Creating and Capitalizing on Opportunities to Reduce Poverty:
The Process and Power of Integrated Knowledge Translation

by

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Abstract

This thesis describes the experiences of partners involved in integrated knowledge translation (iKT)—a poorly understood process wherein partners from diverse professional spheres (e.g. community, government, and academia) work together to ensure research generated is relevant for the context of its intended application. The partnership under study—*Putting Research to Work*—is centered on the issue of family poverty in Edmonton, Alberta. Through an iterative and inductive process of qualitative description using previously generated data, I present partners experiences on how to offset structural and political barriers, and create and capitalize on opportunities to use research in government. Two papers (Chapter IV and V) capture these findings. In the discussion and conclusion (Chapter VI), I delineate why and how these findings pose relevance to nursing.

Preface

For this thesis, I used data generated by Dr. Maria Mayan from her study *Putting Research to Work: Understanding and Improving Knowledge Translation in Population Health* (PRW). Dr. Maria Mayan obtained research ethics approval from the University of Alberta Research Ethics Board, PRW, No. 247152, August 17, 2011. In discussion with my committee, I was responsible for the study's research design, literature review, methodology, and manuscript composition. I conducted the data analysis for paper 1 (chapter IV) and paper 2 (chapter V) in consultation with Dr. Maria Mayan (Primary Investigator for PRW) and Sanchia Lo (Research Coordinator for PRW). I have prepared paper 1 (chapter IV) and paper 2 (chapter V) to submit for publication in *Implementation Science.*

Dedication

This thesis is dedicated to the 1279 families who, despite facing daily injustice, volunteered their time and energy to participate in the Families First Edmonton (FFE) research project. I would also like to dedicate this study to the PRW partners, whose courage within their organizations made this work possible.

Acknowledgements

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- Dr. Jane Drummond, thank you for showing me the importance of challenging the status quo, even though it may be an unpopular pursuit at the time. I am inspired by your early involvement in the politically charged issue of poverty, long before it entered into the radar of other applied health scholars and became part of a dominant conversation.
- Dr. Maria Mayan, thank you for providing me the opportunity to be a part of your research program and conduct this work. Your ongoing questions that have shaped my thinking for this research will continue to influence my future involvement in research and your mentorship in qualitative inquiry has shaped my everyday thoughts. I hope to emulate the way that you collaborate with others.
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This work would also not be possible without my parents.

- *Mom and Dad*, thank you for making countless sacrifices for me so that I could pursue an education and for demonstrating kindness, humility, and integrity to me long before I could understand the importance of those qualities.

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List of Abbreviations

CARNA – College and Association of Registered Nurses of Alberta

CBPR – Community based participatory research

CIHR – Canadian Institutes of Health Research

CUP – Community University Partnership

FFE – Families First Edmonton

FoN – Faculty of Nursing

HSERC – Health Science Education and Research Commons

iKT – Integrated Knowledge Translation

KT – Knowledge Translation

OECD – Organisation for Economic Co-operation and Development

PRW – Putting Research to Work: Understanding and Improving Knowledge Translation in Population Health

RN – Registered Nurse

SDoH – Social Determinants of Health

UoA – University of Alberta

Glossary of Terms

Analysis of Previously Generated Data

For this thesis, I was afforded the opportunity to use qualitative data aligned with my research interest that I did not generate. This circumstance, unlike qualitative secondary analysis—in which the "research interest is distinct from that of the original work" (Heaton, 1998, para. 2)—had not yet been discussed in any literature that I could find. As such, I termed my approach 'Analysis of Previously Generated Data.' I favor the term 'generated' over 'collected' to reflect the interactive and selective process used by the investigator to accurately re(present) the phenomena in qualitative inquiry (Mayan, 2009). For this thesis, I have defined 'Analysis of Previously Generated Data' as follows:

> *The analysis of qualitative data by an investigator who is using data which they did not generate themselves, but analyzing with the same (or similar) research interest as the original primary investigator who generated the data.*

Both 'Qualitative Secondary Analysis' and 'Analysis of Previously Generated Data' maximize resources and are used to reduce costs and to answer timely and relevant research questions. However, steps must also be taken to mitigate concerns that may compromise the integrity, rigor, and validity of the inquiry. I have addressed these steps in Chapter III (methods).

Integrated Knowledge Translation

In this study, the Canadian Institute of Health Research (CIHR, 2015) definition of iKT, which describes the trajectory of the partnership under study, will be used:

> *iKT is an approach to doing research that applies the principles of knowledge translation to the entire research process . . . Each stage in the research process*

is an opportunity for significant collaboration with knowledge users, including the development or refinement of the research questions, selection of the methodology, data collection and tools development, selection of outcome measures, interpretation of the findings, crafting of the message and dissemination of the results (Integrated knowledge translation, para. 12)

The term 'research use,' where stated (i.e. Paper 1) refers to the use of research made possible through iKT.

Inter-disciplinary and Cross-sectoral

In Chapter VI (discussion and conclusion) of this thesis, I use the term 'discipline' to refer to those regulated by the Health Professions Act in the province of Alberta. Accordingly, inter-disciplinary work refers to nurses working with health professionals in other disciplines, such dentistry, pharmacy, and medicine. Cross-sectoral work refers to nurses working with those who serve the same clientele, but function outside of health care sector (e.g. social services, criminal justice).

Knowledge-to-Action

While I recognize different types of equally valuable knowledge, such as tacit (e.g. experiential) offered by non-academic partners, I use the term "knowledge-to-action," introduced by Graham et al. (2006), to refer to the uptake or use of research knowledge in government polices, practices, and programs—which is the central focus of this thesis (p. 14).

Knowledge User

CIHR (2015) broadly defined the term 'knowledge user' as:

An individual who is likely to be able to use research results to make informed decisions about health policies, programs and/or practices . . . [whose] level of engagement in the research process may vary in intensity and complexity . . . [such as] a practitioner, a policy maker, an educator, a decision maker, a health care administrator, a community leader or an individual in a health charity . . .

In this thesis, I use the term 'knowledge user' to refer to decision-makers, which include those "responsible for decisions on behalf of a large organization or jurisdiction" (Innvær, Vist, Trommald, & Oxman, 2002, p. 240). Decision makers, in this thesis, encompass both 'civil servants' (i.e. government employees who do not change with elections) and 'policymakers' (i.e. elected officials).

Organizations and Institutions

Despite being used as analogous, an important distinction exists between the entangled concepts of 'organizations' and 'institutions.' Organizations, as tangible agents, embody institutional arrangements. In the words of Pluye, Potvin, and Dennis (2004), organizations and institutions are "intertwined social structures," wherein,

Social institutions permeate organizations and they are made operational by organizations that seek to make them as efficient as possible (p. 124).

In this thesis, I make reference to the involvement of the academic, health and social service organizations involved in PRW, and simultaneously recognize the institutional factors (e.g. norms and social arrangements) that characterize them. At times, I use the term 'sector'—consistent with the language of the PRW partners who participated in the interviews—to refer to the diverse professional spheres of academia, community, and government.

Partners

Partners, in this study, encompass diverse stakeholders including funders, knowledge users, and researchers that crisscross different sectors (i.e. community, government, academia), levels of governments (e.g. regional, municipal, provincial), and jurisdictions (e.g. recreation, transportation, income support, housing). In this study, partners who participated in the interviews represented 10 organizations, including: (a) Alberta Health Services; (b) Alberta Human Services (formerly, Alberta Employment and Immigration); (c) Bent Arrow Traditional Healing Society; (d) City of Edmonton; (e) Kara Family Resource Centre; (f) Multicultural Health Brokers Co-Op; (g) United Way of the Alberta Capital Region; (h) University of Alberta; (i) Community University Partnership for the Study of Children, Youth, and Families; and (j) YMCA of Edmonton;

Population Health and Health Promotion

In discussing the goals of the iKT partnership, I recognize the tension surrounding the 'population health' and 'health promotion,' approach in recent "health policy discourse" (Collins & Hayes, 2007, p. 338). Namely, critics of 'population health' have suggested this approach lacks "an explicit values base" and discourages the political engagement necessary to advance social justice issues (Raphael & Bryant, 2002, p. 192). However, in this thesis, I use the term 'population health' as it was consistently used by those involved in partnership under study and by the Public Health Agency of Canada, both of which my findings have relevance to.

Poverty and Low-Income

While conceptually different, the terms 'poverty' and 'low-income' are often used interchangeably. In the FFE study, 'low-income' was used, and defined with respect to

the type of services families receive (Schnirer & Stack-Cutler, 2012). In this study, I will use the word 'poverty' for two reasons. First, poverty is more than a measure of about income generation (e.g. Statistics Canada, 2013), but captures an individual's lack or denial of the social and economic resources to obtain basic needs (i.e. absolute poverty) or exclusion from activities that enhance well-being (i.e. relative poverty) in their community (Raphael, 2009). Second, the term 'poverty' is used in recent government and community action plans (e.g. Alberta's Social Policy Framework, Mayor's Task Force to Eliminate Poverty in Edmonton), which this study hopes to inform.

Upstream and Downstream

These are public health terms used describe "the tension between . . . respond[ing] to emergencies (help people caught in the current)" [downstream] and focusing on health promotion and illness prevention "(stop people from falling into the river)" [upstream] through addressing the social and economic factors that shape health, such as ethnicity, class, and gender (National Collaborating Centre for Determinants of Health, 2014, p. 2). As the National Collaborating Centre for Determinants of Health (2014) explained,

> *In the classic public health parable credited to medical sociologist, Irving Zola, a witness sees a man caught in a river current. The witness saves the man, only to be drawn to the rescue of more drowning people. After many have been rescued, the witness walks upstream to investigate why so many people have fallen into the river* (p. 2).

Chapter I: Introduction

Poverty is a complex health and social problem that deprives people of social and material goods. To address such issues, integrated knowledge translation (iKT) partnerships are growing in popularity as a platform for diverse partners to unite with the aim of generating usable research knowledge and collective solutions. The CIHR (2015) acknowledges iKT through specific grants and evaluation mechanisms, which have dramatically changed the research production and use in Canada and abroad.

However, the collective work and interactive dialogue necessary to understand and address social problems using research is poorly understood. The literature review in chapter II identifies multiple knowledge gaps within the field of iKT, including organizational-level factors impinging on iKT, the process of working across sectors (e.g. government, academia, community), as well as the benefits of iKT to organizations and society.

If partners from diverse professional spheres are to use iKT partnerships as a means of generating relevant research, researchers must evaluate existing partnerships. One such partnership was *Putting the Research to work* (PRW), located in Edmonton Alberta. This partnership dates back to 2000, when community, funder, university, and government partners "with interests and mandates embedded in the health and well-being of" low-income families (Gray, Mayan, Lo, Jhangri, & Wilson, 2012, p. 272) came together to develop and execute a community-based study—FFE (Drummond, Mayan, Schnirer, & So, 2007; Drummond et al., 2014).

The purpose of my thesis is to describe how iKT partners create and capitalize on opportunities to use research within and across municipal and provincial governments.

The overall research question is: What are partners' experiences in moving knowledge-to-action within and across municipal and provincial governments?

The data I used to answer this question had been previously generated, but not yet analyzed, an approach/process I call 'Analysis of Previously Generated Data,' defined in the glossary of terms (p. 11) and critiqued in methods (Chapter III). Using qualitative description (Sandelowski, 2000; Sandelowski, 2010), ATLAS.ti was used to manage and organize the data. Due to the emergent nature of qualitative research, adaptations in my analysis were made as it occurred. This process involved consultation with Maria Mayan (Primary Investigator for PRW) and Sanchia Lo (Research Coordinator for PRW), wherein we collectively examined the meanings of specific passages or paragraphs within the data.

Two major findings are presented:

1. The first paper (Chapter IV) identifies bureaucracy as a structural barrier to iKT, and the politically potent combination of external pressure and internal insight as a way to instigate change within government.
2. The second paper (Chapter V) identifies the political barrier of election cycles, which promote short-term thinking, uncertain priorities, and lost iKT project partners. My findings demonstrate that relationships among partners offset the turbulence associated with election cycles and serve as an important precursor to research use.

The findings presented in Paper 1 and Paper 2 hold significant implications for the developing field of iKT. Research partners in iKT projects must be mindful that, while attaching research projects to a broader political agenda can be productive, it may

limit the capacity for complex and critical ideas to develop, and poses a risk for researchers to become co-opted by a government agenda—a situation counterintuitive to challenging broader government directions and priorities through research. However, researchers must partner with government to develop internal insight, which, in turn, can enhance external pressure efforts with information on context and diplomacy (e.g. knowing when and how to advocate for change externally). Furthermore, iKT partners must invest in their relationships with government, which I found to be an important pre-cursor to using research knowledge.

In the discussion and conclusion (Chapter VI), I identify why and how the findings in Paper 1 and Paper 2 hold relevance to nursing; In short, I introduce and critique Allen's (2004) description of contemporary nursing practice and integrate my findings with the suggestions from a recent Gallup poll (Khoury, Blizzard, Wright, Linda, & Hassmiller, 2011) to generate two broad recommendations and specific strategies for nursing practice, education, and research.

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Chapter II: Literature Review

Summary of Literature Review

iKT is the central phenomena of interest in this study. As such, iKT will anchor this literature review, which will include a brief history of the knowledge translation (KT) field, what is known about iKT, and gaps in knowledge pertaining to evaluation of iKT at the population health level. This warrants a discussion of partnerships, which are foundational to iKT. However, the experiences of those most knowledgeable about iKT (i.e. iKT partners themselves) are not adequately described or explored in the literature. Consequently, the processes and factors shaping this work are not well known.

Knowledge Translation (KT) and Integrated Knowledge Translation (iKT)

The beginning of the 21st century marked a change in Canadian research landscape. Following decades of "intellectual activity" (Estabrooks et al., 2008), the distinction between research dissemination and research use (Lomas, 1997) became well known, creating a strong impetus for KT work. Accordingly, there were major shifts in national research funding organizations. Most notably, the CIHR adopted Graham and colleagues (2006) knowledge-to-action framework and encouraged applicants to plan for end-of-grant KT and/or iKT through "specific granting mechanisms" (Estabrooks, Teare, & Norton, 2012).

