Challenges and Opportunities in Knowledge Translation Research with Older Adults

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Learning Objectives

By the end of this presentation, you will be able to:

1. Demonstrate familiarity with language and approaches to knowledge translation (KT) research in Canada;

2. Discuss the role of KT in enhancing healthcare and social support of older adults;

3. Consider challenges, solutions, and experience gained by researchers in coordinating a KT study evaluating late-life suicide prevention training workshops for healthcare and social service providers.
Question

• How long does it take for a clinical innovation to bridge the gap between the research world (either pure or applied) and standard clinical practice?

• Consider a novel intervention, or a novel assessment tool or technique, or a new instrument or piece of apparatus.
Answer

• Conventional wisdom says roughly 20 years.
Answer

• Conventional wisdom says roughly 20 years.

• This is not good.

• Despite efforts of the professions to ensure continuous improvement and life-long education (via continuing professional education, in-service presentations, workshops, conferences, scientific meetings, trainings, sabbaticals, and the like), providers tend to do what they learned when they underwent their professional training.
As a result, governments, granting agencies, and healthcare researchers have increased their focus on moving new knowledge, developed through innovative research, out into clinical services and routine healthcare practice.

This has been variously described as:

- Translational research
- Knowledge translation
- Knowledge to action (or knowledge for action)
- Research to practice
- Bench to bedside
Additional KT Terminology

- Knowledge Synthesis
- Knowledge Exchange
- Linkages
- Knowledge Utilization
- Diffusion
- Implementation
- Transfer
• These terms tend to be used interchangeably in the KT field; however, it is important to know that many are derived from diverse theoretical perspectives or disciplines/fields, and that using one term instead of another might be confusing or lead people to assume that you are making certain assumptions.

• It should be safe to use KT as an overarching term.

• **Note:** although KT shares some features with program evaluation (and can involve program evaluation), they are not one and the same thing (just as some KT researchers employ RCT methods, but KT ≠ conducting a randomized trial).
• In Canadian healthcare, we tend to use “Knowledge Translation” (KT) as an umbrella term encompassing a wide variety of activities and approaches aimed at bridging the gap between novel research findings and their healthcare application.

• This reflects language used by the Canadian Institutes of Health Research (CIHR).

• CIHR has a Vice President of KT and provides support for KT through awards, grants, and meeting support (including café scientifiques).
At CIHR, knowledge translation (KT) is defined 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.

www.cihr-irsc.gc.ca/e/29418.html
“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.”

http://www.cihr-irsc.gc.ca/e/39033.html
CIHR Additional Definitions

• “Synthesis”-“Contextualization and integration of research findings of individual research studies within the larger body of knowledge on the topic. A synthesis must be reproducible and transparent in its methods, using quantitative and/or qualitative methods.” (e.g., Cochrane review, meta-analysis, systematic review, consensus panel)
**CIHR Additional Definitions**

- “Dissemination” - Involves identifying the appropriate audience and tailoring the message and medium to the audience.
  
  (e.g., stakeholder summaries, patient education sessions, research papers and presentations, media releases and interviews, listserves, RSS feeds, social networking, and developing and releasing treatment guidelines)

- Some KT bodies provide weekly e-mail summaries or physical mailings to members, or online postings of digests of recent research abstracts on a given topic
CIHR Additional Definitions

• “Exchange” - The exchange of knowledge refers to the interaction between the knowledge user and the researcher, resulting in mutual learning.”

• They quote the Canadian Health Services Research Foundation in defining knowledge exchange as “collaborative problem-solving between researchers and decision makers that happens through linkage and exchange. Effective knowledge exchange involves interaction between knowledge users and researchers and results in mutual learning through the process of planning, producing, disseminating, and applying existing or new research in decision-making.”
• CIHR further differentiates between what they call “end of grant” KT and “integrated” KT

• End of grant KT comprises the status quo, or typical way that researchers translate knowledge into action—by way of standard dissemination practices (final study report to funding agency, conference presentations, media releases, and peer-reviewed publication)
• Integrated KT appears truer to what many would consider “KT research” and involves recognizing a gap in knowledge, devising a method for beginning to fill that gap, and then doing so, testing out one’s assumptions and knowledge “products” with the knowledge end-users or stakeholders (preferably from the very start), then iteratively refining one’s knowledge products, delivering/disseminating them, assessing their impact, revising them further given stakeholder feedback, and so on.
• Integrated KT ideally involves and integrates the knowledge users throughout the process, from the stage of needs assessment to selection of methods, tools, and approaches, collection and analysis of data or information, interpretation of findings, and dissemination of the results (e.g., participatory action research)
KT Action Categories (from Graham & Logan, 2004)

