

***Advancing Public
Health Systems and
Services Research in
Canada:
Developing a
Pan-Canadian Agenda***

Proceedings from:

**Canadian Public Health Systems
and Services Research Think Tank**

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Think Tank Planning Committee

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Executive Summary

1. 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.
2. The main focus of effort to date in developing the field has been in the USA over the past decade, although a mainly BC-based effort has been underway in Canada for the past 6 years.

The international picture

3. Efforts are now underway in both the USA and Canada (this workshop) to develop national PHSSR agendas. The US process involved seven steps:
 - Systematic literature reviews
 - White papers distributed to key practice and research partners
 - Webinars with subject matter experts presenting and facilitating discussion in the four areas covered by the targeted systematic reviews (Workforce, Finance, Data and Methods, and Structure and Organization)
 - Vetting with research and practice community: Keeneland Conference, AcademyHealth PHSR Interest Group, National Association of County and City Health Officials (NACCHO) annual meeting etc.
 - Online comment period
 - Publication
 - Back to step one

Moving the agenda forward in the USA requires:

- A shared vision and coherent definition for PHSSR (take the time to get it right now)
 - A committed group with sustainable funding and infrastructure from more than one source
 - Training, capacity building, and funding of new researchers in multiple disciplines
 - Elevate the visibility of PHSSR among policy makers, practitioners and researchers
 - Innovative strategies to disseminate and translate findings to appropriate audiences with the aim to improve population health
4. In the United Kingdom, PHSSR has not emerged as a separate concept but is found within the broad field of public health research. There are a number of challenges faced in the UK, including fragmentation across funding bodies, a disconnect between research and practice, and weakness in the areas of intervention research and Knowledge Translation. Inadequacies in the evidence base result from:
 - Research questions that are not directly relevant to the needs of policy makers and practitioners
 - Studies that are often of poor quality methodologically
 - The difficulty of determining the transferability from one setting to another
 - Poorly described interventions
 - Evidence that is too imprecise to determine the relationship between the intervention and the outcome

Methodological development, improved research capacity, and better translation of research into practice are required. Some key principles needed to move from knowledge to action are apparent:

- Joint researcher and decision-maker planning and execution of research from the start
 - Selection and ‘framing’ of research question must speak to decision-makers
 - Keeping close to decision-makers throughout study
 - Passive dissemination of results through traditional academic channels is not enough – the media utilised must fit the audience
 - Development of knowledge brokerage
5. A review of the PHSSR literature published over the past 12 years was conducted in preparation for the Think Tank. The priority research areas reflected in the literature of the USA are:
- Partnerships and linkages
 - Public health performance
 - Public health workforce
 - Essential/core functions of public health
 - Public health infrastructure

Based on the same analysis of the UK PHSSR literature, the priority research areas in the UK (which has only one-tenth the number of published articles) are:

- Policy/legislation development
- Evidence-based practice
- Health disparities
- Partnerships and linkages
- Public health workforce

The Canadian situation

6. The literature review found that the five main areas of PHSSR focus in published literature in Canada are:
- Partnerships and Linkages
 - Public health infrastructure
 - Evidence-based practice
 - Policy and legislation development
 - Health disparities
7. A non-random survey of public health researchers, practitioners, policy-makers and others (largely from Ontario, BC, Manitoba, Quebec and Alberta) asked respondents to identify their top three priority PHSSR issues from a list generated through the literature review. Based on 250 responses, the top five priorities are:

- Evidence-based practice
- Public health performance
- Public health infrastructure
- Health disparities
- Core public health functions

Thus, there is congruence between the literature review and survey with respect to evidence-based practice, public health infrastructure and health disparities emerging as priorities.

8. Some of the main implications arising from the literature review and survey that we thought might inform the Think Tank deliberations include issues related to:
 - Scope and definition of PHSSR
 - Health Promotion and Health Equity
 - Methodology and Complexity

PHSSR Issues, Priorities and Framework

9. The working part of the Think Tank began with two 'Fishbowl' exercises, in the first of which practitioners listened to researchers discuss their key 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.

Both the researchers and practitioners/policymakers identified the following topics as priorities:

- Partnership/collaboration
- Usable and accessible data
- Research infrastructure
- Scope of PHSSR
- Training and capacity
- Public health and primary care collaboration
- Leadership
- Outcomes
- Governance structures

Researchers were more focused on policy advocacy, frameworks, methodology, and complexity theory/systems thinking. The practitioners and policy-makers, on the other hand, were interested in comparisons across different forms of infrastructure, knowledge translation, application of theory, and innovation and effectiveness. The interest in theory was somewhat surprising because we often hear that academics are too focused on theory and not enough on practice. Another surprising finding was that it was researchers and not practitioners/policy makers who identified public health human resources as an important area for investigation and development.

Some of the priorities identified were not research priorities per se, but rather were related more to the need for enhancing research capacity.

10. Based on these exercises and discussions, the following priorities for PHSSR emerged, all of which were previously identified as important in our review of the literature and in our survey:
 - Data development/Public Health Information Systems
 - PH System Performance
 - Governance, System/Organizational Structures
 - Partnerships/Collaboration
 - Knowledge Translation Research on Appropriate PHSSR Methods
 - Development of Capacity to do PHSSR
 - Public Health Ethics
 - PH Workforce

Overall, the reaction to the list was that although it captured the discussion around research issues and research capacity, it was not very useful for coming to a consensus on an agenda. Many commented that the list might not reflect the interests or priorities of practitioners or the community. One of the clear themes emerging from day one, that was perhaps not evident in the list, is that the research must be relevant and accessible to the appropriate stakeholders. This highlighted the need for some discussion around values and principles. The lack of focus on marginalized (particularly First Nations, Métis and Inuit) populations was also raised. A focus on reducing health inequities was a clear priority for many of the participants and yet did not emerge in the initial fishbowl generation of priorities by either researcher or practitioner/policymaker participants.

11. A draft logic model and a draft research framework were presented to the group as a starting point for further reflection on the PHSSR agenda. The draft logic model (see Figure 2) suggests a wide range of issues for PHSSR to address along with interactions between the components, recognizing that there are other components to add and other interactions to consider which will require a wider consultation and dialogue.

The draft research framework (see Figure 3) illustrates that a PHSSR agenda needs to be concerned not only with the subject matter of the research itself (described here as research issues, and taken from the system performance logic model), but also with the research approaches used (including, in particular, the development and/or application of new and innovative methodologies) and with the capacity and infrastructure required to undertake the research. Capacity and infrastructure include the development of PHSSR researchers and practitioner-researchers, as well as the data and information systems needed to undertake the research, and of course the research funding programs needed to support the research.

As with the logic model, the draft research framework will doubtless undergo further revision. But taken together, the logic model and framework may represent the first step in defining the overall structure of a PHSSR agenda for Canada.

Link between Strategic Directions of Funders and PHSSR Agenda

12. There is close alignment between the goals and focus of PHSSR and the four strategic research priorities for CIHR's Institute for Population and Public Health, which are:
 - Pathways to health equity
 - Population health interventions
 - Implementation *systems* for population health interventions in public health and other sectors
 - Theoretical and methodological innovations
13. There are two significant funding initiatives in CIHR's Institute for Health Services and Policy Research that may be of relevance to PHSSR: Community-based Primary Healthcare (CBPHC) and Evidence-Informed Healthcare Renewal (EIHR). It is an opportune time to study CBPHC given that every province and many other countries are embarking upon CBPHC reform and this variability offers unprecedented and rich opportunities for comparative research. The goal of EIHR is to provide relevant, timely and high-quality evidence, both in the short term and long term, for the perennial challenges of how best to finance, fund, sustain and govern provincial, territorial and federal healthcare systems.
14. Several areas of PHSSR that may be of interest to the Public Health Agency of Canada are:
 - Comparative analysis of different provincial/territorial structures
 - Exploring the interface between policy and evidence, and how to best translate evidence
 - Exploring formal models (i.e., system coordination and sharing of data) to deal with pandemic outbreaks
15. As a result of a discussion about how to improve data management and availability, there was consensus among participants that we need to advocate for a centralized system of data management and rethink "privacy" (high benefits to the public versus low cost to privacy).

Major themes

16. For the final working groups of the day, we decided that, rather than refining the major research priorities, the working groups would focus on the larger themes that had emerged. These were: 1) principles and values; 2) research issues; 3) research approaches; 4) research capacity; and 5) network development. Participants were asked to self select into the group that most interested them and there were relatively equal numbers in each of the five groups. Some of the main points brought up by these groups include:
 - The overall vision for the PHSSR agenda is to improve population health and reduce health disparities in part by informing policy and system change
 - True partnerships among practice, policy and research are essential; research questions must be identified collaboratively and relevant stakeholders must be involved in all stages of research
 - The principle of reducing health inequities must also be a research approach so it becomes ingrained in the PHSSR agenda
 - Both quantitative and qualitative methods are required that consider the complex system

- Access to timely and appropriate data is critical
- Develop capacity and training opportunities to link researchers and practitioners and engage the practice community
- The main purpose of an international and a Pan-Canadian PHSSR network would be to advocate for, promote the value of, and develop PHSSR; initial steps for the development of each were discussed

Next Steps and Closing Remarks

17. Next steps discussed included:

- Disseminate the results of the Think Tank in Canada and internationally
- Further develop the PHSSR network in Canada
- Refine the logic model and research framework in consultation with the network
- Identify key research issues in consultation with the field (e.g., CCMOHs)
- Hold a pre-conference workshop at the Canadian Public Health Association conference in June 2011 to disseminate results to date, gather feedback and expand networking opportunities
- Develop a PHSSR session at the Canadian Association for Health Services and Policy Research (CAHSPR) Conference
- Develop a five year PHSSR strategic plan
- Identify funding opportunities and develop research teams and proposals
- Explore infrastructure funding options to hire support staff and develop and maintain a website, etc.
- Publish work to date and ongoing progress (Canadian Journal of Public Health was suggested as the journal)
- Collaborate further with Academy Health's Public Health Systems Research Interest Group (<http://www.academyhealth.org/Programs/ProgramsDetail.cfm?ItemNumber=2077>), as well as the Center for Public Health Systems and Services Research at the University of Kentucky (<http://www.publichealthsystems.org/cphssr>)
- Explore the development of an international network with international partners

Discussion

18. Major points for moving the agenda forward were identified in the discussion. These include the next steps identified above but also include some sober second thoughts as we finalized this report. These include the following recommendations:

- In the absence of immediate resources to continue development of a pan-Canadian PHSSR agenda, support and encourage provincial PHSSR agenda-setting process, such as the one that will take place in Ontario in October, 2012

- Continue to work on defining PHSSR, clarifying its scope and distinguishing it from (or merging it with) population health intervention research
- Clarify the relationship between the broader field of health services research and PHSSR
- Continue work on conceptualizing and developing methodologies most relevant for PHSSR, drawing on complexity science and systems thinking
- Find ways to address the data access issues that are hampering progress on health research in general, but PHSSR specifically
- Refine, revise and consult on the PHSSR logic model and framework
- Give much more thought to the place of Public Health Ethics in the PHSSR agenda
- Engage with people in the field on clarifying and validating the PHSSR priorities, and the other issues above
- Begin immediate work on the next steps identified for establishing Canadian and international PHSSR networks.

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Think Tank Overview

Rationale

Public health services research, sometimes called public health systems research, is an emerging subset of health services research, described as “the new kid on the block”¹, and defined as “a field of study that examines the organization, funding and delivery of public health services within communities, and the impact of these services on public health”², p.180. Its importance has been recognized in the US by the Institute of Medicine³ and the Department of Health and Human Services⁴. At the same time, funding for health services research in the US is directed primarily at the health care system in general, and much less at public health services per se.¹ This creates a “public health system knowledge disparity”⁵, p.571 which also seems to be true in Canada.

Mays and colleagues² note that “A persistent obstacle to public health system improvement has been the lack of information about what constitutes effective public health practice, and how best to organize, finance and implement these activities.”⁶, p. 179. Lenaway and colleagues⁶ have argued that a Public Health Systems and Services Research (PHSSR) agenda is important to: 1) catalyze new research and practice based initiatives; 2) establish a framework that would create opportunities “to better coordinate, leverage, and identify resources and activities”⁶, p.411; and 3) provide a scientific basis for making decisions about the health of the nation.

We believe that a PHSSR agenda in Canada will provide similar benefits. PHSSR is needed to assist the research and policy community in understanding “how the level of development of national public health infrastructure and the multiplicity of organizational arrangements in public health affect health outcomes”⁶, p.410. Currently, we do not have a PHSSR agenda in Canada and there is very little in the Canadian literature to identify PHSSR priorities, although there have been some efforts to catalyze the development of such an agenda.

In British Columbia (BC), a large interdisciplinary group of researchers and knowledge users has come together to develop a PHSSR agenda in BC, which we believe represents one of the first attempts to develop a comprehensive PHSSR agenda in Canada. This group, the Core Public Health Functions Research Initiative (CPHFRI, see www.uvic.ca/cphfri), comprises researchers from four universities, and decision makers and practitioners from all six health authorities (five regional and one provincial), as well as the Ministry of Health. It is co-led by Trevor Hancock and Marjorie MacDonald. Over the past few years, funded by two infrastructure grants from the Michael Smith Foundation for Health Research, CPHFRI has engaged in an extensive team-building process, established a set of research priorities for public health services/systems renewal in BC⁷, and successfully leveraged over \$5 million in peer reviewed funding from MSFHR and CIHR to carry-out this agenda.

