

*Collaborative Research Grant Initiative:
Mental Wellness in Seniors and Persons with Disabilities*

Information and Project
Development Workshop
September 14, 2009

Background

Ministry of Seniors and Community Supports
\$3,000,000 grant to AHS to:

- Increase the amount and quality of mental health research being done in the area of seniors and persons with disabilities
- Support evidence-driven changes in practice and policy, improving system effectiveness and efficiency
- Improve, measurable mental health outcomes for Albertans being served by the Ministry



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Background Cont'd

- Research to focus on “mental health issues” among:
 - Seniors
 - Persons with disabilities

Guiding Principles

- Ensure relevancy to Ministry's services and supports
- Engage key stakeholders
- Provide access to quality, applicable evidence
- Value different research approaches
- Encourage cross-sectoral partnerships/collaboration
- Facilitate effective knowledge translation



Project Steering Committee

- A Project Steering Committee was formed to guide the planning and implementation of the CRGI
- Composed of key personnel from the Ministry of Seniors and Community Supports, service delivery and programs within the Ministry and AHS, AHS research program staff, and the Research Partnership Committee
 - Phase 1 focused on question and plan development, scope, proposed funding, and capacity building (Completed)
 - Phase 2 will advise on additional planning, start-up, implementation, monitoring, knowledge transfer, network development, and research data integration and intersectoral collaboration (Commencing)
 - Phase 3 will support targeted dissemination, knowledge transfer, and sustainability

Domains (areas of interest)

The Project Steering Committee identified six domains as areas of interest to the Ministry and requiring investigation:

- 1) Independent living: Supports and barriers*
- 2) Employment*
- 3) Early identification and prevention: Protective and risk factors*
- 4) Poly-pharmacy: Risks associated w/ using several medications*
- 5) Strength-based approaches
- 6) System capability to respond to those with complex needs*



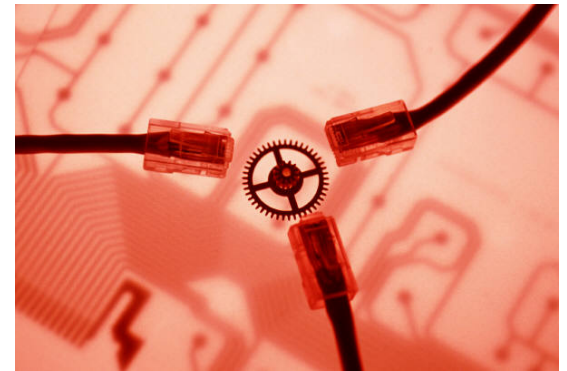
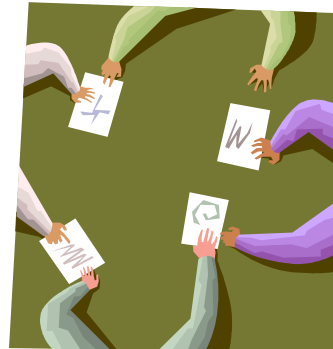
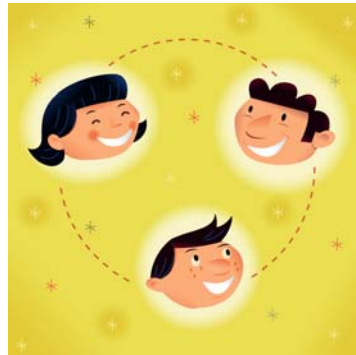
Research Question Development

A background image showing a sunset over a field of green crops. The sun is low on the horizon, creating a bright orange and yellow glow that transitions into a soft purple and pink sky. The field below is a dense, green expanse of crops, possibly corn or soybeans, stretching to the horizon.

