Twisting the Lion’s Tail: Collaborative Health Policy Making in British Columbia

Ronald R. Lindstrom, Stuart M. MacLeod and Adrian Levy

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Let’s talk.
As I was reading and thinking about the contributions to this issue of *Healthcare Papers* focused on collaborative policy making, one of my favourite quotations kept coming to the forefront of my mind: “In the long history of humankind (and animal kind, too) those who learned to collaborate and improvise most effectively have prevailed.” If you do a quick search for this uplifting statement online, you will most likely be told that its author is none other than the renowned British scientist Charles Darwin. Alas, dig a little deeper, and you will learn that the attribution of this quotation to the father of evolutionary theory is almost certainly an error (Darwin Correspondence Project 2011). Nobody, it seems, actually has the foggiest who first uttered or inscribed this pithy observation!

While I still quite like the quotation and believe it holds a lot of water, the facts of its murky origins and ubiquitous copycat attribution to Darwin also – in a pleasingly inverse sort of way – speak to collaboration’s deceptively simple appearance versus its much more complex actualization. That is to say, while just about everyone in healthcare, business, government and academia (and even your local coffee shop) sings the praises of collaboration and urges lots more of it to take place, actually *making collaboration happen in practice* is a far from straightforward enterprise.

An exploration of the benefits and challenges facing collaboration in health policy making is the focus of this issue’s lead paper. Toward the end of their discussion, Ronald Lindstrom, Stuart MacLeod and Adrian Levy (2011) conclude that the “essence” of their argument is that “*research should inform practice* and practice should inform research” (emphasis theirs). Acknowledging that neither has happened on a consistent basis, the authors call for a “new strategy” that “encompasses the interdependence of research and practice and respects different kinds of knowledge and the needs and capacity of all stakeholders.”

The main stakeholders Lindstrom, MacLeod and Levy have in mind are government, academia and health authorities – these are the ones that must be able to collaborate in order to set priorities and coordinate health research, knowledge translation (KT) and policy making. Getting in the way of such collaboration, they argue, has been our emphasis on “structural change in health services delivery.” Rather, we ought to be attending to “the domains of people and process”; with regard to people, the authors stress the need to reconceptualize *relationships* – most importantly, between health services researchers and policy makers.

Lindstrom, MacLeod and Levy illustrate their contentions by via brief references to British Columbia’s Ministry of Health Services and Provincial Health Services Authority. In the former, greater coordination and collaboration between health authorities
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and academic health sciences appears promising; in the latter, there has been increased emphasis on translating knowledge into practice. While these examples are thin on detail, they provide some real-world context for the more esoteric discussions that follow of such things as complexity science, participatory action research, KT and the study of “knowledge boundaries” and “boundary objects.”

Where I found some of the strongest traction was in the authors’ more extended discussion of efforts in British Columbia to lead and manage health system change by focusing on the boundaries – interfaces or borders – between “the myriad of stakeholders involved in the health system.” Specifically, the authors detail efforts by the province’s General Practice Services Committee “to bridge knowledge boundaries.” In plainer words, innovation is being driven by ensuring active engagement of multiple stakeholders early in the development of policy, service and system change.

The first commentary on this issue’s lead paper asks why, despite the “wealth of evidence and support for its use,” Canada is still beset by “poor translation of research evidence into policy”? In their quest to understand this paradox and to offer solutions, Adalsteinn Brown, G. Ross Baker, David Klein and Jeremy Veillard (2011) argue that new roles, structures, vehicles and behaviours are not required. Rather, they put forward two propositions.

First, the authors contend that the use of evidence ought itself to be made a policy, and that the focus should be on translating “collections of evidence” rather than from individual studies. In this regard, KT would become “part of a synthesis activity,” one that would involve “encouraging” researchers “to frame their findings around policy questions.” While I find this a tantalizing suggestion, I have to wonder how comfortable most academic researchers would be with such policy-oriented “framing.” I am rather more optimistic about the viability of the authors’ second suggestion: we should, they say, include in our policy-focused knowledge gathering and management evidence that is produced outside post-secondary institutions, hospitals and ministries.

Brown and his colleagues conclude by arguing for the measurement of “the proportion of policy with evidence and the proportion of evidence without policy.” Such analysis, the authors assert, would help to increase the value gained from investing in evidence creation. Again, though, my practical self wonders just how the “stronger hand” of management they envision could ever cohere such a large number of independent-minded individuals and organizations.

Whereas Brown and his co-commentators propose policy making itself as a way to engender better policies, Carol Herbert and Allan Best (2011) say that fruitful collaboration of the kind the lead authors encourage “must begin with the convergence of two driving imperatives: the need to ground partnership in shared values and the need for systems thinking.” Focusing on what they label the “necessary partnership” among academia, government and health services, Herbert and Best devised a six-point framework that sets out the six principles for implementing a beneficial “value chain.” There is much to admire in the authors’ value-driven approach – in particular, their emphasis on “social responsibility.” I am not always clear, however, on the actual processes they imagine would be involved in the “centrepiece” of their model: implementation. I am sure that Herbert and Best are right that values matter, but more needs to be done to understand their role in the “boundary” transactions Lindstrom, MacLeod and Levy address.
The next few commentaries step away from theoretical considerations. Instead, they present views anchored in personal experiences with policy making. Renaldo Battista (2011) argues that “a central piece of the therapeutic puzzle is missing that would ensure the cohesiveness of the initiatives” Lindstrom, MacLeod and Levy advance: that is, an “intermediate” health technology assessment (HTA) organization that would “generate scientifically valid evidence in response to specific questions.” There might be a kinship here with Brown and his colleagues’ recommendation that researchers frame their findings around policy questions; however, Battista goes a bit further into the realm of praxis by suggesting that “greater forums for exchange” (e.g., a pan-Canadian network) and more powerful channels of KT communication are required.

For her part, Patricia Martens (2011) draws on lessons from the Manitoba Centre for Health Policy to point out that the kinds of relationships advocated by Lindstrom, MacLeod and Levy require significant time, money and institutional commitment. Thinking largely of the role of universities in collaborative research and KT networks, Martens argues that “integrated” KT “implies user involvement in research from start to finish” (a proposition, incidentally, that is quite familiar in the HTA world). But Martens also adds the caveat that while boundary crossing is a noble objective, we must be cautious not to erase the borders that distinguish researchers from policy makers. Not unlike the lead authors, though, Martens asserts that “relationship building” is essential for positive collaboration; however, unless universities value and reward those sorts of relationships, not much will be accomplished.

For the sake of clarity and persuasion, most of the contributors to this issue presented approaches that are broadly prescriptive. I therefore found valuable Diane Watson’s caution that no one strategy will ever suffice for every project – or even for every part of a single project (Watson 2011). Advancing collaborative policy making, she says, requires clarifying roles, responsibilities and “rules of engagement” at the individual project level. Not unlike Martens, Watson concludes that the “different kinds of knowledge” and roles of policy makers and researchers require us to “be clear about and respectful of the boundaries” between them, thus acknowledging that “interdependence, dependence and independence” can all factor in to these complex relationships.