At the 2009 Canadian Public Health Association (CPHA) Conference, CPHFRI members held a workshop to propose the idea of developing a PHSSR agenda for Canada. This session was very well attended and participants from across the country confirmed this need and expressed interest in participating in the process. At that time, the Ontario Agency for Health Promotion and Protection (Manson), the Public Health Agency of Canada (Taylor), and two of CIHR's Applied Public Health Chairs (Paradis, MacDonald) all expressed interest in partnering and funding the process to establish a Canadian agenda for PHSSR. Subsequently, one more CIHR/PHAC Applied Public Health Chair (Martens) joined the team and additional funding was committed from the BC Centre for Disease Control (Ogilvie, Henry) and Research Western (Kothari). We also received a CIHR Meetings, Planning and Dissemination grant to fund the think tank (PIs: MacDonald, Hancock and Paradis).

Think Tank Objectives

The purpose of this invitational Think Tank was to bring together a group of key stakeholders from across Canada with an interest and expertise in PHSSR, as well as international PHSSR consultants to engage in discussion and debate about public health services and systems research priorities in Canada. 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. To identify research priorities in public health services/systems.
2. To establish clear linkages between the strategic directions of funders to ensure a place for PHSSR in the research landscape.
3. To establish consensus on a Canadian PHSSR agenda.
4. To develop a five year plan to advance the agenda.
5. To establish a Canada wide network of PHSSR researchers and supporters.

Leading up to the Think Tank

The Think Tank planning committee met several times via teleconference in the months leading up to the Think Tank and also met in person once at the 2010 CPHA Conference. This team compiled a list of potential Think Tank invitees, which included public health researchers, decision-makers and practitioners representing provincial, national and international organizations. The list was reviewed to ensure that it included representation from each province, as well as various sectors and disciplines. Invitations were sent to approximately 70 potential participants along with a description of the Think Tank (see Appendix 1) and biographical sketches of the confirmed international invitees (see Appendix

2). The following documents were sent to participants in advance and were also in the reading package provided to participants at the Think Tank:

- Think Tank agenda (Appendix 3)
- Overview of Brainstorming Survey

In preparation for the Think Tank, a review of the literature was initiated and an online survey was conducted. Marjorie MacDonald provided an overview of both in her presentation on the first day of the Think Tank; they are summarized later in this report and full versions will be available separately on the CPHFRI website.

Overview of Think Tank Agenda

The agenda was developed by the Think Tank Planning Committee; a copy of the full agenda is included in Appendix 2.

The first day began with an overview of the agenda and purpose of the meeting, followed by presentations on the status of PHSSR in the US and UK. This was followed by a presentation on the work that was done leading up to the Think Tank; specifically, the findings of an online survey and a review of the literature. 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 Canada. The day ended with working groups developing lists of the most important research themes or priorities.

Day two began with a discussion of research priority themes based on the deliberations of the first day. Next, a panel discussed the link between the emerging PHSSR priorities and the strategic directions of three funding agencies. The participants then chose to join one of five working groups: principles and values, research issues, research approaches, research capacity, and network development. Participants discussed these themes in relation to the emerging research priorities that had been identified. The day concluded with a discussion on the development of a PHSSR network followed by closing remarks about the next steps.

Think Tank Participants

Forty-two participants attended the two-day Think Tank. This included two invited international guests from the US and one from the UK chosen for their expertise in PHSSR, along with 39 Canadian researchers, practitioners and policy makers. Participants who attended the Think Tank are listed in Appendix 4.

Think Tank Day 1

Introduction

Gilles Paradis began by welcoming the participants to the Think Tank and to Montréal. Trevor Hancock then gave a brief overview of the meeting agenda and purpose of the two day meeting. He presented the objectives and intended outcomes of the Think Tank as previously outlined above.

Trevor pointed out that at this meeting, we would not likely meet all of these objectives, particularly developing a five year plan and establishing consensus on a PHSSR agenda but that the Think Tank will be a starting point for these processes. Moreover, debating the definition and terminology surrounding PHSSR was not part of the agenda. That being said, it still came up throughout the discussions. He indicated that he was excited about the broad representation of disciplines, sectors, and provinces that were participating in the meeting; this was reiterated by many of the subsequent presenters. Trevor welcomed the international guests and expressed his enthusiasm to collaborate further with them and gain insight from their expertise and experience.

Opening Panel: The Status of PHSSR in the US

Gregory Taylor, Director General, Office of Public Health Practice, from the Public Health Agency of Canada introduced the panel members, Dr. Scutchfield from the University of Kentucky and Dr. Jacobson from the University of Michigan.

F. Douglas Scutchfield, MD

Peter B. Bosomworth Professor of Health Services Research and Policy, University of Kentucky

Dr. Scutchfield (known to all as Scutch) began by saying that he was thrilled to be involved in the Think Tank and that he felt that the process would inform and facilitate PHSSR efforts in both the US and Canada. Dr. Scutchfield is the Principal Investigator for the National Coordinating Center for Public Health Systems and Services Research (<http://www.publichealthsystems.org/phssr>) funded by the Robert Wood Johnson Foundation. Dr Scutchfield outlined early steps taken to establish PHSSR in the US and provided a list of some key US articles. A comprehensive national agenda setting process for PHSSR is currently underway in the US, which involves seven steps:

1. Systematic literature reviews
2. White papers distributed to key practice and research partners
3. Webinars to gather input from subject matter experts in the four areas covered by the targeted systematic reviews (Workforce, Finance, Data and Methods, & Structure and Organization)
4. Vetting the results with the research and practice communities: Keeneland Conference, AcademyHealth PHSR Interest Group, National Association of County and City Health Officials (NACCHO) annual meeting, etc.
5. Online comment period
6. Publication
7. Back to step one (in an iterative continuous process)

Lessons from the US process:

- Funding is critical for success
- Training of new PHSSR researchers is easier than transitioning a researcher from an existing research area
- “Questions from practice are always more interesting”
- Research must be of value and interest to practitioners and partnerships sought out
- Things that work in Health Services Research (HSR) in general also work in PHSSR, so we can learn from the larger field of HSR
- Coordination is a challenge given the broad range of stakeholders and organizations in public health
- “We don’t get no respect and what we do is hard to explain”
- We need new data, particularly financial data and longitudinal data
- It is a challenge to get federal interest and support
- We need to use new and more robust methodologies

Peter Jacobson, JD, MPH

Professor of Health Law & Policy, University of Michigan School of Public Health & Director, Center for Law, Ethics & Health, University of Michigan, & President, Public Health Law Association

Dr. Jacobson indicated that it was an honour to be invited to the Think Tank and a pleasure to share the panel with his friend “Scutch”, a founder and thought-leader in the field. He was happy to see the involvement of practitioners and policymakers from this early stage in the process. In the US, although they are further ahead of Canada in some respects, they still have a long way to go. Much of what has been published in the US related to PHSSR is still conceptual or descriptive and poorly translated to practitioners and policymakers. He highlighted the importance of the work that Scutch is doing to move toward more analytical and empirical findings that are accessible to those who can use the information.

Dr. Jacobson believes the following are necessary to move the PHSSR agenda forward:

- A shared vision and coherent definition for PHSSR (take the time to get it right now)
- A committed group with sustainable funding and infrastructure from more than one source
- Training, capacity building, and funding of new researchers in multiple disciplines
- Elevate the visibility of PHSSR among policy makers, practitioners, and researchers
- Innovative strategies to disseminate and translate findings to appropriate audiences with the aim to improve population health

Dr. Jacobson's presentation was followed by a question and discussion period. Dr. Jacobson highlighted the need for a conceptual shift for policymakers to start thinking about *health* rather than *healthcare* and to better understand the benefits of a public health approach. Dr. Scutchfield indicated that there has been some movement in the US toward this cultural shift with an understanding that investment in medical care is not improving mortality rates or population health outcomes and that the major gains have been a result of public health initiatives.

Opening Panel: The Status of PHSSR in the UK

Beth Jackson, Manager, Research and Knowledge Development, Strategic Initiatives and Innovations Directorate, Public Health Agency of Canada introduced David Hunter. She explained that Mike Kelly from the National Institute for Health and Clinical Excellence (NICE) was also supposed to present on this panel but had to cancel at the last minute due to illness. Professor Kelly sent his presentation which was distributed to the participants and is summarized below. Professor Hunter noted that he was familiar with the work of NICE and would also be covering some aspects of Mike Kelly's presentation.

Mike Kelly

Director of the Centre for Public Health Excellence, National Institute for Health and Clinical Excellence

Professor Kelly's presentation focused on the challenge of creating the evidence base both for action on the social determinants of health and on cost-effective public health interventions. The inadequacies in the evidence base result from:

- Research questions that are not directly relevant to the needs of policy makers and practitioners
- Studies that are often of poor quality methodologically
- The difficulty of determining the transferability from one setting to another
- Poorly described interventions
- Evidence that is too imprecise to determine the relationship between the intervention and the outcome

An evidence-based approach works well where there are plentiful studies, a good proportion of which are trials; when the variables are based on individuals rather than on groups; where the intervention is relatively downstream and the causal pathway is short, and where there is plentiful information about how the intervention was actually carried out. However, it does not work well when the evidence is not clear but requires interpretation because the methods for understanding the processes of inference and judgment are less well understood.

He concluded that the problem is the absence of the right kind of evidence, namely good intervention-outcome studies. This problem is compounded by the poor relationship between evidence producers and policy-makers, and their very different needs and understandings.

Professor David J. Hunter

Professor of Health Policy and Management, Durham University

Director of the Centre for Public Policy and Health, Wolfson Research Institute, Durham University

Deputy Director, Fuse - the Centre for Translational Research in Public Health

Non Executive Director, National Institute for Health and Clinical Excellence

Professor Hunter began by expressing his appreciation for being invited and stating that in the UK they often look to Canada for guidance around public health innovation, particularly around intervention research and knowledge translation. In the UK, they don't use the term public health systems or services research but many of the same issues fall under public health research.

Professor Hunter began by outlining the various funding sources that support public health research in the UK. He then outlined some key issues in the UK:

- Public health research in UK is fragmented across funding bodies
- Lack of joined up priority-setting and funding: too many silos and compartments
- Disconnect between research community and policy and practice communities
- Strengths in epidemiological research rather than intervention research
- Hierarchy of evidence still evident – RCTs remain the 'gold standard' (Professor Hunter noted that NICE is challenging this)
- Weaknesses in knowledge to action/knowledge transfer (timely access to relevant research)
- Focus of incentives is on traditional academic outputs: peer review high impact journal papers (which is not where practitioners look for information)
- Limited capacity of public health research academic community
- Complex problems demand complex solutions (need to look at what the best method is to address the particular questions)

Professor Hunter included a slide encouraging the move towards a new research paradigm. He outlined Jean-Louis Denis and colleagues' description of types of knowledge indicating that we need to move from a focus on *mode 1* knowledge (focus is knowledge generation, basic to applied research, scientist as expert, and clear standards of knowledge) to a focus on *mode 2* (focus is problem solving, learn by doing, knowledge is co-created and context dependent, flexible methods and general guidelines for quality)⁸.

This was followed by some key principles to facilitate the Knowledge to Action process which he believes is critical to successful and timely uptake of public health research:

- Joint researcher and decision-maker planning and execution of research from the start
- Selection and 'framing' of research question must speak to decision-maker
- Keeping close to decision-makers throughout study
- Passive dissemination of results through traditional academic channels is not enough – the media utilised must fit the audience
- Development of knowledge brokerage

Professor Hunter concluded by highlighting the challenges faced in the UK, which include the need for: methodological development, improved research capacity, and better translation of research into practice.

Providing Context on PHSSR in Canada: Literature Review and Survey Findings

Marjorie MacDonald, RN, PhD

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Co-Director, Core Public Health Functions Research Initiative
CIHR/PHAC Applied Public Health Chair

Dr. MacDonald began by welcoming participants and thanking the Think Tank sponsors. She provided an overview of the events leading up to the meeting and of the work to date in British Columbia of the Core Public Health Functions Research Initiative (CPHFRI). CPHFRI, an interdisciplinary group of researchers and decision-makers, underwent a similar think tank process to identify research priorities in 2007, developing a research framework by collaboratively identifying research priorities. There was clear alignment between the research priorities of decision-makers and researchers. This interdisciplinary group has since leveraged funding to carry out this full research agenda. There have been challenges, however, when applying for national funding and the group has had to be strategic about how to frame the PHSSR agenda to align with public health and/or health services research.

Dr. MacDonald then provided summaries of the literature review and brainstorming survey that were developed in preparation for the Think Tank. The full reports of each will soon be available as separate documents on the CPHFRI website.

The purpose of the literature review was to: a) Identify work being done to define PHSSR and its scope, potential, and benefits; b) Explore the nature of PHSSR being done in Canada; and c) Identify PHSSR priorities in the 5 countries under review (Canada, US, UK, New Zealand, and Australia).

Major findings from the literature review include:

- The comprehensive search strategy resulted in over 1000 articles being identified; approximately 800 were coded and abstracted
- Only 38 articles specifically used the term Public Health Services Research *or* Public Health Services and Systems Research and only 14 articles made reference to or discussed establishing a research agenda for PHSSR
- Only in the US has there been explicit, collaborative efforts to define the field and the vast majority of literature has been published in the US (593 articles versus 88 in Canada)
- The existing PHSSR literature focuses more on describing and defining what public health people do, rather than on what it is they should or could be doing
- As illustrated in Table 1, a focus on health equity is relatively less prominent in the US than in the other four countries
- In Table 1 below, the priority areas of PHSSR focus in the literature for each of five countries are identified, as reflected in the number of publications on that topic. The top three topics are reported in red. In Canada, for example, the two topics most often discussed in the literature include partnerships/linkages and public health infrastructure. Two topics tied for third place: evidence-based practice and policy/legislation development.