- Two-day facilitated consultation group meeting was held to refine the six domains into research questions
- Background reports were commissioned (through an RFP process) to summarize existing literature
- Questions were to be the focus of research grants available to academic and non-academic researchers (i.e., service providers)
- The questions were part of a detailed project plan, which was submitted to and subsequently approved by the Ministry of Seniors and Community Supports

Main Elements of the CRGI

- Research Grants
- Mental Health Research Network
- Knowledge Exchange
- Integration of Research Data and Cross-Sectoral Collaboration/Promotion



Research Grants – Funding Levels

- **Ideas Fund** (*up to \$8,000*): Small, innovative, short-term one-time research/evaluation projects
- **Seed/Bridge Fund** (*up to \$25,000*): Startup grants for small research/evaluation projects (e.g., pilots, literature reviews) or bridging from one phase of the project to next (e.g., to cover funding gaps)
- **Operating Grants** (*up to \$210,000 over 3 years*): Mental health services/population health research with defined outcomes, to answer the approved research questions in priority domains




A sunset over a field of flowers. The sun is low on the horizon, creating a warm orange and yellow glow that transitions into a soft purple and pink sky. The foreground is a field of green and yellow flowers, possibly poppies, stretching towards the horizon.

Research Grants – Ideas Fund

- **Purpose:** small, innovative, one-time, one-year projects to increase capacity of practitioners, service providers, and/or administrators to conduct research and evaluation activities related to their services/programs (*one year maximum*)
- **Principal Applicant:** must be a practitioner, service provider, and/or administrator working within or in partnership with programs and services offered by the Ministry of Seniors and Community Supports or contracted services through community agencies
- **Team composition/Partnerships:** encouraged to involve seniors or persons with disabilities, community agencies
- **Scope:** Projects must be focused on research or evaluation, be related to mental health or mental well-being, fall under one of the six domains, and target seniors and/or persons with disabilities

Research Grants – Seed/Bridge Fund



- **Purpose:** financial support the startup of research/evaluation projects (often in the pilot stage), or the transition of research/evaluation projects into their next phase (e.g., to cover funding gaps) (*two year maximum*)
- **Principal Applicant:** academic researchers, practitioners, service providers, and/or administrators
- **Team composition/Partnerships:** encouraged to be multi-disciplinary and multi-sectoral, and to be comprised of a service provider or decision/policy-maker and a community partner (e.g., seniors or persons with disabilities, community organizations), and have sufficient research expertise.
- **Scope:** Projects must be focused on research or evaluation, be related to mental health or mental well-being, fall under one of the six domains, and target seniors and/or persons with disabilities

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Research Grants – Exclusions

Grants are not expected to support research in the following areas:

- Basic/biomedical research (i.e., CIHR Pillars 1 and 2)
- Early life experience (i.e., child development)
- Children or youth (although transition to adult services and supports may be studied)
- Clinical treatment options for mental health
- Operational funding for new or existing interventions/programs

A photograph of a sunset over a field of flowers. The sun is low on the horizon, creating a bright orange and yellow glow that transitions into a soft purple and pink sky. The foreground is a field of green and yellow flowers, slightly out of focus.

Mental Health Research Network

- Researchers and service providers share knowledge that is both practical and relevant to determine and implement best practices
- A questionnaire was distributed to researchers and service providers to better understand their network needs
- Broader feedback will be obtained and a sub-committee will help guide network development

Mental Health Research Network Cont'd

- The majority of respondents view the network as serving the three following purposes:
 - Formal linkage opportunities between services, supports, and academic partners
 - Collaboration on research and/or evaluation projects
 - Sharing information on emerging best practices
- Respondents are most interested in the following network features or tools:
 - A searchable expert database (including interests, position, contact information, etc.)
 - Synthesized briefings (e.g., of local evidence, fact sheets)
 - Access to local experts for problem solving
 - Virtual learning opportunities (e.g., online workshops, modules)
 - Face-to-face meetings (provincial)

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Knowledge Exchange

- Information Sharing Meetings
 - Research Days
 - Lunch and Learn Sessions
 - Supporting Staff in Conference Presentations (e.g., travel grant)
- Virtual Research Centre
 - Application process, resources for applicants
 - Main communication tool for the Network
 - Portal to collaborative research environment
 - Summaries of CRGI projects in formats appropriate for policy makers and other service providers



Integration of Research Data / Cross-Sectoral Collaboration

- Opportunity to make better use of existing information sources
- Use of existing databases and information holdings of Seniors and Community Supports and AHS
- A sub-committee will help guide these activities

Application Process

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- Guidelines and application forms for the Seed/Bridge Fund and Ideas Fund are available online at http://www.mentalhealthresearch.ca/KeyInitiatives/ResearchGrants/Seniors_PwD/Grants/Pages/default.aspx
- Read the guidelines carefully before submitting an application
- Contact us if you have any questions about the application process