There are important distinctions between end-of-grant KT and iKT. Investigators who employ end-of-grant KT assume that the knowledge-to-action gap is a result of inadequate, often passive interventions (e.g. lectures, publication) to disseminate research (Bowen & Graham, 2013; Wensing, M., Bosch, M., & Grol, R., 2013). As such, plans for end-of-grant KT often involve "intensive dissemination activities that tailor the message

and medium to a specific audience," such as "briefings to stakeholders" (Canadian Institute of Health Research, 2015). iKT, on the other hand, is based on the assumption that the knowledge-to-action gap is an issue of "knowledge production" (Bowen & Graham, 2013). Simply put—if researchers do not ask relevant questions, decision makers cannot use their findings.

Thus, in iKT, researchers demarcate a commitment to engage with knowledge users at the outset of any research endeavor to ensure that the research products will be relevant for the contexts in which change is warranted. As Wheatley and Kellner-Rogers (1999) succinctly stated—"people support what they create." However, given the collective work and interactive dialogue necessary to understand and address social problems using research, scholars (Davies, Nutley, & Walter, 2008; Greenhalgh & Wieringa, 2011) have argued that the word 'translation'—which implies a linear and didactic mode of research dissemination—is misleading. Notwithstanding, iKT requires that non-academic partners bring essential contextual knowledge to the table throughout all phases of the research process to increase the likelihood of research use, which is the central aim of iKT (Denis & Lomas, 2003).

What is Known About iKT

Early and incremental engagement is critical to producing relevant, usable, scientific knowledge

iKT is rooted in community based participatory research (CBPR). Drawing on the early work of Kurt Lewin (as cited in Wallerstein & Duran, 2008), CBPR "is a collaborative approach to research" whereby stakeholders must recognize "the unique strengths" (Community Health Scholars Program, 2002, p. 2) and "diverse expertise"

that partners bring at various times throughout the life of a research project (Chapman, Bisanz, Schnirer, & Mayan, 2010). These principles, which do not privilege "one source or type of knowledge over another" (Kothari, Sibbald, & Wathen, 2014, p. 2) are apparent in CIHR's (2015) definition of iKT.

Partners engaged in iKT must frequently evaluate their process and adapt. Thus, it is critical to have "processes and structures that support input and dialogue, and dissension from all members" (E. S. Weiss, Taber, Breslau, Lillie, & Yuelin, 2010, p. 746). A key point in this process is involvement from the outset. As Bowen and Graham (2013) recognized, research uptake is more successful when research questions are developed with decision-makers and knowledge users. This early engagement strengthens relationships (Clark et al., 2014) and builds trust (Pirie & Gute, 2013), which facilitates the knowledge sharing process (Wathen, Sibbald, Jack, & Macmillan, 2011). Likewise, all stages of the research process must be informed with contextual knowledge where change is warranted.

Partnerships, which are foundational to iKT, are shaped by the context in which they are situated and by the quality of relationships of those involved

The success of iKT hinges on involvement from people. These 'partnerships', which have long been recognized as essential to research uptake (Lomas, 2000b) are rarely defined. Accordingly, the World Health Organization (2009) reviewed multiple sources to develop a "working definition" of, partnership:

> *A collaborative relationship between two or more parties based on trust, equality, and mutual understanding for the achievement of a specified goal. Partnerships involve risks as well as benefits, making shared accountability critical.*

This definition captures characteristics and processes that are well supported in the partnership literature, which iKT draws on. In their synthesis, Lencucha, Kothari, and Hamel (2010), found that trust and reciprocity, which can be achieved overtime through sustained, in-person contact, are critical to the success of iKT. In addition to building these personal relationships, being strategic about who is involved is also important. For instance, involving stakeholders who have ‘credibility’ (Grimshaw, Eccles, Lavis, Hill, & Squires, 2012; Israel, Schulz, Parker, & Becker, 1998) in their respective spheres is paramount.

While many partnerships begin with common principles (Community-Campus Partnerships for Health Board of Directors, 2013), it is important to note that iKT is not a ‘one size fits all’ approach. Scholars have cautioned against any universal KT plan (Goering, Ross, Jacobson, & Butterill, 2010) or partnership model (Mitchell, Pirkis, Hall, & Haas, 2009) when the best approach will invariably depend on the context of work. Interestingly, Kothari et al. (2014) found that having shared goals is not always necessary, given different motives for involvement. In the literature on ‘communities of practice’ (i.e., groups of people who congregate to learn more about a shared interest), Wegner, McDermott and Snyder (2002) argued that it is not realistic or warranted to expect all members to contribute equally. Rather, they advise varying “levels of participation,” as those who sit “on the sidelines” learn through observation, and can use their insights productively in their current work (semi-privately) or for future initiatives (publically).

What is Not Known About iKT

The benefits of iKT to organizations and society

In a society focused on outcomes and efficiency, iKT partners are challenged to demonstrate their value. However, like the majority of collaborative work, iKT seldom has a “clear destination” (Denis & Lomas, 2003). Despite dedicating a tremendous amount of time and effort into iKT, research findings may not always provide immediate or clear contribution (Kothari & Wathen, 2013). In fact, two recent systematic reviews investigating the effect of public health partnerships (Hayes, Mann, Morgan, Kelly, & Weightman, 2012) and interagency collaboration (Smith et al., 2009) failed to find any significant impact on health outcomes.

There is little-to-scant process evaluation of iKT partnerships (Kothari et al., 2014). However, as Kothari and Wathen (2013) pointed out, iKT can lead to a better understanding of different “professional worlds,” prompting organizational and culture shifts, and a “group-level identity transformation,” wherein stakeholders can continually benefit from existing networks that can be leveraged (p. 187). While partners have reported that these benefits are worth the investments demanded by collaborative research (Denis & Lomas, 2003), it is not clear, however, *how* this transformation occurs, or what specific benefits ensue.

Organizational-level factors impinging on the iKT process

Organizational level factors shaping iKT, and processes involved in overcoming these factors, are not well known. While organizational determinants of research use have been studied in clinical practice (Kitson, 2009), they have seldom been explored across organizations that aim to promote population health. Furthermore, traditional methods to evaluate these factors, often established a priori (e.g. Belkhodja, Amara, Landry, & Ouimet, 2007), over-simplify the complex work of iKT (Salter & Kothari, 2014). Rather,

the experiences of partners themselves must be explored. However, the studies that have generated interviews with partners (e.g. Bowen & Martens, 2005; Martiniuk, Secco, & Speechley, 2011) have not focused their analysis at an organizational level—which has a greater influence on public policy than individuals or groups themselves (Nutbeam, Harris, & Wise, 2010). Because these organizational components are poorly understood, partnerships tackling society's most pressing issues are likely to fail.

The process of iKT across multiple sectors

Despite advances in iKT, it remains a poorly understood process. In their critique of forty-eight knowledge-to-action models, Davison, Ndumbe-Eyoh, and Clement (2015) found that that "attention to multi-sectoral approaches or actions were the factor often lacking" (para. 1). More must be known about these approaches to do iKT well. If we are to improve the health outcomes of a large, diverse, and marginalized population, more insight is needed into the factors and processes that are inherent when working with multiple sectors, a variety of disciplines, and different levels of government. We can learn about these everyday dynamics from the perspectives of partners themselves, which will be uncovered in this study.

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Chapter III: Methods

Brief Description of Original Study

I used previously generated qualitative data that had not yet been analyzed. The original project, entitled *Putting Research to Work: Understanding and Improving Knowledge Translation in Population Health (PRW),* explored the process of knowledge translation in a population health context (Mayan et al., 2011). To deeply understand the phenomenon, the original researchers purposefully sampled partners upon the conclusion of the service delivery (i.e. implementation) phase of FFE in 2010, when "project partners expressed an interest in [continuing] to share learning's and [work] together to implement improvements identified during the research project" (Families First Edmonton, 2014).

The data I used for this thesis was generated data with PRW partners surrounding the development of a KT plan. As such, the original research question was as follows:

> *How do diverse partners (funders, decision makers, service providers, community leaders, and researchers) collaborate to translate evidence from population health research within and across sectors and organizations for the purpose of improving health outcomes for low-income families*? (Mayan et al., 2011)

Through a multiple method design, (see Morse & Niehaus, 2009, Appendix 1) qualitative data collection/generation occurred from February 2010 until August 2012 and included semi-structured interviews, field notes from meetings, and a review of partner documents. Simultaneously, a quantitative survey—the Partnership Self-Assessment Tool (E. S. Weiss, Anderson, & Lasker, 2002) was also administered to assess the collaborative process during transition into PRW by providing a measurement

of key indicators related to synergy—as Lasker et al. (2001) defines, "the proximal outcome of partnership functioning that makes collaboration especially effective" (p. 187).

For the semi-structured interviews, the original researchers (M. Mayan & S. Lo) sent emails to twenty-three key members from the PRW partners inviting them to participate. These individuals were community/funder (n=6), government (n=8), and academic (n=9) partners, who met the following inclusion criteria: a) spoke English, b) were a PRW partner, and c) were knowledgeable about PRW and its history. Accordingly, participants represented ten different government, community, funder, and academic organizations.

Because of the small nature of the partnership and sample size, no demographic information was collected. The interviews ranged from 30 to 90 minutes in duration. Generally, questions moved from obtaining past history with the partnership (e.g. Can you describe your history with PRW?) to inquiring about current events (e.g. What are the current system priorities in your organization and the language used to describe them?) and future directions (e.g. What are the leverage points in your system?). The interviewer used prompts to clarify responses (e.g. What do you see that needs to be done within your organization to put the research to work, given some of the things you just spoke to?). Informed consent was obtained prior to data collection/generation.

Limitations

Challenges of Using Previously Generated Data

Like the advantages of using qualitative secondary data (Heaton, 2008), using previously generated data has many benefits. Namely, using previously generated data is

a cost-effective and feasible approach to answer timely research questions and capitalize on existing resources. However, as Heaton (2008) noted, scholars “have debated whether the re-use of qualitative data is in keeping with some of the fundamental principles of qualitative research” (p 40). I will outline three methodological holes and how I will address them.

Data fit

In examining secondary analysis, critics have questioned whether “data collected for one (primary) purpose can be re-used for another (secondary) purpose” (Heaton, 2008). As Hammersley (2010) noted, the extent of this problem will depend on the nature and scope of the data set. In my case, this is not a serious threat because my research question (i.e. What are partners' experiences in moving knowledge-to-action within and across municipal and provincial governments?) is the primary research interest. Another concern may be the discrepancy between my approach and the original method. However, the flexible nature of qualitative description, which is amenable to “hues, tones, and textures” of other qualitative approaches (Sandelowski, 2000), makes the issue of data fit less of a concern.

Context

Qualitative analysis requires more than just words on paper. During data ‘collection’ (e.g. interviewing, participant observation), researchers “generate not only what are written down as data but also implicit understandings and memories of what they have seen, heard, and felt” (Hammersley, 2010). This tacit knowledge would be “generally unavailable to someone who did not carry out the data collection in the initial study” (Hammersley, 2010). Thus, I would be susceptible to interpretive challenges when

attempting to make sense of the data. However, like the issue of data fit, the extent of this problem will depend on a number of factors (Hammersley, 2010). These may include the relationship of the secondary analyst to the primary investigator and the cultural knowledge of the analyst. In my case, the PI (M. Mayan) and other key PRW members (S. Lo) were available to clarify and verify areas of ambiguity. Furthermore, as a graduate student, I have been working closely within and have cultural knowledge of workings of the partnership since September 2013.

Data Generation

Perhaps one of the most serious threats is the missed opportunity for data generation (Hammersley, 2010). However, in my case, data analysis was monitored concurrently with data generation. Thus, if a new question emerged during analysis—researchers inquired about this during subsequent interviews. As such, questions changed from one interview to the next based on emerging "gems" (Mayan et al., 2011).

Description of Method

I approached the research question using "qualitative description" as described by Sandelowski (2000; 2010). This approach provides an opportunity to "conduct a rigorous, useful, and significant study" that entails a comprehensive, coherent, and useful "description and summary of the phenomenon" (Mayan, 2009, p. 53) in the "everyday language" of the partners (Sandelowski, 2000, p. 336). That is, qualitative descriptive studies produce "data-near" findings (Sandelowski, 2010, p. 78) whilst allowing "room for the "unanticipated" (Sandelowski, 2000, p. 336). Thus, I conducted both an "exploration (finding out what is there) and description (describing what has been

found)" of the data to accurately (re)present the "facts" and "the meanings participants give to those facts" (Sandelowski, 2000, p. 336).

Setting

PWR partners had a long-standing, mutually beneficial, and productive partnership. Since 2000/2001, partners demonstrated resiliency and commitment to using the research generated in their community-based study—FFE. The tenacity of these partners was evidenced by a number of activities. For instance, despite government restructuring and challenges faced in the implementation phase of FFE (Gray et al., 2012) many stakeholders who were involved in the original research project continued to work within the partnership and became more determined to improve services for their shared clientele.

Furthermore, new members had shown interest in contributing to the partnership. For instance, following the end of the service provision phase, new students and volunteers responded to the opportunity to meet ongoing requests made by community and government partners. In addition to an ongoing interest in knowledge generated from the FFE study (i.e. service provision and outcomes), partners have also requested that collaboration within the PRW partnership itself be studied. This interest provided the basis for my thesis work.

Access to the Data Set

In Heaton's (2008) comprehensive literature review, she found three main modes of secondary analysis that have been employed in practice, which I argue, are applicable to analysis of previously generated data. In my case, the data were retrieved via "informal data sharing," (p. 35) wherein I discovered my research interest was well aligned with the

primary investigator (M. Mayan) of the original study, who possessed data on this subject matter that had not yet been analyzed. As such, I have the benefit of close contact with the primary investigator and team involved in the initial inquiry. This close relationship is highly advantageous as it provides me with more immediate, rich, and inside "knowledge of the context in which the primary research was carried out" (Heaton, 2008, p. 35).

Sample and Saturation

Consistent with qualitative descriptive methods, the sampling approach in the original study was purposeful. The sample is inclusive of 23 participants, spanning 25 interviews (seven from 2010 and eighteen from 2011-2012)—meaning that two dyad or 'couple' interviews took place (one in 2010 and one in 2012). This number is comparable to similar studies. In Mason's (2010) study of sample size in PhD studies (spanning Great Britain and Ireland), he found that the average number of participants studied for a content analysis was 25. Yet, I must consider other factors that affect saturation. In addition to the qualitative method and study design, Morse (2000) outlined six other factors that one should consider when estimating saturation. These include "the quality of data, the scope of the study, the nature of the topic, the amount of useful information obtained from each participant, the number of interviews per participant, [and] the use of shadowed data" (p. 3).