Table 1: Main Priority Areas by Country (Top 3 Highlighted in Red)

Priority Area	Canada	US	UK	Aus	NZ
Partnerships/Linkages	26	169	19	8	3
Public Health Infrastructure	24	122	10	9	5
Evidence-based Practice	21	82	21	13	3
Policy/Legislation Development	21	121	24	14	5
Health Disparities	19	95	20	15	7
Public Health Workforce	15	147	15	8	4
Public Health Performance	12	155	10	4	7
Essential/Core Functions	9	124	9	8	2

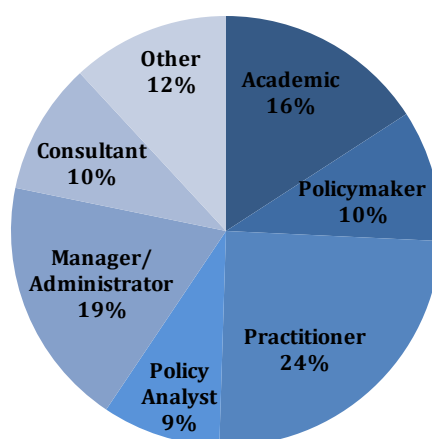
In short, the concept of public health systems and services research is new; the literature is primarily descriptive and largely from the US. It is only in the US that there has been an explicit attempt thus far to define the field. Key areas of focus in the PHSSR literature shared across several countries (in approximate order of importance) include partnerships and linkages, evidence-based practice, policy and legislation, health disparities, public health infrastructure, public health workforce, public health performance and essential or core public health services.

The online survey was developed based on the priorities identified in the preliminary review of the literature. This was a brief survey available in both French and English that was distributed widely through a variety of public health listserves and networks across the country. The survey was not intended to be a population-based representative sample but rather a wide sampling of public health stakeholders to provide a broad spectrum of perspectives. It was intended to be an online “brainstorming” opportunity for participants to identify PHSSR priorities. A total of 338 respondents participated in the survey with varying numbers completing each question because some questions were skipped over by participants.

One third of respondents were from Ontario, more than a quarter from BC and one in seven from Manitoba, while somewhat less than one in ten were from each of Quebec and Alberta; the remaining provinces and territories together provided only 8% of total respondents. This likely reflects that fact that the investigators were primarily from BC and Ontario and thus more likely to use their own networks for distribution. We tried to distribute the survey widely through Canada-wide networks, but it may be that respondents who knew the investigators were more likely to respond. It is clear, therefore, that the priorities identified are not necessarily representative of the Canadian public health community as a whole. Nonetheless, the congruence between the survey responses and the emphases in the literature suggest that there is some validity to these findings.

Well over half of respondents indicated they worked primarily at the local level, almost a third at the provincial level and ten percent at the national level. There was a fairly good spread of participants across the various affiliations, as shown in Figure 1.

Figure 1: Respondents' Primary Affiliation



Participants were asked how familiar they were with the concepts of: public health services and systems, public health research, and public health services and systems research. They responded on a scale of 1 to 10, with 1 being not familiar at all and 10 being very familiar. Table 2 presents respondents' familiarity with the three concepts based on their employment category. The table illustrates that respondents in all employment categories are most familiar with the broad concept of Public Health Systems/Services and more familiar with Public Health Research than with PHSSR. Not surprisingly, academics are most familiar and practitioners least familiar with PHSSR.

Table 2: Mean Familiarity with Concepts by Employment Category

	MEAN TOTAL	Academics (n = 42)	Policy Makers (n = 26)	Policy Analysts (n = 23)	Consultants (n = 26)	Other (n = 31)	Managers/ Administrators (n = 49)	Practitioners (n = 62)
Public health services/systems	7.8	8.0	8.7	8.1	8.1	7.3	8.2	7.9
Public health research	6.7	8.0	7.2	7.1	6.9	6.8	6.4	6.3
Public health services/systems research	5.8	7.0	6.2	6.1	6.1	5.9	5.4	5.3

Based on the frequency of topics identified in the literature review as well as a list of priorities identified in the US agenda setting process⁶, a list of fourteen PHSSR topics was created. Survey respondents were asked to select the three areas out of the fourteen that they believe should be assigned highest priority in terms of public health services/systems research; the findings are presented in Table 3. The percentages do not add up to 100 because respondents were allowed to select up to three choices. Therefore, the percent value in the table indicates the percent of respondents who selected each area as one of their top three priorities. As indicated at the top of Table 3, for example, 27.4% of respondents chose 'Evidence-based Practice' as one of their top three PHSSR priorities. More detail about the analysis of priorities by respondent category is provided in the full survey report, available on the CPHFRI website.

Table 3: PHSSR Priorities Identified in the Survey (n = 250)

<i>Rank</i>	<i>PHSR Priority</i>	<i>Frequency</i>	<i>Percent*</i>
1	Evidence-based Practice	93	27.4
2	Public Health Performance	90	26.5
3	Public Health Infrastructure	74	21.8
4	Health Disparities	69	20.4
5	Essential/Core Functions of Public Health	61	18.0
6	Public Health Organization & Structure	50	14.7
6	Partnerships/Linkages	50	14.7
7	Health Assessment & Surveillance	49	14.5
8	Public Health & Primary Care	41	12.1
9	Policy & Legislation Development	36	10.6
9	Public Health Workforce	36	10.6
10	Individual & Community Health Services	30	8.8
10	Information Systems	30	8.8
11	Emergency Preparedness	26	7.7
12	Public Health Finance	22	6.5

The top five PHSSR priorities from the Canadian literature and the survey are presented in Table 4 below. There is congruence between the literature and the survey with respect to the priorities of evidence-based practice, public health infrastructure and health disparities. Priorities identified in only one of the literature review or survey include: partnerships, public health performance, policy and legislation, and core public health functions. These are, however, largely congruent with the priorities emerging from the overall literature review.

Table 4: Top Five Priorities from the Canadian Literature and Survey

Top 5 Priorities: Canadian Literature	Top 5 Priorities: Canadian Survey
Partnerships & Linkages	Evidence-based practice
PH Infrastructure	PH Performance
Evidence-based practice	PH Infrastructure
Policy/Legislation	Health Disparities
Health Disparities	Core PH Functions

An important point to note is that in the literature review, priorities were defined with respect to the frequency of a particular issue appearing in the literature. Authors did not specifically identify the topic as a priority. In the survey, however, we specifically asked respondents about their priority PHSSR issues. Also, the literature spanned a number of years from 1990 to the present whereas the survey focussed on current priorities. Thus, any differences between the literature and the survey may be reflecting changes in priorities over the years.

Dr. MacDonald concluded her presentation by highlighting some implications arising from the literature review and survey that might inform the Think Tank deliberations:

Scope and definition of PHSSR

- Shift in language from PHSR to PHSSR to link the field explicitly with health services research. Is this a good thing? Are there any drawbacks to making this connection? If we do want to link our agenda to HSR, how do we do this?
- If we understand this field as incorporating public health systems research, this argues for research methodologies and approaches that can take into account and analyse issues from a systems perspective, more specifically complex adaptive systems.
- People are more likely to understand the concept of public health research than public health services/systems research. What are the implications of this finding for moving the agenda forward?
- There may be similarities and overlaps between Population Health Intervention Research (PHIR) and PHSSR. PHIR is defined as: “the use of scientific methods to produce knowledge about policy and program interventions that operate within or outside of the health sector and have the potential to impact health at the population level”⁹. PHIR often highlights intersectoral collaboration beyond the health sector, while PHSSR may focus, in fact, on a population health intervention that is within the health sector. If PHIR is developing its own agenda, do we in PHSSR need to link with those developing this agenda?

Health Promotion and Health Equity

- There is a limited literature emerging that explores issues related to how societies can create the conditions in which people can be healthy. Is this a focus we want to ensure gets integrated into a PHSSR agenda?
- Health equity (framed as health disparities) appears to be less of a focus in the US literature than in the other four countries included in the review. To what extent do we want to orient our PHSSR agenda to reduction of health inequities?
- Survey findings reflect a high priority on health disparities/inequities, but it is less of a priority for practitioners and managers than for other respondents. How do we move an equity research agenda forward if this is not a priority for those public health professionals closest to practice?

Methodology and Complexity

- The empirical PHSSR literature has a strong focus on “traditional” methodologies, primarily quantitative much as health services research does. We need innovative and creative methodologies that can take complexity and the systems focus into account – and this means explicit attention to context.

What is missing in the literature?

- There is nothing at all in the PHSSR literature about public health ethics, yet many ethical concerns arise and are identified in the literature. Is this an issue that we want to see integrated into our agenda? What else is missing?

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. Simultaneous translation (French to English and vice versa) was used during this portion of the Think Tank so fishbowl participants could speak in the language most comfortable to them.

Researchers

For the first fishbowl exercise, the researchers were asked to discuss what they saw from their perspective as the major issues affecting, or to be addressed in, the emerging field of PHSSR. The following questions and issues emerged from the researchers’ perspective:

- **Methodology** – The types of questions to be answered require innovative methodologies, models and methods. Must move beyond Randomized Control Trials as the ‘gold standard’; individual data is much easier to analyze and collect than population level data.
- **Public health human resources** – Understand what is needed in advance and find better ways to deal with surge capacity.
- **Governance structure** – What are the models of governance and what are the best ways of structuring the system? How do we best organize public health?
- **Scope of PHSSR** – Can we link to population health intervention research? Is examining population level effectiveness within this agenda?
- **Usability of data** – Investment is required to develop information systems and improve access to data (particularly local level data to determine effectiveness – this is relevant to those in practice).
- **Complex adaptive system / systems thinking** – How do we get from logic models (an important place to start) to dynamic models? How do we analyze complex interactions? We need to develop new methodologies/tools and increase capacity of researchers.
- **Public policy advocacy** – How do we develop effective strategies to influence policymakers and the ‘whole of government’ process to adopt policies that would promote health? We need to use research as a tool to foster innovation and change in the system.
- **Outcomes** - What are the outcomes that public health can produce and how do we measure them? We need to make the argument for increased spending on public health – if we do x , it will lead to better outcomes for y , as well as save money.
- **Inventory of existing data** - Province by province; for example, what outcome information is available, staffing data, how often it is collected, costing data, etc.
- **Public health and primary care collaboration** - What are the mechanisms that could be used to strengthen the collaboration – is there potential for better population health through integration of two sectors, as well as other sectors?
- **Partnership/collaboration** – There is a need for the right mix of research, intervention and policy working in partnership, involving all stakeholders in the process to ensure integrated knowledge exchange.
- **Training** – Integrating public and population health perspective early in the curriculum for all health sciences students
- **Leadership** – What are the attributes, skills, knowledge, attitudes and behaviours that lead to good leadership and how do we develop these at all levels?
- **Conceptual framework** - What are the different questions/priorities and how do they fit together?
- **Community** – What are the priorities for the local level service provider?
- **Avoid duplication** – How can we learn from what is already known?
- **Research infrastructure** – Develop a mechanism for maintaining/sharing data, so we can benefit from synergies across areas. Can we develop a system where practitioners or policymakers can go and get available literature reviews or find out if someone has addressed a question?

Practitioners / Policy-Makers

Next, the practitioners and policy-makers were asked to discuss the same question from their perspectives. They came up with the following questions and issues:

- **Partnership/Collaboration** – There is a lack of capacity within practice to be a meaningful partner in public health practice research means there is less applied research – need for more joint appointments or other strategies to meaningfully engage with the practice community, as well as other disciplines and policymakers. Need to create a system that is capable of providing timely research with access to specific contextual data; policy/practice need rapid evaluation of literature and targeted studies/evaluations while academics need to answer publishable questions that are of interest to them.
- **Standardized national data sets** – Appropriate and adequate data sets are necessary for HR needs, public health service needs, finance, etc.
- **Accessible local data** – How to access evidence and use it to be able to understand what makes a difference to practice of public health at the local level?
- **Research infrastructure** – How to position PHSSR academically and institutionally, for example with respect to: data, training, recruitment, collaboration, advocacy, cross-appointments?
- **Scope of PHSSR** – We need to determine the implications of inclusion and/or exclusion and linking to population health intervention research and health services research.
- **Interdisciplinary training and capacity** – What is the most effective way to build capacity and improve training beyond the health and even public health, sector?
- **Comparative analysis of infrastructure** – What are the infrastructure differences between regions, provinces, and even countries and how does it impact effectiveness, equity, outcomes, etc.
- **Primary care and public health integration** – What are the most strategic and effective models of integration relevant to local, provincial/territorial and national agendas?
- **Knowledge translation** - What are the processes that will allow us to use the data that will impact end users? There is a need for informative quick reviews that are transparent and evidence-based to study regional and local practices that impact population health in order to impact policy.
- **Leadership** – We need to determine enablers and barriers to change to gain insight into why certain kinds of change are harder than others (eg, acute care decisions made on product and profit and seem to come easier); culture of decision-making (how are decisions made? i.e., in a closed and secretive fashion vs. open and discussed; among a narrow group vs. broad input; or science based vs. intuitive).
- **Local level outcomes** – Engage with frontline workers, managers, and community members to examine both process outcomes and health outcomes. Why is it that certain groups succeed in getting better outcomes, despite the same system and budget constraints?
- **Systematic integration of theory into research** - Historically public health research has been driven by epidemiology, but it can benefit from a more interdisciplinary approach to

include a greater range and richness of theory and methods (i.e., social science theories in relation to intervention research; complexity and complex adaptive systems theory; intersectionality theory; community-based participatory and action research (CBPAR) methodologies).

- **Infrastructure and governance structures** – Examine the impact of different governance structures and public health infrastructure; for example, examining the Public Health Agency of Canada when it was a new structure and the impact it has had on the system and population health outcomes.
- **Innovation and effectiveness** – Identify those who are doing new things, show how it works and make it available across the country.

Analysis of Fishbowl Responses

Following the Think Tank, the responses of researchers and policymakers/practitioners were analyzed. The responses of both groups were compared to determine what the overlaps in interest were, and whether there were specific priorities that emerged in each group that were not shared by the other group. Overall, as reflected in Table 5 below, 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.

