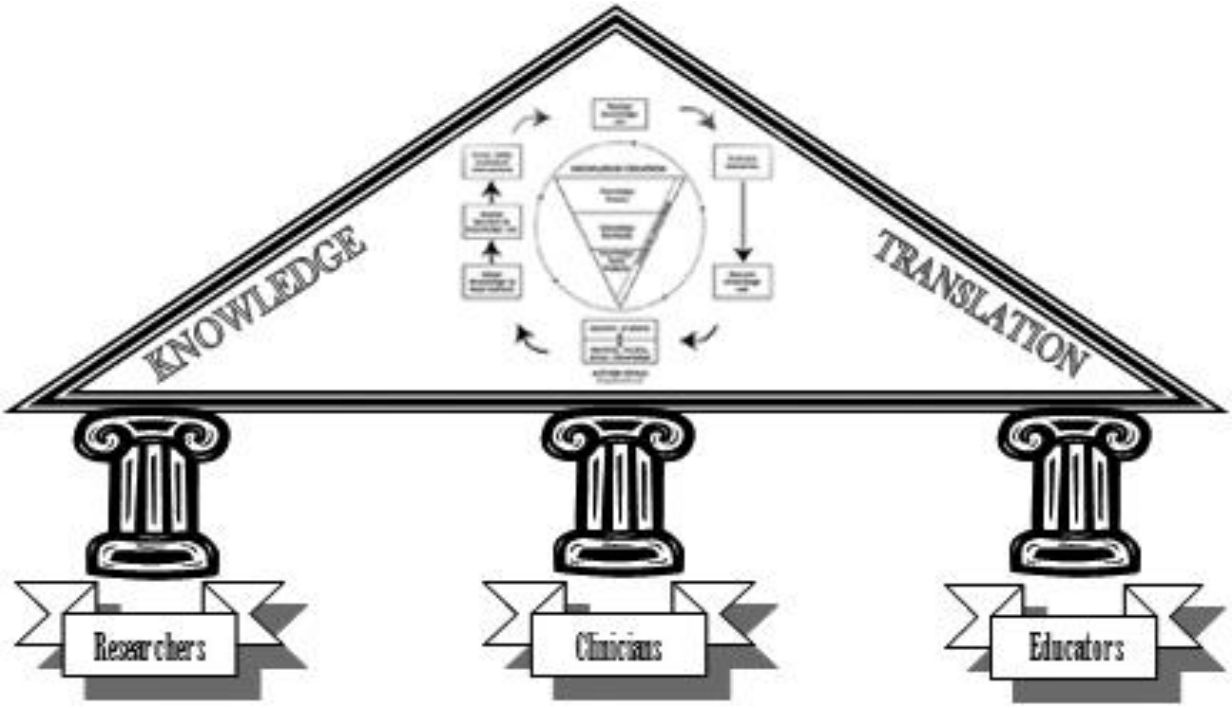
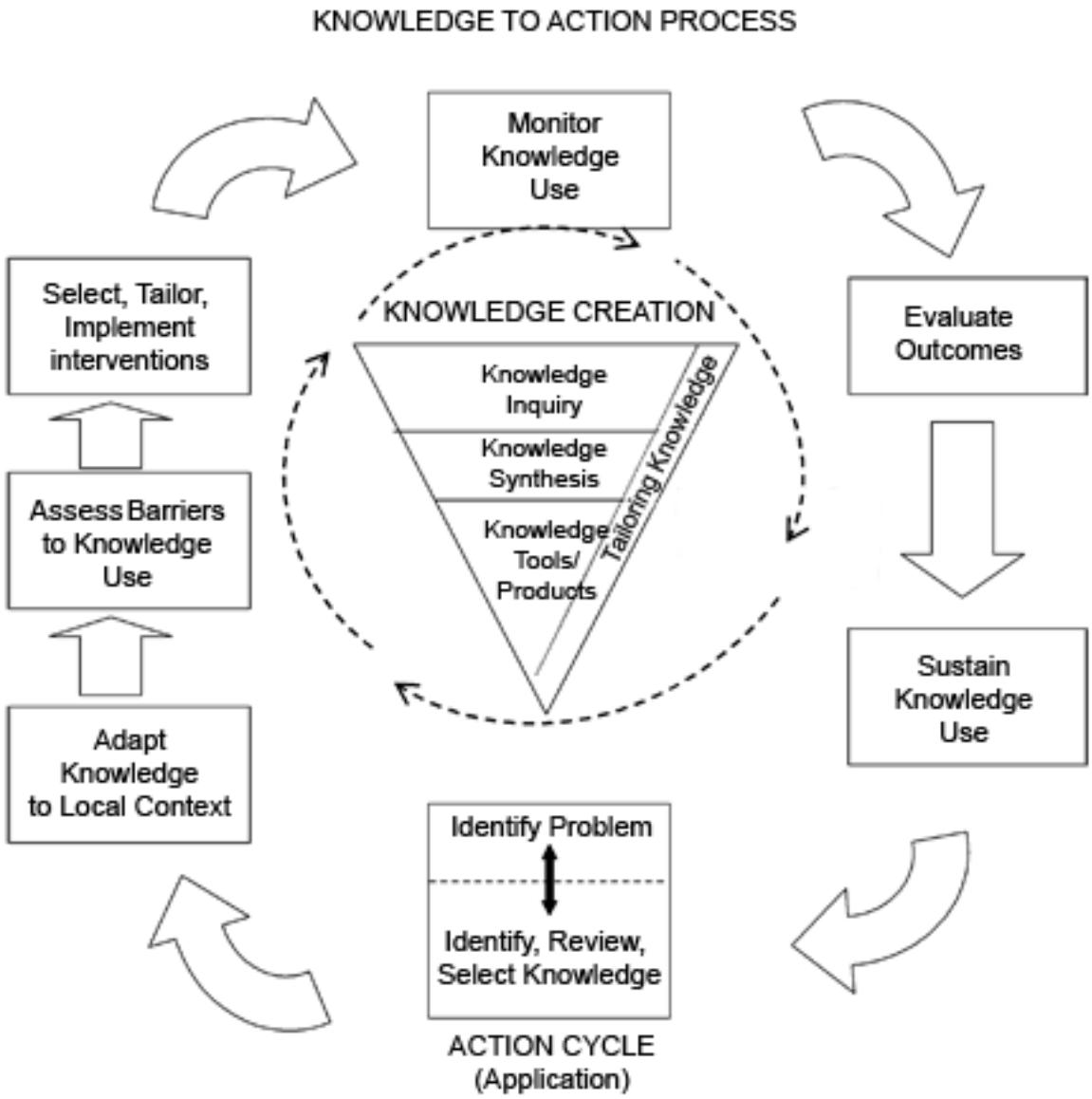
# Edith Strauss Rehabilitation Research Project
## (in Knowledge Translation)