Considering these factors outlined by Morse (2001) and the data I used, I expected that a sample of 23 would adequately reach saturation. In my case, the data was of good quality, with professionally transcribed interview transcripts, which had very few unclear segments. The scope of my study was narrowly focused on iKT, and the nature of the data that had been generated on this topic is rich. That is, the data includes thick

descriptions provided by partners with long-standing relations, who disclosed insight about how promote research use in government. Four of the participants were interviewed at two time points. Furthermore, participants with long-standing relations shared their perspective about the behaviors “and opinions of others,” which Morse (2001) called “shadowed data” (p. 291). This “interesting alternative data” helped me achieve a quicker understanding of how bureaucracy slowed progress, and the external path necessary to promote research use in government, facilitating saturation (Morse, 2001).

In qualitative inquiry, it is easier to achieve saturation when using homogenous data (Maria Mayan, personal communication, June 2013). While participants in this study were heterogeneous in the sense of representing different organizations, they had a shared domain of interest (Wenger et al., 2002) in the health and well-being of families living in poverty. This commonality among participants helped me to understand the phenomena more rapidly and achieve saturation.

Analysis

I used an inductive, iterative, and abductive process of qualitative content analysis, which is “the analysis strategy of choice in qualitative descriptive studies” (Sandelowski, 2000, p. 338). Thus, I aimed to understand “the latent content of the data” (Sandelowski, 2000, p. 338) by considering the meaning and context within “specific passages or paragraphs” (Mayan, 2009, p. 94). As Mayan (2009) described, latent “content analysis is the process of identifying, coding, and categorizing the primary patterns in the data” wherein the context and meaning of participants language “is taken into consideration” (p. 94). More specifically, the conventional approach delineated by

Hsieh and Shannon (2005) was used, wherein “coding categories are derived directly from the text data” (p. 1277).

I used key tools such as coding, memoing, and theorizing and modified my analysis according to demands imposed by the data (Mayan, 2009, p. 93). Broadly, the process I used was four-fold:

Coding

First, I actively immersed myself in the transcripts to become familiar with the data (Hsieh & Shannon, 2005). This involved me first, reading the entire set of set of transcripts “repeatedly” to “obtain a sense” of data set as a whole (Hsieh & Shannon, 2005, p. 1279)—a process that took several months. During this time, I inputted electronic comments within the transcripts regarding anything that was striking, such as general first impressions (e.g. language in government is very different), thoughts, interesting points (e.g. organizational change needed before ‘research hits’), and “plans for working with the data” (Mayan, 2009, p. 94).

Upon a subsequent rereading, I read the data again “to derive codes” (Hsieh & Shannon, 2005, p. 1279). In doing this, I highlighted sections (e.g. words, phrases, concepts) of the text/data that were persistent (Mayan, 2009) or “appear[ed] to capture key thoughts or concepts” (Hsieh & Shannon, 2005, p. 1279) that participants identified as barriers, facilitators, or strategies related to iKT. Following Hsieh and Shannon (2005), I derived most labels “directly from the text,” which became “the initial coding scheme.”

Codes that emerged were, at times, “reflective of more than one key thought” (Hsieh & Shannon, 2005, p. 1279). I also double-coded excerpts that ended up in more than one of the emerging categories (Mayan, 2009). For example, I double-coded

segments of text that partners used to describe the significance of relationships, using the words of other partners, such as 'small ripples' and 'greater than policy change.' As I coded, I took reflective notes using the memos feature in Atlas.ti. Following the advice of Richards and Morse (2013), I wrote memo's "freely, to record hunches and to think aloud." (p. 153)

Categorizing

After initial coding, I begin to sort codes into categorizes. This involved collating similar, related, or linked codes into "meaningful clusters" (Hsieh & Shannon, 2005) and eventually, appropriate categories. I used the 'network view' on ATLAS.ti to group codes (including the highlighted sections of the text) into categories. During this process, I considered three points:

1. I was flexible in the organization of data, wherein relationships between codes warranted combing/merging or further splicing subcategories or categories. As Mayan (2009) described, this involved moving "excerpts around," re-naming or nixing categories, or creating subcategories "if there are two distinct ideas or perspectives within one category" (p. 95). Furthermore, I created a hierarchical "tree like structure" to organize layers of data excerpts, codes, subcategories, and categories (Richards & Morse, 2013, p. 150).
2. When I came across a 'negative case' (i.e. data that is contrary to what most participants are describing), I searched for similar cases in the data. However, "if no similar cases [were] found, then [I considered that] initial case . . . an anomaly" (Mayan, 2009). For example, when noting one participant speak about the benefits of bureaucracy (e.g. 'standardization and sharing of resources'), I

read the entire dataset a second time, and attributed this lone remark to the participant's relative new position within their organization and early involvement in the partnership.

3. I restricted the number of categories to ten or twelve. This helped me "keep clusters broad enough to sort a large number of codes" (Hsieh & Shannon, 2005, p. 1279) and account for the data in a meaningful yet manageable way (Mayan, 2009).

Once data was categorized, I evaluated the categories in two ways, as outlined by Mayan (2009).

1. I took action to ensure fit. To do this, I read through the excerpts in each category and judged them by internal and external homogeneity. In examining internal homogeneity, I asked myself if the data reflected and fits into its respective category. I also examined external homogeneity. That is, I asked myself if the differences between categories are "bold and clear" (Mayan, 2009, p. 97) and likewise, if the differences in the subcategories are reflective of distinctive experiences.
2. I presented the preliminary categories to two partners (in separate meetings) who were deeply involved in PRW. The excerpts in each category resonated with both partners, who advised me of the accuracy of my interpretations and relevant labels for categories, such as 'short-term thinking.'

As Hsieh and Shannon (2005) articulated, "definitions for each category, subcategory, and code are developed" to "prepare for reporting the findings" (p. 1279).

As such, I identified “exemplars for each code and category” (Hsieh & Shannon, 2005, p. 1279) to include in Paper 1 (Chapter IV) and Paper 2 (Chapter V).

Forming Themes

As Richards and Morse (2013) noted, the discovery of themes “usually involves copious and detailed memos that are abstract and reflective” (p. 160). As such, I reviewed and organized these memos in theming. Furthermore, in consultation with the M. Mayan and S. Lo, I asked critical questions about “how the categories are related” (Mayan, 2009, p. 97) and how memos for each category “are linked to other memos” (Richards & Morse, 2013, p. 178). As expected, I had one to three themes for each paper (Mayan, 2009), which are expressed as the “Statement of Principle Findings” in the discussion for Paper 1 (Chapter IV), Paper 2 (Chapter V), and final discussion/conclusion chapter (Chapter VI).

Making Conclusions

Using the categories and themes, I made overall conclusions about the research. In the words of Sandelowski (2000), I generated a “descriptive summary of the informational contents of data organized in a way that best fits the data” (p. 339).

Rigor

Establishing Trustworthiness

To ensure my research findings are “worth paying attention to” and have that confidence that my conclusions come from the data (Maria Mayan, personal communication, June 2014), I used Lincoln and Guba’s (1985) criteria for trustworthiness. I will outline each criterion and describe how each criterion/standard was evidenced:

Credibility

To ensure the findings make sense and accurately (re)present the data, I took two actions. The first is member/participant checks. To elaborate, I obtained feedback from two key partners early and incrementally to check and verify developing preliminary categories. The second action I have taken is prolonged engagement in the setting. While I was not present during data collection, I have been involved with the partnership since September 2013 as a research practicum student, a volunteer, and a member of the community-university-partnership community. This substantial involvement provided me "precious knowledge" of the data (Richards & Morse, 2013, p. 150) and context where it was generated which in turn, helped me determine "what is really going on in the data" (Maria Mayan, personal communication, June 2014).

Transferability

To help others determine if the findings have applicability in other contexts, I have provided a detailed and thick description of the setting and participants including the nature and history of the partnership itself within this thesis document. In Paper 1 and Paper II (chapter IV and V, respectively), I have provided a brief description of the partnership and made reference to papers that provide this thick description.

Dependability

To demonstrate transparency, I have created a detailed audit trail. This document provides a chronological record of my decisions/choices, insights, and subjective interpretations, which allows for another researcher to examine my decision trail and resulting interpretations.

Confirmability

To be confidant that my findings are logical and that I am practicing reflexivity, I have kept a journal (separate from the audit trail) that details how my bias may be influencing my analysis. This is further described, in turn, as a verification strategy.

Verification Strategies

Verification strategies, as described by Morse, Barrett, Mayan, Olson, and Spiers (2002), were used to identify when I should stop, modify, and continue with my analysis. These verification strategies helped me to identify and correct threats to trustworthiness incrementally, or "as they surface[d]" (Morse et al., 2002), contributing to rigor, and are as follows:

Investigator responsiveness

To ensure I was responsive to the data, I involved 'peer-reviewers' at key moments. These include my mentors and colleagues in the Faculty of Nursing and at the Community University Partnership in the Faculty of Extension who helped me embrace uncertainty and identify conjectures. For instance, when I noted participants referring to having 'relationships,' 'trust,' and conversation ('when the organization would say…') with organizations, I became excited about the notion of organizations possessing human characteristics. However, consultation with M. Mayan and S. Lo, led me to realize this notion was "poorly supported" by the data (Morse et al., 2002, p. 18).

Reflexivity

I used a reflective journal to record my personal biases and assumptions about the research. In writing, I asked myself how this might influence my analysis (whether it be helpful in providing contextual knowledge or otherwise). This process functioned to bring both awareness and transparency to the dynamic lens that invariably shaped my

analysis and interpretation of the data (Maria Mayan, personal communication, June 2014).

Methodological coherence

To ensure ongoing coherence between my research question and the components of the method (e.g. analytic procedures), and how the data demanded to be treated, I engaged M. Mayan and S. Lo, who generated the data, in an ongoing discussion as the analysis unfolded. This included a discussion about initial codes and tentative categories, which informed refinement of my research question.

Ethical Considerations

The original study had institutional ethical review board approval. The following are three procedural, situational, and relational ethical considerations particular to my sample, setting, topic, and analytical approach using previously generated data:

Procedural

Procedural ethics pertains to Research Ethics Board requirements. In my case, I contacted the Senior Health Research Ethics Board Coordinator (Charmaine Kabatoff) at the University of Alberta in December 2013 and learned that I would not require any additional ethics review or approval and thus, would not need to submit a formal ethics application for review. There are two reasons for this:

1. The original researchers obtained ethics approval from the University of Alberta Research Ethics Board One prior to data collection. Accordingly, I had signed a confidentiality agreement to comply with the University of Alberta Standards for the Protection of Human Research Participants, obligating me to keep all research information shared with me confidential and secure.

2. The nature of my inquiry was the same, rather than distinct, as the original study. In other words, I used the data in the way the participants have already consented to.

Situational

Situational ethics refers to the "dilemmas that develop unexpectedly and spontaneously, perhaps in situations where the researcher has little control over events" (Goodwin, Pope, Mort, & Smith, 2003, p. 567). During my analysis, partners who participated in the interviews disclosed personally held, controversial, and potentially offensive opinions. Some partners asked the interviewer to "be careful who hears this" or "keep this between us." I discussed these examples on a case-by-case basis with the primary investigator (M. Mayan), who the partners expected to read the transcripts. Given the nature of the opinions, we determined that it was unnecessary to contact the research ethics board at the University of Alberta.

Relational

According to Ellis (2007) relational ethics "requires researchers to act from our hearts and minds, acknowledge our interpersonal bonds to others, and take responsibility for actions and their consequences" (p. 3). Accordingly, prior to the analysis, I asked myself—would my relationships with the participants skew the way I see the data? For instance, will I take more 'stock' into what a certain person said if I know them better personally? As such, I made a conscious effort to ask myself if I am being judicious with my analysis. Furthermore, I also did not disclose any specific information contained in the interviews to other partners, with whom I may have with a more casual relationship.

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Chapter IV: Paper I

Informing Government Policy with Research about Poverty in Alberta, Canada: A Qualitative Description from the Experiences of Integrated Knowledge Translation Partners

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Abstract

Background: Despite established knowledge on the social determinants of health, poverty remains an insidious and growing problem. The government holds primary jurisdiction to address poverty, and the root causes of other health inequities. However, policy change requires ideological alignment and institutional capacity. In recent years, integrated knowledge translation (iKT) partnerships have emerged to improve research uptake, but their work is not well understood. The purpose of this study is to describe iKT partners' experiences with moving knowledge-to-action within government.

Methods: Interview data was generated with 23 iKT partners who worked within or close to municipal and provincial governments, including civil servants, community leaders, and researchers. Partners were asked about how to use research findings to draw attention to and make needed changes in municipal and provincial government departments. Qualitative description was used to frame our data. An iterative and inductive process of coding, categorizing, and theming characterized our analysis.

Results: Partners described how government bureaucracy stymied their research use and progress, as well as how bureaucratic barriers could be overcome. In particular, partners described how to create opportunities for research use wherein research is poised, through an internal-external dynamic, to address current political priorities. The value-laden nature of poverty also has implications for research use.

Conclusion: More knowledge is needed on how those working with and within government use diplomatic and contextual insight to enable research use. Furthermore, iKT partners addressing social justice issues must engage the general public—whose perspectives and preferences, when presented in unity—have the potential to instigate change that would serve to reduce poverty. The broad shift in academia to do more socially accountable research warrants further discussion.

Keywords: integrated knowledge translation; public health; poverty; government

Background

Poverty and Policy

We have long known the causes and consequences of poverty. As early as 360 BC, Plato (2008) recognized the importance of a "well ordered city or government" and more specifically, "the legislator" in determining "the limit of poverty or wealth." Furthermore, the relationship between poverty and health was determined in the mid-19th century. As Raphael pointed out, scholars in the 1800s—Rudolph Virchow and Freidrich Engels—"not only made the explicit link between living conditions and health[,] but also explored the political and economic structures that create inequalities" (Raphael, 2010b). Nearly 170 years later, these messages remain well documented. Furthermore, we have an increased understanding of the "mechanisms and pathways" (Raphael, 2010b) that delineate how poverty affects our health (Public Health Agency of Canada, 2011; WHO, 2014)—a field commonly referred to as the 'social determinants of health' (SDoH).