Project Plan Requirements

Project Plans should be 2 to 6 pages in length (double-spaced, excluding references, ethics reviews, etc.) and should use 12-pt Times New Roman font and 1-inch margins. The following headings are suggested to structure your proposal:

- **Background** - Provide the background (including literature review, if applicable) of the project and why the issue/topic is important.
- **Objective** - Overall purpose of the project, including specific questions the project is intended to address.
- **Approach** - Description of the approach that will be used to conduct the research/evaluation project.
- **Ethical considerations** - Describe how the project will comply with the organization's policies regarding use of personal, social, and health information for research purposes. Briefly describe how ethical consideration will be addressed throughout the project.

Health Research

Proposal Writing

Tips for Writing Effective & Successful Proposals

Nadine Gall

September, 2009



**Alberta Addiction and Mental Health
Research Partnership Program**

Overview

- Elements of a proposal / project plan
- Common errors and pitfalls / keys to success
- Case examples
- Lunch Break
- Case examples and group discussion
- Granting agencies
- Project development support and resources

Research Proposals ... Project Plans

Who, What, Where, When, and Why

- Demonstrates:
 - that your project should be done
 - exactly what you are doing
 - that you know what you are doing
- Your work plan!
- Audience:
Funders, science approval, ethical approval, thesis committees



<http://www.dandennis.com/german%20shepards%20looking%20at%20cat.jpg>

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PREPARATION

“By failing to prepare you are preparing to fail.”
Benjamin Franklin

Title

- The Title of your project is important..
 - It sets the first impression
 - It is often used to help route the application to the appropriate reviewers
- Keys to success
 - Informative , Succinct, Interesting
 - Specify the population of interest

Purpose

- A broad statement indicating the goals of the project.
 - *Eg.* exploration, description, explanation, prediction,
- Keys to success:
 - Relevant
 - Clear
 - Logically argued



Purpose

Example

- ...to describe home care nurses' perception of their current scope of practice, and of the quality of the training they receive

Background

- Statement about the **Current State of Knowledge** in the area
- Might include...
 - Relevant literature
 - Clinical or program evidence
 - Evaluation evidence
- This is your chance to build a case for doing your project

Gaps

Articulate gaps in understanding

- Reinforce the Purpose of the application
- What is the issue that needs to be addressed?
- How does it align with the funding agencies stated priorities?



Rationale & Significance

- Why should the study be done?
 - Will the project build on existing knowledge and evidence?
 - Will the project benefit patients, increase knowledge and/or influence policy?
 - Will the project help to resolve controversies?
- Keys to success
 - Lead reviewers to answer the above questions.
 - Use the literature review & background to support your arguments.
 - Explain how your project fits into the funding agencies stated priorities



Tappers & Listeners

~ Newton (1990).



Tappers & Listeners

~ Newton (1990).



2.5%

Tappers & Listeners

~ Newton (1990).



50%

vs.

2.5%

Research Question(s) / Objectives

- Explicitly state what you propose to study or evaluate
- Often includes:
 - Population of interest (person, place, time)
 - Variables or key measures
 - Relationship between variables being investigated