While Martens and Watson see value in maintaining boundaries, Hugh MacLeod (2011) takes a rather contrary view. Arguing that the boundaries spoken of by the lead authors are in fact “the silos of research, policy and operations,” MacLeod proposes that it is only by asking “wicked questions” – ones that unearth the “embedded and often contradictory assumptions” in policies and systems – that we will succeed in bringing about the necessary “horizontal connectivity and integration between the silos.”

Perhaps it is in Duncan Sinclair’s commentary that we find a productive middle ground on the boundary dispute: “make the boundaries thinner and more permeable” so as to engender “mutual respect, co-operation and collaboration” (Sinclair 2011). Easier said than done, of course, as Sinclair admits. For him, the lead authors miss an opportunity to go beyond theory and to explain how real change can occur, and one of the related shortcomings in their argument, he remarks, is the absence of patients in the picture.

Where Sinclair does concur, however, is in the role values – especially as they are manifested in politics/Politics – play in inhibiting change and reinforcing boundaries’ “relative impermeability.” In this respect, I would be
deeply intrigued to listen in on a conversation among Sinclair, Herbert and Best as they puzzle out the mechanics of operationalizing values in collaborative policy making.

One of the recommendations that Lindstrom, MacLeod and Levy made that really hit home for me was their advice that successful transformation will occur when we link strategies to people to operations. The final piece in this issue of Healthcare Papers is less of a formal commentary and more of a case study, casting light on the merits of that insight. Joanna Nemis-White and seven colleagues explain a recent initiative at the Cape Breton District Health Authority, whereby that organization surveyed primary care providers in order to gain information that would contribute to developing evidence-based strategies that support practitioners and patients (Nemis-White et al. 2011). While it uses language that is far removed from the theoretical discourse of Lindstrom, MacLeod and Levy, the “collaborative” and “inclusive” approach documented here leads me to believe that, in fact, research-informed policy making can – with the right time, methodologies, funding and attitudes – be more than a fond aspiration.

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References


INVIDED ESSAY

Healthcare Papers
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in British Columbia

INVITED ESSAY

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ABSTRACT
The respective roles of government, academia and health authorities in supporting health systems and service delivery research in the context of health policy making have often been unclear. A new strategy is necessary, one that encompasses the interdependence of research and practice and respects different kinds of knowledge and the needs and capacity of all stakeholders. Reform efforts to date have focused mainly on structural change and genuine collaboration has been pushed to the back seat. A major challenge in the health policy making process is expressing not just what we think but how we think, which requires us to be self-aware and critically reflective on how
we make sense of our day-to-day realities. Using an analogy with philosophical roots, this essay explores health services research in the context of the BC health system and examines how such research and related activities can be contextualized, understood and applied in health policy making.

Introduction

If the need for priority setting and coordination of health services research, knowledge translation and health policy making is so important, why doesn't the necessary convergence occur? Is the problem leadership, or power, or subtly conflicting goals or possibly overwhelming complexity? Are the apparent gaps between research, practice and policy just too big to handle? The respective roles of government, academia and health authorities in supporting health systems and service delivery research in the context of health policy making have often been unclear. A new strategy is necessary, one that encompasses the interdependence of research and practice and respects different kinds of knowledge and the needs and capacity of all stakeholders.

As a priority, a move toward convergence must be collaborative. The long-standing preoccupation with driving health system reform and redesign has pushed genuine collaboration – the very thing that makes it successful – to the back seat. We must move beyond the dominant historical focus on structural change in health services delivery to fully consider the domains of people and process.

In this essay, we explore health services research in the context of the BC health system and examine how such research and related activities can be contextualized, understood and applied in health policy making.

Health Services Research: Clarifying the Scope and Nature

One generally accepted definition of health services research is that espoused by Academy Health. For the purposes of this essay, it serves as a reference point: “Health services research is the multidisciplinary field of scientific investigation that studies how social factors, financial systems, organizational structures and processes, health technologies, and personal behaviours affect access to health care, the quality and cost of health care, and ultimately our health and well-being. Its research domains are individuals, families, organizations, institutions, communities, and populations” (Lohr and Steinwachs 2002: 8). In particular, attention is focused here on the latter part of this definition – the domains. More importantly, the relationships within and among stakeholders comprising these domains is emphasized because they are so important to the application and relevance of health services research in practical real-world settings.

A major challenge in the health policy-making process is expressing not just what we think but how we think. Using an analogy with philosophical roots, this essay explores health services research in the context of the BC health system and examines how such research and related activities can be contextualized, understood and applied in health policy making.
between us and reality) and axiology (the values and beliefs that guide us in our pursuit of knowledge) are well-described in the scientific methodology (particularly qualitative) literature, but the systematic application of these concepts is sporadic (Creswell 2003; Grbich 1999; Tashakkori and Teddlie 1998). While it is not our intention to bring excessive academic analyses into these complex philosophical questions, the “lion’s tail” offers a useful metaphorical insight into their nature. This metaphor is not new, dating back to at least the time of Sir Francis Bacon (1561–1626), a 16th-century English philosopher. (We would like to acknowledge that the idea for using this metaphor had its genesis in a conference attended by the lead author [R.R.L.] in Edmonton, Alberta [Osberg and Biesta 2003, October].)

The lion is reality – what there is to know. The lion’s tail represents the relationship between us who seek to know and reality – how we come to know. This tail has taken on a number of different forms that have developed over centuries and that are well-described in the literature (Creswell 2003; Lincoln and Guba 2000; Tashakkori and Teddlie 1998; Veenstra 1999).

From an ontological perspective, this progression of beliefs has changed significantly since the early days – from 19th-century positivism (the knower and the known are independent, a single reality, value free) to, more recently, post-modern constructivism (meanings are constructed as the knower engages with the world; multiple interpretations are possible). The broad ontological, epistemological and axiological variables are reinforced in describing both what we desire to know and how we come to know it. The manner in which we, as individuals, function with our different ways of knowing and understanding our reality, often in unconscious opposition to other world views and mindsets, can help or hinder our relationships with each other. This affects the processes we use to frame and solve a problem and may significantly influence outcomes.

The Health Services Research and Policy-Making Environment in British Columbia

As international scholars observe (Campbell et al. 2009; Lavis et al. 2008), the use of research evidence to support decision and health policy making has not flourished. Many factors have hindered decision and policy makers’ uptake and use of research evidence. These have been well-documented in the Canadian setting (National Forum on Health 1997) and are repeated here in summary form:

• Limited availability of pertinent evidence (e.g., outdated, not readily accessible)
• Lack of consensus among decision-makers (e.g., values, interests and experiences)
• Inappropriate use of evidence (e.g., misinformation, conflict with strongly held beliefs)
• Lag times between research and its application (e.g., geographical disparities, inconsistent adoption)
• Being overwhelmed with information (e.g., little time, skills and tools to make sense)
• Failure to keep health outcomes in mind (e.g., influences of advertising and private industry)
• Different and changing values (e.g., lack of shared interests and values)
• Lack of accountability for decisions (e.g., lag times between decision and outcomes)
• Reliance on tradition and judgment (e.g., professionalism)
• Protection of privacy and confidentiality (e.g., turf wars, lack of public trust, data-protection issues)
• Poorly coordinated health information
systems (e.g., lack of standardized, linked and accessible data)

For the most part, these same barriers remain in place today. Researchers and policy makers appear to be living in different worlds, described in the “two-communities theory” three decades ago (Caplan 1979). That so much time has passed with so little apparent progress underscores a collective failure. Improvement first requires a re-conceptualization of the relationships between health services researchers and policy makers. One change of perspective is to move beyond the usual conceptualization of research – practice gaps to defining boundaries, more specifically, knowledge boundaries. This is much more than a change of terminology – it may aid decision-makers in addressing important issues. Below, critical issues and potential solutions are examined from the perspectives of two major organizations in British Columbia – the Ministry of Health Services and the Provincial Health Services Authority (PHSA). The perspective of academia is added in follow-up.

