Advancing Public Health Systems Research in BC: Renewing the Agenda

Proceedings from:
British Columbia Public Health Systems Research Think Tank
Richmond, BC
February 13 & 14, 2014
Contact Information:
Dr. Marjorie MacDonald
University of Victoria
PO Box 1700 STN CSC
Victoria, British Columbia V8W 2Y2
marjorie@uvic.ca
250-472-4265
Acknowledgements

We would like to acknowledge the support of the Canadian Institutes for Health Research and the BC Ministry of Health.

Travel expenses for many of the participants were covered by their organizations and we would like to acknowledge that this think tank would not have been possible without these contributions.

The following individuals are acknowledged for their input as the Planning Committee of the Think Tank: from the University of Victoria, Marjorie MacDonald, Trevor Hancock, Bernie Pauly, and Heather Wilson Strosher, and from the BC Ministry of Health, Warren O’Brien.

We would like to express our appreciation to Heather Wilson Strosher (University of Victoria) for coordinating the meeting, corresponding with participants and drafting this report. We would also like to thank Luiza Souza and Jeremy Riishede (University of Victoria) and Jodi McKinney (BC Ministry of Health) for assisting with arranging aspects of the meeting.

Finally, we thank the participants, including our invited colleagues from the US, Quebec, and Ontario. All of them took time out of their busy schedules to contribute their knowledge and expertise and we are grateful for their contributions.
Public health systems and services research (PHSSR) is a new and emerging field that lies between and links public health research and health services research. The main efforts to date in developing the field over the past decade have taken place in the USA, lead primarily by the National Coordinating Center for PHSSR at the University of Kentucky.

The Core Public Health Functions Research Initiative (CPHFRI) has been developing a PHSSR agenda over the past 7 years, primarily focused on British Columbia (BC) but also including partners in Ontario. All of the initial priority areas identified at a think tank held in 2007 have now been funded and given that there have been substantial shifts in public health organization and renewal in the province, we will be establishing a new set of PHSSR priorities for BC.

The working part of the Think Tank began with two ‘Fishbowl’ exercises; in the first, researchers listened to knowledge users discuss their key PHSSR issues, while in the second the roles were reversed. Overall, it is clear that there was considerable overlap in the research interests of the practice and research communities, although the emphasis within interest areas varied somewhat. The top research priorities identified by both the researchers and knowledge users were: a) Intersectoral/Multisectoral Collaboration; b) Public Health Economics; c) Data and Information Systems for Public Health; d) Public Health Workforce; e) Community Engagement/Interests; f) Impact and Outcomes; and g) Cross-comparisons of Organizational Structures. Researchers were more focused on examining policy development, universal versus targeted interventions and public health ethics. The knowledge users, on the other hand, were more interested in population health intervention research, and exploring impacts and outcomes.

Based on these exercises and discussions, the following priorities for PHSSR emerged:

- Multisectoral/Intersectoral Collaboration
- Data and Information Systems for Public Health
- Public Health Economics
- Public Health Decision Making
- Public Health System Organization
- Population Health Interventions
- Public Health Ethics
- Public Health Workforce
Building on the original CPHFRI research framework, the following cross-cutting themes also emerged which will be relevant to all research projects:

- Partnerships (how we work together)
- Knowledge Translation and Exchange
- Equity
- Methodological advancements (Natural Experiments, Quick Strikes, Public Health Economic Analysis, Complexity Science Methods, etc.)
- Complexity as a theoretical foundation for this work
- Outcomes

Next steps include holding a webinar to get feedback on the draft frameworks, renaming and re-visioning CPHFRI, expanding partnerships and networking opportunities and securing infrastructure funding.
# Table of Contents

ACKNOWLEDGEMENTS ............................................................................................................. 3
EXECUTIVE SUMMARY .............................................................................................................. 4
TABLE OF CONTENTS .................................................................................................................. 6
THINK TANK OVERVIEW ........................................................................................................... 7
  Rationale ................................................................................................................................. 7
  Think Tank Objectives ........................................................................................................... 8
  Overview of Think Tank Agenda ............................................................................................ 8
  Think Tank Participants .......................................................................................................... 9
OPENING RECEPTION .................................................................................................................. 9
  Welcome and Introductions ..................................................................................................... 9
  Welcome and Introduction to the First Nations Health Authority ........................................... 9
  The History of CPHFRI .......................................................................................................... 10
  Reflections from the Michael Smith Foundation for Health Research .................................. 11
THINK TANK DAY 1 ..................................................................................................................... 12
  Introduction ........................................................................................................................... 12
  Keynote Presentation: *The Status of PHSSR in the US and Lessons for BC* ....................... 12
  Panel: Link between PHSSR Strategic Directions of Research Funders ............................... 14
  Fishbowl Activity .................................................................................................................... 16
  Working Groups: Identifying Priorities in BC ....................................................................... 18
THINK TANK DAY 2 ..................................................................................................................... 20
  National Reflections: ON PHSSR Agenda & Pan-Canadian Think Tank ............................. 20
  Provincial Reflections: BC Ministry of Health ....................................................................... 20
  Priorities identified in Day 1 .................................................................................................. 21
  Panel: *Knowledge User Engagement – Working through the challenges* .......................... 21
  Small Groups: *Finalizing Emerging Priorities* ..................................................................... 22
  Drafting a New Framework ..................................................................................................... 23
  Next Steps: *Where do we go from here?* ........................................................................... 29
APPENDICES ........................................................................................................................................ 30
  Appendix 1: Think Tank Agenda ......................................................................................... 30
  Appendix 2: List of Participants ......................................................................................... 33
Think Tank Overview

Rationale

The Core Public Health Functions Research Initiative (CPHFRI) has attracted close to $6 million in peer reviewed funding to develop and conduct a research program and training opportunities aimed at studying public health systems renewal in Canada. This collaborative program of research brought together an inter-disciplinary team of academic researchers and national, provincial and local public health policy/decision-makers and practitioners. CPHFRI’s goals were to: a) advance the field of public health services research in Canada by implementing a consensus-based research agenda through the application and development of innovative research methodologies; b) broadly inform public health systems renewal in Canada that, in turn, will contribute to improving population health and reducing health inequities; c) contribute to better integration and linking of public/population health services and health services more broadly, particularly primary care; and d) train expert public health systems and population health intervention researchers.