## PROPOSAL GUIDELINES

## Due: December 15, 2014 by 11:59 pm






Graham, I. D., J. Logan, et al. (2006). "Lost in knowledge translation: time for a map?" J Contin Educ Health Prof **26**(1): 13-24.

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## Application Checklist

- ☐ The research question concerns knowledge translation in rehabilitation; either an end-of-grant knowledge translation research project or an integrated knowledge translation project.
- ☐ The research proposal is based on a knowledge translation model.
- ☐ The principal investigator holds a McGill University appointment with the School of Physical and Occupational Therapy
- ☐ The principal investigator has formal research training (PhD or equivalent)
- ☐ The project leader is a clinician, clinician manager or a doctoral/masters/professional student in Rehabilitation Sciences
- ☐ The 1-page mid-term written report must be submitted by August 1, 2015
- ☐ The project leader will be available to **orally present** the project and its developments during the Interactive Project Presentations Day in May 2016
- ☐ The 2-page final written report must be submitted by March 1, 2016
- ☐ The project leader will prepare a **poster presentation** of their final study results and will display their poster at the subsequent Interactive Project Presentations Day in May 2017. Cost for poster printing will be covered by the Edith Strauss Rehabilitation Research Projects (i.e. this cost should not be included in the budget)
- ☐ Completed application form including, the title of the project, the names and affiliations of the investigators, and the contact details of the team members.
- ☐ Research proposal, no longer than 3,000 words
- ☐ Budget justification
- ☐ Short CV of each member of the team
- ☐ Employer's letter of support (for clinicians applying for stipend or participating as a project leader)
- ☐ Signature of each member of the team
- ☐ Application receipt by December 15, 2014 11:59 pm **electronic version of application**

Applications submitted to: Anita Menon
straussresearch.spot@mcgill.ca

Questions/assistance with protocol development: Anita Menon
Tel 514-398-4400 ext. 09310
straussresearch.spot@mcgill.ca