"Researchers and policy makers appear to be living in different worlds."

Issues from the Perspective of the BC Ministry of Health Services

In 2006–2007, the British Columbia Ministry of Health assessed its own role in research and examined its relationship to the broader research community. This resulted in an internal report (2007): The Ministry and the Research Community: Overview of Current Issues in the Ministry of Health. A number of strengths and challenges were identified. Generally, it was found that there were limited time, skill, awareness and ability to identify relevant research and researchers. There was ambiguity concerning when and how the staff ought to be involved in research activities, coupled with a non-existent shared understanding of terms such as research, evidence and research community.

And, beyond the ministry, the critical question of relationships with the broader research community was specifically addressed with the acknowledgment that there was “consistently strong appreciation of the need for constructive working relationships with academic researchers and the value of improving the ministry’s strategic use of research findings” (British Columbia Ministry of Health 2007: 12) Strong interest was expressed in working with researchers to seek timely answers to immediate questions and to inform long-term strategic planning. However, a significant limitation in the ability of the ministry to do so was acknowledged. This was further compounded by “a lack of clarity about how to meet both short and long-term research needs with existing mechanisms, and uncertainty about how to establish appropriate working relationships with researchers” (British Columbia Ministry of Health 2007: 13). Clearly, the need to value, create and maintain robust relationships both within the ministry and with other stakeholders in health authorities and academia was seen as fundamental to any future progress in the health services research arena. The ministry clearly acknowledged the value of research to support its role, recognized current gaps in research capacity and accepted the major challenges that it needed to confront.

In British Columbia, there has been a considerable amount of provincial health policy making across the health system since the inception of the health authorities and a clear mandate for the ministry to create the policy framework in which they operate. (The
BC perspective and input were submitted by the BC Ministry of Health Services. More recently, particularly during the past two years, the ministry has taken steps to begin to strengthen its use of health system research through an evolving collaboration with the Michael Smith Foundation for Health Research (http://www.msfhr.org), along with linkages to a number of academic institutions across British Columbia. These relationships combined with some early thinking on increased coordination and collaboration between health authorities and academic health sciences (building on the concept of academic health science centres and networks set out below) provide a potentially robust platform to move this agenda forward.

**Issues from the Perspective of PHSA**

PHSA, one of six BC health authorities, was established in December 2001. (PHSA agencies and services currently include BC Ambulance Service, BC Cancer Agency, BC Cardiac Services, BC Centre for Disease Control, BC Children’s Hospital and Sunny Hill Health Centre for Children, BC Mental Health and Addiction Services, BC Renal Agency, BC Transplant, BC Women’s Hospital and Health Centre and a number of other provincial programs and services.) It is composed of specialty agencies, programs and services and works collaboratively with the other five geographical (regional) health authorities, academic and research organizations and other sectors. However, the role of PHSA in supporting health systems and service delivery research, including the translation of knowledge into practice in order to improve health outcomes, has never been adequately clarified during the provincial health system reform process.

In keeping with fiscal realities and the ever-changing milieu of health services delivery, PHSA is caught in a continuous process of reshaping and refining its role. An ongoing challenge is to create a more integrated academic environment, one that strongly links health, education and research. Its strategic plan (PHSA 2010) forcefully reflects the growing importance of and its commitment to research as a cross-cutting theme, and a strong commitment to developing and advancing enterprise-wide research capacity. This includes a vital role in developing provincial research platforms in collaboration with key stakeholders.

PHSA is also encouraging more research in the health systems and services area, much of which is situated under the umbrella of health services and policy research and includes knowledge translation, the development of partnerships and the engagement of the public. A key component of its research strategy includes the translation of knowledge into practice in order to improve health outcomes. This type of research is particularly important with respect to the escalating human and financial resources devoted to the provincial health services delivery system.

**Issues from the Perspective of Academia**

Academic health sciences centres typically share an interdependent mission of service delivery, education and research. In 2002, Lozon and Fox highlighted problems associated with such organizations, and these are summarized as follows:

- They lacked a consistent nomenclature, an exact definition and a standard way of organizing.
- They were predominantly focused on medicine and were not sufficiently interdisciplinary.
- They failed to keep pace with health reform initiatives and to reflect the reality of regional service delivery.
There is a need for stronger relationships across government ministries and with academic health sciences centres to allow for improved coordination of activities.

With respect to their relationship with government:

- They lacked knowledge of each others’ realities.
- They lacked structures to establish and nourish meaningful relationships with each other.
- They were preoccupied with complex internal relationships at the expense of developing relationships with government toward developing health policy.
- They failed to engage in systems thinking.

Overall, Lozon and Fox highlighted the need to advocate for stronger relationships across government ministries, provincial and federal, and with academic health sciences centres to allow for improved coordination of activities, including funding (Fyffe and Srigley 2002). This direction has again been recommended recently by a National Task Force convened by the Association of Canadian Academic Healthcare Organizations (http://www.acaho.org) and the Association of Faculties of Medicine of Canada (http://www.afmc.ca). In March, the task force issued a blueprint titled Three Missions, One Future (Academic Health Sciences Centres National Task Force 2010). This document called for an evolved landscape for academic health sciences, shifting from centres to networks. Desired outcomes would include, for example, new academic healthcare organizations, more collaborative partnerships, improved relationships between academic health sciences networks and government and a broader, future-focused problem-solving research mandate.

**Improvement through Collaboration between Government, Health Authorities and Academia: Addressing Health Policy Making in the Real World**

Scholars such as Lavis (2006) caution that the research and policy-making processes are distinct and asynchronous and that there is a dearth of good research on the design of processes applicable to policy making. Lavis et al. (2008) have recently called again for rigorous processes to ensure evidence-informed decision-making, including health policy making. Indeed, there is a rapidly growing body of literature that points to this need and that offers a number of approaches, methods and tools to improve the level of sophistication. Parsons (2007) argues that accomplishing real change at the systems level is very difficult in large part due to deep, underlying principles, values and beliefs. Parsons counsels us “to distinguish between reality and our ideas about reality … [This] allows us to investigate our most deeply held views of how the world operates while still benefiting from multiple conceptions of reality” (2007: 408).

In order to address such complex, real-world problems, researchers need to collaborate across their respective professional knowledge and practice boundaries and be more engaged in applying research in the policy-making process (Bammer 2005). A new kind of science is advocated – integration and implementation – which will, for example, accomplish the following:

- Better link research and practice
- Enhance skills for engaging multiple stake-
holders to scope issues
- Encourage different ways to conceptualize approaches to research
- Improve the ability to deal with system fragmentation
- Increase the understanding of research roles in policy making
- Promote effective collaboration among multiple stakeholders in the research process

Scholars such as Bammer have encouraged the integration of systems thinking and complexity science; participatory research methods; and knowledge management, exchange and implementation.