In April 2007, CPHFRI team members, along with national and international experts, participated in a think tank to share their ideas, interests, and concerns related to research priorities for public health systems renewal in BC. The result was a shared research agenda, a research framework, and a time ordered set of research priorities that are illustrated in the cube diagram below.

This process enabled CPHFRI to demonstrate that true partnerships existed and that the research agenda had “built in” policy-relevance based on collaboratively identified priorities of researchers, decision-makers and practitioners which resulted in our high degree of success in obtaining provincial and national peer-reviewed funding. To date, we have completed seven research projects, along with the RePHS (Renewal of Public Health Systems) project which is
in year 5 and the ELPH (Equity Lens in Public Health) project which is in year 2. Now that all of CPHFRI’s initial priority areas have been funded, and given that there have been substantial shifts in public health organization and renewal in the province, we are establishing a new set of priorities for public health systems research in BC.

Think Tank Objectives

The purpose of this invitational Think Tank was to bring together a group of key stakeholders from across British Columbia with an interest and expertise in public health systems/services research (PHSSR) to engage in discussion and debate about research priorities in BC and to establish a new PHSSR agenda. The meeting provided a forum for this discussion.

The objectives of the entire process, which began before the meeting and will continue beyond it, were:

1. Celebrate the successful launch of a PHSSR agenda in British Columbia
2. Develop consensus on a PHSSR agenda for BC for the next 5 years
3. Start a process to revision and rename CPHFRI
4. Expand the network of PHSSR researchers and supporters

Overview of Think Tank Agenda

The meeting agenda was developed by the Think Tank Planning Committee; a copy of the full agenda is included in Appendix 1. The think tank began with an opening reception on the evening of February 12, 2014. A history of CPHFRI was presented, along with an introduction to the First Nations Health Authority and reflections on PHSSR in BC from the Michael Smith Foundation for Health Research.

The first day began with an overview of purpose of the meeting and a presentation on the challenges faced in the first years of developing a PHSSR agenda in BC, followed by a presentation on the status of PHSSR in the US with lessons for British Columbia. This was followed by a panel with representatives from two CIHR Institutes. The afternoon of day one began with a “fishbowl” activity in which participants were invited to share their views on research priorities related to public health services and systems in BC. The day ended with working groups developing lists of the most important research themes or priorities.

Day two began with a presentation on the work done to develop a national, as well as an Ontario-based, PHSSR agenda. This was followed by a presentation on ‘Provincial Reflections’ from the BC Ministry of Health. Next was a discussion of research priority themes based on the deliberations of the first day. Following this presentation was a panel in which three knowledge users shared their insights on overcoming challenges. The participants
then broke into small groups to finalize emerging themes. The day concluded with closing remarks about the next steps.

Think Tank Participants

A total of forty-six participants attended the two-day Think Tank; however some of the participants were only available one of the two days. Participants included one invited international guest from the United States, two representatives from the Canadian Institutes of Health Research, one from the National Collaborating Centre on the Determinants of Health, one from the Michael Smith Foundation for Health Research (reception only), and one from the Middlesex-London Health Unit in Ontario. From British Columbia, there were a total of 42 researchers, practitioners and policy makers representing the BC Ministry of Health, six health authorities, and four universities. Participants who attended the Think Tank are listed in Appendix 2.

Opening Reception

Welcome and Introductions

Marjorie MacDonald welcomed the participants and acknowledged the First Nations territory where the meeting was being held. She then gave a brief overview of the purpose of the meeting and provided a warm welcome to the new First Nations Health Authority (FNHA) and the next presenter, Michelle DeGroot.

Welcome and Introduction to the First Nations Health Authority

Michelle DeGroot, Executive Director, Policy, Planning and Strategic Services, FNHA, provided a background and introduction to the new First Nations Health Authority. Her presentation began with an overview of First Nations in BC. The Aboriginal population in BC is close to 200,000 and almost half are under the age of 25; there are 26 cultural groups and 32 Aboriginal languages. Michelle provided an overview of the history of the FNHA; governance structure; vision, values, and directives; the mandate and priorities. One of the concluding slides outlined the keys to success:

• Lead with culture
• Honour those who paved the way
• Maintain unity and discipline
• Create strong relationships
• Engage at the appropriate level
• Respect each other’s process
An element of the presentation that resonated for many of the think tank participants was the First Nations’ perspective of wellness, along with the commitment to First Nations’ values, approaches and culture.

The History of CPHFRI

Marjorie MacDonald and Trevor Hancock provided some background information on Public Health Systems and Services Research (PHSSR) and the history of the Core Public Health Functions Research Initiative. PHSSR is a new and emerging field that lies between and links public health research and health services research and is defined as “a field of study that examines the organisation, funding and delivery of public health services within communities, and the impact of these services on public health” (Mays, et al., 2003, p, 180).

The Core Public Health Functions Research Initiative was created in 2006 to examine the implementation of the Core Functions framework and was supported by a small Team Planning grant awarded by the Michael Smith Foundation for Health Research (MSFHR) and the BC Ministry of Health. Marjorie acknowledged how important that initial infrastructure funding was for leveraging future peer-reviewed funding. Another key to CPHFRI’s success was the ability to demonstrate that the research priorities were collaboratively identified by researchers and knowledge users at an initial think tank held was held in April 2007. Since then, CPHFRI has completed seven research projects and has two five year projects still underway. These projects have examined a variety of core public health programs as exemplars so as to not overburden health authority participants with continual studies; the core programs examined so far include:

- Unintentional Injury Prevention
- Food Safety
- Food Security
- Healthy Living
- Chronic Disease Prevention
- Core Programs that include STI Prevention
- Mental Health Promotion and Prevention of Mental Disorders
- Preventing the Harms of Substance Use

CPHFRI was also involved in planning a national think tank to identify national PHSSR priorities. A draft logic model and research framework were developed but due to lack of resources, there has not been much progress on the national agenda. We believe, however, that the findings from this think tank may complement and help move the national agenda forward.