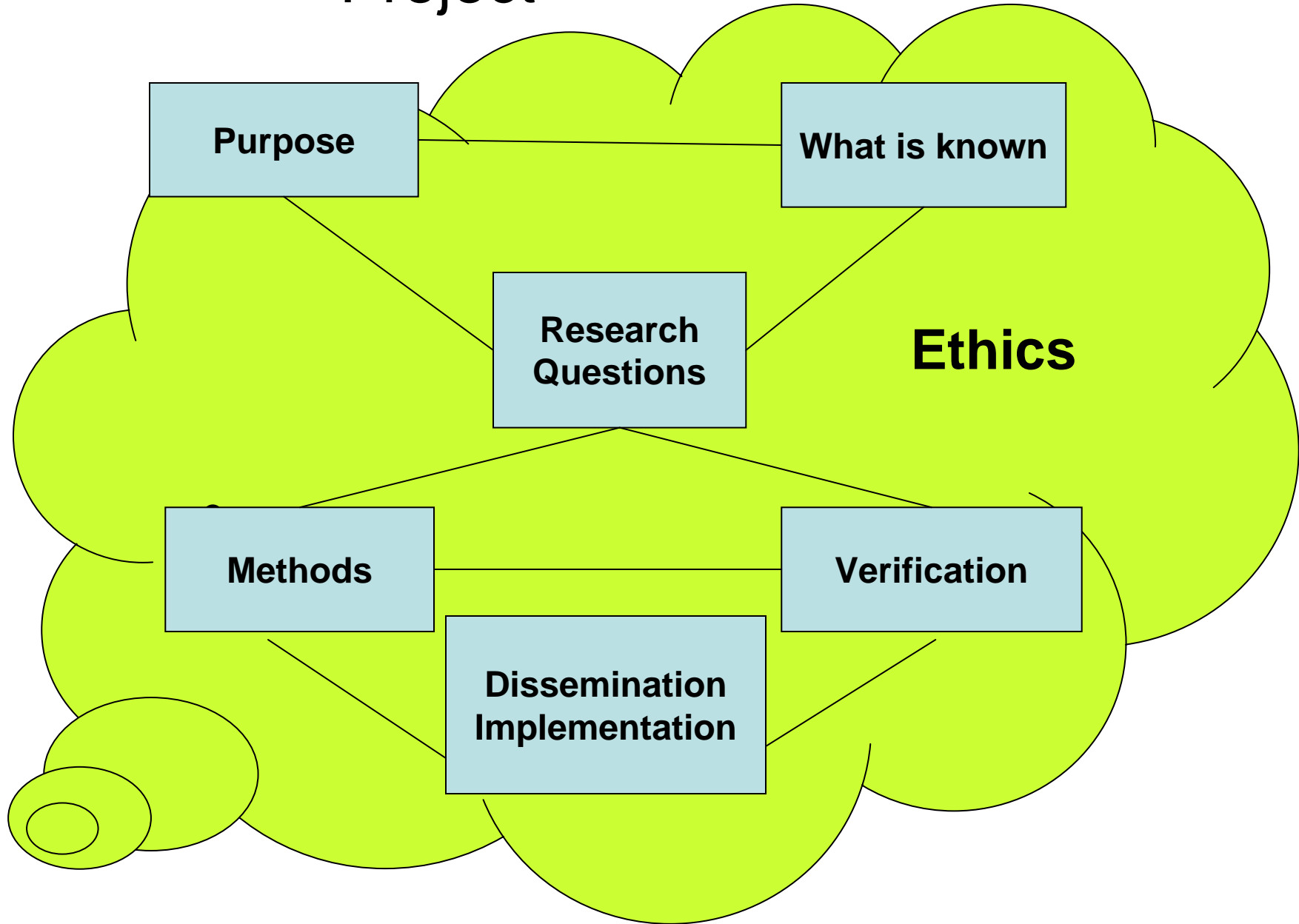


Clarity

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Considerations for Designing Your Project

(adapted from Maxwell, 1996, p. 62)



Research Question / Objectives

Example – Home Care

Primary:

To describe home care nurses' perceptions of their scope of practice

Secondary:

To examine home care nurses' satisfaction with their training and how well it prepared them for their current scope of practice

Research Questions / Objectives

- **Keys to success:**
 - Be clear and consistent
 - Only have one or two primary research questions or objectives
 - Measurable
 - Relevant or novel (as you've established in the background section)
 - If it is a pilot study, state clearly the objectives of the pilot study!

Approach

- Elements to consider....
 - Project Design
 - Participants
 - Data collection
 - Analysis Plan



Project Design

- What methods will you use to address the study question(s) / objectives?
- This will depend directly on the Purpose and specific Objectives of your project

Study Design

Common Pitfall

The Incorrect Design (or the wrong objective)

- *The primary objective is to determine if coffee drinking causes pancreatic cancer.*
- *A case-control study will be conducted*

Study Design

Common Pitfall

- ***Better:*** *The primary objective of this study is to determine if there is an association between coffee consumption and pancreatic cancer.*

Case Example

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Case Example 1 : Effectiveness of a medication adherence program for seniors

- **Background:** Medication adherence is an important issue among seniors and can greatly affect treatment success and overall quality of life.
- **Primary Objective:** To test the effectiveness of a medication adherence program for seniors with depression
- **Study Design:** Prospective cohort study
- **Sample Size:** All seniors currently enrolled in the medication adherence program
- **Analysis Plan:** Demographic characteristics will be collected along with relevant clinical information. Simple descriptive statistics will be used to track refill patterns.
- **Ethical Considerations:** No additional consent required for this study.