## Time Line

| | |
|---|---|
| Dec 15, 2014 | Application submission deadline (11:59 pm deadline) |
| Dec 19, 2014 | Compiled applications sent to reviewers |
| Jan 15, 2015 | Reviewers meeting |
| Jan 23, 2015 | Notice of decision released by email |
| Feb 1, 2015 | Payment period commences |
| Aug 1, 2015 | Mid-term study report submission |
| Mar 1, 2016 | Final study report submission |
| May 2016 | Interactive Project Presentations Day- oral presentation by project leader |
| May 2017 | Interactive Project Presentations Day- poster presentation by project leader |

## Goals of the Project and Expectations

### *Goals*

The overall aim of this rehabilitation research and knowledge translation program of research is to two-fold: 1) to enhance partnerships between academic researchers, educators, clinicians, and clients, and 2) to increase the flow and uptake of information between researchers, educators, clinicians and other stakeholders for improving health care services and patient outcomes.

Specifically, each research project should address a knowledge translation question that links and informs at least two of the following three areas: clinical practice, education and research.

### *Expectations*

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 (*http://www.cihr-irsc.gc.ca/e/29418.html*).

Applicants will be expected to be familiar with, and base their proposal on, a knowledge translation model (e.g. *http://www.ncddr.org/kt/products/ktintro/ktintro.pdf* or *http://mentalhealthresearch.ca/Publications/Documents/Knowledge%20Translation%20Review_FINAL.pdf*.). Applicants must provide a convincing case that the proposed project will increase the flow and uptake of information between researchers, clinicians, educators, patient groups and/or other stakeholders concerned with rehabilitation, health promotion, or healthy living with a disability.

The principal applicant and project leader will be responsible for providing **a total of four study reports**. The first report is a **1-page written mid-term report** on the progress made to date. The second report is an **oral presentation** of the project and its developments at the Interactive Project Presentations Day. Each project will be presented followed by general discussion. This event will be held during the afternoon for funded teams, members of the Edith Strauss Rehabilitation Research Project, and other interested parties. Project leaders and principal applicants must attend this event; team members are expected to attend. The third report is a **2-page final written report** on the work accomplished and an accounting of expenditure. The fourth report will be a **poster presentation** of the final study results to be displayed at the subsequent Interactive Project Presentations Day. Project members are encouraged to prepare a

manuscript for publication at the end of their project. **All** written reports, oral presentations and publications (even those after funding period) must acknowledge the support of the Richard and Edith Strauss Canada Foundation, and be sent by email to straussresearch.spot@mcgill.ca for our files.

## Funding

The annual funding envelope for projects is **$100,000**. Funding will be awarded to peer reviewed and merit based rehabilitation research projects in research and knowledge translation/exchange.

Projects will be funded as follows:

- ◊ **Doctoral Student led project – a maximum of $12,000**
- ◊ **Masters Student led project – a maximum of $10,000**
- ◊ **Clinician led projects – a maximum of $12,000**

Any changes to the funding guideline noted above are subject to prior board approval of the Edith and Richard Strauss Foundation.

There are two funding opportunities per year (Dec 15th and June 15th), but applications of a suitable standard may be presented in the interim period for consideration. The payment periods for the projects are approximately from February 1st to March 31st, and July 1st to June 30th.

Projects are expected to be **completed within a year**. However, project leaders are eligible to apply for funding for another project in a subsequent year. Only one project per **project leader** will be allocated for each funding year. Funding for each project is non-renewable, but a **maximum extension of 6 months** will be granted for project activities to be completed.

Funding is expected to cover stipends/pays for the project leader or research assistants, as well as any project-related expenses (i.e. photocopies, equipment, communication, conference registration fees and expenses etc.). Funding will also cover stipends/pays for clinicians or clinician managers to get reimbursed for their time away from clinical work. A budget with detailed justification of all costs is required as part of the application. The budget should exclude

costs related to preparing and printing the poster (printing should be covered by CRIR when available or through Edith Strauss).

## Eligibility

The designated ***principal applicant*** (principal investigator) on the grant must hold a McGill University appointment at the School of Physical and Occupational Therapy and have a PhD or equivalent.

The principal applicant has responsibility for the intellectual direction of the proposed research and for financial and progress reporting to the Director of McGill School of Physical and Occupational Therapy.