Reflections from the Michael Smith Foundation for Health Research

Diane Finegood, President and CEO, MSFHR, emphasized the need for new research paradigms that are able to contribute to the understanding of complex systems. As illustrated in one of her slides and in Table 1 below, any research or intervention will be more valuable the closer one can get to understanding paradigms and goals; however it will also be more challenging. Given the complexity of the public health system, she challenged the group to move beyond a reductionist paradigm when developing the PHSSR agenda. Unfortunately, however, Dr. Finegood was not optimistic about the amount of funding available for PHSSR, particularly from the MSFHR.

Table 1: Intervention Level Framework

<table>
<thead>
<tr>
<th>Level</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paradigm</td>
<td>Deepest held beliefs</td>
</tr>
<tr>
<td>Goals</td>
<td>What trying to achieve</td>
</tr>
<tr>
<td>Structure</td>
<td>Information flows, connectivity, trust</td>
</tr>
<tr>
<td>Feedback &amp; delays</td>
<td>Self-regulation, reinforcement &amp; adaptation</td>
</tr>
<tr>
<td>Structural elements</td>
<td>Subsystems, actors, operating parameters</td>
</tr>
</tbody>
</table>

Given that CPHFRI’s entire program of research is based on a complexity science framework and approach, we believe that we have indeed moved beyond a reductionist paradigm but that further development in new paradigm research is warranted.

---

Think Tank Day 1

Introduction

Marjorie MacDonald and Trevor Hancock welcomed participants and gave a brief presentation on the challenges faced in the first years of developing a PHSSR agenda in BC. These challenges were broken down into five areas:

**Challenges of Multiple Successful Funding Applications**
- Research burden on the health authorities (HAs) and other participants
- Research burden on the researchers

**Different research cultures**
- Researchers versus practitioners
- Among different HAs
- Between the Ministry of Health and HAs
- Among different disciplines

**Methodology**
- Labour intensive and slow
- Participation is not easy on either side

**Resources**
- Lack of infrastructure funding
- Need more resources for participation, training, analysis, dissemination

**Sharing Results**
- Timeliness (Quicker analysis, Quantitative as well as Qualitative, Interim reports)
- Goal is to expand forms of dissemination (Webinars, Policy rounds)

**Keynote Presentation: The Status of PHSSR in the US and Lessons for BC**

**Glen Mays**
F. Douglas Scutchfield Endowed Professor of Health Services and Systems Research, College of Public Health, University of Kentucky

Dr. Mays’ was invited to speak to the think tank participants about the history and status of PHSSR in the US and provide some insight for moving the agenda forward in BC. He has been a key figure in the US for advancing the PHSSR agenda. His research focuses on strategies for organizing and financing public health services, preventive care, and chronic disease management. Mays is co-PI (with F. Douglas Scutchfield) of the National
Coordinating Center for Public Health Services and Systems Research at the University of Kentucky (http://www.publichealthsystems.org/phssr) funded by the Robert Wood Johnson Foundation. He also directs the Public Health Practice-Based Research Networks Program, which brings together over 100 public health agencies and researchers from around the US to study innovations in public health practice. A comprehensive US national agenda setting process for PHSSR, published in 2012, identified the following priority areas:

- Public health system organization and structure
- Public health financing and economics
- Public health workforce
- Public health information and technology
- Cross-cutting elements
  - Quality
  - Law and policy
  - Equity and disparities
  - Metrics and data
  - Analytic methods

Dr. May’s presentation focussed primarily on the first two priority areas and was a definite highlight of the think tank. He clearly outlined the successes and scope of PHSSR in the US over the last decade. In particular, participants were inspired by his research on public health economics and its impact on informing policy development in the US. For example, one of his slides outlined mortality reductions attributable to public health spending and another demonstrated how increases in public health spending per capita were correlated with decreased medical expenditures per recipient. This type of research can be used to estimate the value of public health spending on health and cost impacts. The use of the Public Health Practice-Based Research Networks has resulted in a vast amount of available quantitative data relevant to real-world settings, and increased engagement in research by decision makers and practitioners as most often they are identifying the research topics, disseminating the results and applying them in their own organizations. The presentation concluded by outlining the benefits of a “rapid-learning system” in public health where research continuously influences practice and practice influences research.

Dr. Mays’ presentation is available online at http://works.bepress.com/glen_mays/131/

---

3 http://www.publichealthsystems.org/research-agenda.aspx
Panel: Link between PHSSR Strategic Directions of Research Funders

Nancy Edwards
Professor, School of Nursing and Director, Community Health Research Unit, University of Ottawa; Scientific Director, CIHR Institute of Population and Public Health (IPPH); CHSRF/CIHR Nursing Chair

Dr. Edwards began by assuring the participants that there is a place for PHSSR within the funding initiatives of CIHR and that IPPH is strengthening their *systems* orientation. Her presentation included an overview of many of the IPPH funding initiatives. She pointed out that 70% of the funding for CIHR goes toward the Open Operating Grants Program so strategic initiatives are not the main source of funding; she strongly encouraged participants to apply to the open competitions to increase the visibility of population/public health and health systems and policy research since biomedical research dominates. She also encouraged participants to explore the SPOR Network in Primary and Integrated Health Care Innovations and the Pathways to Health Equity for Aboriginal Peoples.

Information about IPPH can be found on the IPPH News and Announcements webpage: http://www.cihr-irsc.gc.ca/e/38101.html

David Buckeridge
Institute Advisory Board Member, CIHR Institute of Health Services and Policy Research; Associate Professor, Epidemiology and Biostatistics, McGill University; Canada Research Chair in Public Health Informatics; Medical Consultant, INSPQ & Montreal Public Health
As an Institute Advisory Board Member, Dr. Buckeridge was representing CIHR’s Institute of Health Services and Policy Research (IHSPR). At the time of the think tank, the current research priority areas for IHSPR were:

- **Primary Health Care Innovations**
  - Signature Initiative in Community-based Primary Health Care
  - SPOR Network in Primary and Integrated Health Care
- **e-Health Innovations**
- **Financing, sustainability and governance**
  - Signature Initiative in Evidence Informed Healthcare Renewal
- **Access to appropriate care across the continuum**
- **Drug policy**

Dr. Buckeridge presented some very interesting work being done around e-Health and participatory epidemiology; for example, using social media sites to track correlations with obesity rates and using online cohorts for surveillance of flu outbreaks. The main messages from his presentation were:

- New synergies are needed between public health and primary care to prevent and manage acute and chronic conditions
- E-health and social media are creating new opportunities to bridge the gap between public health and primary care
- Integrated information systems are the backbone to analyze and summarize population health and performance data
- Learning health care systems are essential to transform and sustain effective health care

Interestingly, Dr. Buckeridge and Dr. Mays both highlighted the need for learning systems where research and practice continually inform one another.