Yet political action on the SDoH has been insufficient and government policies are still needed to ensure all individuals have the necessary resources and opportunities to avoid poverty. Such legislative actions include "protecting workers' rights" through "labour unions," raising minimum wage to a livable standard, and providing adequate "tax and social transfer policies (in the form of unemployment insurance, social assistance, wage subsidies, family benefits and pension benefits, tax credits, etc.)" (Organisation for Economic Co-operation and Development [OECD], 2015, p. 41). However, according to recent analyses from the OECD (2014), Canada allocated only 18.3% of our GDP to public social expenditure, which includes poverty-reducing social

supports such as “pensions, health services, and income support” (p. 116), giving us a rank of twenty six out of thirty four member countries (Raphael, 2012, p. e425).

According to the OECD (2015), income inequalities “have reached almost unprecedented level[s] in recent years” (p. 40). These disparities affect Canada’s vulnerable, such as children, whose relative poverty is approximately two percent higher than the overall population (UNICEF Innocenti Research Centre, 2012), perpetuating inter-generational poverty (Briggs & Lee, 2012). Not surprisingly, Canadians’ health continues to decline. For instance, in the United Nations Children's Fund report card (2013),—an “overview of child well-being in 29 of the world’s most advanced economies”—Canada ranks 17th in overall child well-being (an average score determined by well-being across five dimensions).

Barriers to Research Use and Policy Action

In the face of strong evidence on the SDoH, the reasons for lack of research use and policy action on the SDoH are complex and contextual. Scholars studying policy change agree that because research findings must “compete with other sources of persuasion” (Lomas, 2000a), such as interests, ideologies, and other ideas (C. H. Weiss, 1979), “evidence is unlikely to be decisive in any policy decision” (Farrer, Marinetti, Cavaco, & Cosgongs, 2015, p. 420); hence, the term evidence *informed* decision-making (Oxman, Lavis, Lewin, & Fretheim, 2009). In the case of poverty, institutional structures and ideological context profoundly shape research use and policy action.

Institutional Structures

The government holds primary responsibility to address poverty, and the root causes of other health inequities. As such, knowledge users in government are

policymakers (i.e. elected officials) and bureaucrats/civil servants (i.e. government employees), whose "authority and status is largely or wholly determine[d] by the position to which he/she is appointed" (Garston, 1993). However, the "institutional structure" where government policies are made must also be considered. Accordingly, Lomas (2000a) described the messy "context for decision making", which includes:

> *. . . those who officially and unofficially have a voice, the history and nature of the interest groupings, the distribution of responsibility and accountability, the implicit and explicit rules of conduct. . .* (p. 142)

In the case of poverty, a known contextual barrier is the provincial and federal governments division of responsibility for health and social programs (McIntosh, 2004). The bulk of responsibility to address the SDoH falls on the provinces, which are increasingly, "expected to do more with less" (Lasker et al., 2001, p. 180) and with limited cost sharing from the federal government (Raphael, 2010a)—a reflection of a broader ideological force.

Ideology

The lack of policy action on poverty, in part, stems from the belief held by many Canadians that lifestyle choices, merely eating well, exercising, and avoiding risk-taking behaviors, such as smoking, are the primary determinants of health (Reutter et al., 2006)—a perception that is perpetuated by the modern media (Gasher et al., 2007) and more broadly, "the ideology of individualism prevalent in North America" (Raphael, Curry-Stevens, & Bryant, 2008, p. 222). As such, poorer individuals are liable to be wrongly stigmatized as lazy or apathetic (Reutter et al., 2009). If Canadians subscribe "to the myth that poverty is primarily about individual choices rather than the systems we

create in our societies" (Briggs & Lee, 2012), change is unlikely. Furthermore, "conservative winds" emerging in the 1980s (Sanders, Baum, Benos, & Legge, 2011), manifested by changes to the tax structure and inflation/living costs outpacing minimum wages, suggest that market forces have impinged on Canadian public policies (Raphael, 2010a). Such neoliberal ideologies exacerbating poverty will not be readily, easily, or quickly shifted.

The Process and Power of Integrated Knowledge Translation (iKT) Partnerships

In addition to ideological challenges, there is a limited understanding and application of skills, tools, and approaches likely to promote research use in government. Research about the SDoH has been primarily disseminated didactically (e.g. academic journals, online publications)—which is a "passive" intervention that is unlikely to instigate change on an individual or organization level (Wensing, M., Bosch, M., & Grol, R., 2013). Furthermore, research disseminated in this way may not answer the questions of relevance to decision makers. Rather, a more interactive approach is needed to operationalize 'upstream' (National Collaborating Centre for Determinants of Health, 2014) investments in the SDoH.

iKT offers the potential to more productively move research into action. In iKT, researchers demarcate a commitment to engage with "knowledge users" at the outset of any research endeavor to ensure that the research products are relevant for the contexts in which change is warranted. Thus, the central aim of iKT is research use (Denis & Lomas, 2003).

Our iKT partnership, called *Putting the Research to work* (PRW), was located in Edmonton, Alberta. This partnership dates back to 2000-2001, when community, funder,

university, and government partners “with interests and mandates embedded in the health and well-being of” low-income families (Gray et al., 2012, p. 272) came together to develop and execute a community-based study called Families First Edmonton (Drummond et al., 2007; Drummond et al., 2014).

This work informs two phenomena. First, because the Families First Edmonton (FFE) study “arose out of a shared desire to find a better way to deliver existing services to families with low incomes” (Gagnier, 2010, p. 2), the data are rich with information about families living in poverty, including changes in social, health, and economic outcomes over time. The second phenomenon—and the focus of this study—is the iKT partnership and its efforts in translating research about poverty into government policies

Purpose

The purpose of this study is to describe the factors that iKT partners identify as important for using research findings within and across municipal and provincial governments. Our research question is: What are partners’ experiences with moving knowledge-to-action within and across municipal and provincial governments?

Methods

Qualitative description (Sandelowski, 2000) was used to approach our research question. This methodological approach was used to transform the “everyday language” (Sandelowski, 2000) and learning’s of the iKT partners into a succinct description of the phenomena under study.

Sampling

We used a purposeful sampling approach. As such, current partners—who were knowledgeable about and involved with the PRW project—were invited to participate by

email. Overall, 23 partners participated in 25 interviews. Interviews spanned from 2010 until 2012, with a dyad interview occurring once in 2010 and once in 2012. We considered similar qualitative descriptive studies (Mason, 2010) and other factors (Morse, 2000) in determining saturation. As we noted in another analysis:

> *While partners in this study are heterogeneous in the sense of representing different organizations, they have a shared interest in using research to improve the health and well-being of low-income families. This commonality among partners helped us understand the phenomena more rapidly and achieve saturation* (Pullishy, Mayan, Lo, Richter, & Drummond, 2016b)

Accordingly, partners crisscross the diverse professional spheres of academia (n=9), government (n=8), and community/funder (n=6), represent two levels of governments (i.e.. municipal, provincial), and oversee multiple jurisdictions (e.g. housing, transportation, recreation).

Data Generation

Partners provided consent for this research prior to being interviewed, which spanned approximately 30-90 minutes. Generally, the interview began with questions that obtained information about the partner's prior history with the partnership (e.g. Can you describe your involvement with the PRW project thus far?) to inquiring about present interest (e.g. What are the current priorities in your organization or system?) as well as future priorities (e.g. Who do we need buy-in from and how do we get it?). The interviewer used prompts to clarify and obtain more information (e.g. Given the current priorities you have spoken to, what should we be doing now to ensure research will be used?).

Analysis

Our qualitative content analysis unfolded as an inductive, iterative, and abductive, process. More specifically, a "conventional approach" (Hsieh & Shannon, 2005) was used. LP read the entire set of transcripts repeatedly to understand the data holistically before beginning to code and highlight sections of text that captured persistent thoughts and/or concepts about barriers, facilitators, or strategies related to iKT. In discussion with MM and SL, LP used memoing to document how the analysis was modified according to demands imposed by the data (Mayan, 2009, p. 93).

Ethics and Rigor

Rigor was ensured through using Lincoln and Guba's (1985) criteria for trustworthiness and Morse, Barrett, Mayan, Olson, and Spiers' (2002) verification strategies. Central PRW members were consulted early and incrementally to verify developing preliminary categories. Ethical approval was obtained from the research ethics board at the University of Alberta. Given the collaborative nature of community-based work, we considered relational aspects of research ethics (Ellis, 2007). As we noted in another analysis (Pullishy et al., 2016b),

> *While we recognize that our bias can be helpful in interpreting the data, we were vigilant not to take more 'stock' into what a certain person said if we had a more casual relationship with them.*

Findings

Bureaucracy as a Structural Barrier to Research Use[1]

[1] The term 'research use' refers to the use of research made possible through iKT

Partners recognized bureaucracy existed foremost in government and acted as a structural barrier to their momentum, autonomy, and productivity. Specifically, government partners identified that their “work within the existing structures” of government was “bound by [their] rules and process,” particularly for partners in a position of “low official authority” (e.g. middle managers). According to government partners, bureaucracy made it difficult for issues “to get traction” internally. This difficulty was, in part, created by organizational culture, norms, and structures (detailed below) that rewarded partners for prioritizing an “administrative point of view” and discouraged partners from thinking “outside of the box” and divorcing their “very specific institutional interest.” As such, partners discussed the challenges of making change both across and within organizations.

Bureaucracy Impeded Research Use across Organizations

Partners described a tension between their organizational and collective iKT goals. Despite government partners’ belief in the value of the project and desire to make changes to support low-income families, their work for the project was done “off the side of their desk” and met with resistance from “system needs.” One example was the attempt to develop a universal application form for low-income families (e.g. day care subsidy, recreation access, income support). Government partners working at both provincial and municipal levels expressed frustration about their “individual structure” and “own policies” that served to make compromises across organizations difficult, while other partners speculated that their lack of progress stemmed from the fact that they were “not being TOLD to do it… internally.”

Partners also spoke broadly about the challenges of doing work that would reap/yield benefits outside of the organization. Partners from all sectors recognized that bureaucracy created an environment where government partners were expected to follow due process internally over achieving collective goals. For instance, one civil servant indicated that even "asking a question" on behalf of the partnership to the appropriate person in their organization was an arduous and time-consuming process because, "I can't necessarily ask this person. I have to get their permission to have this person talk to this person."

Bureaucracy Impeded Research Use within Organizations

"Layers" and "divisions within government," coupled with "rules and processes" formed, in part, reasons that partners struggled to instigate change internally. Partners both in and outside of government recognized the "prescribed roles and prescribed duties" and "limited scope" of civil servants. In particular, those in mid-level managerial positions reported that having a "level of influence was strictly restricted by [their] position within the organization" and, when asked how to "draw attention" to issues in their system, indicated they needed to go "through the appropriate chain of command." As such, civil servants desired a "policy or structure in place" that allowed them to work more autonomously.

While relationships with each other were highly valued by partners, in part, because they served to remove "some of the bureaucracy," other partners felt that the potential for making change was "too dependent on the people" as partners "won't be here forever." Rather, partners speculated that "chang[ing] the process of how you

implement a policy" would have a "greater impact" and "legacy—the lasting change" than policy change alone.

External Pressure as Politically Potent for Research Use

In contrast to the struggles of generating attention or movement internally, partners described the political potency of "external pressure," which generated "something in the wind" and dictated the "broader priorities" of government leaders. Partners provided multiple examples of external pressure, including "media coverage or the potential for media coverage," "when bad things happen" (e.g. high homicide number in Edmonton in 2011), external meetings, protests (e.g. "against the cuts in education"), and community groups (e.g. Public Interest Alberta). Partners expressed that external pressure has the greatest impact on government when groups of people demonstrated solidarity, commitment, and staying power over a shared concern.

Government Response to External Pressure

Partners described that "the layering" (i.e. bureaucracy) made it "harder" to instigate change from within government. External pressure, instead, obtains political attention and stimulates direction in a way that civil servants working on the inside cannot. Why? Partners' explained inter-connected reasons for this including the need for accountability and responsiveness, and "permission to engage."

Civil servants identified that, since accountability is one of government's "public service values," "formal leaders" must be both responsive to "what constituents are asking for"—which dictate the "broader priorities" of government. As a result, the work of civil servants is shaped by "what's happening politically," which filters into senior level priorities and civil servants' work. As one partner put it, "MY boss needs to be

involved . . . if it's HIS plan it's OUR plan...that's how government works." External pressure helped civil servants "justify, at the end of the day" why resources were allocated a certain way. However, government partners needed to be sensitive to outcomes. As one partner stated, "accountability is a big deal in government." One civil servant explained that, in light of responding to external pressure, "sometimes it's not always in our best interest to be immediately responsive," particularly if "the consequence would have been a bad outcome."

By contrast, partners in community demonstrated more "autonomous decision-making" to make change "happen faster." One partner explained that community non-profit agencies are often funded to "perform [their] mission, not necessarily to run this particular program in this particular way," which "frees agencies up" and permits them to "back off and say a year later − 'oh it didn't work let's try something else.'" This autonomy, in part, explains why partners described "non-profits" as "change leaders" who can "jump on the bandwagon." On the other hand, government partners "have to align everything with what's happening politically . . . with the goals of the person they work for."

Government Response to Poverty

Partners attributed the lack of external pressure on the heavily value-laden issue of poverty to the public's "culture of independence" and entrenched ideologies, values, and misconceptions about poverty. One partner stated, "we live in a province where we blame those who are low income and we say, 'it's your fault . . . you are not working hard enough.'" However, "windows of opportunity" do open. Following a change of premier in Alberta, one community partner stated:

We were a little concerned about even bringing up poverty. However, given the regime change that happened, all of a sudden this is no longer a four-letter word. The Province is actually open to having a conversation about poverty and using that language, yes we have a poverty problem, which is refreshing

Internal Insight as Key to Informing External Pressure

While partners described external pressure as a change agent, it was most productive when paired with internal insight. Unlike the media, which drew attention to issues by generating a "perceived crisis," in which the government is "forced to respond," internal insight helped partners draw attention to issues productively in a deliberate, and calculated way. Partners emphasized that research use is promising when "aligned with a set of [issues and] values at a political level." As one government partner suggested, "it is easier to hook your evidence to something that has momentum, rather than trying to use your evidence to create momentum." Partners referred to these "almost cosmic" opportunities, wherein researchers are in "a position to help," as "the stars aligning" (i.e. "have the right person with the right level of influence in the right position at the right time").

Partners drew on and sought advice from "allies" (current or previous project partners) situated in community and government, who could "easily see … what the sector needs," identify what is "going on in the environment," and advise how and when to proceed with change efforts. Context and diplomacy were described as "invaluable" for introducing and using research in the government sphere.