The ***project leader*** is expected to be guided through the process by the ***principal applicant***. Grant applications will be accepted from ***project leaders*** who are clinicians, clinician managers, or doctoral/masters/professional students in Rehabilitation Sciences. Project leaders can also be considered as project co-principal investigators, when appropriate. A doctoral or master's student is ineligible to receive a stipend from the Edith Strauss research project if they are receiving any doctoral or master's award (e.g. Strauss, CIHR or FRSQ fellowship)

Where appropriate, the research team is expected to include:

- Clinician(s) or clinical manager;
- A doctoral/masters/professional student in Rehabilitation Sciences
- A clinical supervisor/educator
- An academic educator

It is good practice to involve patients, carers and the public in health research. Involvement means that "people who use services are active partners in the research process rather than [just] 'subjects' of research" [1].

Proposals are eligible if they meet the following requirements:

1. Research focused on knowledge translation within the rehabilitation or education setting. Either a knowledge translation research project or an integrated knowledge translation project. (See definitions in Glossary)

2. Key stakeholders are identified and appropriately engaged in the research from conception through to evaluation and dissemination of results. Partners may include those involved in health care delivery or planning and administration, policy making, not-for-profit organizations, community organizations, patient support groups etc.
3. Include a clear, explicit, and manageable knowledge translation plan, which specifies the intended audience(s), the means of involvement and communication, and the intended post-grant follow-up.
4. NEW REQUIREMENT: All projects must evaluate the impact of their knowledge translation plan by measuring change in clinicians' practice behaviours, patient-related outcomes, and/or organizational characteristics (as applicable) at the end of their study (i.e. outcome evaluation- Step 6 of the Knowledge to Action cycle). A clear description of this evaluation must be included in the research proposal. The Edith Strauss Committee has prepared an Outcome Evaluation Framework with suggested measures to assess the impact of knowledge translation interventions, which may be applicable for your study (see Appendix for Framework).
5. The scope of proposals should not be so narrow that the results could be meaningful for only a very limited target audience; nor should the scope be so broad that it is impossible to derive meaningful results applicable to real-life situations.
6. Proposed methods for conducting a project must be appropriate, rigorous and feasible; potential problems must be identified and contingencies offered.

## Application Deadline and Instructions

The deadline for applications is **December 15, 2014 at 11:59 pm**.

Please submit an **electronic complete version of the application** to Anita Menon at the following email address: straussresearch.spot@mcgill.ca. **Hard copies of the application are NOT required.**

The application consists of:

1. An application form containing:
   a. Title of the project
   b. Names and affiliations of the investigators
   c. Co-ordinates of the team, including e-mail address
   d. Signature of each member of the team agreeing to submission of the proposal
   e. **Lay person structured abstract**, no longer than **250** words
   f. Proposal; 3,000 words (outline below, outline examples in appendix)
   g. Budget with detailed justification of all costs
2. Short CV for each member of the team
3. Employer's letter of support (for clinicians applying for stipend or participating as a project leader)

The proposal should be no longer than ***3,000 words including tables and excluding abstract and references***. The role of each member of the team should be clearly described e.g. consumer, clinician, project leader, principal applicant. Appendices may only include questionnaires; any additional material will be disregarded.

The budget and its justification must be on a separate page and is not included in the word count.

Times New Roman, size 12 font and double spacing should be used for the abstract, proposal, and budget justification.

**Components of Proposal** (systematic review, qualitative or quantitative research proposals are acceptable)

1. Study title
2. Background
3. Study objectives
4. Methods
5. Ethical considerations
6. Logistics
7. References
8. Appendices

## Allowable Costs

The full application must provide a detailed justification of all costs.

The following expenditures will be considered eligible for funding:

- Purchase and maintenance of research equipment and other research tools (all equipment remains the property of McGill University, School of Physical and Occupational Therapy).
- Salaries of research personnel.
- Student or clinician stipend.
- Regional, national and international networking and exchange activities during the planning and dissemination of the research (e.g. networking, conferences, workshops, meetings, communication and dissemination methods). Eligible activities must involve substantive and meaningful interaction between researchers and stakeholders
- Costs associated with the creation and distribution of communication tools
- Conference registration fees and expenses

## Review Process

All eligible applications received by the appropriate deadline date will be entered into the competition.

All members of the Edith Strauss Rehabilitation Research Project Executive Steering Committee will receive full copies of each application and a ranking form. Each application will be assigned to three members of the Committee for detailed review (i.e. primary reviewer; secondary reviewer; reader) and presentation during the grant review meeting.

