<b>1.9</b>
<b>% at least 1 activity</b>	<b>74%</b>

# Resources devoted to KT activities

	<b>Total for 198 grants</b>	<b>Mean per grant</b>
<b>Budget requested</b>	<b>\$46,595,559</b>	<b>\$235,331</b>
<b>Amount awarded</b>	<b>\$37,780,064</b> <b>(19% cut in budget)</b>	<b>\$190,808</b>
<b>Amount from budget spent on KT</b>	<b>\$ 927,182</b> <b>(2.5% of awarded budget)</b>	<b>\$ 4,683</b>
<b>Amount spend on KT from other sources</b>	<b>\$ 727,172</b>	<b>\$ 3,672</b>
<b>Total spent of KT</b>	<b>\$ 1,654,354</b> <b>(equivalent to 4% of awarded budget)</b>	<b>\$ 8,355</b>

Doing a Lot with a Little:  
Amount spent on KT and number of KT activities  
(n=197)

<b>Total Amount spent on KT per grant</b>	<b>Mean # KT activities done</b>
<b>0 (n=60) [30%]</b>	<b>4.9</b>
<b>1-4,000\$ (n=52) [26%]</b>	<b>5.2</b>
<b>4,000-10,000\$ (n=52) [26%]</b>	<b>6.6</b>
<b>10,000+\$ (n=33) [18%]</b>	<b>8.2</b>

# Predictors of KT activity: Regression Analysis

Predictors	# KT Activities done
<b>CHSRF</b>	<b>4.3 (p=.000)</b>
<b>NHRDP</b>	<b>3.1 (p=.000)</b>
<b>MRC</b>	<b>1.1 (p=.12)</b>
<b>CIHR (reference category)</b>	
<b>Importance/usefulness of study findings (7 items- 5 point scale)</b>	<b>1.1 (p=.000)</b>
<b>\$ spent on KT (\$10k increments)</b>	<b>.57 (p=.000)</b>
<b>Female</b>	<b>0.90 (p=.04)</b>
<b>Male (reference category)</b>	
<b>Adjusted R<sup>2</sup></b>	<b>.32</b>

# Who needs to be aware of your findings and who is aware?

Target group	Need %	Aware %	Gap %
Federal/Provincial Policy makers	74	36	38
Health care professional bodies	61	26	35
Patients/consumers	58	24	35
Health care practitioners	80	51	29
Health care managers	60	31	29
Community/municipal orgs	46	23	23
The media	46	23	23
Researchers/academics	94	80	14
Study stakeholders	47	40	7

# Confidence in ability to engage in KT activities

<b>Confidence to engage in KT activities with:</b>	<b>Percentage Very/quite Confident</b>
Researchers/academics	94%
Study stakeholders	84%
Health care practitioners	79%
Health professional bodies	55%
Patients/consumers	54%
Health care managers	53%
Federal/provincial policy makers	48%
Media	45%
Community/municipal organizations	43%

# Conclusions

- **Canadian researchers are doing KT**
  - Diffusion, dissemination and implementation activities
- **Researchers have limited resources for KT**
  - Many doing KT without any resources
- **Number of KT activities related to**
  - agency funding the grant
  - perceived importance of findings
  - \$ spent on KT
  - being female

## Conclusions Cont'd

- **Gaps in KT exist despite KT efforts with:**
  - policy makers, patients/consumers, health care professional bodies, health care professionals and managers
- **Researchers least confident in their abilities to engage in KT activities with these audiences.**

# The Qualitative Component

- Survey results indicated that researchers generally do not feel that their target audiences know about their research results

## Objective:

- To identify researchers' perceptions of barriers and facilitators to knowledge translation activities.

# Methods

## Study Design

- Analysis of open-ended questions from the survey
- Semi structured telephone interviews with a purposive sub-sample of 13 respondents.

# What do researchers see as **barriers** to uptake of study results?

- **Researcher barriers**

- Researchers lack KT skills
- KT is time consuming & researchers lack time

- **Institutional barriers**

- Lack of reward and recognition from universities

# Barriers cont'd

- **Funding agency barriers:**
  - Lack of funding for KT activities
- **Decision/policy maker barriers**
  - Political ideologies may prevent PMs/DMs from wanting to hear research findings
  - Difficulties stimulating audience interest
  - Frequent staff turn-over at policy level

# What do researchers feel does/would **facilitate** uptake of study results?

- **General facilitators:**
  - Receiving a summary of effective KT practices
  - Presentation opportunities – formal and informal
- **Funding agency facilitators:**
  - Receiving adequate funding and time for KT from funding agencies
  - Receiving a funding agency produced newsletter or pamphlet templates
  - Receiving funding for presentations

# Facilitators cont'd

- **Access to KT specialist:**
  - Presence of a KT resource person at funding agency or institution
- **Researcher related facilitators:**
  - Dedication and experience of PI and research team
- **Decision maker facilitators:**
  - Having HCP association as partner, and then having them help to identify appropriate audience(s)
  - Having relationship with audience
  - Receptor capacity (PM/DMs interested in research findings)
  - Stakeholder involvement/other links with PM/DMs
  - Widespread interest in research topic
    - Relevance of research topic

# Conclusions: Qualitative

- Although researchers agree that the importance of KT is increasingly being recognized, they also agree that
  - KT is extremely time and resource consuming, and there are few incentives/rewards for it
  - they lack the knowledge/skills\* to effectively engage in KT outside of their own peer group (researchers)
    - \*ie summary of effective practices; KT resource person at the agency or institution; help in writing for a lay audience; training in KT
  - Too many aspects of interacting with and informing policy makers are beyond the control of the researcher

# Overall Implications

- Researchers need help to push findings to, or create a pull for their findings, by policy makers/managers, patients, professional bodies, health care providers
- They lack the skills, experience and confidence to be able to interact productively with many audiences.
- The nature of the expectations/requirements that a given funding agency has of their funded researchers influences the type of the KT activities engaged in by the researchers.

Ottawa Health Research Institute



IRSO

Institut de recherche en santé d'Ottawa



***Thank You!***

AN INSTITUTE OF • UN INSTITUT DE