Case Example 1 : Effectiveness of a medication adherence program for seniors

Issues to Consider:

- Limitations of the proposed study design
 - Is the study design described accurately?
 - Can the investigators meet their objective given the proposed methods?
 - No Comparison group mentioned
- Is review of prescription refills a sufficient indicator of adherence?
- What other factors might influence adherence and how will those be accounted for?
- Others??

Project Design

Some Types of Quantitative Research Designs:

- Survey research
- Observational
 - Cohort studies
 - Prospective
 - Retrospective
 - Case-control studies
- Interventional
 - Quasi-experimental
 - Randomized controlled trials



Qualitative Research

- Understanding the meaning
- Understanding the context
- Identifying the unanticipated
- Understanding the process

Methods often involve in-depth interviewing, focus groups, observation

Participants



- Selection and Recruitment
 - Who will be involved in the project?
 - How will they be invited to participate?
- Keys to success:
 - Clearly describe the participant group
 - Provide and justify appropriate selection criteria
 - Describe the recruitment methods

Participants

Example – Home Care

- The study group will consist of all Home Care Registered Nurses in Alberta. Addresses will be obtained from a database maintained by the College & Association of Registered Nurses in Alberta. Letters of support have been obtained from the CARNA.

Data Collection

- What information needs to be collected to answer your questions?
 - Choose measures that will directly address the project questions / objectives
- Where will the information come from?
- Exactly how will the information be collected?

Example – Home Care

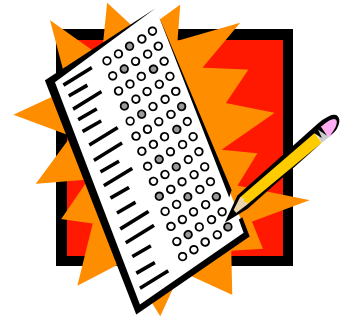
Primary Measures (Variables):

- Scope of practice (treatment modalities, types of health conditions treated, referral practice)

Secondary Measures

- Sociodemographic information (age, gender, license status,...)
- Practice characteristics (years in practice, location, number of patients)
- Education

A Note About Questionnaires



- Data collection instrument
- What reviewers are looking for:
 - How was the questionnaire developed (and by whom)?
 - Are you using a Standardized Instrument?
 - Reliability and Validity
 - Has the questionnaire been pretested among the patient population being studied?
 - How will the questionnaire be administered?
- Accuracy of the information

Data Collection Instruments

Example: Description of measurement tool

- Measurement tool: the questionnaire was developed by the research team and has used valuable information by Boon in qualitative interviews with home care staff. A draft copy of the questionnaire is included for review, along with discussion of the psychometric properties. The questionnaire will be pre-tested using a number of home care staff, as well as independent assessors.

Consistency is Important

- The **purpose** of this study is to determine if there are differences in pain control with nurse versus patient-administered analgesia following surgery.
- **Research Question:** Does the administration of analgesic by nurses vs. by patients themselves affect pain intensity during postoperative recovery in older adults?
- **Hypothesis:** Patients who self-administered narcotics will be more satisfied than patients who receive narcotics administered by nurses.
- **Sample Size:** To achieve a power of 80% to detect a 20% difference in the total morphine dose in the first 24 hours post-surgery, 30 subjects in each group will be required.

Consistency is Important

- The **purpose** of this study is to determine if there are differences in *pain control* with nurse versus patient administered analgesia following surgery.
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Sample Size

How Many Participants will you need?