For more information on IHSPR, visit: [http://www.cihr-irsc.gc.ca/e/35708.html](http://www.cihr-irsc.gc.ca/e/35708.html)
Fishbowl Activity

Trevor Hancock explained the purpose of the “Fishbowl Activity”. The intent was to provide an opportunity for participants to share their views on research priorities and also offer them a chance to listen to others’ perspectives.

Participants self-identified as knowledge-users or researchers and each group was given a chance to be on the inside of the fishbowl while the other group listened. Twelve researchers and sixteen knowledge users were each asked to discuss what research they would like to see done and why. Trevor reminded participants not to focus on individual public health issues but rather to address the system level research questions.

Following the Think Tank, the responses of researchers and knowledge users were analyzed. The responses of both groups were compared to determine overlaps in interest, and whether there were specific priorities that emerged in one group that were not shared by the other group. As reflected in Table 1 below which includes the number of responses for each priority area identified, it is clear that there was considerable overlap in the research interests of the practice and research participants, although the emphasis within interest areas varied somewhat. We were encouraged by this finding which replicated our initial think tank in 2007. This means that research projects can be designed to incorporate the concerns of both groups ensuring policy and practice relevance, as well as researcher engagement.
Table 2: Analysis of Practitioner/Policymaker and Researcher Responses

<table>
<thead>
<tr>
<th>Knowledge Users (16)</th>
<th>Researchers (12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Investment/PH Economics (9)</td>
<td>PH Economics (4)</td>
</tr>
<tr>
<td>Impact and Outcomes (8)</td>
<td>Impact and Outcomes (4)</td>
</tr>
<tr>
<td>Data and Information Systems (7)</td>
<td>Data and Information Systems (5)</td>
</tr>
<tr>
<td>Intersectoral/Multisectoral Collaboration (6)</td>
<td>Intersectoral/Multisectoral Collaboration (4)</td>
</tr>
<tr>
<td>Expand Scope of PH System (4)</td>
<td>Expand Scope of PH System (4)</td>
</tr>
<tr>
<td>Community (4)</td>
<td>Community Mobilization/Engagement/Interests (6)</td>
</tr>
<tr>
<td>Population Health Intervention Research (7)</td>
<td>Population Health Intervention Research (3)</td>
</tr>
<tr>
<td>PH Decision Making (5)</td>
<td>PH Decision Making (3)</td>
</tr>
<tr>
<td>PH Workforce (3)</td>
<td>PH Workforce (4)</td>
</tr>
<tr>
<td>Wellness Model (4)</td>
<td>FNHA / Wellness Model (3)</td>
</tr>
<tr>
<td>Complexity (2)</td>
<td>Complexity and systems thinking (4)</td>
</tr>
<tr>
<td>Policy Development (2)</td>
<td>Examining and Informing Policy (4)</td>
</tr>
<tr>
<td>Equity (2)</td>
<td>Equity (4)</td>
</tr>
<tr>
<td>Regionalization/Comparison of Structures (3)</td>
<td>Cross Provincial/National Comparison (2)</td>
</tr>
<tr>
<td>Quick turnaround (1)</td>
<td>Nimble/ responsive in our research (4)</td>
</tr>
<tr>
<td>Partner with Business/Private Sector (2)</td>
<td>Engage Business Community (4)</td>
</tr>
<tr>
<td>Culture and Identity (2)</td>
<td>Culture and Identity (2)</td>
</tr>
<tr>
<td>Natural Experiments (3)</td>
<td>Natural Experiments (1)</td>
</tr>
<tr>
<td>Implementation science (2)</td>
<td>Implementation science (1)</td>
</tr>
<tr>
<td>Knowledge Translation (1)</td>
<td>Knowledge Translation and Exchange (3)</td>
</tr>
<tr>
<td>Context (3)</td>
<td>Context (1)</td>
</tr>
<tr>
<td>Methodology (1)</td>
<td>Methodology (2)</td>
</tr>
</tbody>
</table>

The topics below were unique to either practitioners/policymakers or researchers:

<table>
<thead>
<tr>
<th>Knowledge User (16)</th>
<th>Researchers (12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH management / Leadership (1)</td>
<td>PH Ethics (3)</td>
</tr>
<tr>
<td></td>
<td>Universal vs. Targeted Interventions (2)</td>
</tr>
</tbody>
</table>
Overall, there is clearly a lot of overlap between the PHSSR interests of the two groups. There was a great deal of focus by both groups on intersectoral and multisectoral collaboration, public health economics, and data and information systems. The knowledge users were the first group to express their interests and there were more knowledge users than researchers in the fishbowl. Many participants expressed that they echoed what was already said before them; therefore the numbers in the table may not accurately represent levels of interest in each topic. Researchers were more focused on examining policy development, universal versus targeted interventions, and public health ethics. The knowledge users, on the other hand, were more interested in population health intervention research, and exploring impacts and outcomes.

**Working Groups: Identifying Priorities in BC**

The first day of the Think Tank ended with participants dividing into five working groups to identify the top PHSSR priorities in BC. Trevor Hancock facilitated the discussion and reporting back from the working groups. An analysis of the notes from the five groups, along with the fishbowl responses, were integrated into a modified version of the ‘CPHFRI cube’ (see Figure 1 below), which was the organizing framework for PHSSR that emerged from the first think tank in 2007 (for a description of the original CPHFRI cube, see page 7). This modified cube was a first attempt to incorporate the ideas that had emerged so far during the think tank. Along the top are cross-cutting themes that would be relevant to each research project; the face of the cube represents research priority areas (note that the ones with ‘??’ preceding them are potential research priorities that were not identified as frequently by the group so were in need of further reflection); and the third dimension is the ‘Public Health System’ which is what any given research project would be examining. This draft framework was used to spearhead the discussion on day two and was later modified into refined draft frameworks.
The collective infrastructure and effort of public, private and voluntary agencies that contribute to local public (population?) health production.