Table 5: Analysis of Practitioner/Policy maker and Researcher Responses

Researchers	Practitioners / Policymakers
Partnership/collaboration	Partnership/Collaboration
Usability of data	Accessible local data
Research infrastructure	Research infrastructure
Scope of PHSSR	Scope of PHSSR
Training	Interdisciplinary training and capacity
Public health and primary care collaboration	Primary care and public health integration
Leadership	Leadership
Outcomes	Local level outcomes
Governance structure	Infrastructure and governance structures

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

Researchers	Practitioners / Policymakers
Public health human resources	Comparative analysis of infrastructure
Inventory of existing data	Standardized national data sets
Methodology	Knowledge translation
Complex adaptive systems / systems thinking	Systematic integration of theory
Public policy advocacy	Innovation and effectiveness
Conceptual framework	
Community	
Avoid duplication	

Overall, there is clearly a lot of overlap between the two groups. There was a great deal of focus by both groups on data sets, access to data, and research infrastructure. The researchers were the first group to express their interests in the fishbowl so this may be why their list is slightly longer. The practitioners and policymakers may have shared more of the same priorities but didn't want to duplicate what was already said.

Researchers were more focused on policy advocacy, frameworks, methodology, and complexity theory/systems thinking. The practitioners and policy-makers, on the other hand, were interested in comparisons across different forms of infrastructure, knowledge translation, application of theory, and innovation and effectiveness. Two findings were somewhat surprising. First, it was practitioners and not researchers who suggested the need for better integration of theory. Usually it is practitioners who say that researchers are too theoretical and insufficiently attentive to the challenges of practice. Another surprise was that it was researchers and not practitioners/policy makers who identified public health human resources as an important area for investigation and development.

A few participants pointed out that there was an important distinction between research priority areas and research capacity issues. Some of the priorities identified were not research priorities per se, but rather were related more to the need for enhancing research capacity. For example, the priorities of training and developing effective leadership qualities might be better categorized as research capacity issues, whereas access to useable data and examining local level outcomes are actually research priority areas.

Trevor Hancock brought up the point that there was no identification of cost-effectiveness as a priority, which has a major impact on decision-making, and was curious about why it did not come up. The Public Health Agency of Canada (PHAC) is doing some cost-effectiveness studies around upstream interventions, indicating this is always of interest to politicians and senior management. In part, this omission may be because it is impossible to develop cost-effectiveness models without appropriate data on effectiveness in the first place and these data are not available or accessible. It would be beneficial to have research available that compares the cost effectiveness of population health interventions versus other healthcare interventions such as elective knee surgeries. Any research that can support the 'prevention argument' would be useful. Another omission in the list of priorities was health inequities or health disparities, which was surprising given its prominence in both the literature review and the survey.

Working Groups: Identifying Priorities in Canada

The first day of the Think Tank ended with participants dividing into five working groups to identify the top PHSSR priorities in Canada. Anita Kothari facilitated the discussion and reporting back from the working groups. The responses from the five groups were integrated into a list of emerging priorities (see below) that was used to spearhead the discussion on day two.

Think Tank Day 2

Emerging Priorities in Canada

Day two began with a discussion of the themes that were beginning to emerge as research priority areas for PHSSR in Canada. Pat Martens began with an engaging presentation to start off the day. She spoke about the importance of: collaboration and ensuring the right stakeholders are involved from the beginning, contextualizing the research, integrated knowledge translation, and advocating for the importance of PHSSR. She then facilitated a discussion in which the Think Tank participants reviewed the emerging themes, commented on and validated them. These themes were based on the top priority areas identified by the working groups at the end of the first day, all of which were previously identified as important in our review of the literature and in our survey.

- **Data development/Public Health Information Systems**
 - Access to data
 - Data Quality
 - Workforce data
 - Who is impacted – individual, community levels, etc.
 - Resources
 - What are the PH data gaps (parallel to HSR data gaps previously)
 - How do we close the gaps
 - Valid comparisons/indicators
 - Small area analyses
 - Linked data
 - Correlated to level of action
 - Robust data infrastructure
 - Organizational structure to allow access
- **PH System Performance**
 - Need good indicators (core duties and outcomes/impact of PH)
 - Evidence-based practice and decision-making
 - Knowledge synthesis
 - Rapid Assessment
 - Economic evaluation of Cost-effectiveness in comparison to genetics, drugs, health technology
 - What types of PHS increase health and decrease inequities
 - Priority setting

- **Governance, System/Organizational Structures**
 - Nature of PH Leadership
 - Mobilize and Influence people and policy; citizen engagement
 - Impact of restructuring
 - Funding models
 - Comparisons- International, provincial, local
 - Increased understanding of how political systems work
 - Critical factors for system change
 - Addressing resistance to change
 - Models of PH
- **Partnerships/Collaboration**
 - Interdisciplinary and Intersectoral Models
 - Creation, maintenance and effectiveness of partnerships within and outside of health system
 - Partnering with primary care
- **Knowledge Translation** (Integrated KT, Knowledge Exchange & Dissemination)
 - How to mobilize people and programs and enable transformation
 - Transforming policy-making and practice
 - Shaping the policy-shapers
 - Influencing agenda via the electorate
 - Optimize capacity to use appropriate research knowledge
 - Utilizing evidence for local context
 - Enabling strong partnerships through entire process (research/policy/practice)
 - Community Based / Participatory
- **Research on Appropriate PHSSR Methods**
 - Research designs appropriate for pop level effects
 - How to measure impact of comparative policy/programs
 - Scaling up – taking research from pilot to program
- **Development of Capacity to do PHSSR**
 - Training
 - Education
 - Funding
 - Learning research by doing for PH workforce
- **Public Health Ethics**

- **PH Workforce**

- Building competencies, skills development
- Training
- Planning for future staffing needs
- What skills do people need (surge capacity and change management)

Overall, the reaction to the list was that although it captured the discussion around research issues and research capacity, it was not very useful for coming to a consensus on an agenda. Many commented that the list might not reflect the interests or priorities of practitioners or the community. One of the clear themes emerging from day one, that was perhaps not evident in the list, is that the research must be relevant and accessible to the appropriate stakeholders. This highlighted the need for some discussion around values and principles. The lack of focus on marginalized (particularly First Nations, Métis and Inuit) populations was also raised. A focus on reducing health inequities was a clear priority for many of the participants. Although participants had missed this in their earlier listing of priorities, they clearly indicated here that it needed to be a focus.

Draft Logic Model & Research Framework

A draft logic model and a draft research framework (see Figures 2 and 3) were then presented to the group by Trevor Hancock as a starting point for further reflection on the PHSSR agenda. He had developed the logic model and framework overnight based on his understanding of the issues involved in PHSSR and identified by participants in Day 1. Neither the logic model or framework were considered by him or anyone else as final or definitive, but as drafts they were well received by participants who believed they would be worth developing further, as part of the follow-up activities after the Think Tank.

Draft public health system performance logic model

If PHSSR is intended to develop our understanding of the way the system of public health services works, and contribute to improving the performance of the system, it might be helpful to have an overall logic model for this purpose. Such a logic model would need to include the main factors believed to be important in determining the performance of this system, which would then become the main components of a PHSSR agenda.

The logic model (modified slightly from the version originally presented at the Think Tank) assumes that “a well performing (effective) public health system delivers efficacious public health services as its contribution to improving population health while reducing health

inequities” (see Figure 2 below). Thus public health is understood as one form of population health intervention (there are many others, largely beyond the health care system), for which outcomes are assumed. It is also assumed that efficacious services have been or can be determined; it is not primarily the purpose of PHSSR to determine that efficacy, any more than clinical health services research is concerned with the clinical efficacy of a medication or surgical intervention. PHSSR is largely focused on whether, how and how efficiently services found to be efficacious are delivered, what factors are important in determining their delivery and the quality of their delivery, and what impact they have in practice.

The model suggests that political and public perceptions of both the need for and effectiveness of public health services is the key starting point. If nobody believes there is a need or that there is an effective intervention available, then there will be little or no political will to take action, so there will be little development of policy, legislation or funding. Without those, there will be little in the way of research (which largely creates the evidence base), education and training or development of key infrastructure components such as databases and information systems. That, in turn, will mean there is neither an adequate number of skilled human resources (including those with leadership capabilities) nor well-organised and resourced organisations capable of delivering public health services and advocating to or partnering with others beyond the health care system. These actions are also important for improving population health and reducing health inequities.

The draft logic model suggests a wide range of issues for PHSSR to address, not only the components identified above but the interactions between the components. It should be noted that this is only a beginning - there are doubtless other components to add and other interactions to consider and the causal logic inherent in the model will need to be considered. All this will require a wider consultation and dialogue.

Draft Framework for a PHSSR Agenda

The draft research agenda was inspired by the BC Core Public Health Functions Framework (<http://www.health.gov.bc.ca/public-health/>). As developers of this agenda, participants sought to incorporate many of the issues identified in this Think Tank and in the earlier BC PHSSR agenda. We assume that the purpose of PHSSR is “to develop and transfer knowledge about the factors that lead to the provision of effective (local) public health services” (see Figure 3 below). The term ‘local’ is bracketed because, although that is the level at which services are delivered and forms much of the focus of PHSSR, it is important to recognize that some public health functions are carried out, and some services delivered, at a provincial or even a national level.

A PHSSR agenda needs to be concerned not only with the subject matter of the research itself (described here as research issues, and taken from the system performance logic model), but also with the research approaches used (including, in particular, the development and/or application of new and innovative methodologies) and with the capacity and infrastructure required to undertake the research. Capacity and infrastructure include the development of PHSSR researchers and practitioner-researchers, as well as the data and information systems needed to undertake the research, and of course the research funding programs needed to support the research.

As with the logic model, this is a draft and will doubtless undergo further revision. But taken together, the logic model and framework may represent the first step in defining the overall structure of a PHSSR agenda for Canada. And it is heartening that many of the themes and components in the draft logic model and research framework echo the issues presented by Nancy Edwards, which followed this discussion - see especially Slide 2 at www.web.uvic.ca/~cphfri/research_projects/publications/PHSSR%20Montreal%20Presentation%20Edwards%20CIHR%20IPPH.pdf

Figure 2: Draft Logic Model

DRAFT Public Health System Performance Logic Model

A well performing (effective) public health system delivers efficacious public health services efficiently as its contribution to improving population health while reducing health inequities.

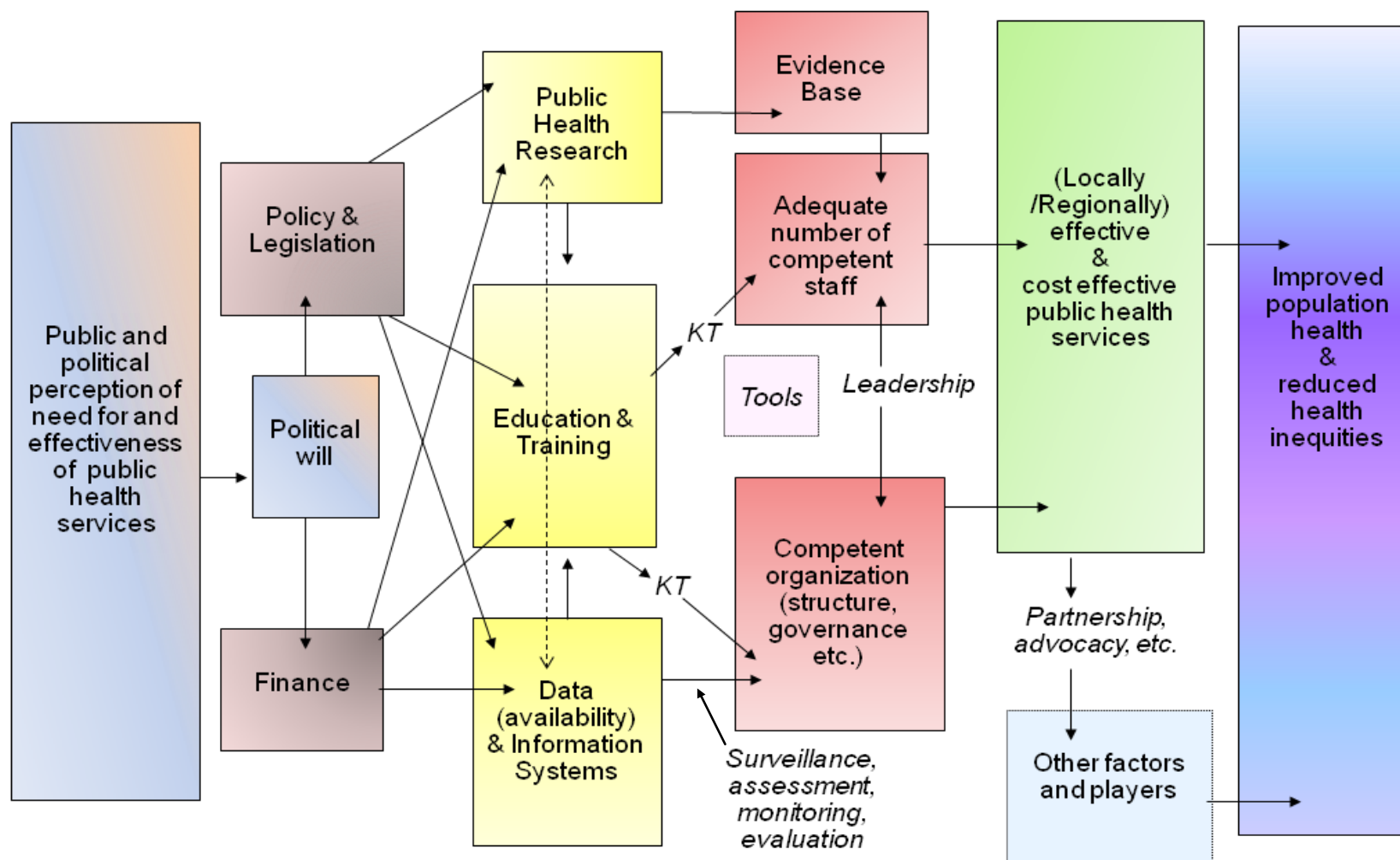
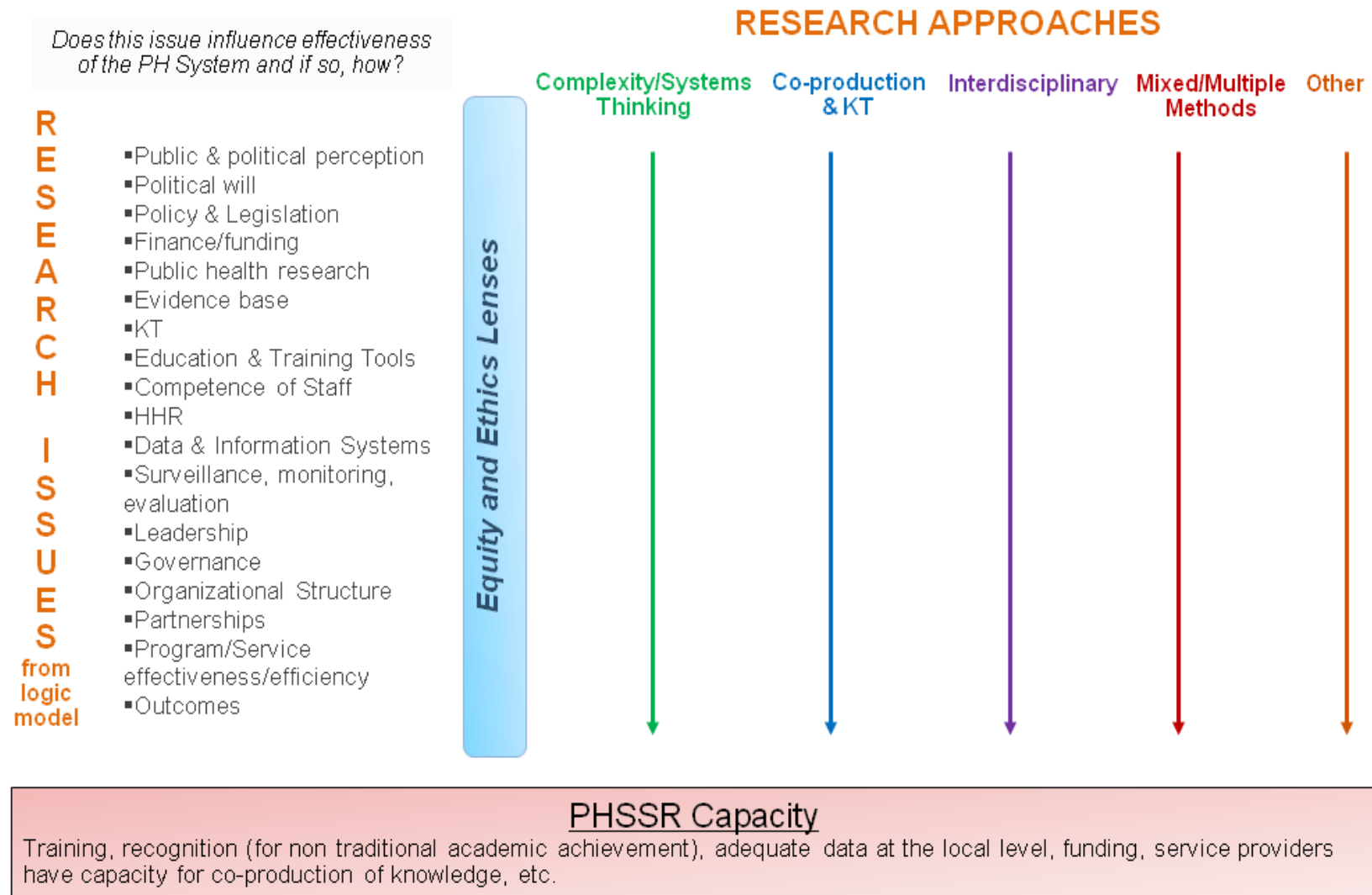


