

Connecting Population & Public Health with Evidence

Ivy Lynn Bourgeault, Scientific Director
Population Health Improvement
Research Network

ivy.bourgeault@uottawa.ca

June 29, 2010



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa

McMaster
University

Inspiring Innovation and Discovery

OHRI



IRHO



UNIVERSITY OF
TORONTO

Outline

- 1) the different types of research questions and methodological approaches to key public and population health issues,
- 2) the different types of data or evidence (both qualitative and quantitative) that bear upon these questions,
- 3) how one goes about finding data or evidence (empirically or drawing upon existing datasets), and
- 4) how one then translates this evidence to different stakeholders in the community and policy worlds.



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa

OHRI  IRHO

McMaster
University 

Inspiring Innovation and Discovery

 UNIVERSITY OF
TORONTO

Research Questions

First, it is good to start with what research is :

- ... the gathering and interpreting of information to answer questions
- ... a systematic attempt to provide answers to questions
- ... a systematic way of asking questions and a systematic method of inquiry



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa

OHRI  IRHO

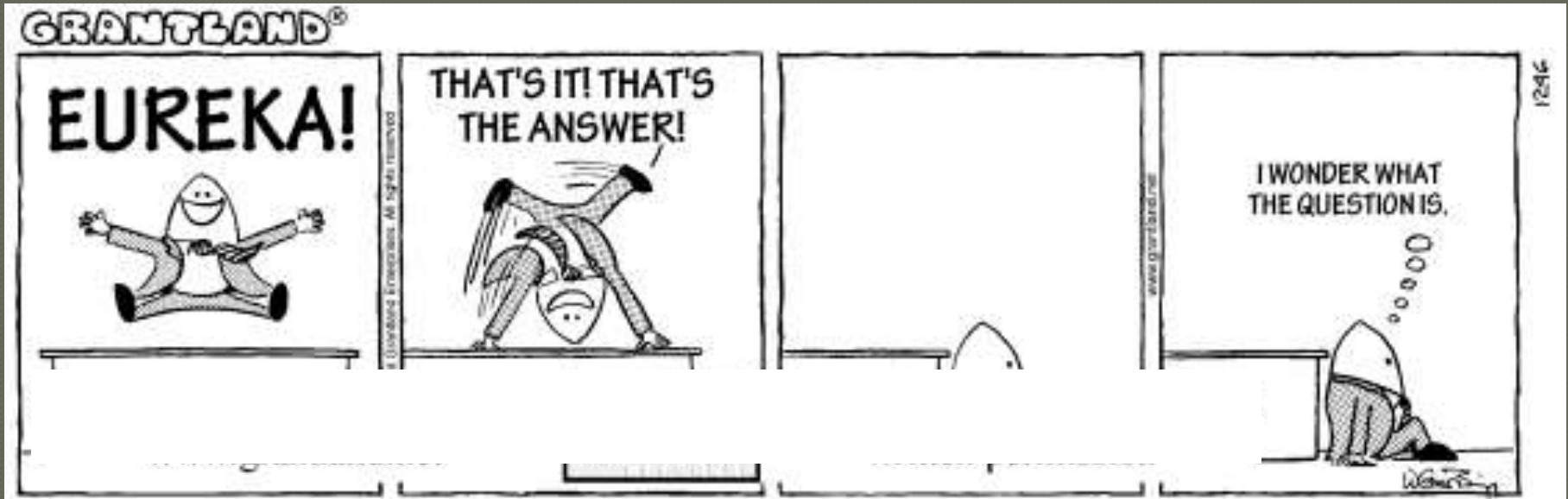
McMaster
University 

Inspiring Innovation and Discovery



UNIVERSITY OF
TORONTO

Research Questions



- The central focus of the research effort that serves as the basis for the research problem and provides direction for the entire process



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa

OHRI IRHO

McMaster
University

Inspiring Innovation and Discovery

UNIVERSITY OF
TORONTO

How to frame a research question/problem.

PICO Framework:

- (P) Patient, population or problem addressed
- (I) Intervention or exposure considered
- (C) Comparison intervention or exposure
- (O) Outcomes of interest

(P) Partner



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa

OHRI IRHO

McMaster
University
HSS 3103
Lecture 1.2
Inspiring Innovation and Discovery

UNIVERSITY OF
TORONTO

What is PHIRN?

- The population health improvement research network would contain two research programmes:
 - *Patterns & Pathways of Inequity* co-led by:
 - **Ronald Labonté** (UOttawa) CRC in Global Health Equity
 - **Carlos Quiñonez** (UToronto) formerly with the CDHSRU
 - *Population Health Interventions* co-led by:
 - **James Dunn** (McMaster) CIHR/PHAC Chair in Applied Public Health, specializing in residential neighbourhoods and population health
 - **Douglas Manuel** (Ottawa Hospital Research Unit) CIHR/PHAC Chair in Applied Public Health



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa

OHRI  IRHO

McMaster
University 

Inspiring Innovation and Discovery

 UNIVERSITY OF
TORONTO

(Some) Key Health Equity Research Questions

- What are the impacts of various governmental and non-governmental policies on equity in health and the social determinants of health? (*i.e.*, *health equity impact assessment*)
- How do various social and cultural categories of discrimination interact on multiple and often simultaneous levels to influence health?
- What are the consequences of *closing the inequality gap* on various outcomes, including health care utilisation, social services utilisation, and disease preventing behaviours for particular subpopulations?



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa

OHRI  IRHO

McMaster
University 

Inspiring Innovation and Discovery

 UNIVERSITY OF
TORONTO

(Some) Key Population Health Interventions Research Questions

- What are the effects of complex, population-based interventions on health?
 - *that is, interventions that do more than just reduce individual risk and improve individual health, but focus on improving the conditions that determine health risks in order to alter the distribution of risk and reduce risk in successive cohorts of people within a given setting*
- What are the health effects of policy initiatives and other natural experiments, both within and outside the formal health sector, that can improve population health?