- Intersectoral/multisectoral collaboration/partnerships
- Data and information systems
  - PH workforce
  - PH decision-making
  - PH system organisation
- Pop health interventions (e.g., FN health governance, anti-poverty strategies)
  ?? Outcomes
  ?? Equity/diversity/CS lens
  ?? Engagement
Think Tank Day 2

National Reflections: ON PHSSR Agenda & Pan-Canadian Think Tank

To position our BC research priorities in a broader context, the second day of the think tank began with a discussion of a national PHSSR agenda that emerged from a think tank in May 2011. More information about the national PHSSR agenda, the report is available at: 
http://www.uvic.ca/research/groups/cphfri/assets/docs/PHSSR%20Think%20Tank%20report%20Final%20revised.pdf.

Trevor also presented some slides on an Ontario PHSSR agenda being lead by partners on the RePHS project. Many of the same priorities were evident in both of these agendas and we will continue to work with the Ontario partners and those from the national think tank as the BC agenda is developed further.

Provincial Reflections: BC Ministry of Health

Arlene Paton, Assistant Deputy Minister, Population and Public Health, BC Ministry of Health, provided the perspective of the Ministry to help inform the agenda setting process. The foundation of Promote, Prevent, Protect: Our Health Begins Here: BC’s Guiding Framework for Public Health is still the Core Public Health Functions Framework which formed the basis of the original CPHFRI agenda. At the time of the February think tank, Setting Priorities for the BC Health System was just about to be released so a brief description of the document was provided. The areas and questions outlined by the Ministry of Health as being important to consider for system change and implementation support when developing our agenda were:

1. **Public health surveillance plan:** How will we implement the surveillance plan to support effective delivery of public health services to achieve better population health?

2. **Public health human resources, training and development:** Do we have the right training and the right balance of health human resources in BC?

3. **Intersectoral collaboration:** How does the public health system structure and culture support effective collaborative relationships?

4. **Health equity:** How can we collectively learn from our efforts to improve health equity in BC?
5. **Research and knowledge transfer through strengthened ties between the academic community and the public health system:** How do we get better at mobilizing knowledge across public health in BC?

Many participants noted how closely each of these areas mapped onto the original CPHFRI agenda, as well as the discussions that were emerging from the first day of the think tank.

**Priorities identified in Day 1**

Bernie Pauly lead a discussion on the priorities identified on the first day of the think tank using the modified version of the CPHFRI cube (see Figure 1 above). There was some discussion around the definition of the ‘population and public health system’ which replaced the Core Public Health Functions Framework from the original cube. Suggested changes to the definition were later integrated into a new definition incorporated into Figures 2-4 which are discussed in detail below. Feedback on the research priorities and cross-cutting themes was also noted and integrated into later drafts of the draft frameworks.

**Panel: Knowledge User Engagement – Working through the challenges**

Three health authority representatives were asked to present on the challenges they see facing knowledge users in terms of engaging in research and provide advice on how to overcome these challenges. First, Victoria Lee, Medical Health Officer, Fraser Health, emphasized the importance of relationships and trust and believes that we need to work together, sometimes with unusual partners, to identify indicators of well being. We need complex methodologies to examine complex public health system issues. As always, resources are key and we need to look for network level opportunities and diverse partnerships, solidifying the relationship between research, policy, practice and community.

Next, Sarah Williams, Physician and Senior Advisor for Health Services, First Nations Health Authority, stressed the importance of culture and identity when working with any First Nations and ensuring the community identifies priorities. Researchers should approach with a genuine spirit of partnership and let the community know that they have certain skills and resources and ask the community if there is a way that this could be useful to them. First Nations know what they need and want. Moreover, the power of messaging can be so damaging; First Nations people must no longer hear how high their risk is of various chronic diseases, instead they need to hear of all of their cultural assets. Lastly, she stressed that an intersectoral approach is necessary to achieve wellness outcomes.
Chris Buchner, Regional Director, Prevention, Vancouver Coastal Health, broke down challenges into four areas:

1. **Data and access** - need to find a balance between privacy legislation and access to data so that we can follow a person through the system.

2. **Infrastructure and resources** – how do we link resource allocation to outcomes? Public health constantly struggles to access limited resources. This challenge is even greater for community partners who play an important role in promoting health and delivering services so we must ensure to collaborate with them.

3. **Methods and models** – some of the most important research findings come from simple methodologies. For example, in Stop AIDS peers were engaged to conduct client satisfaction surveys and this provided useful data to identify gaps and determine what was working.

4. **Culture and understanding and interpretation of results** – data is interpreted differently within the organization by those coming from different perspectives. Have to think about ways to embed research into the culture of the organization in simple ways to inform program implementation.

**Small Groups: Finalizing Emerging Priorities**

Participants broke into small groups and were given the task of reinventing the ‘cube’ and discussing and defining the elements that were essential to include. There was some great brainstorming about what shapes or images could replace the original CPHFRI cube, along with work to refine and define the research priorities and cross-cutting themes.
Drafting a New Framework

Following the think tank, the planning committee met and proposed three possible frameworks based on the presentations, fishbowl exercise and small group discussions (see Figures 2-4 below). Each draft framework includes the same three dimensions: a) the Population and Public Health System at its core including a definition; b) six cross-cutting themes that are relevant to all research projects - equity, methods, partnerships, KTE, outcomes, and complexity; and c) eight research priority areas: PH Workforce, PH Organization, PH Decision-making, Data and Information Systems for PH, Intersectoral/Multisectoral Collaboration, PH Economics, Population Health Interventions, and PH Ethics. Below we have described each of these areas and included sample research questions for each of the research priority areas. The questions are not intended to represent an exhaustive list, but rather provide examples of the kinds of questions that might be asked in relation to each of the themes. There is obviously overlap in some of the areas which will make it easier to incorporate one or more priority areas into a given research proposal or project.

We would like to acknowledge that none of the invited public health information systems experts were able to participate in the think tank (e.g., Dr. Andre Kushnirik and Dr. Elizabeth Borycki), so in addition to the priority of Data and Information Systems for Public Health, we may need to consider adding other priorities related to this. We will work with our absent colleagues to refine some priorities to bring back to the team at an upcoming webinar so we can be sure not to leave this important aspect of PHSSR out of our agenda.