**Complexity Science**
A system is a set of interconnected parts that function together toward a common purpose and may be closed or open to its environment. Key characteristics of complex open systems include being adaptive, dynamic, self-organizing, interdependent and unpredictable. Conceptualizing the health system as a complex adaptive system helps with understanding approaches that will foster successful health policy making. More than a convenient metaphor, complexity science is enjoying broader application as is evidenced by the growing number of recent texts – see, for example, Fisher (2009), Meadows (2008) and Mitchell (2009). The health system has been well described as a complex adaptive system (Anderson and McDaniel 2000; Begun et al. 2003; Edgren 2008; Glouberman and Zimmerman 2002; Lindstrom 2000, 2003, 2009; Plsek and Wilson 2001; Tan et al. 2005; Zimmerman et al. 1998). Kernick expanded these views by suggesting that complex adaptive systems theory “can offer new insights for analysis at all levels of the health systems. Complexity theory moves the emphasis away from analysis, prediction and control to the configuration of relationships amongst the systems components and to an understanding of what creates patterns of order and behaviour among them” (2002: 124). The health system, in terms of complexity, is the lion.

**Participatory Methods**
Participatory investigative methods, including participatory action research, have become increasingly prominent (Bradbury and Reason 2008; de Koning and Martin 1996; Greenwood and Levin 1998, 2005; Herr and Anderson 2005; Kemmis and McTaggart 2000; Wallerstein and Duran 2003). Participatory action research in essence includes active and early participation by all stakeholders involved in a project; iterative and reflective research-action cycles; and research conducted in an equal partnership with those stakeholders involved in the day-to-day realities being studied and addressed. Further, the participatory action research process facilitates transformative learning and attempts to mitigate power differentials among stakeholders. These elements combined make the approach truly participatory and, consequently, more successful. Participatory methods are about researchers and decision-makers who, together, grasp the lion’s tail.

**Knowledge Translation**
With respect to knowledge management, exchange and implementation, there has been a broad, although often unrevealing, discourse surrounding this concept over the past decade. The Canadian Institutes of Health Research (2009), in the context of a “knowledge to action process” model, has recently defined knowledge translation as “a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically sound application of knowledge to improve the health of Canadians, provide more effective health
services and products and strengthen the health care system.” This view reinforces the role of knowledge translation in the exchange of knowledge between multiple stakeholders, leading to action. Further, this process reinforces a critical role for identifying and fostering appropriate relationships (Graham et al. 2006). Of even greater significance, however, is a key contextual aspect: “This process takes place within a complex system of interactions [emphasis added] between researchers and knowledge users” (Canadian Institutes of Health Research 2009). This context is critical. To many observers, this would appear to be the most challenging part of the knowledge translation process, particularly in complex adaptive environments and when employing participatory research. It is about collectively twisting the lion’s tail more often, more carefully and with appropriate scientific rigour.

**Toward Evidence-Informed Policy Making**

Context is critical and reinforces the need to address the complex reality within which health policy making occurs. Knowledge translation is a process, not an event, and multiple evidence sources and complexities associated with organizational design (i.e., culture, structure and processes) must be acknowledged when research is applied in specific situations.

To do this requires examination of what happens when our “thought worlds” intersect with others, particularly when multiple stakeholders are involved in collaborative processes. A shift from the concept of knowledge gaps (as mentioned earlier) to that of knowledge boundaries is required. There is growing awareness of the need to focus on the boundaries (interfaces or borders) that exist among the myriad of stakeholders involved in the health system, in particular the continuum from health services research to policy making.

Framing knowledge translation in the context of managing knowledge across boundaries is relatively new thinking (Carlile 2002, 2004), and this concept is being exercised in recent discourse (Kitson and Bisby 2008; Lindstrom 2006; Van de Ven 2007).

**Knowledge Boundaries and Boundary Objects**

The concept of boundaries and boundary objects from both theoretical and empirical perspectives has been explored in considerable depth by Lindstrom (2006). He refers, fundamentally, to boundaries as walls or gaps that separate or bridges that connect – they can be tangible or intangible. The typical eukaryotic cell membrane is a good metaphor for a boundary as it is both a permeable wall that separates the internal environment from the external and also a bridge that connects the internal to the external to allow for the exchange of nutrients and waste, all of which is necessary to sustain life. Boundary objects are concepts, approaches, models and tools that transect boundaries, particularly those in social worlds; and while they may have different meanings in different circumstances, they are recognized because of certain structural commonalities they exhibit (Star 1989; Star and Griesemer 1989). Carlile (2002, 2004) has written convincingly on boundaries and boundary objects in the context of knowledge management in the automobile and aerospace industries. This concept has seen growing interest in a number of academic fields, including health (Bruhn et al. 1993; Kerosuo 2003; Kitson and Bisby 2008; Lindstrom 2006; Rodriguez et al. 2003; Van de Ven 2007). As Lindstrom observed, the need to understand boundaries is critical “when addressing knowledge and how knowledge is managed by stakeholders within and across a number of domains – individuals, families, organizations, communities, and populations.
… an investment in boundaries and the process of knowledge exchange (boundary objects) at multiple stakeholder interfaces (knowledge boundaries) are key” (2006: 199).

In support of the knowledge boundary concept, Van de Ven (2007) frames the theory-practice dilemma in three ways:

1. A problem of knowledge transfer or mobilization
2. A result of two basic forms of knowing and of knowledge – scientific and practical
3. A problem of knowledge creation, especially when the research process does not adequately engage all relevant stakeholders

Health System Change in British Columbia

Linking Change to Health Services Research

Over the past several years, there has been a concerted effort in British Columbia to craft and then execute an increasingly integrated provincial innovation and change agenda for the health system. (The BC perspective and input were submitted by the BC Ministry of Health Services.) A key underpinning of this approach has been the more systematic use of health services research in the crafting of that strategy. For a sector that has been in perpetual “transformational change” for the past two decades, a key question for anyone adding to that trajectory is, why aren’t we done yet? As argued in this paper, a major challenge in the health policy-making process is expressing not only what we think (what there is to know) but also how we think (how we come to know) and why we think that way (the values and beliefs that guide us in our pursuit of knowledge). In the health sector, the need for change is not in question; a more interesting inquiry is why this change has not yet occurred. The answer lies in the complex set of relationships and the system’s ability to realize and execute on a shared strategic change agenda.

The BC publicly funded health system is a $15 billion dollar collection of activities undertaken in the design, production, marketing, delivery and support of a wide range of health services to a population in excess of 4.4 million people. Services are provided through a government ministry and six health authorities that employ in excess of 130,000 staff members but are also heavily reliant on over 9,000 publicly funded physicians who are affiliated with, but not in most cases employed by, the health system, as well as a range of contractors (predominantly in home and community, assisted living, residential care and housekeeping). Geographically, the system stretches across 89 local health areas made up of metropolitan, urban, rural and remote communities across the vast geography of British Columbia (roughly the size of France and Germany combined).

Demand on this system has continued to grow significantly over the past decade and will continue to grow over the foreseeable future due to an aging demographic, changing technology and increased use of services, exacerbated by a health sector–related inflation rate in excess of general price inflation. The key issue facing the publicly funded health system is its ability to meet the increasing demands and needs of an aging population for quality health services while ensuring the continued sustainability of the system into the future. While there is a general level of agreement on the need for substantive change to better meet emerging needs, and a level of dissatisfaction with the status quo, there is also a wide range of competing solutions that make any focused system-wide adaptation challenging.