- Identify the problem
- Identify the need for change
- Identify change agents
- Identify target audience
- Assess barriers
- Review evidence/literature or develop innovation
- Link(age)
- Implement
- Evaluate (Develop evaluation plan, Pilot-test, Evaluate the process, Evaluate outcomes)
- Maintain change
- Disseminate
Some Examples of KT

- Meta-analyses and systematic review articles
- Consensus statements for reporting of health research
- Training workshops and clinical supervision
- Patents and development of innovative tools/products
- Scientific consensus meetings and knowledge exchanges
- Media interviews or presentations
- Community presentations
- Public service announcements
- Psychoeducation
- Health screening fairs
- Clinical practice guidelines
- “Routine clinical treatment”
An Example of KT Research: The Canadian Coalition for Seniors’ Mental Health (CCSMH) Late-Life Suicide Prevention Knowledge Translation Project
Epidemiologic Considerations

• The World Health Organization estimates that approximately **One Million** lives are lost to suicide worldwide every year.

• Older adults have high rates of suicide.

• As of 2001, there were 1.6 million adults 65+ in Ontario or 12.8% of the population.

• The number of older adults in Ontario may rise to 3.6 million (22.2%) by 2031.

• “Baby boomers” have high rates of suicide.
Some Barriers to Late-Life Suicide Prevention

- Suicide is a low base-rate occurrence.
- Older adults often do not directly access mental healthcare services.
- They also often under-report symptoms.
- There is a paucity of highly trained care providers.
- Access to care barriers abound.
- Competing demands for precious resources.
- Paucity of relevant research.
- Absence of treatment guidelines.
Modes of Prevention

• Public health initiatives (Universal)
  • UK gas ovens/paracetamol packaging
  • Gotland study
  • Suicide prevention strategies/practice guidelines

• Community initiatives (Selected)
  • Gatekeeper model (Spokane, Florio et al.)
  • Outreach initiatives (Japan, Oyama et al.)
  • Telehealth/Telecheck (Italy, DeLeo et al.)

• Clinical initiatives (Indicated)
Birth and Formation of the CCSMH

- CAGP created the Millennium Project-1999
  “To improve the mental health of the elderly in LTC through education, advocacy and collaboration”

- National Symposium 2002: Gaps in Mental Health Services for Seniors in LTC Facilities
  “To engage all relevant stakeholders in order to identify and implement action plans to improve mental health for seniors living in LTC facilities”
To promote the mental health of seniors’ by connecting people, ideas & resources

- Education
- Advocacy / Public awareness
- Research
- Best Practices - Assessment & Treatment
- Family Caregivers
- Human Resources
Linkage with Stakeholders/Collaborators

CCSMH Steering Committee Members
  Alzheimer Society of Canada
  Canadian Academy of Geriatric Psychiatry
  Canadian Pensioners Concerned
  Canadian Association of Social Workers
  Canadian Caregiver Coalition
  Canadian Geriatrics Society
  Canadian Health Care Association
  Canadian Mental Health Association
  Canadian Nurses Association
  Canadian Psychological Association
  Canadian Society of Consultant Pharmacists
  College of Family Physicians of Canada
  Public Health Agency of Canada (Advisory)
Maturity and Growth: Key Accomplishments

- Invitation to Present at Senate Hearings on MH x2
- National Guidelines Project
- National Conferences
  - September 25th & 26th 2005 (CCSMH meeting, Ottawa)
  - November 2006 (CAGP/CCSMH meeting, Toronto)
  - September 24th & 25th 2007 (CCSMH meeting, Toronto)
  - September 2008 (CAGP/CCSMH meeting, Vancouver)
  - September 2010 (CCSMH meeting, Halifax)
- CCSMH Research Initiative
  - Research Workshop with CIHR 2004
  - Seniors’ Mental Health Research Network
CCSMH Guideline Project: Setting the Context

- Funding awarded in Jan. 2005 by Public Health Agency of Canada, Population Health Fund

- Goal: To lead and facilitate the development of evidence-based recommendations for best practice guidelines in areas of seniors’ mental health
Setting the Context: Review of CCSMH Guideline Project: Guideline Topics

- Assessment & Treatment of Delirium
- Assessment & Treatment of Depression
- Assessment & Treatment of Mental Health Issues in LTC (with a focus on mood & behaviour)
- Assessment and Prevention of Suicide
# Guideline Development Group Members: Suicide

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Discipline</th>
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<tbody>
<tr>
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<td>Ms. Fae Jackson</td>
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<td>Ms. Simone Powell</td>
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<td>Senior Policy Analyst</td>
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Objectives

- To identify existing high-quality guidelines
- To facilitate collaboration of key leaders to review selected guidelines
- To facilitate a process of creating guidelines / recommendations ("meta-guidelines")
- To disseminate the product for review / analysis
- To revise and disseminate for implementation
Setting the Context: Review of CCSMH Guideline Project: Principles for Creating Guidelines