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa

OHRI IRHO

McMaster
University

Inspiring Innovation and Discovery

UNIVERSITY OF
TORONTO

Research Approach	Types of Data/Evidence
<ul style="list-style-type: none"> ⦿ Drawing upon existing data 	<p><i>Qualitative and quantitative</i></p>
<ul style="list-style-type: none"> ⦿ ‘Systematic’ reviews/syntheses 	<p>Literature – published & grey</p>
<ul style="list-style-type: none"> ⦿ Secondary data analysis 	<p>Administrative data Survey data – linked datasets Policy documents</p>
<ul style="list-style-type: none"> ⦿ Empirical studies 	<p><i>Qualitative and quantitative</i></p>
<ul style="list-style-type: none"> ⦿ Retrospective – looking back 	<p>Documents/Interviews/Observations Survey</p>
<ul style="list-style-type: none"> ⦿ Prospective – looking forward 	
<ul style="list-style-type: none"> ⦿ ‘Natural’ experiments ⦿ Program evaluation 	<p>Pre and post intervention measures</p>



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa



McMaster
University

Inspiring Innovation and Discovery



UNIVERSITY OF
TORONTO

Funded projects from PHIRN call for proposals

Principal: Dr. Carles Muntaner, University of Toronto

Project title: **Labour market policies and social determinant of health: A review to establish priorities for Ontario**

Study intends to:

- synthesize the best available evidence in support of using labour market policy as a strategy for health promotion through action on social determinants of health.
- update the findings of the Employment Conditions Knowledge Network , with a specific focus on high-income jurisdictions and a ‘finer-grained’ review of relevant policies and interventions.
- suggest priorities for further exploration & intersectoral action in Ontario.



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa



Click View
then
Header
and Footer
to change
this text

Funded projects from PHIRN call for proposals

Principal: Dr. John Cairney, McMaster University

Project title: **Unmet need in mental health care: Exploring social determinants using intersectionality**

- Study aims to:
 - use linked data to estimate the number of Ontarians who meet diagnostic criteria for one or more of the following - depression, anxiety, substance/alcohol abuse - but who did not seek care in the past 12 months from a health care professional; and
 - identify high risk groups that may be more likely to have unmet need for mental health and addiction problems.



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa



McMaster
University

Click View
then
Header
and Footer
to change
this text



Funded projects from PHIRN call for proposals

Principal: Dr. Yogendra Shakya, Access Alliance and Multicultural Health and Community Services

Project title: **Pathways to income security and health for racialized families**

- This study will identify the 'critical nodes' of inclusion/exclusion and empowerment/disempowerment in the everyday pathways, policies, and services available for racialized families to use in order to address the systematic barriers and discriminations they face in achieving income security and health for their families



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa

OHRI  IRHO

McMaster
University 

Click View
then
Header
and Footer
to change
this text

UNIVERSITY OF
TORONTO 

Funded projects from PHIRN call for proposals

Principal: Dr. Sean Kidd, CAMH

Project title: **Addressing mental health disparities among marginalized groups: Learning from the most exceptional innovators in our community**

Study intends to:

- identify individuals and organizations successfully addressing inequity in the area of mental health from four at risk groups: immigrants/refugees, homeless persons, Native Canadians, and sexual minorities.
- identify one exceptionally effective individual, group, or organization in each area. Each person and/or group will: participate in an in-depth case study; and participate in a showcase event to learn about their innovative efforts.



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa

OHRI  **IRHO**

McMaster
University 

Click View
then
Header
and Footer
to change
this text

 UNIVERSITY OF
TORONTO

Funded projects from PHIRN call for proposals

Principal: Dr. Brenda Bruner, Queen's University

Project title: **Promoting a population level intervention to enhance participation in physical activity: The role of marketing and peer ambassadors**

- Study will enroll six schools participating in the Community Physical Activity Pass. Students will have a custom-developed campaign in addition to the use of Peer Ambassadors who will act as positive role models for PA, and increase awareness of PA and its benefits.
- Schools in the comparison group will receive the standard Pass promotion which typically consists of class announcements and letters. The findings will help guide program decisions and refine community-wide strategies to enhance PA.



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa



McMaster
University

Click View
then
Header
and Footer
to change
this text



Finding Data/Creating Evidence

- Look to the literature
- Ask and involve community partners
- Draw upon data directories
 - Stats Can Data Centres
 - CIHI
- Join/support data liberation efforts
- Link data to policy/program problematics



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa

OHRI  IRHO

McMaster
University



Inspiring Innovation and Discovery



UNIVERSITY OF
TORONTO

Translating Evidence

- Publish – grey and peer-reviewed
- Present – range of audiences and formats
 - *E.g., CHNET-Works!*
- Media – *public audiences*
 - *Be clear and accessible – build relationships*
- Knowledge broker – *policy audiences*
 - *1-2 page briefs*
- Target ‘Take Home’ Messages



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa

OHRI  IRHO

McMaster
University 

Inspiring Innovation and Discovery

 UNIVERSITY OF
TORONTO

Key 'Take Home' Messages

1. Be open and innovative
2. Data need to be made available and of high quality
3. Evidence needs to be meaningful for there to be uptake
4. Translating evidence is a social process



RRASP

Réseau de recherche sur l'amélioration
de la santé des populations

PHIRN

Population Health Improvement
Research Network



uOttawa

OHRI  IRHO

McMaster
University 

Inspiring Innovation and Discovery

 UNIVERSITY OF
TORONTO