Figure 3: Draft PHSSR Agenda

DRAFT Framework for a Public Health Systems & Services Research Agenda

Purpose: To develop and transfer knowledge about the factors that lead to the provision of effective (local) public health services.



Panel: Link between Strategic Directions of Funders and PHSSR Agenda

Heather Manson, Senior Medical Advisor to the President, Ontario Agency for Health Promotion and Protection, introduced the members of this panel indicating that the purpose was for them to reflect on what they have heard so far at the Think Tank in relation to the strategic directions of each of their organizations. Members of this panel included: Nancy Edwards from the CIHR Institute of Public and Population Health; Robyn Tamblyn from the CIHR Institute of Health Services and Policy Research; and Gregory Taylor from the Public Health Agency of Canada. Representatives from the Canadian Health Services Research Foundation (CHSRF) were also invited but were unable to attend the Think Tank.

Nancy Edwards

Professor, School of Nursing and Director, Community Health Research Unit, University of Ottawa

Scientific Director, CIHR Institute of Public and Population 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 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 collaborate with those in the social sciences who are interested in health research because the Social Sciences and Humanities Research Council (SSHRC) is no longer funding any health-related research.

There is close alignment between PHSSR and the four strategic research priorities for IPPH which are:

- Pathways to health equity
- Population health interventions
- Implementation systems for population health interventions in public health and other sectors
- Theoretical and methodological innovations

Dr. Edwards concluded with some information on work being done on Population Health Ethics and an upcoming Population and Public Health Ethics Casebook. Information can be found on the IPPH News and Announcements webpage: <http://www.cihr-irsc.gc.ca/e/38101.html>

Robyn Tamblyn

Scientific Director, CIHR Institute for Health Services and Policy Research

Professor, Department of Medicine and Department of Epidemiology and Biostatistics, McGill University, Faculty of Medicine

Dr. Tamblyn talked about two significant CIHR funding initiatives: Community-based Primary Healthcare (CBPHC) and Evidence-Informed Healthcare Renewal (EIHR). It is an opportune time to study CBPHC given that every province and many other countries are embarking upon CBPHC reform and this variability offers unprecedented and rich opportunities for comparative research. She offered several examples of priority research questions related to CBPHC and provided information on two funding opportunities: CBPHSC Team Grants and CBPHC Scientist awards.

Next, Dr. Tamblyn provided information on the EIHR initiative; the goal of EIHR is to provide relevant, timely and high-quality evidence, both in the short term and long term, for the perennial challenges of how best to finance, fund, sustain and govern provincial, territorial and federal healthcare systems. The objectives of this initiative are to:

- Fund timely and policy-relevant research on healthcare renewal
- Build research capacity
- Advance the timely translation of research evidence to governments

For more information and to sign up for the CIHR IHSPR e-bulletin, visit: <http://www.cihr-irsc.gc.ca/e/43249.html>

Gregory Taylor

Director General, Office of Public Health Practice, Public Health Agency of Canada

Dr. Taylor indicated that the Public Health Agency of Canada (PHAC) does fund a significant amount of research through a variety of mechanisms. Generally, funded research takes the form of evaluations, needs assessment, development of methods and tools, and targeted studies. Unless PHAC partners with other agencies, such as CIHR, funding competitions do not go through a peer review process.

PHAC is not responsible for all aspects of public health. PHAC supports public health in the provinces/territories but they are not responsible for system level implementation. Moreover, Health Canada is responsible for obesity prevention and tobacco control. The role of PHAC is to:

- Promote health
- Prevent and control chronic diseases and injuries
- Prevent and control infectious diseases
- Prepare for and respond to public health emergencies
- Serve as a central point for sharing Canada's expertise with the rest of the world
- Apply international research and development to Canada's public health programs
- Strengthen intergovernmental collaboration on public health and facilitate national approaches to public health policy and planning

During his talk, Dr. Taylor outlined a few areas of research that may be of interest to PHAC:

- Comparative analysis of different provincial/territorial structures
- Exploring the interface between policy and evidence, and how to best translate evidence
- Exploring formal models (i.e., system coordination and sharing of data) to deal with pandemic outbreaks

Dr. Taylor's presentation was followed by a question about how to improve data management and availability. Nancy Edwards began by stating that we need to be clearer about what our data needs are; biomedical research is better at this and it is easier to visualize research that takes place in a lab compared to accessing an administrative data base. We also need to emphasize the impact data has on critical decision-making. Gregory Taylor agreed and indicated that there are a lot of challenges related to privacy. When PHAC works with Stats Canada, they must send PHAC staff to work with Stats Canada rather than having direct access to data. Finally, Robyn Tamblyn also expressed her frustration around access to data, expressing the need for provincial legislation for accountable management and timely access to data. Cory Neudorf also pointed out that the Canadian Institute for Health Information (CIHI) needs to be considered. There was consensus that we need to advocate for a centralized system of data management and rethink "privacy" (high benefits to the public versus low cost to privacy).

Working Groups: Addressing Major Themes

For the final working groups of the day, we decided that, rather than refining the major research priorities, the working groups would focus on the larger themes that had emerged. These were: 1) principles and values, 2) research issues, 3) research approaches, 4) research capacity, and 5) network development. Participants were asked to self select into the group that most interested them; there were relatively equal numbers in each of the five groups. An overview of each groups' discussion is included below.

Principles and Values

Seven people chose to be in this group, mostly representing the practitioner/policy spectrum: Connie Clement, Peter Jacobson, James Talbot, Amanda Parks, François Benoit, Gaynor Watson Creed, and Lorna Storbakken.

What are we trying to achieve with PHSSR - what is the overall vision and purpose?

1. Goal/rationale is to improve population health and reduce disparities, not just findings for the sake of findings but implement them and document the change to inform policy.
2. What are we giving to the field? Influence policy and change practice. Assist the community in using the results by developing knowledge and tools, e.g. by providing frameworks, cost-benefit, etc.
3. Collaborative – encourage true partnerships between practice, policy and researchers – ensure questions are identified collaboratively and practitioners are involved in all stages of research.
4. Research must be independent both in: a) the solicitation process (should be a fit with funder's agenda but has to be some sense of independence); and b) in the way the research is conducted (once money is committed, researchers cannot be told what results are wanted or how they are arrived at

Research Issues

This group also had seven members, all researchers: Pat Martens, Marjorie MacDonald, Ruta Valaitis, Robyn Tamblyn, Jennifer O'Loughlin, David Patrick, and Maude Ruest Archambault.

This group came up with the following:

- Does financial investment lead to change?
- We need to learn from international systems about strategies/initiatives to reduce health inequities
- There is a need for intervention and surveillance platforms – access to data is a major concern (need to advocate for it and let the public know why it's important)
- Link into Community Based Primary Health Care (CBPHC) initiatives to work together and share learning and funding
- Evidence-based story telling
- We can answer systems and services issues by *addressing* major public health issues (i.e. obesity – what contributes to reducing obesity rates? Implement an intervention and research it to determine effectiveness). In other words, any public health issue can be the exemplar for addressing public health services and systems research questions

Research Approaches

This group had five participants who chose to discuss research approaches, including: Lisa Lix, Anita Kothari, Nancy Edwards, Pierre Tousignant, and Catherine Donovan. The group discussed the following elements:

- Current methodologies may not be adequate to address the types of PHSSR questions that arise
- Quantitative and qualitative methods are required that consider the complex system
- Develop capacity- linking researchers and practitioners and engage the practice community (need for release time to be involved in research and extending funding opportunities to include practitioners)
- Generalizability of findings – comparisons across geographies, etc.
- Seed funding to develop innovative methods
- Summer schools and other forums to bring together researchers, practitioners and policymakers
- Recognition that we may use real data or simulation models ('what if' questions)
- Role of community – use of community based participatory action research
- Health inequities – a principle but also a research approach so it becomes ingrained in the PHSSR agenda

Research Capacity

This area interested the most participants with nine people choosing to discuss the theme of research capacity: Gilles Paradis, Victoria Lee, David Mowat, Jane Underwood, Danièle Francoeur, Tom Kosatsky, Isaac Sobol, Margo Greenwood, and Pierre Bergeron. This group discussed the following:

1. Training – both researchers and professionals; Strategic Training Initiatives, job training – shift training to applied setting, context specific training around specific issues
2. Organizations – i.e., National Collaborating Centres, provincial institutions, and schools of PH contribute to process; PHRED model in ON – research mandate where research meets community health organizations
3. Cultural shift in use of knowledge - address needs of community and resource-poor settings
4. Collaboration - internet based, CBPAR, networking – linking practitioners, researchers and communities
5. International collaboration
6. Funding – necessary to build capacity - increase provincial and other funding
7. Infrastructure – need to influence eligibility and access to major infrastructure funding – (NCE, CFI)

Network Development

This group had seven people interested in discussing the development of both a Pan Canadian network and an international network: Trevor Hancock, Cory Neudorf, Greg Taylor, Roger Wheeler, Allan Best, David Hunter, and Beth Jackson.

Purpose of an international network:

- a) Advocate for and promote the value of PHSSR
- b) White paper development
- c) Cross-national comparisons- Core indicators of system performance
- d) Sharing research findings

Purpose of a Pan Canadian network:

- a) Champion, promote and develop PHSSR agenda
- b) Link practitioners, policymakers, and researchers
- c) Develop, support and share public health services and systems research
- d) Influence and find common ground, i.e., link to Health Services Research agenda

Next steps for network development:

- Begin by electronic linkage with the core group of Think Tank participants
- Assemble 2-3 task groups to take on immediate steps (i.e., refine framework, develop white papers, vision, values, etc.)
- Development of network within Canada – could be community of practice, working group or small network. Scan potential network members; decide who needs to be included (e.g., Council of CMOH, PHN Council, CAHSPR, etc.)
- Assemble international task group to engage with others internationally. The three international participants were keen to be involved in the formation of an international network

Next Steps and Closing Remarks

Next steps were discussed and these included:

- Disseminate the results of the Think Tank in Canada and internationally
- Further develop the PHSSR network in Canada
- Refine the logic model and research framework in consultation with the network
- Identify key research issues in consultation with the field (e.g., CCMOHs)
- Hold a pre-conference workshop at the Canadian Public Health Association conference in June 2011 to disseminate results to date, gather feedback and expand networking opportunities

- Develop a PHSSR session at the Canadian Association for Health Services and Policy Research (CAHSPR) Conference
- Develop a five year PHSSR strategic plan
- Identify funding opportunities and develop research teams and proposals
- Explore infrastructure funding options to hire support staff and develop and maintain a website, etc.
- Publish work to date and ongoing progress (Canadian Journal of Public Health was suggested as the journal)
- Collaborate further with Academy Health's Public Health Systems Research Interest Group (<http://www.academyhealth.org/Programs/ProgramsDetail.cfm?ItemNumber=2077>), as well as the Center for Public Health Systems and Services Research at the University of Kentucky (<http://www.publichealthsystems.org/cphssr>); Dr. Scutchfield indicated that they would post information on their website about our process and progress
- Explore the development of an international network with international partners

Trevor Hancock, Marjorie MacDonald, and Gilles Paradis thanked everyone for sharing their insight. They indicated that they are energized about the next steps.