Equity

Equity, specifically health equity, was a cross-cutting theme in the original CPHFRI cube and remains a key theme. To achieve equity in health requires attention to the infrastructure that supports and organizes public health. Health inequities embedded in health and societal structures are potentially remediable and we will continue to examine how an equity lens is or can be operationalized to address inequities at the structural, community, or service level.

Partnerships

The principle of partnership is a guiding philosophical value for CPHFRI’s team work. The kind of knowledge construction relevant for studying the population and public health system must be created in partnership to be integrated into practice at every system level. All knowledge users and researchers are engaged as equal partners and identify priorities and develop the program of research collaboratively.

KTE

Knowledge translation and exchange is critical to ensuring that the products of our research are relevant, accessible and utilized. Since the inception of CPHFRI, our
philosophical perspective on KTE has meant that it is embedded in each research project and all of the partners are involved in both knowledge production and knowledge use; in other words, decision makers are also researchers while researchers are also knowledge users.

Methods
An overarching goal will be to contribute to the adaptation, development, training and use of innovative methods development by focusing on methods for studying implementation and outcomes, complex systems, and rigorous tracking of causal processes in non-experimental designs. Some methods discussed at the think tank included natural experiments, public health economic analysis, and Quick Strikes which would involve short term funding and quick turnaround of findings.

Complexity
The complexity inherent in studying implementation processes in complex systems creates many methodological challenges. Complexity was added as a cross-cutting theme given that all projects involve the study of a complex adaptive system – the population and public health system. A focus on complexity has always been inherent in the CPHFRI framework, and provides a theoretical basis for several of our research projects but it was explicitly named in the framework. The addition of complexity as a cross cutting theme enhances its importance.

Outcomes
Another addition to the cross cutting themes from the original CPHFRI framework is ‘outcomes’. Each project, on some level, will examine outcomes, whether the project will be exploring a population health intervention or examining the public health workforce, organization or decision-making, outcomes will be central to each project. The importance of shifting our emphasis from process to outcomes is reflected in this addition.

Research Priority Areas

Public Health Workforce
What are the essential core competencies, training requirements and the optimal workforce composition required for an effective population and public health system? How do we work with other sectors to facilitate public health skill development?

Public Health Organization
What characteristics of public health delivery systems influence the effectiveness of public health strategies? What is the relationship between organizations and structures responsible for public health? How does public health fit within the larger health system and what impact does this have on PH outcomes?

Public Health Decision-making
How are the most effective public health programs and policies chosen? What factors contribute to evidence-informed decision making? How do values, political support,
advocacy, leadership, and public opinion impact public health decision making? How do we synthesize relevant research to inform policy, practice, and program implementation decisions in a timely matter?

**Data and Information Systems for Public Health**

Access to relevant and informative data sets is required to produce and use evidence. How do you protect privacy while also enabling access to important data, within and outside of the health care system? What can we learn from e-Health innovations in relation to the population and public health system?

**Intersectoral/Multisectoral Collaboration**

How do sectors work together for optimal public health outcomes? How does the public health sector engage and collaborate with other sectors, including those not normally associated with public health, which together can have a substantial impact on health and well-being outcomes? Note that this research priority is different than the cross-cutting theme of ‘partnerships’ which focuses on the way in which people engaged in the research work together as partners.

**Public Health Economics**

How do investments in public health strategies impact or offset the need for downstream spending on health care and/or other social services? How can this information be used to influence policy and advocate for greater public health resource allocation and increase the efficiency of the population and public health system?

**Population Health Interventions**

There is a great deal of overlap between PHSSR and Population Health Intervention Research and as this BC research agenda unfolds, we must clearly define the relationship between the two. Population health interventions are defined by PHIRIC as “policies, programs and resource distribution approaches that impact a number of people by changing the underlying conditions of risk and reducing health inequities” \(^4\). One example of a population health intervention that was suggested at the think tank was examining the impact and outcomes of the new First Nations Health Authority as a system level intervention.

**Public Health Ethics**

How do we contribute to the developing field of public health ethics which may include the principles of social justice, equity, advocacy, community engagement, culture and identity, all of which may contribute to promoting and protecting the health and well-being of the public?

---

\(^4\) [http://www.cihr-irsc.gc.ca/e/38731.html](http://www.cihr-irsc.gc.ca/e/38731.html)
Figure 2: Draft Research Framework 1

* The collective infrastructure and actions of individuals and public, private and voluntary organizations that contribute to local, regional, provincial, national and global health and wellness through promotion, prevention and protection.
Figure 3: Draft Research Framework 2
Figure 4: Draft Research Framework 3

* The collective infrastructure and actions of individuals and public, private and voluntary organizations that contribute to local, regional, provincial, national and global health and wellness through promotion, prevention and protection.
As noted above, each of these three draft frameworks includes the same elements. The first draft framework (Figure 2) is simply a modification of the CPHFRI cube which emerged from the 2007 think tank. The benefit of the cube is that it easily demonstrates the three dimensions. The second draft framework (Figure 3) was based on a diagram that was proposed by one of the small groups that was attempting to include the same elements in a more fluid, less boxy, visual representation. Some noted that the challenge with the cylinder is that it is more difficult to include the three dimensions. Finally, the third draft framework (Figure 4) includes the cross-cutting themes at the core to show that they are relevant to each research priority area, which are the ‘spokes’ on the framework, and the ‘population and public health system’ is the outer layer.

Next Steps: Where do we go from here?

Next steps were discussed and these included:

- Holding a webinar to get feedback on the draft frameworks;
- Renaming and re-visioning CPHFRI;
- Expanding partnerships and networking opportunities;
- Securing infrastructure funding.

Glen Mays also provided some final reflections for the participants based on his observations of the two days. First, there are opportunities for learning from each other by doing a cross-national comparison between the US and Canada given that there are both commonalities in priorities and differences in structures that exist between the two countries. He would be interested in collectively pursuing this with members of the team. Second, it is clear that there is a huge set of research issues emerging; a timeline would help outline which topics are most relevant and important at various stages. Finally, he recommended identifying different stakeholders who can be responsible for moving each topic area forward.