This challenge is hardly surprising as the sector is made up of several distinct levels and
cultures of people with their own perspectives, reference knowledge, interests and time horizons: politicians; those in public service; those in health operations governance and administration; and a collection of collaborating, but also competing, health professionals embedded in a strong regulatory, professional and institutional environment. Organizational change is, in and of itself, often difficult. Change in professional organizations is known to be even more difficult due to diffuse power structures, competing interests and different ideas. Change becomes even more challenging in a multi-stakeholder sector that adds in the political, civil service and administrative dimensions. The ontological, epistemological and axiological dimensions can all be subject to different interpretations and agendas. Successful change is therefore likely posited on the need to focus on the boundaries (interfaces or borders) that exist between the myriad of stakeholders involved in the health system.

**Bridging Boundaries through Collaboration within the Health Sector**

In a sector that relies heavily on its human resources to deliver on its mission, engagement and bridging the knowledge boundaries are critical. The challenge of successfully linking strategy to people and operations is at the heart of any successful transformation strategy and critical to making change in the health system. In an environment where the workforce is critical to any significant change, aligning the values, interests and commitment of key stakeholders (politicians, civil servants, health administrators, physicians, clinicians and staff) to a compelling shared vision of why we need to change, where we want to go and how to get there should be the basis of any strategy.

The General Practice Services Committee is an example of how British Columbia has been trying to bridge knowledge boundaries. It is a joint committee of the ministry, the BC Medical Association (BCMA) and the Society of General Practitioners of British Columbia. Both the ministry and the BCMA/Society of General Practitioners have four appointed members on the committee. All decisions of the General Practice Services Committee are made by consensus.

The General Practice Services Committee was originally established under a ministry-BCMA subsidiary agreement for general practitioners in November 2002 with the mandate of finding solutions to support and sustain full-service family practice in the province. This mandate was renewed under the 2004 ministry-BCMA Working Agreement with a total funding of $799 million since the General Practice Services Committee’s establishment in 2004–2005, focused on a range of priorities:

- Chronic disease prevention and management
- Maternity care
- Care of the frail elderly and patients requiring end-of-life care
- Service to patients with complex care needs
- Mental health care
- Recruitment and retention of full-service family practitioners
- Fostering of multidisciplinary care between general practitioners and other healthcare providers

The identification of the General Practice Services Committee priorities was guided by feedback obtained from its 2004–2005 province-wide consultation with BC general practitioners (professional quality improvement days). This consultation engaged approximately 1,000 general practitioners from across the province and identified key areas of focus for sustaining full-service family practice in
British Columbia. The collaborative approach found expression in a 2007 Primary Health Care Charter and underscored a longer-term commitment to collaboration with family physicians as a key to improving patient health outcomes.

The General Practice Services Committee uses the Institute for Health Improvement’s Triple Aim Initiative as a lens through which to assess existing and new initiatives. Triple Aim identifies the following health system-wide goals as key to achieving more coordinated, integrated and comprehensive patient care (Institute for Healthcare Improvement n.d.):

- The approach positively impacts the experience of the individual patient and the healthcare professional providing those services.
- The approach positively impacts the health (physical and mental) of a defined population.
- The per capita cost of the approach has a positive effect on healthcare costs/spending.

This approach has emerged and developed into an expanded provincial commitment to integrated community-based service delivery in the 2010/2011–2012/2013 service plan under the goal for British Columbians to “have the majority of their needs met by high quality community based health care and support services” (BC Ministry of Health Services 2010: 9). The first objective listed under this goal is to provide a system of community-based healthcare and support services built around attachment to family physicians and extended healthcare teams. This expanded approach stretches and challenges the notion of realizing effective strategy across multiple boundaries through an expanded network that includes a combination of family physicians; medical specialists; nurse practitioners; pharmacists; community care nurses, allied health, home healthcare staff and community mental health and substance use staff; public health and community healthcare services; and a range of other allied health professionals including physiotherapists, chiropractors and massage therapists as well as a range of alternative healthcare providers offering naturopathy, traditional Chinese medicine and acupuncture.

A range of service delivery and administrative structures is being developed to facilitate active collaboration across these different boundaries. These include the following:

- The use of Divisions of Family Practice (divisions are affiliations of family physicians having common care goals and/or in the same geographical location)
- The use of collaborative services committees or similar community-level structures to facilitate collaboration between health professionals and regional health authorities
- The establishment of and/or contracting for integrated health networks in each community-based service delivery area as a structural approach to link community care nurses, allied health professionals, home health support staff, mental health and substance use staff and public health professionals into meaningful teams that provide coordinated care for target populations
- Mechanisms to facilitate collaboration with communities (municipal, agencies) in the development of an effective integrated system of primary and community care service delivery and the provision of expertise to assist communities and agencies in taking supportive action for the target populations.

Critical to this whole process has been iterative learnings about not only the what of change but also the how of change that is
respectful of bridging different values and beliefs across the multiple stakeholders – in one word, relationships.

As the health sector in British Columbia moves forward in further developing the strategic agenda for 2011/2012–2012/2013, it is not only focusing on further refining a clear and shared understanding of the system-level problem(s) it wants to solve, attaining clarity on what system-level changes need to be made and establishing a clear game plan and mileposts to get there, but it is also making a serious effort to link this strategy to people and operations – to bridge knowledge boundaries.

Successful change is likely posited on the need to focus on the boundaries that exist between the myriad of stakeholders involved in the health system.

Bridging Boundaries through Collaboration with Academia

The development of evidence-informed policy making using research requires the bridging of boundaries between the different interests and foci of very different health sector stakeholders (ranging from political and civil service members to health administrators and healthcare professionals) and academics. Bridging the ontological, epistemological and axiological differences requires thoughtful dialogue and collaboration. Researchers need to collaborate across their respective professional knowledge and practice boundaries but also be more sensitive to the “realities” for the range of stakeholders engaged in the policy-making process.

A key initiative in British Columbia has been the increased use of action research because it is better suited to the evaluation of policy, service and system-delivery changes – this will result in faster feedback loops to government and those involved in managing change to modify action where it is not achieving the promised results. This approach is being used to support the results-focused strategic innovation and change agenda. It includes active and early participation by all stakeholders involved in a project; iterative and reflective research-action or Plan-Do-Study-Act (PDSA) cycles (see http://www.ihi.org); and research conducted in an equal partnership with those stakeholders involved in the day-to-day realities of the problem or issues being studied and acted upon. The critical importance of identifying and managing the complex interactions between stakeholders engaged in both the production and application of knowledge is critical to the increased effective use of health services research in the development and execution of policy.

Summary and Recommendations: Toward Improved Collaborative Health Policy Making in British Columbia

Reduced to its essence, our argument is that research should inform practice and practice should inform research. Historically, in the context of health policy making, neither has happened consistently. Here we provide four recommendations for moving toward improved collaborative health policy making.