Following the think tank, evaluation forms were emailed 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. 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.

Discussion

This exciting two day Think Tank brought together a diverse group of public health policy and decision makers, practitioners, and researchers from across the country to initiate the process of developing a PHSSR agenda for Canada. It culminated in the identification of several priority areas for research; a draft Public Health System Performance Logic Model; a draft Framework for a Public Health Systems and Services Research Agenda; identification of thematic areas requiring further development (e.g., principles and values, research methods and approaches, research capacity, network development); and a set of next steps for moving the agenda forward.

At the outset of the project, we identified five objectives for our agenda setting process (see p. 12), two of which we hoped to achieve at this meeting, one that we thought would be partially accomplished, and two that we anticipated would need to be carried forward. In this section, we discuss and analyze what was accomplished in this meeting and what remains to be done in relation to all five objectives.

Objective 1: To identify research priorities in public health services and systems.

Panel Presentation

The think tank was structured in a way that we hoped would lead logically to a discussion of research priorities in PHSSR. We began with a panel presentation by researchers invited from the two countries outside Canada from which the largest volume of literature on PHSSR has come; the US, which has engaged in a very extensive agenda setting process, and the UK, which has a health system with many similarities to that of Canada. The US has led the way in the development of the field of PHSSR. The UK, like Canada, has been doing research that could be classified as PHSSR but which has never been explicitly named as such. They have, however, provided leadership in new ways of thinking about intervention research, particularly from a systems perspective. Our intent was to learn from the experiences of these two countries.

The agenda setting process. We concluded that the systematic and iterative process used in the US to establish a PHSSR agenda would be well worth emulating in Canada. In fact, some aspects of our process to date do parallel theirs, but on a much smaller scale. As both Scutchfield and Jacobson emphasized, however, sustainable funding and infrastructure is essential to do a credible job of implementing this process. Although we have had a good start in Canada, building on the BC process and securing CIHR funding for this meeting, it is not yet clear what kinds of resources will be available to proceed with full development of the research agenda. It may be that until resources can be secured, we will have to proceed in small steps. The process may be supported by developing provincial-level PHSSR agendas. This is currently underway in Ontario with a team led by Anita Kothari and Sandra Regan (both investigators on the *Renewal of Public Health Systems Emerging Team grant*). Well developed research agendas in multiple provinces will, no doubt, contribute to and provide a foundation for a pan-Canadian agenda.

A common message. There were some common messages from the four international presenters, although these relate more to what is needed to support PHSSR rather than identification of research priorities per se. All presenters stressed that, to advance the field, it is important to ensure that the research questions address the knowledge priorities and concerns of policy makers. Both Jacobson and Hunter argued that early and active involvement of decision makers and practitioners throughout the research process was essential. Not only is this likely to produce more relevant research but may also facilitate knowledge translation (KT), which our presenters suggested has not been well done. Given the emphasis in the presentations on researcher-

decision maker partnerships and KT, it is not surprising that the theme of partnerships and linkages emerged as an important priority in the literature review, and although it did not rank in the top five in the survey, it was still identified as an important priority by a significant proportion of respondents.

We know that KT has become an important focus in Canada, where we use the term “integrated knowledge translation”¹⁰ to describe the active involvement of decision makers and practitioners in every stage of the knowledge creation enterprise. Canadian funding agencies, in particular, have been leaders in the KT field and the tremendous development of this field in Canada has been facilitated by strategic funding initiatives for KT, and requirements that KT (both end-of-grant and integrated KT) be built directly into research proposals. Many research teams in Canada, including our own *Core Functions Research Initiative in BC (CPHFRI)*, have taken this to heart and made integrated KT, specifically partnerships between researchers and decision makers/practitioners, not only a focus of research, but a philosophical orientation underlying this work. And, KT did emerge in 2007 as a priority in the BC PHSSR agenda setting process⁷. It is not surprising, therefore, that KT was a significant issue discussed throughout our two days of meetings, particularly in our fishbowl exercise, in the synthesis of working group priorities on Day 1, and in the final list of priorities on Day 2.

PHSSR definition. Dr. Jacobson pointed out that a shared vision and coherent definition for PHSSR is necessary to move the agenda forward. He suggested that we really need to take the time now to get it right. Of course, as noted by Trevor Hancock in his introduction, we did not build any time into the agenda for discussion on the definition or scope of PHSSR. We made an assumption that we could accept the definition developed in the US and needed to get on with the business of establishing priorities and moving toward consensus on the agenda. This may well have been a mistake on our part. It is difficult to establish consensus on priorities if there is not a high level of agreement among members on the definition and scope of the field. This was evident in the fact that at several points during the meeting, the need to be clear about the meaning and scope of PHSSR was identified by participants, and there were moments when there appeared to be some lack of clarity about the distinctions between public health research in general and PHSSR. For example, the place of intervention research, particularly population health intervention research, in the PHSSR landscape is not clear, although it was central to the presentations of both Hunter and Kelly from the UK. In Canada, Population Health Intervention Research (PHIR) is developing as an area of focus in its own right^{11,12} and is currently planning its own agenda.¹ To what extent do these areas overlap? We will continue this discussion later with respect to the objective of establishing links between the strategic directions of funders and the PHSSR agenda.

¹ International Conference to Advance a Population Health Intervention Research Agenda.
<http://srph.tamhsc.edu/centers/cchd/montreal-conference.html>.

Literature Review and Survey

We followed the panel discussion with a presentation by Marjorie MacDonald of the findings from our PHSSR literature review and survey, both conducted in preparation for this meeting. Our intent was to provide a foundation for the discussion of PHSSR priorities by identifying the most important issues reflected in the recent literature on PHSSR, and the priorities perceived by key public health stakeholders across the country.

A consensus on priorities. What was perhaps most striking about the literature review is that there was a great deal of overlap in the PHSSR priorities identified across five western/developed countries (Canada, the US, the UK, Australia and New Zealand). This suggests that the field of public health experiences similar challenges in western democracies in which the health care system at large devours the greatest proportion of resources for health, and captures the lions' share of public and media attention. When delving into the literature we gathered from various countries on any given priority area, this observation does appear to have some general validity, although this will need to be confirmed in the analysis of our full literature data base (now in progress).

A potential implication of this is that what we have learned from the PHSSR literature in different countries may well be broadly applicable internationally even when health care systems differ. This is important because, to date, we have limited literature to draw from that is Canada-specific. If we can make use of the lessons learned in the US, for example, where the field of PHSSR is more advanced and better developed, then we can proceed to advocate for changes in public health services and systems in Canada based on that evidence. This is not to say that we do not need to develop our own evidence base in Canada grounded in our own public health system context, but we can proceed with at least some confidence.

The other important observation is that there was considerable congruence in the priorities identified in both the literature review and in the survey, although the relative rankings differed somewhat. This suggests that, even though our survey findings were not based on a representative sample from across the country, the priorities identified do reflect the most important areas for future exploration and development in the field of PHSSR.

The link between PHSSR and HSR. MacDonald concluded her presentation with a discussion of some of the implications arising from the findings of the literature review and survey. For example, she observed that there had been a shift in the name of the field in the US from the original Public Health Systems Research to the revised Public Health Systems and Services Research. This signaled an intent to make an explicit link with the field of Health Services Research (HSR). Scutchfield, in his presentation, did argue that what works in HSR can be used to guide the development of PHSSR. Perhaps so, but what MacDonald questioned was whether there might be a down side to making this explicit link to HSR. Do we want to think more

deliberately about this as we develop our research agenda? Are there distinctions between HSR and PHSSR in terms of focus, goals, and underlying values that might be important to consider before hitching our wagons together? For example, the health care system at large is primarily focused on treating individuals who are experiencing disease, illness, and other health challenges and so health services research (HSR) largely assumes this focus. Public health, by contrast, focuses on the health of the population as a whole and specific population groups experiencing inequities; it takes seriously the determinants of health, which seem to be much less of a focus in HSR. Thus, the language we use and the underlying values become important in conveying our focus to the world. As Jacobson argued, it is important to get it right at the beginning. Clearly, we did not come to any conclusions about this and the question did not get picked up in discussions at this meeting. Nonetheless, just because it did not get much air time at the meeting does not mean we do not need to give this some more thought as we move forward.

Appropriate methodologies for PHSSR. Another observation made by MacDonald is that the empirical PHSSR literature has a strong focus on traditional or familiar methodologies, perhaps in line with its HSR parentage. She challenged the group by suggesting that we need innovative and creative methodologies that take the systems focus into account. This is consistent with an emerging line of argument within public health more generally and specifically within the PHSSR literature that we need to take a systems perspective – after all, this is about public health systems^{13,14,15}. The idea has also been raised that the public health system is a “complex adaptive system” and that public health interventions and services are complex¹⁶. Concepts from complexity science have been invoked as useful in understanding the implementation and impact of complex public and population health interventions^{17,18,19} within a complex system¹⁶.

If this is so, then we need a serious engagement with the question of what it might mean methodologically for PHSSR to adopt a systems thinking and/or a complexity science perspective. We need to go beyond a metaphorical application of complexity concepts or a mere exhortation that we need to engage in systems thinking to advance the field. We actually need to identify the kinds of study designs, the theoretical frameworks, the data collection approaches, and the analytic methods that are congruent with a complexity perspective, and justify why and how these might advance our knowledge about the implementation and impact of effective public health services and the development of a high performing public health system. This challenge appears to have resonated, at least with the researcher participants in the Think Tank; it was identified in the Fishbowl exercise as an important issue in the field of PHSSR and made it into the final list of priorities.

Priorities for PHSSR. In the end, a set of priorities was identified and grouped into the following general categories: 1) data development/public health information systems; 2) public health system performance; 3) governance, system/organizational structures; 4) partnerships and collaboration; 5) knowledge translation; 6) appropriate PHSSR methods; 7) development of

capacity for PHSSR; 8) public health ethics; and 9) public health workforce. None of these are listed in any particular order of priority. All but two of these have been integrated into our draft logic model, while others are also important elements in our draft Framework for a PHSSR Agenda.

A considerable amount of time was spent throughout the two days on the issue of access to data and the need for data infrastructure. It was clear that there was a lot of frustration in the room around this issue because it came up in every interactive exercise during the two day meeting. What was interesting to us is that this was not an issue identified as a high priority either in the PHSSR literature or in the survey, so why it emerged here as such a concern is not clear. Certainly, this is an important issue to take forward as we begin to develop our research agenda and it is central to supporting effective public health performance. If we are to use evidence and data to drive our practice in public health, then we need access to existing data within the system. This is why it is identified as a key component of our public health performance logic model.

Public health system performance was one of the key categories of priority identified by this group. It was also the number 2 priority identified in our survey, and ranked 6th in the Canadian literature on PHSSR. This validates that the performance of the public health system is an important area of concern for PHSSR in Canada. Given recent cuts to public health services in at least some provinces, the implications for public health performance could be significant. If we can produce evidence that public health performance, and the resultant impact on population health, is affected by system and structural changes then we might have evidence to support advocacy efforts to ensure adequate spending in public health across the country. The centrality of public health performance is highlighted in the title of our draft Public Health Performance Logic Model, suggesting that the performance of the public health system is, in fact, the immediate focus of PHSSR, while the ultimate goal is improved population health and reduced health inequities.

Public health governance, system, and organizational structures is another key focus for PHSSR, which also found its way into our logic model as an immediate determinant of locally effective public health services, and an intermediate determinant of the ultimate goals of public health (as noted above). Current research within CPHFRI (e.g., the Renewal of Public Health Systems program of research) is examining the impact of different public health governance structures on implementation and impact of the BC Core Functions Framework and the Ontario Public Health Standards. There is a need to move beyond these two provinces to examine governance structures across the country and the relationship between these structures and public health system performance, and ultimately how these might affect health outcomes.

Partnerships/collaboration and knowledge translation have already been discussed and clearly fit nicely into our logic model. As discussed above, there is obviously a strong connection between

partnerships and knowledge translation, particularly integrated knowledge translation. In our logic model, partnerships and KT are processes that support implementation of locally effective services, ultimately producing the desired outcomes.

Appropriate PHSSR methods have already been discussed above. These do not figure into our logic model, but are an essential element in our draft Framework for a Public Health Systems and Services Research Agenda.

The development of capacity for PHSSR was an issue that we spent considerable time discussing at various points in the meeting. Although capacity is not a research priority in itself, building capacity to conduct and use research is essential in contributing to effective public health performance. PHSSR capacity is thus the foundation for our draft Framework for a PHSSR agenda.