Internal Insight about Context

Having ongoing conversations and meetings—which provided researchers with precious knowledge of government context (e.g. timing, opportunities)—were critical to identifying opportunities for research use. Research partners indicated they were eager to "have a fricking inkling" of the "hottest question[s]" in government to "be able to start working on something" and "advance a little bit faster," rather than "sitting here trying to figure out what you want." Such insight allowed researchers to create and capitalize on opportunities within "narrow windows of opportunity," meanwhile, being sensitive to timing outside of their own sector (e.g. election cycles). The absence of such dialogue stalled partnership productivity and momentum. One researcher expressed concern when one of the community partners "decided to cancel [a] meeting . . . as the researchers *needed it* desperately" and wanted "to get going" (i.e. begin analysis).

Internal Insight about Diplomacy

Partners noted that "diplomacy" within their system was important to "maneuver information . . . within the existing structures" and not "offend anybody". A long-standing research partner with FFE discussed the need for a metered process, in which the outcome is anticipated:

> *We want to move forward but at the same time, if we do something right now, is it gonna be well received? Is it gonna be appreciated? Will it even do more damage?*

Some of this information about how to do a good "sell job" was transferred to partners in "backroom discussions" or "challenging conversations" which sometimes happened "after the meeting." One partner explains the challenges of getting the partnership the

"proper attention it needed" following a clash of opinions and the loss of involvement from a "big player"

> *. . . after that, I learned a little bit more about some of the political sensitivities that I wasn't aware of when I first joined the committee. . . I didn't know there was some resistance within the system. When I found that out, that helped me understand how to leverage it better and communicate about it.*

As another partner from government put it, "if you understand the ideology, then you WORK it." Through dialogue, partners "working in th[e] field" provided information on opportunities for alignment, instances of potential conflict, and facilitated connections with "the movers and shakers."

Discussion

Statement of Principle Findings

The results from our study provide awareness into making change within government. In short, iKT partners described:

1. The prescribed and limited scope of civil servants created by bureaucracy, which stymied their ability to instigate change within government, and
2. The politically potent combination of external pressure and internal insight, which served to inform all partners of the context and diplomacy necessary to advance the partnerships' priorities and create opportunities for research use within and across government.

Contribution to Literature

Targeting Modifiable Barriers

External leverage must be used to overcome the inertia of bureaucracy. Our findings illustrate that the *diffusion of innovation*—a theory found to dominate the entire knowledge utilization field (Estabrooks et al., 2008)—bears little relevance to research uptake within organizations such as government, where structural mechanisms (i.e. bureaucracy), rather than the early adoption and characteristics of innovations, dictate the absorption of knowledge. Since bureaucracy is likely to be a permanent fixture and structural barrier to research use for years to come, it is important to learn how to use strategic leverage points to overcome it.

Our findings reinforce the need to focus on what is “amenable to change” (Lomas, 2000a) and contribute to Estabrooks et al.’s approach (2009) which involves assessing and targeting only what is *modifiable*—which, in our study, was described by partners as external pressure. While public awareness on an issue alone is not enough for change, we believe it is an important first step for civic engagement and exerting external pressure. Furthermore, we argue that, rather than “compete with” (Lomas, 2000a) other sources (e.g. public opinion) and purveyors (e.g. internet, new media, alternative news) of policy persuasion (Raphael, 2011), they should be targeted instead. Beliefs about poverty are not only “amenable to change” (Lomas, 2000a), but have the potential to be transformed into external pressure, which our findings have shown has a strong ability to instigate change.

Creating Public Awareness

For government officials to care about poverty, the people of Canada must demand it. While our partners speculated that publicly held poverty myths (e.g. that the poor are lazy) prevent constituents from applying external pressure on poverty issues, it is

not clear how pervasive knowledge deficits around poverty are, and if they are the sole issue for a lack of external pressure. In Alberta, Reutter et al. (2006) found that “91% of survey respondents agreed that poverty is linked to health,” whereas in Ontario, Shankardass et al. (2012) found that only 53%–64% participants (depending on the framing of the question) were “aware of health inequalities between the rich and the poor” (p. 1). This knowledge, however prevalent, is skewed with beliefs about lifestyle choices (Reutter et al., 2006; Rock, McIntyre, Persaud, & Thomas, 2011) despite the fact that “socio-economic differences [in health] persist even when controlling for behavioural risk factors” (Tjepkema, Wilkins, & Long, 2013).

Harnessing Internal Insight

Our findings reveal how iKT partnerships provide contextual and diplomatic insight, which can be harnessed to improve research use. While our findings confirm those of Redden (2014), who found that the media is likely to generate a response from government, our results add that the media may generate what partners called a “perceived crisis” and provoke “defensive behavior” or an unwanted response (action or inaction) from government. Thus, we suggest that an anticipated response should be pursued and that external pressure should be applied diplomatically and in light of political context.

Furthermore, our findings about internal insight contribute to unpacking what Scriven (1999) termed a “black box” of research use in government settings. In particular, the essential context and diplomacy that partners in this study shared with partners, may explain, in part, why direct interactions (interpersonal contact) between policy makers and researchers has consistently shown to increase “prospects for research

use" (Innvær et al., 2002; Lavis, Oxman, Denis, Golden-Biddle, & Ferlie, 2005). As such, our findings suggest that internal insight, through providing a better understanding of "different professional worlds" (Kothari & Wathen, 2013), increases productivity and success on common goals, such as research use.

Contribution to Practice of iKT Partnerships

Re-Evaluating iKT Principles in Bureaucratic Organizations

As iKT partnerships continue to unite diverse sectors, we should be aware of the different routes needed for change in government. iKT draws on CBRE principles (Cargo & Mercer, 2008), which involves reversing traditional power structures (Wallerstein, 2006) and bringing issues identified by those who want change (e.g. constituents, service providers, middle managers) to those with a more dominant voice (e.g. elected officials). However, we found that this "bottom up" (Panda, 2007) approach can be a fruitless and frustrating endeavor within government. Our findings resonate with Gaston's (1993) definition of bureaucracy:

> *An organizational structure characterized by a hierarchy whose occupants are appointed, whose lines of authority and responsibility are set by known rules (including precedents), and in which justification for any decision requires reference to known policies whose legitimacy is determined by authorities outside the organizational structure itself* (p. 5).

iKT partners should use a 'bottom-up' approach outside (not inside) of government. Consistent with Farrer and colleagues (2015) qualitative synthesis, our findings re-affirm the importance of considering what or "who has the power to effect change" (p. 406). As our partners explained, civil servants in middle managerial positions

hold little change-producing power. Thus, researchers attempting to have influence through civil servants who are in middle manager (Ouimet, Landry, Ziam, & Bédard, 2009) or in policy functions(Lavis et al., 2003) may have the wrong primary target. On the other hand, external perspectives and preferences, when presented in unity, have the potential to influence senior government authorities and their priorities in a way that cannot be done internally.

Engaging with Government without being Co-Opted

Researchers must reconcile the tension supporting government initiatives and providing “grist for the mill.” This figurative phrase was used long ago by Weiss (1979) and similarly by one PRW partner to describe situations wherein findings serve as “political ammunition” that align with entrenched interests or ideologies (p. 429). While we agree this can be a “worthy model of utilization” (C. H. Weiss, 1979, p. 429) we caution its use in light of our findings and a broader paradigm shift in academia termed “mode 2 knowledge production.”

In short, mode 2 knowledge production is a thesis “recognizably derived” (Nowotny, Scott, & Gibbons, 2003) from Kuhn (1962)—which argued that the “production of knowledge and the process of research were being radically transformed” from being driven by scientists to and for their host institutions (mode 1) to being responsive to prevalent issues identified by, and affecting society at large (mode 2). As such, researchers are (and will continue to be) expected to work with and for the public, which requires partnering with civil servants to address complex social issues.

Unlike partners from community and government, researchers are better suited to challenge the broader (potentially detrimental) direction of government and instigate

change. Consider, for instance, that partners in community organizations are often funded by government, and may have a fiscal incentive to be cautious in applying external pressure. Furthermore, our findings demonstrate the limitations of civil servants in introducing new ideas. Primarily, civil servants are heavily influenced by the political realities of their professional sphere, have a limited ability to challenge the status quo, and often lack authority to change broader directions of government. As such, our findings align with known descriptions of bureaucrats or civil servants, who cannot bring about change or advocate for issues because their "authority and status is largely or wholly determine[d] by the position to which he/she is appointed in [their] organizational structure" (Garston, 1993, p. 5)

We argue that researchers are poised to challenge government direction and priorities and must capitalize on their unique position as an iKT partner. As our findings demonstrate, researchers can harness the internal insight and advice provided to them by civil servants, who hold precious knowledge of the context (e.g. leverage points, timing) and diplomacy required for change.

Limitations and Strengths

We recognize two limitations of our study:

1. Elected officials, who were not directly involved in PRW, were not represented in our sample. These individuals could lend further insight and description into the phenomena under study. Notwithstanding, our results amplify and distil the voices of iKT partners who have a long history of work within and close to government.
2. Few partners interviewed were available to participate in "member checking"—a tool used by qualitative researchers to verify preliminary categories, enhancing

credibility (Lincoln & Guba, 1985; Mayan, 2009). However, LP discussed preliminary findings with two central PRW partners early and incrementally. Furthermore, our findings resonated with current government partners, who were not involved in PRW, but working in partnership with researchers on partnership projects building on PRW. This suggests that the phenomena had been accurately re(presented) and is still relevant.

Future Research

Future work about research use in government settings could benefit from a more detailed evaluation. Specifically, more knowledge is needed on how to harness internal insight to inform external pressure. Specific research questions may include:

- What information is important to garner from those working within government?
- What external efforts are most persuasive to decision makers, and when? What is a suitable role for researchers in applying external pressure?
- How can iKT partners get constituents to coalesce over mutual concerns so that shared expectations can be presented to government authorities in unity?
- How should constituents be informed and involved about driving change to reduce pervasive social issues, such as poverty?
- How can activists and advocates overcome resistance underpinned by public ignorance/misconceptions?
- What else is needed, beyond public awareness, to motivate the public to push poverty onto the political agenda?

Conclusion

The partners in this study began their work at a time when iKT and partnership work was rare and not yet well understood. Through a deeper understanding of one another's professional spheres, partners identified that external pressure, when informed with internal insight, stimulated political attention, movement, and priority in a way that cannot be generated internally. These findings must be considered when targeting change within government. While many organizations contribute to health equity in valuable ways, government bodies have the jurisdiction to make changes that would serve to address the root causes of poverty and associated health inequities, such as raising minimum wage, ensuring affordable housing, and progressive taxation. As such, these findings should be of interest to iKT partners, social justice scholars, and community activists alike.

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Chapter V: Paper 2

Relationships may be "greater than a policy change": A Qualitative Description from the Experiences of Canadian Integrated Knowledge Translation Partners "Living in A Four-Year Cycle"

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Abstract

Background: The purpose of this study is to describe threats to the sustainability of an Integrated Knowledge Translation (iKT) partnership and how these were overcome. The fifteen year old partnership under study was called *Putting the Research to Work* (PRW), located in Alberta, Canada, and is centered on using research to address poverty.

Methods: We generated interview data with twenty-three iKT partners (i.e. civil servants, funders, decision-makers, service providers, community leaders, and researchers) who worked with or within municipal and provincial governments. Partners were asked about the greatest threats to the sustainability of the iKT partnership and how were these overcome. We used qualitative description to frame our data and a conventional qualitative content analysis approach in our analysis.

Results: Partners described how election cycles threatened or posed barriers to their work as well as how relationships offset these barriers. Barriers associated with election cycles included narrow windows of opportunity, uncertain priorities, and lost involvement of project partners. Relationships offset these barriers through expediting work and improving the strategy/position of the iKT partnership. Furthermore, relationships instigated a culture shift, characterized by increased respect and understanding of one another's professional sphere and productive dialogue about both government and research processes. Ironically, partners anticipated that these relationships—albeit difficult to measure and rarely the sole marker of a successful iKT project—could have farther-reaching impact than a particular policy change.

Conclusion: While we recognize policy change is necessary to reduce poverty, we add that relationships across sectors are an important pre-curser to evidence-informed policy. Our findings explain how and why relationships accelerate research use. As such, relationships represent an important investment for partners who will continue to work in narrow time frames imposed by election cycles—a foreseeable reality of any democracy.

Keywords: integrated knowledge translation, sustainability, public health, poverty, government,

Background

Integrated Knowledge Translation

Using research evidence presents both a pervasive challenge and global priority. In bridging the "knowledge-to-action" gap (Graham et al., 2006, p. 14), researchers and knowledge users have been urged, and in some cases required, to come together in an Integrated Knowledge Translation (iKT) partnership. A "partnership," as defined by the World Health Organization (2009) is a "relationship between two or more parties based on trust, equality, and mutual understanding for the achievement of a specified goal" (para. 5). In the case of an iKT partnership, the specified goal is research use or application. Consequently, an iKT partnership is a collaborative process wherein researchers conduct analyses and develop products that will be relevant for decision makers in the intended context of application (Bowen & Graham, 2013). Thus, iKT partnerships provide a platform where interaction and conversation can occur throughout all phases of the research process and where using research evidence can only occur if "knowledge users," (e.g. policy makers, service providers) bring essential contextual knowledge to the table. Of note, given the collective work and interactive dialogue necessary to understand and use research, the word 'translation'—which implies a linear and didactic mode of research dissemination—has been highly critiqued as misleading (Davies et al., 2008; Greenhalgh & Wieringa, 2011).

Poverty and its Effects

Poverty is a complex social issue that deprives people of material and social goods. Generally, researchers agree on the distinction between absolute poverty (i.e. lacking basic needs) and relative poverty (i.e. exclusion from activities that enhance well-

being)—the latter of which is commonly used to ascertain poverty rates in wealthy developed countries, such as Canada (Raphael, 2009).

Poverty affects us all—regardless of our socioeconomic status. For low-income families, the social determinants of health (SDoH) have a strong influence on personal health, well-being, safety, and security (Mikonnen & Raphael, 2010; Public Health Agency of Canada, 2011; WHO, 2014). Yet, the consequences of poverty are not limited to the poor. In fact, recent economic analysis estimated the combined social and private cost of poverty in Canada is between $72 and $86 billion annually (Laurie, 2009), $7.1 to $9.5 billion of which are spent in in Alberta alone (Briggs & Lee, 2012). These sobering numbers encompass three preventable expenses. First, missed economic opportunities occur when individuals who are “un- or under-employed” do not generate private or tax revenue (Briggs & Lee, 2012). Second, intergenerational costs incur “when children who grow up in poverty and are unable to escape it” (Briggs & Lee, 2012). Third, the “remedial costs of poverty” (Laurie, 2009) are related to an increased strain/demand on more expensive, restorative or ‘downstream’ public services (National Collaborating Centre for Determinants of Health, 2014), such as acute care hospital use, social assistance, and the justice system. Furthermore, many costs, such as being a victim of crime, cannot be quantified.