- Evidence-based
- Broad in scope
- Reflective of the continuum of settings for care
- Clear, concise, readable
- Practical
- Cultural diversity, user friendly, caregivers, gender, special populations
Setting the Context: Review of CCSMH Guideline Project: Scope of all Guidelines

- Interdisciplinary/inter-professional
- Older adults (65+)
- Continuum of healthcare settings
- Should address variations across Canada
- Cross referencing between guidelines
- Consumer input and involvement necessary
- Gaps in knowledge to be identified
• The CCSMH guidelines focus on:
  • The language of Suicidology (Glossary)
  • The epidemiology of late-life suicide
  • Suicide risk and resiliency factors
  • Detection, assessment and diagnosis
  • Treatment and risk management
  • Systems of care
  • Ethics, confidentiality, and research needs
Review of Process: The Beginning

Approval for Guideline Project from Pop. Health, Fund, Health

Determine & Formalize Group Members and Consultants for each group
- Determined criteria for selection
- Gathered Names and Contacted individuals
- Formalized membership

Guideline Topics Formalized

Determine & Formalize Co-Leads for each group

Formalize Guideline Development Groups
- CCSMH – overall facilitation
- Co-chairs – primarily responsible for all aspects of guidelines
- Group Members – 4-8 per guideline
- Consultants – called on as appropriate
Review of Process: Phase I & II

**Phase I: Group Admin. & Preparation for Draft Documents (Apr. –June 2005)**

- Meetings with Co-leads & Workgroups
- Creation of
  - Terms of Reference
  - Guiding Principles & Scope
  - Guideline Framework Template
- Comprehensive Literature and Guideline Review
- Identification of review tools and grading of evidence tools

**Phase II: Creation of Draft Documents (May-Sept. 2005)**

- Meetings with Co-leads & Workgroups
- Shortlist, Review & Rate Literature and Guidelines
- Summarize evidence, gaps and recommendations
- Create draft documents
- Review and revise draft documents and recommendations
Suicide Guidelines: Tools

- To evaluate existing guidelines & to formulate CCSMH guidelines: AGREE Tool

- Levels of Evidence: Shekelle et al. (1999)
Guidelines: Categories of Evidence:

Ia Evidence from meta-analysis of randomized controlled trials
Ib Evidence from at least one randomized controlled trial
IIa Evidence from at least one controlled study without randomization
IIb Evidence from at least one other type of quasi-experimental study
III Evidence from non-experimental descriptive studies, such as comparative studies, correlation studies and case-control studies
IV Evidence from expert committees reports or opinions and/or clinical experience of respected authorities

Shekelle et al 1999
Guidelines: Strength of Recommendation

A. Directly based on category I evidence
B. Directly based on category II evidence or extrapolated recommendation from category I evidence
C. Directly based on category III evidence or extrapolated recommendation from category I or II evidence
D. Directly based on category IV evidence or extrapolated recommendation from category I, II, or III evidence

Shekelle et al 1999
Suicide Guidelines: Review of Guidelines Utilized

Suicide Guidelines: Review of Guidelines Utilized Cont’d

- Royal College of Psychiatrists (2003). Assessment following self-harm in adults
Suicide Guidelines: Review of Primary Literature Cont’d

- January 2000 to June 2005
- Suicide Information & Education Collection (SIEC)

General impressions …while there is a lot of good work out there, it is surprising how so much work still doesn’t answer a lot of our questions and how much practice remains “opinion-based”
Review of Process: Phase III & Phase IV

Phase III: Dissemination & Consultation

Stage 1: To guideline group members (May – Dec. 2005)

Stage 2: CCSMH Best Practices Conference Participants (Sept 2005)


• Feedback from external stakeholders reviewed & discussed
• Achieving consensus within guideline groups on recommendations & content
• Final revisions
Review of Process: Phase V & VI

Phase V: Completion of Final Recommendations & Guideline Document (Jan. 2006)

Phase VI: Dissemination & Evaluation
- Translation, Formatting, Printing
- Website, Hard Copy Mailout
- Dissemination and Knowledge Exchange Team
CCSMH Guideline Implementation

- Presentations/Education Sessions
- Regional/Provincial Task Force Groups
- Individual Organization/Team Commitment and Collaborative Review & Implementation
- Research
- Endorsements
- Knowledge Exchange Committee
- Personal Commitment from our Leaders
• How do we ensure that guidelines and other KT tools are actually used?
• How do we ensure that guidelines and other KT tools are actually used?