**In advance of the grant review meeting**, all Committee members will be required to:

1. Read **all proposals** and recommend one of the following funding decisions to each proposal: Not fundable; Invited to resubmit, Funded with revisions, and Funded without revisions. Provide a brief justification of your funding recommendations and email the completed evaluation form to Anita Menon prior to the meeting.
2. Read your **assigned proposals** and prepare to present your comments at the meeting.
3. Members attending the meeting are also encouraged to read the unassigned proposals in order to provide additional comments.

### During the grant review meeting

Committee members attending the meeting will be presented with the funding recommendations for each proposal and the justifications. Each study will be discussed and budget reviewed by the

three assigned reviewers and other Committee members. A final funding decision will be made collectively by the Committee for each proposal.

Applicants will be informed of the results of the competition as follows:

1. All applicants will be sent a Notice of Decision by email, indicating whether or not their proposal was approved for funding, and the amount awarded.
2. Applicants will receive a Scientific Officer's Report and a copy of all comments from the Committee members by email shortly after receiving their Notice of Decision.

# APPENDIX

## OUTCOME EVALUATION FRAMEWORK (to assess impact of KT interventions)

| DOMAINS | Outcome measure |
|---|---|
| **STRUCTURE EVALUATION** | |
| Clinician/patient knowledge* | Quantitative<br>• Create a knowledge questionnaire (based on the learning objectives of the KT intervention) to measure change in knowledge regarding a specific content area |
| Clinician/patient attitudes towards evidence* | Quantitative<br>• ***Practice Style Trait Questionnaire***[1]: to identify the practice style trait of clinicians and their overall attitude towards evidence-based practice<br>• ***EPIC Scale***[2]: to measure clinicians' belief in their ability to implement EBP, known as EBP self-efficacy.<br>Qualitative<br>• Use of focus groups with potential knowledge users |
| Clinician practice behaviours* | Quantitative<br>• Chart audit of clinician practices<br>Qualitative<br>• ***PERFECT Tool***[3]: standardized semi-structured questions regarding change and reasons for change in clinicians' practice behaviours |
| **PROCESS EVALUATION** | |
| Create a concept map based on the Program Logic model or Proceed-Precede model | |
| **OUTCOME EVALUATION** | |
| Patient outcomes* | Quantitative<br>• Any outcome measure relevant to the content area (e.g. FIM scores)<br>• Patient Satisfaction Questionnaire (from RAND Health)<br>Qualitative<br>• Create a series of semi-structured questions for telephone or in-person interviews |

*Ideally these outcome measures should be used at baseline and at post-intervention, but can also be administered during the intervention

1. Green, LA, Gorenflo, DW, Wyszewianski, L. Validating an instrument for selecting interventions to change physician practice patterns: A Michigan Consortium for Family Practice Research study. *Journal of Family Practice.* 2002 Nov; 51(11): 938-942.

2. Salbach, N. M. and Jaglal, S. B. (2011), Creation and validation of the evidence-based practice confidence scale for health care professionals. Journal of Evaluation in Clinical Practice, 17: 794–800. doi: 10.1111/j.1365-2753.2010.01478.x

3. Menon A, Cafaro T, Loncaric D, Moore J, Vivona A, Wynands E, Korner-Bitensky N. Creation and validation of the PERFECT: a critical incident tool for evaluating change in the practices of health professionals. Journal of Evaluation in Clinical Practice. 2010 Dec; 16(6) 1170-1175.

Refer to StrokEngine Assessment for more details on **PERFECT**: www.strokengine.ca

**Components of a Review Proposal** *(http://www.york.ac.uk/)*

1. Background
2. Review questions
3. Methods
    a. Search strategy including search terms and resources to be searched
    b. Study selection criteria and procedures
    c. Study quality assessment checklists and procedures
    d. Data extraction strategy
    e. Synthesis of the extracted evidence
4. Ethical considerations
5. Logistics
    a. Distribution of responsibilities
    b. Project timetable
    c. Budget
6. References
7. Appendices

**Guide Outline of a Research Project Proposal**

1. Study title, principle collaborators and institutions
2. Abstract
3. Background
4. Aims and objectives
5. Methods
    a. Study description
        i. Study design
        ii. Study site
        iii. Study population
        iv. Proposed intervention (if an intervention study)
        v. Main exposures and/or confounders and/or outcomes to be measured
    b. Selection of study population
        i. Inclusion criteria
        ii. Exclusion criteria
        iii. Sampling
        iv. Randomisation (if a randomised trial)
    c. Study procedures
        i. Procedures at enrolment
        ii. Follow-up (if a cohort study or trial)
        iii. Measurement of exposures and confounders
        iv. Measurement of outcomes
    d. Sample size
    e. Data management
    f. Proposed analysis
2. Ethical considerations

    a. Confidentiality
    b. Informed consent
    c. Ethical approval
3. Logistics
    a. Distribution of responsibilities
    b. Timetable
    c. Budget
4. References