Sustainability of iKT Partnerships

iKT partnerships, because they have built-in mechanisms to improve and ensure ongoing research use across sectors, disciplines, and levels of government, are well poised to take on complex and chronic issues, such as poverty. However, the goals of these kinds of iKT partnerships cannot be accomplished easily or quickly or within the

timeframe between elections. The sustainability of the iKT partnership, or "the continuation of an innovation" (Wiltsey Stirman et al. (2012) is critical to instigate and press for the uptake of research and the required practice, program, or policy changes. Understanding the sustainability or long-term prospects of iKT partnerships, to support that their work on complex and pervasive issues can be ongoing, presents an area for further study (Bowen & Graham, 2013).

Purpose

In this paper, the iKT partnership under study is called *Putting the Research to Work: Understanding and Improving Knowledge Translation in Population Health* (PRW). PRW began in 2000, when partners in the community, government, and academic sector united to develop a community-based study (Drummond et al., 2007; Drummond et al., 2014). All partners involved represented organizations with a shared interest and mandate in reducing poverty. The PRW iKT partnership worked together for over 15 years.

The purpose of this study is to describe the factors that iKT partners identified as important to sustain their iKT partnership. Our specific research question is: What were the greatest threats to the sustainability of the iKT partnership and how were these overcome?

Partners, in this study, encompass diverse stakeholders including funders, knowledge users, and researchers that crisscross different sectors (i.e. community, government, academia), levels of governments (e.g. regional, municipal, provincial), and jurisdictions (e.g. recreation, transportation, income support, housing).

Methods

We approached the above stated research question using 'qualitative description' as described by Sandelowski (2000; 2010), which entails a comprehensive, coherent, and useful "description and summary of the phenomenon" (Mayan, 2009, p. 53) in the "everyday language" of the partners (Sandelowski, 2000, p. 336). That is, qualitative descriptive studies produce "data-near" findings (Sandelowski, 2010, p. 78) whilst allowing "room for the unanticipated" (Sandelowski, 2000, p. 336).

Recruitment

MM and SL sent emails to twenty-three key PRW partners inviting them to participate. These individuals were community/funder (n=6), government (n=8), and research (n=9) partners, who met the following inclusion criteria: a) spoke English, b) were a PRW partner, and c) were knowledgeable about PRW and its history. Accordingly, partners in this study encompass diverse stakeholders that crisscross different sectors (i.e. community, government, academia), levels of governments (e.g. regional, municipal, provincial), and jurisdictions (e.g. recreation, transportation, income support, housing).

Sampling

Consistent with qualitative descriptive methods, our sampling approach was purposeful. To deeply understand the phenomenon, MM and SL purposefully sampled 23 partners highly involved in PRW. In total, 25 interviews (seven from 2010 and eighteen from 2012) were conducted; two dyad interviews took place (one in 2010 and one in 2012). This number is comparable to similar qualitative descriptive studies (Mason, 2010), and considered in light of other factors that affect saturation (Morse, 2000). While

partners in this study are heterogeneous in the sense of representing different organizations/sectors, they have a shared interest (Wenger et al., 2002) in using research to improve the health and well-being of low-income families. This commonality among partners helped us understand the phenomena more rapidly and achieve saturation.

Data Generation

Because of the small nature of the partnership and sample size, no demographic information was collected. The interviews ranged from 30 to 90 minutes in duration. Generally, questions moved from obtaining past history with the partnership (e.g. Can you describe your history with the PRW project?) to inquiring about current events (e.g. What are the current system priorities in your organization and the language used to describe them? Who is seen as a credible source of information by your organization?) and future directions (e.g. What are the leverage points in your system?). The interviewer used prompts to clarify responses (e.g. What needs to be done within your organization to put the research to use, given some of the things you just spoke of?). Informed consent was obtained prior to data collection.

Analysis

We used an inductive, iterative, and abductive process of qualitative content analysis, which is “the analysis strategy of choice in qualitative descriptive studies” (Sandelowski, 2000, p. 338). More specifically, we used the conventional approach delineated by Hsieh and Shannon (2005). LP read the entire set of set of transcripts “repeatedly” to “obtain a sense” of the data set as a whole and read the data again “to derive codes” (Hsieh & Shannon, 2005). LP highlighted sections (e.g. words, phrases, concepts) of the text/data that were persistent (Mayan, 2009) or “appear to capture key

thoughts or concepts" (Hsieh & Shannon, 2005) that partners identified as barriers, facilitators, or strategies related to iKT. In discussion with MM and SL, LP used memoing to document how the analysis was modified according to demands imposed by the data (Mayan, 2009, p. 93).

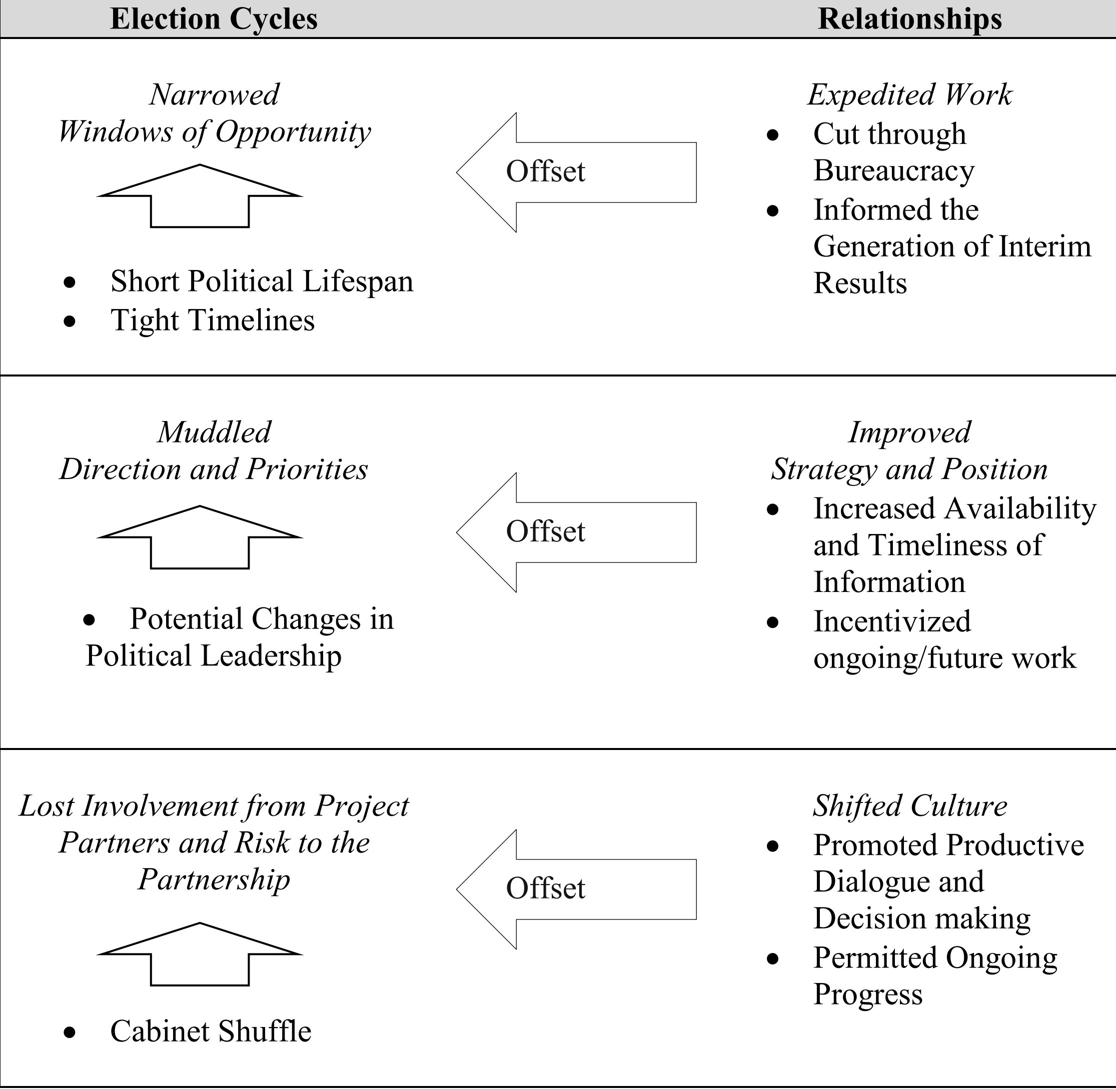
Ethics and Rigor

To ensure rigor, we used Lincoln and Guba's (1985) criteria for trustworthiness and Morse, Barrett, Mayan, Olson, and Spiers' (2002) verification strategies. LP obtained feedback from central partners early and incrementally to verify our developing preliminary categories. The university research ethics board approved the project. We also considered relational aspects of research ethics (Ellis, 2007), given our shared history with our partners. While we recognize that our bias can be helpful in interpreting the data, we were vigilant not to take more 'stock' into what a certain person said if we had a more casual relationship with them.

Findings

Partners described how election cycles threatened or posed barriers to the iKT partnership (and therefore, its progress) as well as how relationships helped offset these barriers. Primarily, election cycles created barriers through narrow windows of opportunity, muddled directions and priorities, and lost involvement of project partners. Relationships among iKT project partners offset these barriers through expedited work, improved strategy and position, and a shifted culture.

Figure 1. Overview of Findings



Election Cycles Narrowed Windows of Opportunity

Short Political Life Span Promoted Short-Term Planning

Election cycles were described as being disruptive to progress on low-income issues. In particular, partners expressed that election cycles promoted short-term planning for issues that required long-term attention. This made it difficult for partners to obtain commitment and funding for projects addressing issues that extended beyond their current "political lifespan." One civil servant involved in FFE since its inception, when asked about any legacy points or lessons learned, remarked:

> *. . .any of these kind of action/research pieces that involve government . . . Politically, they've only got a lifespan of perhaps four years. . . We've got sort of the program evaluation model, which is also very expensive and tends to be biased towards looking at the past and trying to figure out how to do cheap policy objectives instead of [asking] - where are we going to go next?"*

Another civil servant explained:

> *Unfortunately, we still live in a four-year cycle . . . we're talking about extrapolated savings [in FFE], so generationally we're gonna see a difference in things or you're gonna see a difference in the amount of emergency care, but it might not be this year. It might be NEXT year . . . <u>not</u> in that four-year period. . . We've never been able to sell it in a way that **current** people are gonna accept it and move on something that they may not – reap the benefits from. It might be the NEXT group that gets the glory . . .*

Tight Timelines Contributed to a Sense of Urgency

Partners described the need to "move quickly" to have research on a given priority generated and used, which contributed to a sense of urgency ("tick tock") to produce results faster than researchers had "the capacity" to. Failing to demonstrate improvements or cost-savings within these time frames jeopardized potential for future funding—"a catch 22" situation. One researcher explained:

> *With the new administration, the new Premier…things are moving. . . [we are] going to have to be extremely timely with [our] analysis if [we want] to at all maximize any of the work… [we] put into this project. . . now's the time. . . the pace is going to be very fast now going forward, partially because Government has this new administration and they want to maximize it.*

Relationships Expedited Work

Existing Rapport Cut Through Bureaucracy

Relationships offset the barriers associated with narrow windows of opportunity, so that the partnership could continue through multiple pathways. First, by removing "some of the bureaucracy," relationships accelerated the work of project partners. Having a standing relationship with someone in another department or organization helped partners "get in the door" and connect with others informally, such as through a "a phone call" or "a coffee," whereas "before . . . it would have been sending an email to their director to ask for somebody." By going "to the people that I know," rather than "asking for permission," the partners could begin their work more efficiently. This aided partners in creating, identifying and capitalizing on opportunities faster.

Ongoing Conversations Informed the Generation of Interim Results

Through ongoing conversations, partners recognized that the final research results, to be determined in five years (from a longitudinal study), were no longer answering "the hottest question." To "hold interest," partners used their "collective wisdom" and "connections" to inform the generation of "interim results" that would be "relevant to today's government." Furthermore, partners working in government recognized that while "windows of opportunity," may be narrow, they provided an opportunity to get initiatives or ideas "moved forward quicker" provided those initiatives or ideas were aligned with "broader priorities." As one civil servant explained:

> *I made sure that I had relationships with the people creating the bigger things that I knew were happening and would talk to them about what we were trying to do and some of my bigger ideas.*

To simultaneously meet partnership goals, government's partners shared the internal language and priorities so that research inquires could be generated and positioned accordingly. As one partner put it, "so if you understand the ideology, then you WORK it." Another civil servant in a different level of government advised:

> *Right now we have huge fiscal problems…we need to frame [our work] in a way that fits into the current economic picture…so that we're making reasonable requests and things become doable and manageable and not necessarily…the pie-in-the-sky…you're gonna get a no just because there isn't enough money to go around…If we put [our work] into some perspective of...something we could do in this market. So, it may not be… our full meal deal, but can we actually start and move something without it being huge cost… then we have some hope of moving something forward.*

This “lever to keep partners involved” (i.e. interim results) not only helped meet current political priorities in narrow windows, but ensured that data would be of interest to decision makers (e.g. “things that we can influence”). Such work justified ongoing involvement in the research and sustainability of the partnership.

Election Cycles Muddled Direction and Priorities

Potential Changes in Political Leadership Generated Uncertainty

Another reason that election cycles disrupted partnership progress on poverty issues was related to uncertainty about upcoming priorities and direction. Given the potential for changes in leadership, project partners working in government did not know what would be upcoming “opportunities” in their respective departments. Partners recognized that “priorities do shift” and “it’s…a challenge because what’s right today may not be what’s right tomorrow” or “no longer relevant.” A seasoned community partner noted, “some really neat initiatives have just fallen off the table over the years” because “a Minister changes, a CEO changes, a manager changes, or somebody changes and their priorities are all of a sudden not those priorities.”