First, the importance of research and evidence-informed policy making needs to be more effectively embedded within the triad of government, academia and health authority organizational cultures. This may happen through strong leadership and strategic change management initiatives that recognize the value and relevance of creating robust relationships. There must be a shift from a preoccupation with the management of, to leadership in, the health system (doing things right versus doing the right thing).
Second, strategies and a framework must be developed for multiple stakeholder engagement to ensure the tripartite success of academia, government and health authorities. With respect to academia and community, for example, Van de Ven (2007) advocates “engaged scholarship.” This focus builds upon the earlier work of Boyer (1996), who described four key interdependent characteristics of university scholarship (discovery, integration, sharing knowledge and application) and then added a fifth (engagement) that creates an environment that enables academia, society and communities to communicate and work together on the most crucial issues.

Third, a close review of international experience is required to address the value of engaging key stakeholders. In the United States, Community-Campus Partnerships for Health (http://www.ccpph.info/), in keeping with the national strategy around community engagement, has embraced “community-engaged scholarship” as fundamental to academic institutions, especially those that house health professional schools. This is seen as a means to enhance collaboration in educating health professionals, produce knowledge that is community relevant and shape healthier communities. Similarly, in the United Kingdom, a recent report by the Council for Science and Technology (2008) concluded that evidence-informed policy making depends on a healthy relationship between academia and government policy makers. Several inhibiting factors were identified: poor working relationships, ignorance of each others’ abilities, mistrust of each other and discounting of relationship value. Recommendations from this report include the need to build relationships, build capacity and provide incentives for strong partnerships. These activities are seen as precursors to culture change, with an emphasis on improving the coherence of relationships.

Finally, in keeping with our opening metaphor, we encourage people to twist the lion's tail more often, but carefully, to elicit new and exciting responses that will prompt us to see and respond to the complex challenges in the health system in ways we have yet to imagine.

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Twisting the Lion’s Tail: Collaborative Health Policy Making in British Columbia


Playing to Our Strengths in Evidence and Policy

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ABSTRACT

Lindstrom, MacLeod and Levy provide an interesting and challenging perspective on collaborative policy making. In this commentary, we argue that effective policy making will require playing to our strengths as policy makers and researchers, rather than the creation of new roles and vehicles. We also argue that we need greater value placed on evidence and intellectual capital across all institutions in our health system.
Playing to Our Strengths in Evidence and Policy

Compliments to the Authors and Introduction

Lindstrom, MacLeod and Levy’s paper (2011) is a thought-provoking contribution that manages to weave together several related lines of scholarship. They show how the different contexts around researchers, policy makers (civil servants and politicians), clinicians and administrators create barriers to the successful translation of research evidence into policy. Using relatively recent insights into our health systems based on complexity theory, they make a strong closing argument for earlier, stronger and more frequent collaboration based on shared understandings of problems. Perhaps most importantly, they also show how thoughtful approaches to these boundaries – reflected in the BC General Practice Services Committee – can make better collaboration and translation of evidence into policy a reality.

Better health policy is a particularly important goal for Canada. The healthcare system maintains an almost iconic status in our country, with some describing it as the third rail that politicians would typically revere instead of reform (Sinclair et al. 2005). Concerns over healthcare remain top of mind for Canadians and are accompanied by demands for more and better care (Soroka 2007). So healthcare is important in Canada. Better translation of evidence should lead to better policy and better healthcare.

Fortunately, Canada benefits from a large, dynamic and successful health services research community. Just about every province can boast of internationally recognized health services researchers and research centres. Institutions such as the Canadian Health Services Research Foundation have invested in training for decision-makers to use evidence more effectively, while the Canadian Institutes of Health Research have introduced innovative programs to help focus and speed the translation of evidence into health policy.

In this issue of Healthcare Papers, Lindstrom, MacLeod and Levy call attention to collaborative models that should help even more with the translation of evidence into policy. Given this wealth of evidence and support for its use, why do the studies referenced by Lindstrom, MacLeod and Levy consistently find evidence of poor translation of research evidence into policy in Canada?

In this short commentary on Lindstrom, MacLeod and Levy’s paper, we argue for an even more inclusive approach to evidence and policy. Our commentary starts from two somewhat atypical propositions:

1. Better translation of evidence requires playing to the strengths that come with our different roles (particularly policy makers and researchers), rather than the creation of new roles.
2. Most of us (researchers, policy makers, clinicians and administrators) already produce evidence but rarely pay sufficient attention to it.

Better Translation of Evidence into Policy Requires Playing to the Strengths That Come with Our Different Roles

A number of papers talk about new structures, new roles and new behaviours as critical to improving the translation of evidence into policy. But we know from a wealth of evidence from health services research that behaviour is one of the hardest things to change. In order to talk about better policy, it may be useful to explore what we mean by policy. Policy is simply a standing position on a repeated decision. This can be reflected positively or negatively in legislation (e.g., all hospitals shall produce quality improvement plans, no hospital shall borrow against its property). But policy really reflects a guide or a rule for decision-making.
This conceptualization of policy puts the challenges faced by public servants into clear relief. The job of policy making is thus more than just finding and implementing the right answer; it is actually finding the set of answers that can be implemented and balanced against all the potentially competing answers in already-existing policy. Effective public servants find good answers and put them into a context already governed by many other answers. This conceptualization of policy has two important implications for improving use of evidence in ministries, agencies and other large organizations that make policy.

The job of policy making is actually finding the set of answers that can be implemented and balanced against all the potentially competing answers in already-existing policy.

The first is to make the use of evidence a policy in itself and integrate it into the set of policies that currently govern policy making. One of us has reported earlier on such an approach (Lomas and Brown 2009). In contrast to what might be expected from a literature that often stresses gaps, barriers, differences and conflicts, this study found that the increased use of evidence as a policy was welcomed. Perhaps most importantly, this policy creates a pull into the policy process for evidence rather than requiring researchers or others to push evidence into the process from outside.

The second implication is to focus on the translation of collections of evidence more than just the evidence from one particular study. If each policy must be balanced against a set of competing policies, policy makers would benefit most from translation efforts that bring together evidence on all of these policies. Collaboratives such as the General Practice Services Committee can help here to frame the set of questions requiring evidence, but playing to the strengths of researchers would suggest framing knowledge translation activities as part of a synthesis activity that brings together insight from several lines of inquiry rather than just the end result of a single analytical process.

This synthetic approach would free up researchers to pursue their own lines of inquiry – something they have been trained to do – while encouraging them to frame their findings around policy questions using synthetic techniques, an increasingly common part of graduate studies in health services research. It would also argue for deepening the research synthesis capacities in all organizations that create policy, whether ministries, agencies or corporations. Finally, it would encourage research funders to act as networkers by bringing together researchers across grants to collaborate on syntheses rather than making knowledge translation a component of each individual grant.

The success of this approach could be captured and compared across organizations such as ministries, agencies or hospitals and jurisdictions using a simple measure such as the proportion of policy that has appropriate evidence supporting it. More refined approaches could measure both the proportion of new policy that has appropriate supporting evidence and the proportion of existing policy that is informed by appropriate evaluation. For both measures, higher proportions would be better and could form the basis for comparative studies of the effectiveness of policy making across any set of organizations.
Most of Us Already Produce Evidence

Typical approaches to improving knowledge translation start from the perspective that the critical locus of evidence production happens somewhere within the research precincts of a university, college, hospital or ministry. This is true for what we may commonly call scientific evidence or evidence that we believe meets the tests of reproducibility and generalizability. But there are important types of evidence that are critical to the development of health policy that are created, refined or maintained outside of research shops.