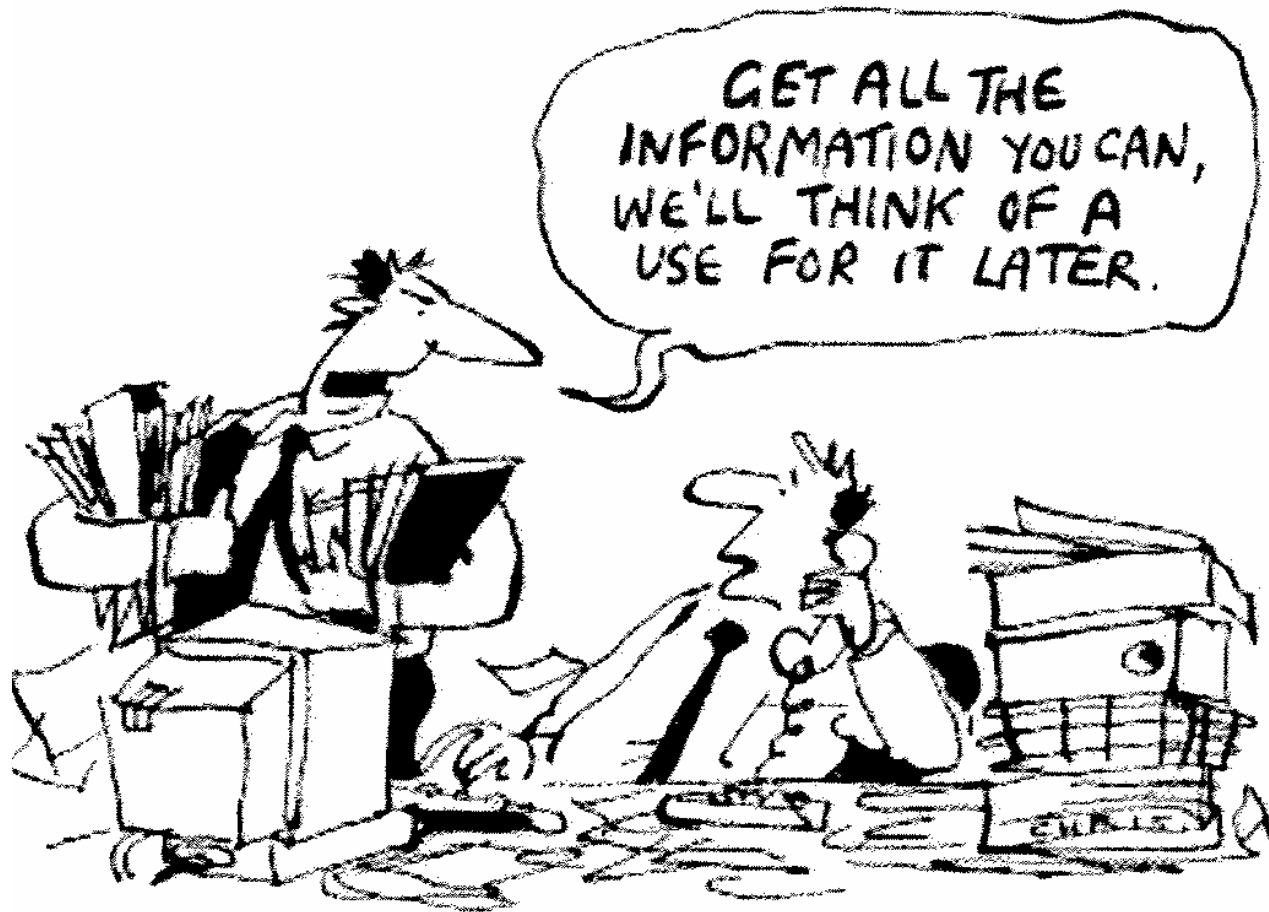
- In research, we usually can't measure everyone
- Forced to make inferences about the population of interest based on information collected from a 'sample'
- If we measure too many, we will waste resources. If we measure too few, we won't be able to detect effects of interest.

Data Analysis

- Plans for compiling and interpreting the information gathered.

Including procedures for:

- Recording, storing information
- Assessing the quality of the information
- Statistical analyses



<http://www.privcom.gc.ca/information/ar/images/cartoon3.jpg>

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Analysis Plan Tips:

- Make sure your objectives are clear, simple and testable
- If you were to present a table of results, what would this table look like?
 - Comparison of means?
 - Comparison of rates or proportions?
 - Summary of key themes (qualitative)?

Analysis Plan Tips:

- Think carefully about your outcome measure.
 - Is it appropriate, relevant and measurable?
- Think about how you would present your final results.
 - What convincing evidence would you present?
 - What could you measure and report that would demonstrate clinical or policy or program impact?