Public health ethics was a priority that did not provoke a lot of discussion at the meeting, and yet was identified as one of the eight priority areas. Still, it does not figure explicitly within either the logic model or the framework. At the same time, there has been considerable recent effort within Canada to begin to develop the focus on public health ethics as distinct from health care ethics. CIHR's Institute of Population and Public Health (IPPH) sponsored a journal club in 2010 where a large group of people interested in population and public health ethics came together by teleconference to discuss the PH ethics literature, to hear presentations from key bioethicists, and to engage in dialogue. This was followed up in 2011 with a Dialogue and Debate series that built on the earlier journal club and again, brought in experts in the field to contribute to the debate. The National Collaborating Centre for Healthy Public Policy has been developing a range of resources to support PH ethics, including resources on deliberative democratic processes, case studies in pandemic ethics, background papers on important PH issues as well as philosophically oriented discussion documents (www.ncchpp.ca)²⁰. We believe that a lot more discussion is needed on the place of public health ethics within a PHSSR agenda and, in particular, where it might fit within both the logic model and the framework.

The final priority area for PHSSR identified by the group is the public health workforce. This was the only priority in the literature review that ranked among the top five priorities for all five countries included in the review. It also ranked 9th in our survey and was identified in the researcher fishbowl as an important PHSSR issue. It shows up in our logic model in the fourth level of factors influencing effective public health performance; that is, competent public health staff are essential to create a competent organization and thus the implementation of locally effective public health services. Research addressing a wide range of questions concerning public health human resources will be important to integrate into a research agenda.

In conclusion, we identified a number of important priorities for PHSSR over the two day meeting. Most of these are consistent with the PHSSR literature and with our survey on priorities. At the same time, concern was expressed among the group that additional validation with those in the field is required and methods for this will need to be built into the process of agenda development as we move forward. Perhaps most importantly, participants suggested that more work needs to be done first on developing the vision and values underlying the field, as well as on defining PHSSR and its scope to distinguish it from related fields like public health research and population health intervention research.

Objective 2: To establish clear linkages between the strategic directions of funders to ensure a place for PHSSR in the research landscape.

Scientific Directors for two CIHR Institutes (Health Services and Policy Research - IHSPR, Population and Public Health - IPPH) as well as the Director General, Office of Public Health Practice at the Public Health Agency of Canada spoke about the links between their funding priorities/programs and PHSSR. We were pleased to hear about new funding initiatives and strategic directions that seem to be a good fit with at least some of the emerging priorities for PHSSR. Our initial concern that PHSSR might get caught between the cracks of the two Institutes seems to have been overstated and the new funding mechanisms that are available can be used to develop the body of knowledge about public health systems and services in Canada. Nancy Edwards pointed out that there is close alignment between PHSSR and the four strategic research priorities for IPPH. In fact, the release of the IPPH strategic plan a couple of years ago was welcomed by CPHFRI, and we published a short piece in the CPHFRI newsletter about the alignment between IPPH's new directions and the CPHFRI program of research²¹.

The stated emphasis of IPPH is, however, on population health interventions and they do not specifically use the language of public health services. Although not all public health services can be defined as population health interventions, we do see a distinct overlap between population health interventions (PHIs) and many public health services. PHIs are “complex and can include policy, program, and resource distribution approaches. Their complexity arises from the fact that they are frequently aimed at more than one system level, involve the use of multiple strategies, and require implementation both within and outside the health sector. In addition, population health interventions are introduced into systems that are, in and of themselves, dynamic and complex”^{17,p.13}. CPHFRI has conceptualized the core public health functions framework in BC as a population health intervention, but we also see the research into its implementation and impact as fitting within the definition of public health systems and services research. The core functions framework is a policy intervention comprising 21 core public health programs which are all about public health services. The framework is being implemented into regional health authorities – that is, organizations that are “complex systems.” The core public health programs and services are often provided solely within the health sector but may also involve collaboration

with and implementation in other sectors (e.g., transportation, agriculture, education). The ultimate aim of public health programs and services is improvement in the health of the population and the reduction of health inequities. Thus, from our perspective, there is no doubt that there is overlap and congruence between the two. At the same time, we also acknowledge that there are differences between them.

From a funding perspective, however, the different terms may create challenges for researchers and review panels in determining where their research might fit within the funding landscape. And, as discussed previously, if a research agenda is being developed for Population Health Intervention Research (PHIR) at the same time that we are developing an agenda for PHSSR, then those who represent the two groups clearly need to be talking. We need to be very clear about what the scope of PHSSR is, how it relates to or overlaps with the scope of PHIR, and how our agendas might be married. For the present, it is gratifying to know that the Scientific Director of IPPH sees a close alignment between PHIR and PHSSR. Nonetheless, we need to think carefully about the relationships as we move forward.

If PHSSR is truly a child of HSR, then IHSPR is an important institute with which PHSSR proponents need to engage. CPHFRP's Renewal of Public Health Systems (REPHS) Emerging Team Grant is funded through IHSPR so there is evidence of a link between the objectives of PHSSR and the aims of IHSPR. However, when writing the REPHS grant, we found it very challenging to fit our research objectives into the strategic priorities of IHSPR (as reflected in Listening for Direction III) and needed to do considerable massaging to find the right fit. Perhaps the newer initiatives described by Robyn Tamblyn will provide new scope for research on some PHSSR priorities. Certainly, collaboration between primary care and public health was identified in our literature review and survey as a priority but it did not rank very highly on the list. This is the focus of the CBPHC initiative and we know many public health researchers and decision makers getting involved in teams to submit proposals. Whether this focus will be sustained over the longer term remains to be seen.

Of course, as Edwards pointed out, we need to make better use of the operating grants competition for funding since the various strategic initiatives will shift and change over time. As identified in the CIHR international review, and CIHR's discussion paper on revamping the open grants competition and peer review process, there are many challenges for this kind of research. The current peer review structure may not work well to support and encourage PHSSR, but the proposed revisions hold some hope that we may be moving toward more innovation in the funding process. That remains to be seen. In the meanwhile, PHSSR researchers will need to do what they have always done – look for the strategic funding opportunities most likely to fit with their objectives, build a strong case for proposals to the open grants competition, and conduct high quality research that can be disseminated to strengthen the field. We are in this for the long haul and so our vision must extend beyond the immediate horizon.

Objective 3: To establish consensus on a Canadian PHSSR agenda.

This objective was perhaps an overly ambitious one. We did not even get to the development of a draft agenda much less achieve consensus on one. A research agenda generally consists of statements of values and principles, a guiding framework, and a set of research priorities. A general plan for achieving the agenda may also be included. Although we did have some discussion in one small group near the end of Day 2 on the importance of values and principles, we acknowledge that to develop a fully formulated agenda and to achieve consensus on it, we will need to do much more work to identify and define the values and principles underlying this enterprise. We did develop a draft logic model and framework, which we believe represents a significant accomplishment of the meeting, particularly since we did not originally anticipate that this would be an outcome. Although the group acknowledged that more work is necessary to refine and achieve consensus on these frameworks, we believe that they will be extremely useful to us in moving forward by providing a foundation for a PHSSR agenda and for developing a consensus on that agenda. Thus, work to refine and finalize these frameworks will be a critical and urgent next step.

Objective 4: To develop a five year plan to advance the agenda.

We did not anticipate that we would make any progress toward this objective at all during the meeting. Rather, we expected that this would be a focus for us as we moved forward following the Think Tank meeting. In fact, the development of a strategic five year plan is one of the next steps identified by the group. With respect to other next steps identified at the meeting, we have already held the proposed pre-conference workshop on PHSSR at the 2011 Canadian Public Health Association Conference, although the attendance was poor on a beautiful sunny Sunday afternoon in Montreal. Most other pre-conference workshops that day suffered from the same low attendance so we are assuming that is not an indication of the level of interest among the public health community. We will be doing a panel presentation at the Canadian Association of Health Services and Policy Research (CAHSPR) conference in Montreal at the end of May 2012 to inform the HSR community about our work and to establish stronger partnerships and linkages with the wider HSR network of researchers in Canada. In 2011, our proposal for a panel presentation at CAHSPR was rejected. We hope that the acceptance of our proposal this year signals a growing interest in PHSSR among HSR researchers in this country.

A lack of funding has hampered our efforts to engage in concrete next steps to move forward with developing the PHSSR agenda. Without funds to support staff and a website, for example, we will continue to be challenged in our efforts. Nonetheless, we hope that widespread dissemination of this report and the publication of papers on the literature review, survey and think tank will stimulate more interest. We will also continue to look for funding opportunities to develop an infrastructure to support our ongoing efforts. It is also possible that engagement of

our participants and others in conducting and publishing new PHSSR studies will help to stimulate more interest in the field.

Objective 5: To establish a Canada-wide network of PHSSR researchers and supporters.

Not a great deal of time was devoted in the meeting to discussion of this objective, but the discussion we did have took us beyond the notion of a Canada-wide network to an international network. There was some discussion that perhaps we did not need yet another network in Canada. There are many networks now operating that have some areas of focus that might overlap with what we have proposed. An important first step might be to identify and describe the various pan-Canadian networks now operating in this country that might have a related focus. However, the small group that did discuss network development near the end of Day 2 did attract a group of people very interested in pursuing this idea. They defined the purpose of both a pan-Canadian network and an international network. Both would have an advocacy focus to promote the value of PHSSR and a knowledge sharing purpose, particularly sharing the results of PHSSR.

This group also identified some important next steps for network development. We are sorry to say that since the meeting in May 2011, we have not made much progress on these steps, partly because we have not had the resources to pursue them. However, some of the steps do not require much in the way of financial resources – although they require committed time and some leadership to get things started. Finalizing this report has re-energized some of us to think about getting back to planning for all the “next steps”, not just those related to network development. In fact, a small group of us who will be doing a panel presentation at CAHSPR in Montreal at the end of May, 2012 will be getting together to discuss this very thing. We hope to have more to report in an update that we will send out to all participants in a few months time. We would be delighted to hear from any of you who would like to assist with initiating the next steps, and especially participating in an electronic network with the core group of Think Tank participants and/or helping to assemble and be part of 2-3 task groups to take on immediate steps (i.e., refine framework, develop white papers, vision, values, etc.).

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Appendices

Appendix 1: Letter of Invitation

Advancing Public Health Services Research in Canada: Developing a Pan-Canadian Agenda

Re: Think Tank Invitation
When: May 26, 2011, 8:30am-5:00pm (continental breakfast served at 8:00am)
 May 27, 2011, 8:30am-3:30pm (continental breakfast served at 8:00am)
 Welcoming Reception the evening of May 25, 7:00-9:00pm
Where: Omni Hotel, 1050 Sherbrooke Street West, Montréal, Québec
Hotel Reservations: 1-800-THE-OMNI (a room has already been reserved on your behalf)
Contact: Heather Wilson Strosher at hlwilson@uvic.ca or (250) 472-4606

We hope you will accept our invitation to participate in the first Canadian Think Tank on Public Health Systems and Services Research. This two day Think Tank will be held **May 26 & 27, 2011** in Montréal, Québec. There will also be a wine and cheese reception the evening of May 25th. *Please note the meeting date has been changed from the original date in April.* The purpose of this invitational meeting is to bring together a group of key stakeholders from across Canada with an interest and expertise in public health systems/services research (PHSR) to engage in discussion and debate about PHSR priorities in Canada. We are also inviting key experts from the US and UK to join the discussion, advise on our process, and provide an international perspective on the priorities we identify. We are excited to have received confirmation from the following international experts (a brief bio of each is also attached):

- **Douglas F. Scutchfield**, Peter B. Bosomworth Professor of Health Services Research and Policy, University of Kentucky
- **Peter Jacobson**, Professor of Health Law & Policy, University of Michigan School of Public Health & Director, Center for Law, Ethics & Health, University of Michigan, & Chair, Public Health Systems Research Interest Group
- **David Hunter**, Director and Professor of Health Policy & Management in Public Policy and Health, Durham University, UK
- **Mike Kelly**, Director, Public Health Excellence Centre, National Institute for Health and Clinical Excellence, UK

The objectives of this meeting will be to: a) identify research priorities in public health services/systems; b) establish a place for PHSR in the research landscape in Canada; c) reach consensus on a Canadian PHSR agenda; d) develop a five year plan to advance the agenda; and e) establish a Canada wide network of PHSR researchers and supporters.

In addition to a foundational grant received from the Canadian Institutes for Health Research, we are receiving additional funding from the Ontario Agency for Health Protection and Promotion, the Public Health Agency of Canada, the BC Centre for Disease Control, Research Western and three CIHR/PHAC Public Health Chairs (Gilles Paradis, Marjorie MacDonald, and Patricia Martens). We

do have funding to cover the travel costs for a small number of people, however, we wanted to broaden the list of invitees because of the interest that has been expressed by many in participating in this groundbreaking process. We are therefore asking those participants who are able to fund the cost of travel through other means to please do so. If you, or your employer, are unable to cover your own travel expenses, please contact Heather Wilson Strosher, our Research Coordinator, at hlwilson@uvic.ca or (250) 472-4606. Please also contact Heather if you have any questions and to confirm your attendance.

We will be providing further meeting details closer to the date but at this time, we would like to get the meeting dates into your calendar in the event that you are able to attend. We hope that you will be able to engage in this exciting initiative and look forward to the insights you have to offer.

Sincerely,



Trevor Hancock

Public Health Consultant, BC
Ministry of Health Services

Co-Lead, Core Public Health
Functions Research Initiative
(CPHFRI)



Marjorie MacDonald

Professor, School of Nursing,
University of Victoria

CIHR/PHAC Applied Public
Health Chair in Public Health
Education and Population
Intervention Research

Co-Lead, Core Public Health
Functions Research Initiative
(CPHFRI)



Gilles Paradis

Professor, Epidemiology,
Biostatistics and Occupational
Health, McGill University

Associate-Director for Population
Health and Preventive Medicine,
McGill University Health Center
(MUHC) Research Institute

Medical Consultant, National Public
Health Institute of Quebec and
Scientific Director, Quebec
Research Network in Population
Health

CIHR Applied Public Health Chair

Appendix 2: Biographical Sketches of International Participants

Biographical Sketches for International Participants

F. Douglas Scutchfield

Peter B. Bosomworth Professor of Health Services Research and Policy, University of Kentucky

Dr. Scutchfield is the initial incumbent in the Peter P. Bosomworth Professorship of Health Services Research and Policy at the University of Kentucky. He is the Principal Investigator of the Center for Public Health Systems and Services Research (<http://www.publichealthsystems.org/cphssr>) and holds faculty appointments in Public Health (Health Services Management), Preventive Medicine and Environmental Health, Family Practice and the Martin School of Public Policy and Administration.