A number of authors point to the relative success of organizations that use data and evaluation as part of their management decision-making (Davenport and Harris 2007). In our healthcare system, the collection, management and use of this information largely happen in hospitals, offices and non-governmental agencies. At the same time, some of the sharpest observers of our system regularly call attention to the home-grown innovations and pilot programs (Rachlis 2005) that could solve some of our challenges but from which we have trouble learning (Lewis 2007).

A number of organizations outside of the healthcare system now look to a more inclusive notion of evidence as intellectual capital that can be obtained from within as well as from an external research community (Teece 2002). This more inclusive notion leads them to invest in identifying intellectual capital across their organization and in realizing the benefits of data, best practices and research findings. Leading organizations now focus on knowledge that can come from a number of sources, including the tacit knowledge that results from efforts to put evidence into practice (Nonaka and Takeuchi 1995). Moreover, within healthcare, a number of initiatives are using citizens’ councils and other direct forms of engagement to gather important evidence on public preferences. Unfortunately, there is relatively little study of this sort of approach to knowledge management within Canadian healthcare. Not surprisingly, we regularly find lists of the challenges we all face in creating and using evidence that Lindstrom, MacLeod and Levy documented throughout their paper. Despite the wealth of health services research in Canada, limits on the amount, applicability and strength of evidence are at the start of many of these lists, at the same time that many organizations neglect the intellectual capital right at hand.

The simplest approach may be to encourage and support the recognition and use of intellectual capital across our system.

There are many policy antidotes to the neglect or poor maintenance of the evidence and intellectual capital at hand in organizations across our health system. These range from familiar calls for better information production and use through e-health to calls for stronger financial incentives and penalties that would encourage all decision-makers to make better decisions. But the simplest approach may be to encourage and support the recognition and use of intellectual capital across our system. Until evidence and intellectual capital are more highly valued, the production, use, analysis and synthesis of data and creation of evidence are likely to be undervalued within our system. Experts have already created taxonomies for intellectual capital, provided case studies on its extraction and use and argued for its importance. But we might be able to do much by measuring and studying the corollary to the first measure, that is, the amount of evidence without a policy.
Conclusion

Support for a management culture at all levels of our system that values evidence and that is supported in its use might go a long way toward making the isolated cases on good evidence use the norm. Lindstrom, MacLeod and Levy have pointed to some of the philosophical and practical approaches to making the translation of evidence easier. We would argue that a stronger hand in managing the investment we make in evidence could also help. If we ran a laboratory, we would likely need to report every year on the value we had produced through the creation and use of evidence. Why not in healthcare? The measurement of two indicators – the proportion of policy with evidence and the proportion of evidence without policy – could provide the start for increasing the value we get from our investments in evidence creation. It could also provide the starting point for figuring out how we take the real lessons and successes from Canadian healthcare and share them across our own system and across the world.

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It’s a Matter of Values:
Partnership for Innovative Change

COMMENTARY

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ABSTRACT

We need new ways of thinking and of working in order to accommodate the complexity of the challenges in and urgent need for health system innovation and change. Solution seeking must begin with the convergence of two driving imperatives: the need to ground partnership in shared values and the need for systems thinking. The authors see three core value perspectives as central to partnerships for change: a patient- and family-centred social responsibility and equity paradigm, a commitment to changing outcomes and an evidence-informed strategy that integrates needs for research and knowledge translation. These imperatives can be expressed as a simple value stream: (1) articulate the shared values foundation of key partners; (2) express a common vision for changes needed; (3) develop a governance framework articulating roles, accountability and decision-making; (4) collaborate on an
We agree with Lindstrom, Macleod and Levy (2011) that the lack of convergence between health services research, knowledge translation and health policy makers – in spite of the obvious need for alignment and coordination of priorities – is a problem. We agree that the respective roles of government, academia and health leaders and managers in supporting health systems and service delivery research in the context of policy making have been unclear, and that a new strategy that recognizes the complexity of the systems involved is required.

The bottom line is that we need new ways of thinking and of working in order to accommodate the complexity of the challenges in and the urgent need for health system innovation and change. Our view is that solution seeking must begin with the convergence of two driving imperatives: the need to ground partnership in shared values and the need for systems thinking.

In practice, these imperatives and the elegant arguments made by Lindstrom et al. can be expressed as a simple value stream: (1) clearly articulate the shared values foundation of key partners; (2) express a common vision for what changes are needed; (3) develop a governance framework that spells out roles, accountability and decision-making; (4) collaborate to develop and continuously refine an integrated, dynamic systems intervention plan that takes the complexity of the priority problems into account and applies well-grounded systems thinking principles; and (5) ensure continuous improvement based on measured outcomes.

Golden and Martin (2004) presented a five-point, systems thinking model for healthcare innovation: strategy, structure, human resources, information and decision-making, and incentives. Culture and values are at the centre – the glue that binds innovations together. These authors ground their model in the much-vaulted successful transformations in the US Veterans Affairs services and in the Canadian Radiation Oncology Services.

We see the progression from values, vision and governance through intervention and outcomes much as Golden and Martin do, but we focus on the necessary partnership between academia, government and health services.
We express it as a six-point framework, shown in Figure 1. This commentary briefly reviews the six principles for action that are key to the implementation of the value chain; the Lindstrom et al. paper provides rich detail for many of them.

Values
We see three core value perspectives as central to partnerships for change: a patient- and family-centred social responsibility and equity paradigm, a commitment to changing outcomes and an evidence-informed strategy that integrates needs for research and knowledge translation. Everything else follows if we acknowledge that the health system (the lion) is a complex adaptive system and if our core value is social responsibility. In a socially responsible paradigm, our health system will provide access to essential services to those who need them, with essential services defined by the partners, including Canadian citizens; our health professional academic institutions and their learners will embrace the notion that education and training pathways must be tied to the needs of the system to deliver those services; our health services researchers in academic institutions and academic health science organizations will study those issues that most affect the population; and all stakeholders will commit to continuous improvement based on measured outcomes.

Participatory research methods are required in order to ask the right questions, identify the necessary evidence and ensure receptivity to the recommended solutions that are derived from the evidence. In fact, change in complex systems adds a priority on action, or innovation, research: as Larry Green has framed it, “If we want more evidence-based practice, we need more practice-based evidence” (Green and Glasgow 2006: 126). Leading thinkers such as Ian Graham (Graham et al. 2006) and Andy Van de Ven (2007) focus on co-production – a close collaboration between research producers and research users. As expressed by Canadian Institutes of Health Research (CIHR 2010), “In integrated KT [knowledge translation], stakeholders or potential research knowledge users are engaged in the entire research process. By doing integrated KT, researchers and research users work together to shape the research process by collaborating to determine the research questions, deciding on the methodology, being involved in data collection and tools development, interpreting the findings and helping disseminate the research results. This approach, also known by such terms as collaborative research, action-oriented research, and co-production of knowledge, should produce research findings that are more likely be relevant to and used by the end users.”