Look Through the Reviewers' Lenses



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Look Through the Reviewers' Lenses

- Ensure that all the pieces fit together
- Show how the proposed study is reasonable and can be done
- Reviewers will be looking to see whether your work is appropriate for the current level of knowledge
- Identify limitations before your reviewers do
- Tailor your application to the funding opportunity – both the audience and the organization's priorities

Knowledge Exchange

- Developing a KE plan is a key part of the collaborative research process
- Important to engage key stakeholders from the beginning
- Knowledge Exchange should be ongoing throughout the project



Knowledge Exchange = Sharing Ideas

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Budget

- Proposals are usually submitted to secure funds for research.
- Keys to success
 - Read instructions
 - Itemize costs
 - Personnel, consultants, equipment, supplies, travel, patient care costs, indirect costs, other expenses.
 - Do not inflate costs
 - Justify the budget

Granting Agencies

Helpful Hints:

- Review a successful application
- Start early, pay attention to instructions and criteria
- Carefully assemble a research team
- Justify decisions
- Arrange for critique of proposal

Thank you.

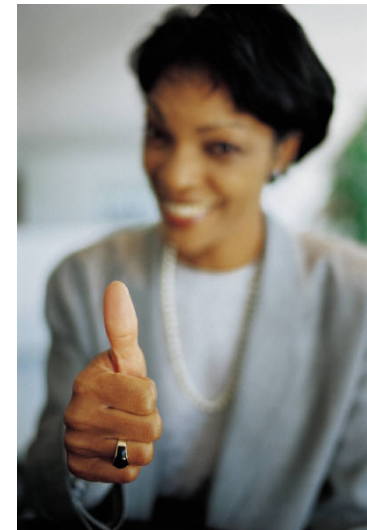


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Ethics Screening

- Ethics requirements for Seed/Bridge Fund and Ideas Fund applications
- Two ARECCI tools



Ethical Principles in Projects

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- Respect for Human Dignity
- Respect for Privacy and Confidentiality
- Respect for Vulnerable Persons
- Respect for Justice and Inclusivity
- Respect for Free and Informed Consent
- Balance of Harms and Benefits:
 - Minimizing risk of harm
 - Maximizing benefits

ARECCI Ethics Guidelines for QI and Evaluation Projects

- Use this decision-support tool to integrate ethics at the project planning stage
- This ethics tool (i.e., **The ARECCI Guidelines for QI and Evaluation Projects**) provides “Ethics Considerations” in the form of six key questions with additional sub-points to assist your thinking in planning your project.
- Hard copy is provided, but the tool is also available online at: www.ahfmr.ab.ca/arecci/areccitools/php

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Building Ethics into Your Plan: Six Ethics Considerations

1. How will knowledge gained from your project be useful?
2. How will your described method or approach generate that desired knowledge?
3. How will you ensure that the participant (or data) selection process is fair and appropriate?



Building Ethics into Your Plan: Six Ethics Considerations...cont'd

4. What have you done to identify and minimize risk? Are the remaining risks justified?
5. How are the rights of individuals, communities, and populations respected?
6. Is informed consent needed in this project?

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More About Risks: What are they?

- Risks= what is wrong for a person, family, community
- Physical, mental, emotional, financial or legal impacts for participants
- Loss of privacy and confidentiality
- Additional burdens to the system
- Vulnerable populations require extra protections

How to Screen your Project Plan for Ethical Implications

- Use the 2nd ethics tool - **The ARECCI Ethics Screening Tool** to decide:
 - The primary purpose of your project
 - Its level of risk to project participants
 - Type of ethics review that may be needed
- Available at: www.ahfmr.ab.ca/arecci/tool

Pathways for Ethics Review

**Screen All Projects Involving
People or their Information
for ethical implications**

Research Projects:
Ethics Review by a
Research Ethics
Board (REB)

Non-research Projects:
Ethics Review by the
*Collaborative Research
Grant Initiative*

Ethics Screening Exercise:



- Introduction to the ARECCI Ethics Screening Tool using a case study example
- Website: www.ahfmr.ab.ca/arecci/tool



For More Information about Ethics in Projects Contact:

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