Dr. Scutchfield was born in Wheelwright, Kentucky. He received his undergraduate degree, with Distinction, from Eastern Kentucky University, who has recognized him as their outstanding Alumni in 1992. He was awarded an honorary Doctor of Science degree by Eastern Kentucky University in 2004. He received his MD degree from the University of Kentucky, where he was elected to the Alpha Omega Alpha Medical Honor Society. He has also received an honorary Doctor of Humane Letters degree from Pikeville College. He completed residency and fellowship training at Northwestern University, the Centers for Disease Control and Prevention and the University of Kentucky. He has done additional graduate course work at the University of Michigan, University of Minnesota and Morehead State University. Dr. Scutchfield served as Epidemic Intelligence Service Officer at the Centers for Disease Control and Prevention.

Dr. Scutchfield is certified by the American Board of Preventive Medicine, and from 1972-1985 he was a Charter Diplomat of the American Board of Family Practice. He is a Fellow of both the American College of Preventive Medicine (ACPM) and the American Academy of Family Practice. Dr. Scutchfield served as a member of the ACPM Board of Regents and President of that organization. He has received the College's Outstanding Recognition Award and Distinguished Service Award. Dr. Scutchfield has been a member of the Board of Trustees and President of the Association of Teachers of Preventive Medicine. In 2008, he received their Duncan Clark Award and gave the Duncan Clark Lecture.

Peter Jacobson

Professor of Health Law & Policy, University of Michigan School of Public Health & Director, Center for Law, Ethics & Health, University of Michigan, & President, Public Health Law Association

Dr. Jacobson is Professor of Health Law and Policy in the Department of Health Management and Policy, University of Michigan School of Public Health, and Director, Center for Law, Ethics, and Health (<http://www.sph.umich.edu/iscr/faculty/profile.cfm?unique=pedj>). He received his law degree from the University of Pittsburgh School of Law in 1970, and a Masters in Public Health from UCLA in 1988. Before coming to the University of Michigan, he was Senior Behavioral Scientist at RAND from 1988 to 1996. His current research interests focus on the relationship

between law and health care delivery and policy, law and public health systems, and health care safety net services.

In 1995, he received an Investigator Award in Health Policy Research from the Robert Wood Johnson Foundation to examine the role of the courts in shaping health care policy. The project culminated in the publication of the book *Strangers in the Night: Law and Medicine in the Managed Care Era* (Oxford University Press, 2002). Jacobson co-authored a law school casebook with Lawrence O. Gostin titled *Law and the Health System* (Foundation Press, 2005), and is also a co-author of *False Hope vs. Evidence-Based Medicine: The Story of a Failed Treatment for Breast Cancer* (Oxford University Press, 2007). He is currently the Associate Editor for Health Law and Public Health for the *Journal of Health Politics, Policy and Law*.

Dr. Jacobson's current research interests focus on the relationship between law and health care delivery, law and public health systems, public health ethics, and health care safety net services. For instance, he is the Principal Investigator (PI) on studies examining public health entrepreneurship, the impact of state and federal law on public health preparedness, and enhancing organizational and operational efficiencies in Michigan's health care safety net providers.

David Hunter

Professor of Health Policy and Management, Durham University

Director of the Centre for Public Policy and Health, Wolfson Research Institute, Durham University

Deputy Director, Fuse - the Centre for Translational Research in Public Health

Non Executive Director, National Institute for Health and Clinical Excellence

Past Chair, UK Public Health Association

Professor Hunter has been Professor of Health Policy and Management at Durham University since 1999 and Head of the Centre for Public Policy and Health since February 2001

(<http://www.dur.ac.uk/school.health/staff/?username=dhs0djh>). His background is in political science, medical sociology and health policy analysis. Before coming to Durham, he was Professor of Health Policy and Management at Leeds University and for most of this period also Director of the Nuffield Institute for Health. His interests lie in health care reform and the development of public health policy and he has published widely in these areas. Professor Hunter is an Honorary Member of the Faculty of Public Health, and a Fellow of the Royal College of Physicians of Edinburgh. He was Chair of the UK Public Health Association between 2004 and 2009. Professor Hunter is also Deputy Director of the Centre for Translational Research in Public Health.

Mike Kelly

Director, Public Health Excellence Centre, National Institute for Health and Clinical Excellence, UK

Note that Professor Kelly was unable to attend the Think Tank due to illness

Professor Kelly joined the National Institute for Health and Clinical Excellence

(<http://www.nice.org.uk/>) in 2005, as director of the public health excellence centre, following the

merger of NICE and the Health Development Agency, where he held the position of director of research and information. At NICE Professor Kelly has led the development of the public health portfolio which has included the public health guidance on the prevention and management of obesity, behaviour change, maternal and child health, community engagement and physical activity and the environment.

Professor Kelly graduated from the University of York with a BA in social science. He also holds a master's degree in sociology from the University of Leicester and undertook his PhD in the department of psychiatry at the University of Dundee. During his career Mike has held the following positions: Professor of social sciences and head of the school of social sciences at the University of Greenwich and Senior lecturer in health promotion at the University of Glasgow. He is also an honorary chair in the Department of Public Health and Policy at the London School of Hygiene and Tropical Medicine and a Fellow of the Faculty of Public Health. Professor Kelly is a medical sociologist with special research interests in coronary heart disease prevention, chronic illness, disability, exercise and health and community involvement in health promotion.

Appendix 3: Think Tank Agenda

Thursday, May 26, 2011

Day One of Symposium

8:00 - 8:30	Continental Breakfast will be provided prior to the meeting
8:30 - 9:00	Welcome Gilles Paradis Background and purpose of meeting Trevor Hancock
9:00 - 10:00	Opening Panel: The status of PHSR in the US F. Douglas Scutchfield & Peter Jacobson Moderator: Gregory Taylor
10:00 - 10:15	Break
10:15 - 11:15	Opening Panel: The status of PHSR in the UK David Hunter & Mike Kelly Moderator: Beth Jackson
11:15 - 12:00	Providing Context on PHSR in Canada – Overview of Literature Review & Survey Marjorie MacDonald
12:00 - 12:45	Lunch provided
12:45 - 1:45	Researcher Fishbowl Exercise: Identifying Gaps in PHSR in Canada Moderator: Marjorie MacDonald
1:45 - 2:45	Practitioner Fishbowl Exercise: Perspectives on Evidence Needed Moderator: Trevor Hancock
2:45 - 3:00	Debrief of Fishbowl Exercise
3:00 - 3:10	Break
3:10 - 4:25	Small Groups: Identifying Priorities in Canada
4:25 - 4:55	Report Back and Brief Discussion: Confirming Priorities in Canada Facilitator: Gilles Paradis
4:55 - 5:00	Closing Remarks Marjorie MacDonald

Friday, May 27, 2011

Day Two of Symposium

800 - 8:30	Continental Breakfast will be provided prior to the meeting
8:30 - 10:00	Confirming Priorities in Canada – present and discuss priorities identified in Day 1 Facilitator: Patricia Martens
10:00 - 10:15	Break
10:15 - 11:30	Panel: Link between Strategic Directions of Funders and PHSR agenda Comment on Day One, Gap Analysis and draft set of priorities Nancy Edwards, Robyn Tamblyn and Gregory Taylor Moderator: Heather Manson
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 - 2:00	Reports back from small groups Moderator: Anita Kothari
2:00 - 3:15	Next Steps: Creating a National Network and Where do we go from here? Facilitator: Trevor Hancock, Gilles Paradis and Marjorie MacDonald
3:15 - 3:30	Reflections and Closing Remarks Marjorie MacDonald
3:30	Refreshments

Appendix 4: List of Participants

Participant List

Allan Best

Managing Director, *InSource*

Associate Scientist, Centre for Clinical Epidemiology and Evaluation, Vancouver Coastal Health Research Institute

Clinical Professor, School of Population and Public Health, University of British Columbia

Past President, Canadian Association for Health Services and Policy Research

François Benoit

Lead, Centre de collaboration nationale sur les politiques publiques et la santé (CCNPPS)

Pierre Bergeron

Expert-conseil, Vice-présidence aux affaires scientifiques, Institut national de santé publique du Québec (INSPQ)

Connie Clement

Scientific Director, PHAC National Collaborating Centre on the Determinants of Health

Catherine Donovan

Associate Professor, Clinical Public Health, Faculty of Medicine, Memorial University of Newfoundland

Nancy Edwards

Professor, School of Nursing and Director, Community Health Research Unit, University of Ottawa

Scientific Director, CIHR Institute of Public and Population Health

CHSRF/CIHR Nursing Chair

Danièle Francoeur

chef d'unité scientifique de la Direction de l'analyse et de l'évaluation des systèmes de soins et services, Institut national de santé publique du Québec (INSPQ)

Margo Greenwood

Academic Lead, PHAC National Collaborating Centre for Aboriginal Health

Trevor Hancock

Public Health Consultant, BC Ministry of Health Services

Co-Lead, Core Public Health Functions Research Initiative (CPHFRI)

David Hunter

Professor of Health Policy and Management, Durham University

Director of the Centre for Public Policy and Health, Wolfson Research Institute, Durham University

Deputy Director, Fuse - the Centre for Translational Research in Public Health

Non Executive Director, National Institute for Health and Clinical Excellence

Past Chair, UK Public Health Association

Brian Hutchison

Past-President, Canadian Association for Health Services and Policy Research

Scientific Advisor, Canadian Health Services Research Foundation

Professor Emeritus, Family Medicine and Clinical Epidemiology & Biostatistic, McMaster University

Former Editor-in-Chief of Healthcare Policy

Beth Jackson

Manager, Research and Knowledge Development, Strategic Initiatives and Innovations Directorate, Public Health Agency of Canada

Peter Jacobson

Professor of Health Law & Policy, University of Michigan School of Public Health & Director, Center for Law, Ethics, and Health, University of Michigan
President, Public Health Law Association

Tom Kosatsky

Medical Director, Environmental Health Services Division, BC Centre for Disease Control
Scientific Director, National Collaborating Centre for Environmental Health

Anita Kothari

Associate Professor, Faculty of Health Sciences, University of Western Ontario
CIHR New Investigator

Victoria Lee

Medical Officer of Health, Fraser Health Authority

Lisa Lix

Associate Professor and Centennial Chair, School of Public Health, University of Saskatchewan

Heather Manson

Senior Medical Advisor to the President, Ontario Agency for Health Protection and Promotion

Marjorie MacDonald

Professor, School of Nursing, University of Victoria
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Patricia Martens

Professor, Department of Community Health Sciences, Faculty of Medicine, University of Manitoba
Director, Manitoba Centre for Health Policy
CIHR/PHAC Applied Public Health Chair

Howard Morrison

Director, Science Integration Division, Centre for Chronic Disease Prevention and Control, Health Promotion and Chronic Disease Prevention Branch, Public Health Agency of Canada

David Mowat

Medical Officer of Health, Peel Region Public Health, Ontario

Cory Neudorf

Chief Medical Health Officer, Saskatoon Health Region
Chair of Board of Directors, Canadian Public Health Association

Jennifer O'Loughlin

Professor, Department of Social and Preventive Faculty of Medicine, University of Montréal
Canada Research Chair in the Early Determinants of Adult Chronic Disease

Gilles Paradis

Professor, Epidemiology, Biostatistics and Occupational Health, McGill University
Associate-Director for Population Health and Preventive Medicine, McGill University Health Center (MUHC) Research Institute

Medical Consultant, National Public Health Institute of Quebec and Scientific Director, Quebec Research Network in Population Health
 CIHR/PHAC Applied Public Health Chair

Amanda Parks

Coordinator, Public Health Core Functions, Quality, and Performance, Interior Health

David Patrick

Director, School of Population and Public Health, University of British Columbia
 Director of Communicable Diseases Epidemiology Services BC Centre for Disease Control

Denis A Roy

VP, Research, Institut national de santé publique du Québec

Maude Ruest Archambault

Senior Project Officer, CIHR Institute of Health Services and Policy Research

F. Douglas Scutchfield

Peter B. Bosomworth Professor of Health Services Research and Policy, University of Kentucky

Isaac Sobol

Member, Advisory Board, CIHR Institute of Aboriginal People's Health

Lorna Storbakken

Director, Core Functions Implementation, Ministry of Health Services

Heather Wilson Strosher

Research Coordinator, Core Public Health Functions Research Initiative (CPHFRI), University of Victoria

James Talbot

Alberta Deputy Chief Medical Officer of Health

Robyn Tamblyn

Scientific Director, CIHR Institute for Health Services and Policy Research
 Professor, Department of Medicine and Department of Epidemiology and Biostatistics, McGill University, Faculty of Medicine

Gregory Taylor

Director General, Office of Public Health Practice, Public Health Agency of Canada

Pierre Tousignant

Consultant, Montreal Public Health Department and Institut national de santé publique du Québec
 Associate Professor, Department of Medicine and the Department of Epidemiology, Biostatistics and Occupational Health, McGill University

Jane Underwood

Associate Clinical Professor, School of Nursing, McMaster University
 Co-Investigator, Nursing Health Services Research Unit, McMaster University
 Senior Partner, Underwood and Associates (Public Health Consultants)

Ruta Valaitis

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 Dorothy C. Hall Chair in Primary Health Care Nursing

Gaynor Watson Creed

Medical Officer of Health, Capital Health, IWK Health Centre, Dartmouth, Nova Scotia

Roger Wheeler

Corporate Director, Public Health Planning, Interior Health

Robyn Wiebe

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