During the time leading up to an election, partners working within and close to government noted that it was unlikely that any new changes or projects would be supported. Actual priorities were also unclear for some time following “changes in government.” One researcher partner discussed this uncertainty with regards to “zero based budgeting”

> *[The new] government could look good for us…this could be a pro or con for us. I’m still not clear… [it] could be an opportunity for us if they...want to partner with us and use our data to help them make decisions... If they are just using the*

budgeting profile [as] a means to justify cuts...spitting polish on it. Again, until we see some real action, it's hard to assess whether this is good or bad.

Relationships Improved Strategy and Positioning

Availability of Partners Increased Accuracy and Timeliness of Information

Through informal relationships and unofficial ("off the record") discussions, iKT partners accessed timely information that informed their work when they felt "rudderless." These conversations were sometimes referred to "meetings after the meeting." As one research partner put it, "there's nothing too formal about how we work together." Even when "really busy," one community partner expressed, "when you need me, you just have to yell loud enough and call often enough that I will always respond...and I will make it that important for me." Similarly, a researcher noted, "anytime they want to meet and hear about what kind of data we have and what's going on, [we will] meet with them anytime." Government partners also demonstrated "this availability," even when they "changed ministries" and were moved off the project. This informal way of working together helped partners access more information, in a timely manner, which was important for mitigating uncertainty and informing their work.

Established Connections Permitted Ongoing/Future Work and Progress

While "the timing might be on or off," partners valued the "social capital" generated by the project. Partners noted their "world got 'a little bigger' with "the connections that I've made and the people that I've met," which permitted work "beyond the project." As one community partner explained,

I meet people in this work that I don't know if I ever would have met if I wasn't involved in the work in this way. I don't even know what they are good for until I

know what I need them for, you know what I mean? I sort of tuck these names and meetings in my back pocket and then when I'm at another meeting six months down the road I'm like, 'I met a lady,' and this is what she does and I'm going to give her a call. She gave me her card. Sometimes the conversations aren't in the right time or the right place but just the fact that you made the connection, you can connect dots at a later point just because this opportunity helps us to make connections out in the community with all kinds of people that I don't work with on a day-to-day basis.

Similarly, a researcher noted an example of a connection made with a government partner that led to future iKT work:

They are ecstatic about the potential to move forward, not with respect to this [upcoming] deadline. They don't care about that. What they want to do is potentially map out a well thought out project where we can talk about what they want, what they need, all of that and take our time with it.

These ongoing conversations also engaged funders by helping "them to see the value in investing in our data" and "lay the grounds for hopefully good will" for future work with partners across sectors.

Election Cycles Lost Involvement of Project Partners and Posed Risk

Cabinet Shuffle Led to Re-assignment of Project Partners

One of the biggest frustrations expressed by the partners was the removal of project partners due to a "cabinet shuffle" and "restructuring" of departments, and thus reorganizing staff, following an election. This meant losing involvement from valuable

government partners who could "think outside the box," and had a history with or "a real passion" for the project.

Reorganization Cost Time and Posed Risk

Precious resources were required to orient newcomers to the iKT partnership project, who were also adjusting to their portfolio internally. A civil servant explained:

> *We are always starting over and trying to bring somebody up to speed and then engage them…to do that and move forward at the same time, it's a lot of time spent - so if we want this to move, there's got to be some continuity in who some of the people are…You need some commitment from somebody that actually… lived through it [explain it], and at least live through a piece to get it pulled together*

Furthermore, newcomers posed a risk to the iKT partnership. Partners expressed that new members could also be unhelpful, unsuitable, and potentially detrimental to the reputation of the partnership project. Partners from all sectors (i.e. community, government, and university), recognized that because "the late comers may not have as much investment," the "extent [that] they will have as much commitment [is] hard to say." Partners speculated that this lack of interest could, in part, be due to fulfilling a commitment "made by [their] predecessor," having a "little bit less passion about the topic," and/or a lack of understanding or agreement with previous choices/decisions made by the partnership.

Partners voiced awareness of the ongoing need to "legitimize their work." As such, those with a long-standing history were capable of "manag[ing] questions and "speak[ing] well" about the project. However, when new-comers joined, partners

expressed feeling “fearful, because . . . it just takes one comment to stop one person right? Then you are trying to catch up.” This could result in lost interest from potential funders or stakeholders.

Relationships Shifted Culture

Respect and Understanding about Different Professional Spheres Promoted Productive Dialogue and Decision Making

Relationships provided “a deeper understanding [and] appreciation of another’s perspective” across different professional spheres, instigating a “culture shift,” which changed how partners informed and made decisions.

Through involvement with the PRW project, partners from all sectors reported that their “work change[d] a little bit” in a “small but significant” way. For instance, government and community partners recognized that “one of the biggest things [the project] did for us was made us realize how important research really is,” which led to a realignment of duties and improved funding reports. This culture shift happened as partners gained respect for each other’s “expertise” or “business,” which explained, “why it takes so much talking,” “why things don’t change fast,” and “why they hardly ever change the way you think they should in the beginning.”

Relationships permitted opportunities for “challenging conversations,” which were demonstrated when partners partook in a “conversational style” of presentation, rather than the traditional didactic form of knowledge dissemination that partners had grown accustomed to. One research partner described the latter as a “pipeline,” wherein information only flows one way. A community partner described the change,

We've seen changes within our own agency that I can directly or indirectly attribute to our involvement with Families First… It's gone from just 'you deliver the information, we receive it, next 'orders of business' to 'what about?' and 'how did this impact?' or 'what [are] the next steps?' To me, that's really encouraging.

Continued Dialogue about Shared Interest Permitted Ongoing Progress

Partners across sectors recognized that "these kinds of small ripple[s]" created by relationships may have an "impact" that is "more important" and/or "way greater . . . than a policy change." Partners recognized they were part of a project that was "trying to build something in the cracks or between the sectors" (i.e. "a policy maker, a provider, an agency, a funder") in pursuit of "a common goal." Following an election and subsequently, stalled progress, one research partner stated,

They changed the whole structure of the government again. It is hard but I think those relationships are really important even though the people are going to change. I think we've established an expectation that we speak to each other

Partners regarded relationships above policy change for two reasons. First, since more than "one policy" was needed to address poverty, partners privileged "community conversation[s]" over policy change because this interaction helped "build capacity to make change" through "taking a common approach, [using a] common language," and "coming together to use. . . common sources of data. " As one government partner explained:

I don't know if policy change is what's going to benefit low-income families…it's not like one policy - we just gotta change this policy for income support and

everything will be better. No, it's about everybody coming to same table you just keep working together

Similarly, a government partner discussed the need for a multi-pronged approach:

You are really informed by that thinking of community solutions to these wickedly complex problems right? The broader issue is so complex and deep-rooted. The [provincial government] . . . won't fix it. Local government won't fix it . . . Individual families won't fix it . . . maybe everyone one sort of trying to understand it together and think about how to fix it might be able to make success, start to make steps in the right direction.

Second, in addition to the need for multiple policies (i.e. a multi-pronged approach), the second reason partners privileged "the community conversation" over policy change was due to the ongoing need to safeguard progress. One community partner explained how policy changes could quickly be reversed:

It's like mercury…you part it and then it comes back. The things that we were happy about that were in the system that impact, it has been minimal. It was great that it happened but then it become minimal again. So I think it's more our relationship that has made a difference and just the fact that big scale research was done. That was phenomenal. So many avenues were part of this.

Discussion

Statement of Principle Findings

This study highlights how relationships among iKT partners offset the barriers and turbulence associated with election cycles and increased "prospects for research use" (Lavis, 2006) through multiple pathways. In particular, we elucidated partners

experiences on how relationships expedited and improved partnership work within narrow windows and during times of uncertainty, respectively. Furthermore, we described the nuanced benefits of a shifted culture, which transformed the way partners informed and made decisions.

The Importance of Relationships in Sustainability

Our findings add that election cycles pose a threat to sustainability of iKT partnerships. While most literature on sustainability within the knowledge translation field has focused on factors that sustain innovations or practices (Wiltsey Stirman et al., 2012), we add that relationships overcome the barriers posed by election cycles and enhance partnership functioning, which in turn enhances research use. Furthermore, our findings respond to a broader call to highlight "the transformation that occurs as a result of an IKT project," since "actionable outcomes" may not be immediate or "forthcoming" (Kothari & Wathen, 2013).

Since transformations made possible through iKT have been discussed rarely, it is not surprising that the merit of iKT partnerships is under question. For instance, Raphael (2015) argued that local "anti-poverty initiatives," (1) "justify the [provincial] government's inaction . . . in addressing the basic levers that produce poverty" by "shift[ing] the focus to local action," (2) "silence critics by offering monies that forces them to endorse the government's unwillingness to address poverty," and (3) only have modest effects, which "at best . . . may make a positive change in the lives of some people suffering from poverty."

While we agree that local initiatives "must be supplemented by significant . . . public policy action" (Raphael, 2015), we argue that relationships among researchers and civil

servants are an important pre-cursor to evidence-informed policy. Our findings resonate with that of other KT scholars. For instance, Bowen (2005) who explored “the characteristics of effective knowledge translation initiatives,” found that “all partners identified the greatest project accomplishment as the development of relationships and the building of networks. . . [which] was perceived as a necessary pre-condition to the completion of deliverables or reports.”

Our findings further explain how relationships enhance research use in the government sphere. In particular, the expediency and improved strategy and position made possible through relationships, may in part (Pullishy, Mayan, Lo, Richter, & Drummond, 2016a), explain why “collaboration between researchers and policymakers” (Oliver, Innvar, Lorenc, Woodman, & Thomas, 2014) has consistently shown to increase “prospects for research use” (Innvær et al., 2002; Lavis et al., 2005). These insights contribute to unpacking what Scriven termed a “black box” (Scriven, 1999) of research use in government settings. As such, we confirm Lavis (2006) suspicion that “knowledge-translation processes offer the potential to make more purposeful linkages. . . between research and public policymaking processes” (p. 40).

Capitalizing on Narrow Windows of Opportunity

The short-term planning associated with election cycles may, in part, explain why service provision has prevailed as the dominant approach to addressing poverty in Canada. Our findings confirm that leaders have an interest in making change that would reap benefits within their political lifespan. Farrer and colleagues (2015) called this phenomena “political short-termism,” which they described as government leaders tendency to “favor short-term objectives that are easier to achieve and demonstrate . . .

every 3 to 5 years" (p. 411). We suspect that short-term planning explains political neglect on the SDoH. This is because policy actions that would address the SDoH take decades or even generations to demonstrate improvements, whereas access to service may be more immediate. As such, researchers must be mindful of whose interests are being served when engaging in iKT (Pullishy et al., 2016a).

While windows to bring attention and movement to ideas or initiatives are narrow, our findings add that they present opportunities for traction and significant advancement. Researchers targeting government to promote health equity (Farrer et al., 2015) and policy change in the health sector agreed that many factors, internal and external to government, must align to inform policy with research. As such, research production and public policymaking have long been recognized as "asynchronous" or "fortuitously linked" (Lavis, 2006). The seldom alignment of these factors renders only a short time frame for policy change. Our findings add that while windows of opportunity are narrow, the proper alignment of political priorities can bring attention and movement to issues in a speed not possible without such windows.

How Relationships Enhance Research Use

The process of iKT itself warrants more attention. While Denis & Lomas (2003) distinguished knowledge translation from other collaborative approaches by it's "central aim" of research use, our findings show that relationship development is a critical component of iKT, and its success. However, our interview questions were not solely focused on relationships. Future studies investigating iKT should, through refined questions, generate more insight about how the quality of relationships enhanced research use and sustained progress. Furthermore, as Wiltsey Stiman and colleagues (2012)

identified, prospective research is needed to elucidate influences on sustainability, as well as "the ways in which [those] influences interact to enhance or challenge sustainability" (p. 13).

We encourage iKT partners to draw on other collaborative approaches to conduct and sustain their work. In doing this, scholars should bridge relevant learning's from other collaborative research approaches (e.g. community based research, deliberative dialogue, communities of practice), which share common principles. We note one exception. As we found in another analysis (Pullishy et al., 2016a), the "bottom up" (Panda, 2007) approach often endorsed by community based research scholars can be a fruitless and frustrating endeavor within government, where "structural mechanisms" (i.e. bureaucracy and levels of authority) stymie change from within government. Notwithstanding, drawing on the learning's from related approaches can help iKT partners avoid similar pitfalls and make the best use of limited resources.

Addressing the Antecedents of Poverty

iKT partners must focus their efforts on changing the root cause of wealth inequities (e.g. minimum wage, affordable housing), rather than service provision. We reinforce the need for an educated public to ensure that political leaders prioritize poverty reduction and make investments that would reap long-term benefits, rather than band-aides to broader social issues. As we found in another analysis, external pressure "has an effect on government when groups of people demonstrate solidarity and action on addressing a shared concern" (Pullishy et al., 2016a).

More knowledge is also needed on how iKT partners can work creatively and constructively with the general public to engage the citizens in addressing threats posed

by health inequities. Constituents (i.e. the general public) not only determine political leadership, but also have the potential to dictate the broader priorities of government through external pressure (Pullishy et al., 2016a). Unfortunately, many marginalized and uneducated citizens vote against their interest, often for parties who implement policies to benefit the wealthy and do little to prevent wealth disparities. We advise that these groups of people should not be targeted. As Lomas (2000a) pointed out, entrenched ideologies may be difficult to change, and it is unlikely that targeting groups with such ideologies would be sufficient enough to reach what Roger's (2003) termed a "critical mass" necessary for a diffusion process.

Strengths and Limitations

The importance of our findings should not be understated. The opportunity to learn from iKT partners, who have extensive experience and a shared history in a large, longitudinal project, is rare. However, we recognize the context and timing of interviews may have influenced our findings. Namely, partners were interviewed in the aftermath of the "global financial crisis"—a time of fiscal austerity in Canada (Ruckert & Labonté, 2014) which likely contributed to partner's feelings of uncertainty, as well as partners precarious and inconsistent availability with external projects.

Furthermore, our interviews coincided with "a surge" (Westlake, 2015) of support for a new political party in Alberta—the *Wild Rose Alliance*. The party's "ideologically distant" (Westlake, 2015) platform on the far right of the political spectrum may have influenced the uncertainty and political forecasts of those interviewed, whose careers and clientele in the health and social services would likely have suffered under a *Wild Rose*

Alliance regime. The political and economic turbulence, however influential, may have also led to greater depth and insight about the impact of election cycles.