• Dissemination plays an important role

• However, incorporating “stakeholders” or “end-users” in the KT process from the very start can increase your odds of successful dissemination (or transfer, or dispersion, and ultimate utilization) tremendously
• It’s not always done well
• Some are resistant to “turn over the keys” or to share leadership in research/KT projects
• The language and approaches of participatory action research can be very unfamiliar or uncomfortable for researchers and clinicians
• The language and approaches of researchers and clinicians can be similarly foreign (or discomfiting) to members of the public and to some frontline providers
• This can be true in KT research and reviews
VISIT OUR WEBSITE TO DOWNLOAD THE GUIDELINES
WWW.CCSMH.CA

To promote seniors mental health by connecting people, ideas and resources.

Promouvoir la santé mentale des personnes âgées en reliant les personnes, les idées et les ressources.

CCSMH
Canadian Coalition for Seniors Mental Health

CCSMPA
Coalition Canadienne Pour la Santé Mentale des Personnes Âgées

English
Welcome

Français
Bienvenue
Selected Examples of Work on CCSMH Guideline Implementation
Publications


Conference Presentations

- American Association of Suicidology
- Canadian Academy of Geriatric Psychiatry
- Canadian Association on Gerontology
- Canadian Association for Suicide Prevention
- Canadian Coalition for Seniors’ Mental Health meetings
- Canadian Psychiatric Association
- Canadian Psychological Association
- Distress Centres of Ontario Conference
- Ontario Psychological Association
Feedback has been very positive from groups in Canada, the U.S.A., and Internationally.

The suicide prevention guideline has been endorsed by the Canadian Association for Suicide Prevention.

Included in the SPRC/AFSP Best Practice Registry.
Next Steps: Implementation

- How can I integrate the CCSMH suicide prevention toolkit into my clinical practice?

- How can I integrate the CCSMH suicide prevention toolkit into my healthcare education and training work?

- What additional materials or support do I need to integrate and implement the CCSMH suicide prevention toolkit into my work?
Additional funding was provided by the Public Health Agency of Canada in late 2007 for additional guideline dissemination and implementation.

The CCSMH Suicide Prevention Knowledge Translation Project has expanded the toolkit available to clinicians, researchers, and educators on late-life suicide and its prevention, consistent with educational recommendations in the guideline.
Toolkit Components

- CCSMH guideline “The Assessment of Suicide Risk and Prevention of Suicide”
- An abbreviated version of the guideline in a special supplement to the Canadian Journal of Geriatrics
- The clinician pocket-card “Suicide Assessment & Prevention for Older Adults”
- An interactive case-based DVD
- Facilitator’s Guide
- Guide for family members of older adults
**Next Steps**

- CCSMH late-life suicide prevention KT study
- Involves assessing potential knowledge transfer and attitudinal change associated with attending training workshops on late-life suicide prevention
  - Developing new tools
  - Evaluating/refining new tools
  - Administering workshops
  - Assessment and follow-up
- Challenges and opportunities have cropped up
- Possibly develop additional video trainings
- Update guideline
Potential Challenges in KT Research

- Contrary to one perception, KT research is not easy or for those squeamish about research
- It has not been traditionally viewed as “sexy”
- Not all KT projects involve seasoned researchers
- Involves many processes, moving pieces, & shifting targets
- Enthusiasm is not always present, or sustainable
- Competition from the next or last “produit du jour”
● Rapid turn-over in healthcare and social service settings

● Priorities change—research rigor is often not persuasive

● Independence of observations can be challenging

● $ to “back fill” provider time

● Need for novel assessment approaches/tools

● Challenge to some accepted research practices (e.g., RCT)

● Yet it is critical and increasingly seen as necessary

● When done well it can be highly impressive and effective
• After all, shouldn’t the interventions and approaches used on a daily basis in our healthcare system be based on tried-and-true methods?

• Shouldn’t we feel comfortable knowing that when we (or our loved ones) seek out care, we will receive the best available approaches that are current and relevant?

• Shouldn’t our healthcare system strive for continual evolution and improvement and sharing of the best available information?

• Shouldn’t our healthcare system incorporate all of these elements?
Thank You
Acknowledgements

- CIHR New Investigator Award, Betty Havens KT Award

- Canadian Coalition for Seniors’ Mental Health (CCSMH)

- National Initiative for the Care of the Elderly (NICE)

- Ontario Ministry of Research and Innovation, Early Researcher Award

- Public Health Agency of Canada (PHAC)
Resources

Edited Books:


Resources

Websites:

• http://www.cihr-irsc.gc.ca/e/29418.html
• http://www.cihr-irsc.gc.ca/e/41933.html
• http://www.cihr-irsc.gc.ca/e/41954.html
• http://www.consort-statement.org/
• http://www.equator-network.org/home/
• http://www.agreecollaboration.org/instrument/
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• www.sprc.org
• http://www.crise.ca/index_eng.asp