**Guide of items for inclusion in a qualitative research protocol**

1. Study title, principle collaborators and institutions
2. Abstract
3. Background
    What is already known
    How will this work contribute to knowledge
4. Aims and objectives
5. Methods
    Qualitative approach/tradition
    Sampling
    Data collection
    Data management
    Proposed analysis
6. Results and Conclusions
7. Ethical considerations
    Confidentiality
    Informed consent
    Ethical approval
8. Logistics
9. References

# GLOSSARY

**Applied Dissemination**[2]**:** A term which refers to the process of disseminating information about an existing program, process, concept or knowledge and skills, and applying that information in a different context.

**Capacity and capacity building**[3]: in knowledge exchange, capacity is the set of skills, structures, and processes, as well as the organizational culture, that allows, encourages, and rewards knowledge exchange. The capacity of decision-making and research organizations is built to achieve knowledge exchange in order to make decisions on the basis of research and other evidence.

**Diffusion**[4] : the process by which an innovation is communicated through certain channels over time among members of a social system.

**Dissemination**[3] :goes well beyond simply making research available through the traditional vehicles of journal publication and academic conference presentations. It involves a process of extracting the main messages or key implications derived from research results and communicating them to targeted groups of decision makers and other stakeholders in a way that encourages them to factor the research implications into their work. Face-to-face communication is encouraged whenever possible.

**End of grant knowledge translation**[5]: consists of diffusion, dissemination and application of research findings.

**Evidence based practice**[6]: practitioners make practice decisions based on the integration of the research evidence with clinical expertise and the patient's unique values and circumstances.

**Integrated knowledge translation**[7]: A collaborative way of doing research, researchers and research users work together to shape the research process- starting with collaboration on setting the research questions, deciding the methodology, being involved in data collection and tools development, interpreting the findings and helping 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 be relevant to and used by the end users.

**Knowledge**[5]: primarily scientific research.

**Knowledge exchange**[5]: collaborative problem-solving between researchers and decision makers that happens through linkage and exchange. It involves interaction between decision makers and researchers and results in mutual learning through the process of planning, producing, disseminating, and supplying existing or new research in decision-making.

**Knowledge transfer**[7]: the process of getting knowledge used by stakeholders.

**Knowledge translation**[7]: 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 research**[8]: Studying the determinants of knowledge use and effective methods of promoting the uptake of knowledge (contributing to the theory of KT).

**Participatory research**[8]: The systematic enquiry, with the collaboration of those affected by the issue being studied, for the purpose of education and taking action or effecting social change.

**Research utilization**[5]: process by which specific research-based knowledge is implemented in practice.

**Synthesis**[7]: synthesis in the context of knowledge translation, means the 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. It could take the form of a systematic review, follow the methods developed by the Cochrane Collaboration, result from a consensus conference or expert panel or synthesize qualitative or quantitative results. Realist syntheses, narrative syntheses, meta-analyses, meta-syntheses and practice guidelines are all forms of synthesis.

# REFERENCES


1. Hanley B, Bradburn J, Barnes M, Evans C, Goodare H. Involving the public in NHS, public health, and social care research: Briefing notes for researchers. *INVOLVE Support Unit*. second ed, 2004.
2. Philanthropic Foundations Canada. Grantmaker Resources. Glossary of Terms. Montreal.
3. Canadian Health Services Research Foundation. Tools to Help Organizations Create, Share, and Use Research.
4. Greenhalgh T, Robert G, Macfarlane F, Bate P, Kyriakidou O. Diffusion of innovations in service organizations: Systematic review and recommendations. *Milbank Quarterly* 2004;82(4):581-629.
5. Graham ID, Logan J, Harrison MB, Straus SE, Tetroe J, Caswell W, et al. Lost in knowledge translation: time for a map? *J Contin Educ Health Prof* 2006;26(1):13-24.
6. Straus SE. *Evidence-based medicine : how to practice and teach EBM*. 3rd ed. Edinburgh ; New York: Elsevier/Churchill Livingstone, 2005.
7. Canadian Institutes of Health Research. About Knowledge Translation CIHR-IRSC.
8. Participatory Research at McGill. Participatory Research Mission. Montreal, 2008.