Conclusion

This paper critically unpacks the significance that relationships hold for iKT partnerships. While we acknowledge that policy change is an important part of iKT partnership goals (in this case, poverty reduction), we add that relationships made possible through iKT partnerships provide a platform where ongoing dialogue serves to cultivate research use throughout turbulent times. Election cycles are a reality of Canadian democracy. As such, we suggest that relationships within and across organizations should be viewed as an investment, and deliberately nurtured and embraced in plans for iKT, so that partners can continue to make incremental strides on progressing and addressing a shared goal.

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Chapter VI: Discussion and Conclusion

The findings presented in this thesis describe the calculated process of iKT used to address family poverty in Edmonton, Alberta. In particular, two major findings have been presented. First, as described in Paper 1, external pressure on government coupled with internal insight of government context and diplomacy is a politically potent combination for instigating change. Second, as outlined in Paper 2, relationships among partners across professional spheres (i.e. academia, community, government) serve as a buffer in offsetting the turbulence associated with election cycles, which contributes to the ultimate goal of the iKT partnership (i.e. narrowing the knowledge-to-action gap). Both findings are relevant for nursing, which will be discussed in this chapter. In the proceeding sections, I will:

1. Introduce and critique the eight inter-related bundles of nursing activity that Allen (2004) found to comprise contemporary nursing practice,
2. Consider my major findings against Allen's (2004) work, and
3. Present two broad strategies that apply to nurses in practice, research, and education.

In short, I argue that nurses can play both a direct and indirect role in advocating for policy action on the SDoH. In order to do so, they must possess three assets: first, nurses must understand that health is broader than the health care system (i.e. possess knowledge of socioeconomic factors shaping health); second, nurses must have the capacity to work within and outside of bureaucracy (i.e. gain skill in exerting external pressure and developing interdisciplinary/cross-sectoral relationships); third, nurses must

be rewarded for developing the knowledge base and capacity referred to in the above two points (i.e. incentive to change).

Summary and Critique of Allen's (2004) Work

To elucidate the relevancy of my findings to nursing, it is useful to first clarify the nature and jurisdiction of nursing practice—an area of contention and debate. Twelve years ago, Allen (2004) illustrated the sharp "discrepancy between nursing's public jurisdictional claims and the reality of everyday practice," through her literature review spanning ten years of ethnographic/field studies examining nursing practice (p. 271). Her guiding question, "What do nurses do when they go to work?" revealed eight inter-related bundles of nursing activity (Allen, 2004, p. 281).

While Allen (2004) answered the question "What do nurses do when they go to work?" she does not address what nurses *should* do when they go to work. While I agree, "the insights generated by this review provide a starting point for the reformulation of the profession's occupational mandate" (Allen, 2004, p. 273), I argue that nurses must consider how to make changes in the context of their work, rather than adapt their work to address manifestations of broader social issues, such as poverty and related chronic illness. In the following paragraphs, I have categorized Allen's (2004) eight bundle's according to how nurses moving forward should use them, including 'Working in a System Beyond its Carrying Capacity' and 'The Holy Grail of Service Provision.'

Working in a System Beyond its Carrying Capacity

Four of Allen's bundles reflect the short-term and expedient interactions that nurses have with patients. While these bundles accurately depict contemporary nursing practice, Allen does not identify the broader contexts underpinning these practices. That

is, the practices captured in these bundles reflect the short-sighted response that nurses, by and large, have made in working in a system that is beyond its carrying capacity. They are as follows:

- *Prioritizing care and rationing resources*

  To manage the "sheer volume of work," nurses ration services based on acuity and prioritize care/treatment for those with the greatest immediate need. Often, this involves "downgrading and disregarding" non-life threatening aspects of care (e.g. psychological, social, emotional).

- *Circulating patients*

  Nurses are often involved in facilitating patient circulation (i.e. "managing patient throughput"). As a result, nurses' interactions with patients are fragmentary and their actions are carried out as a matter of routine, rather than with reflection.

- *Mediating occupational boundaries*

  Nursing work is often focused on expediting "patient throughput." As such, nurses adopt an "extended role flexibility," whereby they plug gaps in services to ensure comprehensive and continuous care for their patients. In doing so, nurses contribute to blurring "their [own] jurisdictional boundaries."

- *Managing multiple agendas*

  Nurses are at the intersection of multiple, competing interests, and must reconcile competing "demands and expectations" (e.g. bureaucracy of organization, emotional capacity, physicians orders, moral compass,

patient preferences). As a result, nurses experience ethical dilemmas, moral distress, and compassion fatigue.

The Canadian health care system functions according to the biomedical model of health—one that views health as the absence of the disease. While our biomedical model of health has led to enormous scientific advances, such as the development of antibiotics and breakthroughs in diagnostic technology (Villeneuve & MacDonald, 2006), the health of Canadians is increasingly threatened by unmet needs that extend beyond the health care system.

Social and economic inequalities, such as earning a wage that is insufficient to meet basic needs, put individuals at risk for chronic illness. Given that income inequality now reaches "unprecedented levels" (OECD, 2015), it is not surprising that preventable chronic diseases, such as asthma, hypertension, and obesity, afflict a growing number of children and adults. As such, nurses, who work at every point of contact with the health care system, spend most of their time treating illness, rather than promoting health or changing the basics of the system within which they work.

The 'Holy Grail' of Service Provision

The other four bundles reflect the amount of resources, time, and energy nurses expend on service provision and the importance of communication in day-to-day nursing work in an environment that is highly politicized and crossed with disciplinary silos. They are as follows:

- *Bringing the individual into the organization*

  Nurses use "routines and standard operating procedures" to efficiently process people and "manage patient flows." Accordingly, nurses spend a

significant amount of time and energy reconciling "the needs of individuals with the needs of the organization."

- *Obtaining, fabricating, interpreting and communicating information*

  Nurses possess critical information on patient need. As a result, they have a significance influence on other team members' work; yet ironically, nurses seldom have time to attend team meetings.

- *Managing the work of others*

  To ensure organized and continuous healthcare provision, nurses are heavily involved in managing relationships and "the work of others" (e.g. physicians, care aids, family caregivers)". Often, nurses are not afforded time to build these relationships and rely on "bureaucratic rules" to inform the work of those they do not have time to directly oversee (e.g. nursing attendants).

- *Maintaining a record*

  Nurses expend a significant amount of time and energy documenting their work. However, Allen (2004) found this work rarely served the intended purpose as a communication tool to "support patient care activity," but rather functioned "as a check-list at the end of a shift."

While these activities can help meet individual patient need, this approach does not address the primary reason for service requests—which, when related to poverty and many of the other SDoH, is often preventable. Consider this "But why" story from the Public Health Agency of Canada (2011), which highlights how compromised SDoH can increase demands for services:

"Why is Jason in the hospital?

Because he has a bad infection in his leg.

But why does he have an infection?

Because he has a cut on his leg and it got infected.

But why does he have a cut on his leg?

Because he was playing in the junk yard next to his apartment building and there was some sharp, jagged steel there that he fell on.

But why was he playing in a junk yard?

Because his neighbourhood is kind of run down. A lot of kids play there and there is no one to supervise them.

But why does he live in that neighbourhood?

Because his parents can't afford a nicer place to live.

But why can't his parents afford a nicer place to live?

Because his Dad is unemployed and his Mom is sick.

But why is his Dad unemployed?

Because he doesn't have much education and he can't find a job.

But why ...?"

Certainty, I would not be the first to suggest that this downstream approach is unsustainable. Considering the time nurses spend communicating, prioritizing, and expediting "patient throughput" (Allen, 2004, p. 274), the need for advocacy on the SDoH to prevent illness and promote health has never been greater.

Relevancy of my Findings to Allen's

Following my critique on what Allen found to comprise contemporary nursing

practice, it is clear that nurses must take a more active role in working upstream. As such, the relevancy of my findings to nurses is presented below, followed by recommended strategies for nursing practice, education, and research.

The Need to Apply External Pressure on the SDoH

As found in paper 1 (Chapter IV), external pressure applied to government by groups in unity stimulates political action in a way that cannot be done internally. The sheer number of nurses and their position as a self-regulated profession lends enormous potential for external pressure. However, it is not clear that nurses understand how the SDoH interact to affect their patients. Nurses are currently "trained in systems that emphasize clinical treatment" (Baum, Bégin, Houweling, & Taylor, 2009) and the impact of lifestyle choices alone on the development of disease. While staff and student nurses are exposed to content about the SDoH, more work is needed to ensure all nurses are consistently educated on this subject matter and this knowledge of the SDoH is translated into practices that develop external pressure on political leaders and policymakers.

The Role of Relationships in Overcoming Bureaucracy

In Paper 2 (Chapter V), I found that relationships, within and across organizations, are critical to making incremental progress towards a shared goal. Yet, in my experiences, nurses have limited ability and incentive to build relationships across disciplines and sectors, which require an investment of time and energy not possible amongst other expected day-to-day responsibilities (e.g. documentation and patient care tasks). Furthermore, leaders of nursing organizations are also slow to instigate relationships and connections across disciplines and sectors. Given the nuanced and long-

term benefits that relationships hold, more work is needed to incentivise relationship building beyond the nursing discipline.

Recommendations

Nurses possess a unique front-line perspective and knowledge as they witness first-hand and bear the brunt of problems generated by insufficient action on the SDoH, such as low incomes and housing issues (e.g. Pullishy, 2014). However, nurses have not used this perspective or their position as health professionals to advocate for change. A recent Gallup poll—a widely used indicator of public opinion—revealed that only 14% of opinion leaders (e.g. leaders in industry, government, health services, and academia), perceived nurses as “having a great deal of influence on health care reform” (Khoury et al., 2011, p. 299).

Rather, the respondents viewed “government (75%) and health insurance executives (56%) as the groups most likely to exert a great deal of influence on health reform” (Khoury et al., 2011, p. 301). This latter finding is unfortunate since we found that external pressure dictates the priorities of government. Notwithstanding, many respondents reported that they would like to see more nursing influence in the health care system and offered suggestions for how nurses can assume “a greater leadership role” (Khoury et al., 2011, p. 299). These suggestions align with the major findings in paper 1 and paper 2. As such, I have integrated these Gallup Poll suggestions with the learning’s from Paper 1 and Paper 2 into two broad recommendations, including ‘Develop a collective voice about the SDoH’ and ‘Build Interdisciplinary Relationships and Leadership Capacity.’

Develop a Collective Voice about the SDoH

The first suggestion put forth by the opinion leaders surveyed in the Gallup poll relates to developing a collective voice on health issues, which in the case of this thesis, is poverty. In short:

> Nurses need to make their voices heard . . . Opinion leaders viewed nursing as lacking a single, unified voice to focus on key issues in health policy and viewed many nurses as lacking interest in taking on this role (Khoury et al., 2011. p. 303-304)

As I found in Paper 1, external pressure applied to government in unity stimulates change in a way that cannot be achieved internally. Nurses represent a huge constituency. As such, they must have knowledge, skills, and opportunity to advocate for policy action on the SDoH. Three strategies for developing a collective voice on the SDoH are presented:

- Practice

  Members of regulatory nursing organizations (e.g. CARNA) must create a platform for discussion and awareness building about the SDoH. For instance, a speciality practice group that focuses on the impact of social policy on health could increase awareness among RNs about the SDoH and serve as a hub for political activism.

- Education

  Nursing faculty members must ensure that students are equipped with the necessary skill sets needed for political activism. For instance, a module about harnessing contextual and diplomatic knowledge to inform external pressure could be integrated into an existing communication course in the undergraduate curriculum.

- Research

  Nursing researchers should evaluate the process and outcome of educating nurses with abovementioned skill sets. For instance, investigating the effect of political activism modules on professional activities and behaviour could improve education efforts.

Build Interdisciplinary Relationships and Leadership Capacity

The second suggestion offered from the Gallup Poll relates to initiative and involvement beyond bedside care:

> Opinion leaders felt society, and nurses themselves, should have higher expectations . . . for what nurses can achieve. In other words, respondents felt nurses should be held accountable for not only providing quality direct patient care, but also for health care leadership (Khoury et al., 2011, p. 304)

As discussed in Paper 2 (Chapter IV), relationships function as a supportive vehicle for maintaining progress on a shared goal, such as promoting knowledge-to-action. Furthermore, relationship building is a skill possessed by exemplary and transformational leaders (Kouzes & Posner, 2014) who challenge the status quo. As such, it is fitting that nurses develop their relationships to challenge the biomedical model underpinning their practice and as Lomas (1997) stated, “congregate around issues” rather than disciplines (p. 2). Three strategies for building interdisciplinary relationships and leadership capacity are presented:

- Practice

  Nurses need incentivize to build relationships outside of their discipline. As such, labor unions could advocate for paid opportunities for nurses to

engage in interdisciplinary activities within and outside of their discipline and/or sector.

- Education

  Nursing faculty members must develop course work that integrates students across disciplines and sectors (i.e. inter-professional education). For instance, coursework could encourage collective problem solving among students across disciplines through interactive games.

- Research

  Nursing researchers should determine best practices in promoting inter-professional education and interdisciplinary work. For example, investigators could evaluate both the process (i.e. experience) and outcome (i.e. effect on professional behavior) of interdisciplinary coursework.

Conclusion

My recommendations—albeit challenging to the current domain of nursing—are a necessary future direction. The biomedical model of Canadian health care underpinning the nursing profession fails to adequately address our 21st century health issues and while a strong body of research evidence has demonstrated the vital importance of investing in the SDoH, little is being done in Canada to follow these recommendations. In light of contemporary challenges, it is clear that action must be taken to enact change.

Yet, nurses—who respond firsthand to the problems generated by insufficient action on the SDoH—are trained in organizations that introduce and instil an unsustainable and short-sighted approach that focuses on treating illness, rather than

promoting health. Furthermore, nurses are not readily permitted opportunities to address the socioeconomic conditions that lead individuals to seek health services in the first place. If nurses are to truly care for their patients' health, they must be poised to question and alleviate the use of health and social service band-aids that are currently being used to address manifestations of poverty.

Nurses have an ethical responsibility to develop their capacity to advocate for policy action on the SDoH. While nurses have not yet established themselves as leaders, they must consider how to achieve more influence—primarily through consensus on key health policy issues (i.e. developing a collective voice about the SDoH) and raising professional expectations (i.e. building interdisciplinary relationships and leadership capacity). Ultimately, such actions to transform nursing practice, education, and research are crucial if we are to reduce long-standing social, economic, and health disparities that marginalize families living in poverty.

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