To conclude the think tank, Trevor Hancock, Marjorie MacDonald, Bernie Pauly, and Warren O’Briain thanked everyone for sharing their insight. Evaluation forms were then handed out to participants; responses were very positive and ranged from an appreciation for the richness of the discussions to looking forward to what comes out of the process. Many commented on the benefit of Glen Mays’ presentation and learning from what is occurring in the US as their PHSSR agenda unfolds, particularly the work on public health economics. Several participants commented on the diverse representation of participants (academics, practitioners, policy-makers and research funders) and the common ground that was identified. Many enjoyed the wide scope of perspectives and ideas and commented on the need for securing infrastructure funding in order to move the agenda forward.
Appendices

Appendix 1: Think Tank Agenda

Think Tank Agenda
Advancing Public Health Systems Research in BC: Renewing the Agenda

Wednesday, February 12, 2014  7:00 pm - 9:00 pm
Seymour/Whistler Room, Vancouver Airport Marriott Hotel

Welcoming Reception: Providing Context on PHSR in BC

- Host bar and canapés provided

  Welcome and Introductions
  Marjorie MacDonald and Trevor Hancock

  Welcome and Introduction to the First Nations Health Authority
  Michelle DeGroot

  The History of CPHFRI
  Marjorie MacDonald and Trevor Hancock

  Reflections from the Michael Smith Foundation for Health Research
  Diane Finegood
Thursday, February 13, 2014  8:30 am – 5:00 pm
Seymour/Whistler Room, Vancouver Airport Marriott Hotel

Day One of Symposium

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 - 8:30</td>
<td>Continental Breakfast will be provided prior to the meeting</td>
</tr>
<tr>
<td>8:30 - 8:45</td>
<td>Welcome and Introductions: Background and Purpose of Meeting</td>
</tr>
<tr>
<td></td>
<td>Marjorie MacDonald and Trevor Hancock</td>
</tr>
<tr>
<td>8:45 - 9:30</td>
<td>Looking Ahead: Issues and challenges arising from our first five years</td>
</tr>
<tr>
<td></td>
<td>Marjorie MacDonald and Trevor Hancock</td>
</tr>
<tr>
<td>9:30 - 10:30</td>
<td>Keynote Presentation: The status of PHSR in the US and Lessons for BC</td>
</tr>
<tr>
<td></td>
<td>Glen Mays</td>
</tr>
<tr>
<td>10:30 - 10:45</td>
<td>Break</td>
</tr>
<tr>
<td>10:45 - 12:00</td>
<td>Panel: Link between PHSR and Strategic Directions of Research Funders</td>
</tr>
<tr>
<td></td>
<td>Nancy Edwards (CIHR:IPPH) and David Buckeridge (CIHR:IHSPR)</td>
</tr>
<tr>
<td></td>
<td>Facilitator: Joan Wharf Higgins</td>
</tr>
<tr>
<td>12:00 - 12:45</td>
<td>Lunch provided</td>
</tr>
<tr>
<td>12:45 - 1:15</td>
<td>Knowledge User Fishbowl Exercise: What research would you like to see done and why?</td>
</tr>
<tr>
<td></td>
<td>Facilitator: Bernie Pauly</td>
</tr>
<tr>
<td>1:45 - 2:45</td>
<td>Researcher Fishbowl Exercise: What research would you like to see done and why?</td>
</tr>
<tr>
<td></td>
<td>Facilitator: Ted Bruce</td>
</tr>
<tr>
<td>2:45 - 3:00</td>
<td>Debrief of Fishbowl Exercise: What are the commonalities?</td>
</tr>
<tr>
<td></td>
<td>Facilitator: Marjorie MacDonald</td>
</tr>
<tr>
<td>3:00 - 3:15</td>
<td>Break</td>
</tr>
<tr>
<td>3:15 - 4:25</td>
<td>Identifying Priorities in BC</td>
</tr>
<tr>
<td></td>
<td>Small Groups: Identify and prioritize the top research themes</td>
</tr>
<tr>
<td>4:25 - 4:55</td>
<td>Report Back and Brief Discussion: Emerging PHSR Themes in BC</td>
</tr>
<tr>
<td></td>
<td>Facilitator: Trevor Hancock</td>
</tr>
<tr>
<td>4:55 - 5:00</td>
<td>Closing Remarks</td>
</tr>
<tr>
<td></td>
<td>Trevor Hancock</td>
</tr>
</tbody>
</table>
Day Two of Symposium

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 - 8:30</td>
<td>Continental Breakfast will be provided prior to the meeting</td>
</tr>
</tbody>
</table>
| 8:30 - 9:00| National Reflections: Ontario PHSR Agenda and Pan-Canadian Think Tank  
Marjorie MacDonald and Trevor Hancock |
| 9:00 - 9:30| Provincial Reflections: BC Ministry of Health  
Arlene Paton |
| 9:30 - 10:00| Present and discuss priorities identified in Day 1  
Facilitator: Bernie Pauly |
| 10:00 - 10:15| Break                                                                                           |
| 10:15 - 11:30| Panel: Knowledge User Engagement – Working through the challenges  
Victoria Lee (FH), Sarah Williams (FNHA) and Chris Buchner (VCH)  
Moderator: Marjorie MacDonald |
| 11:30 - 12:30| Finalizing Emerging Priorities (Shared Research Agenda)  
Small Groups: Take one or two key priorities and refine them  
(Groups based on interest) |
| 12:30 - 1:30| Lunch provided                                                                                  |
| 1:30 - 2:15| Reports back from small groups  
Facilitator: Warren O’Briain |
| 2:15 - 3:15| Next Steps: Where do we go from here?  
Facilitator: Trevor Hancock |
| 3:15 - 3:30| Reflections and Closing Remarks  
Marjorie MacDonald |
| 3:30| Refreshments                                                                                   |
## Appendix 2: List of Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marjorie MacDonald</td>
<td>Professor, School of Nursing, University of Victoria, CIHR/PHAC Applied Public Health Chair</td>
</tr>
<tr>
<td>Trevor Hancock</td>
<td>Professor and Senior Scholar, School of Public Health and Social Policy, University of Victoria</td>
</tr>
<tr>
<td>Bernie Pauly</td>
<td>Associate Professor, School of Nursing, University of Victoria, Scientist, Centre For Addictions Research of B.C. (CARBC)</td>
</tr>
<tr>
<td>Warren O’Briain</td>
<td>Executive Director, Communicable Disease Prevention, Harm Reduction and Mental Health Promotion, BC Ministry of Health</td>
</tr>
<tr>
<td>Glen Mays</td>
<td>F. Douglas Scutchfield Endowed Professor of Health Services and Systems Research, College of Public Health, University of Kentucky</td>
</tr>
<tr>
<td>Nancy Edwards</td>
<td>Scientific Director, CIHR Institute of Population and Public Health, Professor, School of Nursing, University of Ottawa</td>
</tr>
<tr>
<td>David Buckeridge</td>
<td>Institute Advisory Board Member, CIHR Institute of Health Services and Policy Research, Associate Professor, Epidemiology and Biostatistics, McGill University, Canada Research Chair in Public Health Informatics, Medical Consultant, INSPQ &amp; Montreal Public Health</td>
</tr>
<tr>
<td>Diane Finegood</td>
<td>President &amp; CEO, Michael Smith Foundation for Health Research, Professor, Biomedical Physiology and Kinesiology, Simon Fraser University</td>
</tr>
<tr>
<td>Arlene Paton</td>
<td>Assistant Deputy Minister, Population and Public Health, BC Ministry of Health</td>
</tr>
<tr>
<td>Stephen Smith</td>
<td>Director, Mental Health Promotion and Mental Illness Prevention, BC Ministry of Health</td>
</tr>
<tr>
<td>Sylvia Robinson</td>
<td>Joint Director, Public Health and Primary Care Collaboration, BC Ministry of Health</td>
</tr>
<tr>
<td>Name</td>
<td>Title</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Matt Herman</strong></td>
<td>Executive Director, Health Living Branch, Population and Public Health, BC Ministry of Health</td>
</tr>
<tr>
<td><strong>Nicolette McGuire</strong></td>
<td>Manager, Performance Management and Evaluation, Business Operations and Surveillance, BC Ministry of Health</td>
</tr>
<tr>
<td><strong>Ciro Panessa</strong></td>
<td>Director, Blood Bourne Pathogens, Communicable Disease Prevention, Harm Reduction and Mental Health Promotion, BC Ministry of Health</td>
</tr>
<tr>
<td><strong>Michelle DeGroot</strong></td>
<td>Executive Director, Policy, Planning and Strategic Services, First Nations Health Authority</td>
</tr>
<tr>
<td><strong>Sarah Williams</strong></td>
<td>Physician, Senior Advisor for Health Services, First Nations Health Authority</td>
</tr>
<tr>
<td><strong>Lynn Buhler</strong></td>
<td>Executive Director, Public Health, Vancouver Coastal Health</td>
</tr>
<tr>
<td><strong>Chris Buchner</strong></td>
<td>Regional Director, Prevention, Vancouver Coastal Health</td>
</tr>
<tr>
<td><strong>Juan Solorzano</strong></td>
<td>Manager, Population Health Promotion, Vancouver Coastal Health</td>
</tr>
<tr>
<td><strong>Karen Dickenson</strong></td>
<td>Director, Clinical Programs, Population and Public Health, Fraser Health</td>
</tr>
<tr>
<td><strong>Victoria Lee</strong></td>
<td>Medical Health Officer, Fraser Health</td>
</tr>
<tr>
<td><strong>Amanda Parks</strong></td>
<td>Coordinator, Health System Planning, Interior Health</td>
</tr>
<tr>
<td><strong>Richard Stanwick</strong></td>
<td>Chief Medical Health Officer, Island Health</td>
</tr>
<tr>
<td><strong>Paul Hasselback</strong></td>
<td>Medical Health Officer, Island Health</td>
</tr>
</tbody>
</table>
Helen von Buchholz  
Project Manager, Public Health Programs, Island Health

Kathy Easton  
Manager, Duncan, Lake Cowichan, Sooke, and West Shore Health Units, Island Health

Ross Graham  
Manager, Strategic Projects, Middlesex-London Health Unit, Ontario

Lydia Drasic  
Executive Director, BCCDC Operations & Chronic Disease Prevention  
BC Centre for Disease Control, Provincial Health Services Authority

Bonnie Henry  
Deputy Provincial Health Officer, BC Ministry of Health  
Associate Professor, School of Population and Public Health, University of British Columbia

Nancy Laliberte  
Leader, PHSA Aboriginal Health Program, Provincial Health Services Authority

Lesley Dyck  
Knowledge Translation Specialist, National Collaborating Centre on the Determinants of Health

Ted Bruce  
Past President, Public Health Association of British Columbia

Elizabeth Saewyc  
Professor, School of Nursing, University of British Columbia  
Research Director, McCreary Centre Society  
CIHR/PHAC Applied Public Health Chair

Jalil Safaei  
Associate Professor, Department of Economics, University of Northern British Columbia

Joan Wharf Higgins  
Professor, School of Exercise Science, Health & Education, University of Victoria  
Canada Research Chair in Health & Society

Annette Browne  
Professor, School of Nursing, University of British Columbia

Susana Caxaj  
Assistant Professor, School of Nursing, University of British Columbia - Okanagan
Advancing Public Health Systems Research in BC: Renewing the Agenda

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bruce Wallace</td>
<td>Post Doctoral Fellow, University of Victoria</td>
</tr>
<tr>
<td>Wanda Martin</td>
<td>Assistant Professor, College of Nursing, University of Saskatchewan</td>
</tr>
<tr>
<td>Shannon Turner</td>
<td>PhD Student, University of Victoria</td>
</tr>
<tr>
<td>Phuc Dang</td>
<td>PhD Student, University of Victoria</td>
</tr>
<tr>
<td>Megan Kirk</td>
<td>PhD Student, University of Victoria</td>
</tr>
<tr>
<td>Mary Hill</td>
<td>PhD Student, University of Victoria</td>
</tr>
<tr>
<td>Kathleen Perkin</td>
<td>Research Coordinator, Equity Lens in Public Health (ELPH), University of Victoria</td>
</tr>
<tr>
<td>Corrine Lowen</td>
<td>Research Associate, Equity Lens in Public Health (ELPH), University of Victoria</td>
</tr>
<tr>
<td>Heather Wilson Strosher</td>
<td>CPHFRI Coordinator, University of Victoria</td>
</tr>
</tbody>
</table>