Systems Thinking
Ontology, epistemology and axiology are all key to sense making when effecting innovative changes but can be stated more simply by using a different metaphor. The lion is like the elephant in the story of the elephant and the blind fakirs. (Five blind men encounter an elephant and, being unable to see it, explore it with their hands. Each man thinks that the part of the elephant he feels represents the essence of the elephant, but none has the whole picture.) What we understand to be true and how we describe what we understand depends on our assumptions, the data available...
to us and how we process those data. The commonly accepted viewpoint in 2011 is that the observer is a participant in the creation of the reality being described in complex adaptive systems. Our methods, interpretation and conclusions in health services and policy research need to be grounded accordingly. For example, the Fraser Institute and Canadian Doctors for Medicare see the financial sustainability of medicare very differently; yet they have access to the same raw numerical data for their analyses. Again, values matter: they affect what data we choose to examine and how we interpret those data. For health policy makers, a crucial value is the weight put on evidence in relation to other important considerations such as politics and context.

One way to promote change in complex adaptive systems is to focus on the “simple rules” that shape the behaviour of complex systems. Greater clarity, consensus and shared action around the central roles of transformative leadership, monitoring and feedback loops, disruptive innovation, networks of adaptive change agents and other foundational success factors are critical for system change.

Leadership

Snowden and Boone (2007) specifically distinguish four systems contexts for leadership: simple, complicated, complex and chaotic. In the simple system, which is relatively stable and has clear cause-and-effect relationships, traditional leadership approaches work well: command and control, delegation in well-refined role responsibilities, organized structures and discrete evaluations (Trochim et al. 2007). However, as systems become more complex, in order to adapt to their qualities, leadership needs to rely more on facilitation and empowerment, self-organizing structures, participatory action and continuous evaluation: “Instead of attempting to impose a course of action, leaders must patiently allow the path forward to reveal itself” (Snowden and Boone 2007: 74). Leaders model the openness, risk taking and reflection necessary for learning and communicate a compelling vision of the required organizational change, providing support and personal advocacy needed to lead others toward it (Iles and Sutherland 2001). They focus on collective, dynamic priorities for change and stability in the system, on supporting different ways of conceptualizing organizations and their challenges and on developing information sharing networks within and across organizations (Osborn et al. 2002). They recognize patterns as they emerge from complex adaptive systems and use them to coordinate and guide action (Osborn et al. 2002).

Does this sound like the way Canadian health systems work today? The gap is clear. To summarize, different forms of leadership are required for inter-organizational partnerships in a complex adaptive system (Best and Holmes 2010). There still is much to learn and much to do to ensure this kind of transformative leadership. This is perhaps one of the most critical challenges emerging from the Lindstrom et al. paper: determining what transformative leadership for innovative change in a complex health system looks like, and then developing and supporting such leadership.

Governance

Effective partnership in practice requires a shared definition of what constitutes collabo-
ration, a clear understanding of who the players are and what their respective roles are within their jurisdiction and at the boundaries, and a commitment to the relationships among stakeholders.

We prefer to conceptualize health services research as studying interconnected elements in a complex system, rather than independent domains, as the definition in Lindstrom et al.’s paper seems to imply. To illustrate, one of us (A.B.) recently completed a CIHR-funded systematic review for Saskatchewan of “large system transformation” using a theoretical lens of complex adaptive systems. The evidence is clear and international experts agree that effective transformation demands integration of strategy across multiple levels (e.g., provincial, regional and organizational) and multiple initiatives (in the case of the Saskatchewan Ministry of Health, Patient- and Family-Centred Care, Primary Health Care Improvement, the Saskatchewan Surgical Initiative and Lean for Healthcare) (Best et al. 2010).

How are the academy, government and health services to work together when they live in such different worlds? There is emerging evidence on critical success factors for inter-organizational partnership, for example, a blend of top-down enabling and bottom-up innovation, clear ground rules for decision-making and accountability, and well-structured and supported learning networks with effective monitoring and feedback of progress (Riley and Best in press). The problem is not that we lack understanding of what must be done for good collaboration; the problem is that we don’t do it.

**Learning Networks**

The co-production approach to participatory or innovation research outlined above (CIHR 2010; Graham et al. 2006; Van de Ven 2007) highlights the need for shared learning across organizations and key players, as is evidenced in the literature on effective inter-organizational partnerships (Riley and Best in press). There is reasonable evidence that network learning is essential for transformative change (Riley et al. 2011). However, as for leadership, there still is much to be learned about how to ensure that learning networks are truly productive in complex systems. This challenge offers rich opportunities for innovation research: as we work to apply the lessons learned from Lindstrom et al., a key element will be to incorporate learning networks into the strategy and to study what works and what does not. A few Canadian universities are actively involved in community-engaged scholarship already and might provide a focus for work along these lines.

**Innovation Research**

As noted, the value stream emphasizes the need for solution-oriented research that uses participatory action, co-production principles. This need has pushed the boundaries of traditional science to create a new science aimed at solutions. The new focus has been referred to as a shift from mode I to mode II science (Denis et al. 2005), with mode II science emerging in response to the challenges of KT.

We use the term *innovation research* in our six-point framework to underscore the core value of improved outcomes as the proof of the pudding for systems thinking and health system partnership. Fortunately, there is a large and rapidly growing literature on “how to” for this kind of research upon which to draw (Best and Holmes 2010; Damschroder et al. 2009; Ward et al. 2009).

Innovation involves a complex array of contextual factors that determine when innovations will occur, be sustained or even spread. The Canadian Health Services Research Foundation (CHSRF) used the following criteria to rank and classify innovations for
its fall 2010 Picking Up the Pace conference, which showcased close to 50 innovations in primary healthcare across Canada:

1. Evidence of impact (i.e., does the innovation improve health outcomes, patient experience or efficient use of resources)
2. Potential for scaling up to the system level
3. Spread within and across jurisdictions
4. Sustainability
5. A range of innovation types

These criteria were used to identify a range of case examples that illustrate primary healthcare innovations and spread strategies at the practice/organizational, regional health authority, local and provincial/territorial levels. Although the emphasis was on cases where spread has been achieved, assessors are encouraged to also identify cases of highly successful innovations that have failed to spread beyond a local area or have remained at the margins of primary healthcare.

Although not meant to be an exhaustive list, the following 10 criteria were expressly used to identify innovations in primary healthcare for the Picking Up the Pace conference:

1. Political commitments and policy frameworks
2. Financial commitments/investments
3. Delivery system (re)design (e.g., organizational and delivery models)
4. Clinical information systems and supportive technologies
5. Decision supports for primary healthcare providers and patients
6. Incentive structures and funding models
7. Quality improvement training and support
8. Coordination/integration within primary healthcare or with other health and social services
9. Performance measurement and evaluation
10. Governance and accountability mechanisms

It was agreed that many identified innovations would likely include more than one and perhaps several of these elements. (To read the full Picking Up the Pace: How to Accelerate Change in Primary Healthcare, please visit http://www.chsrf.ca/Libraries/Picking_up_the_pace_files/CasebookOfPrimaryHealthcareInnovations.sflb.ashx.)

It is often difficult to pinpoint the essential ingredients or levers that predict when innovation will occur, be sustained and spread. Some innovations are successfully implemented within the system, while others remain marginalized, operating on the fringe. Innovation can be top down – driven by influential health system policy and decision-makers – or arise from the “trenches” – driven by passionate, and often clinical, leaders at the local organization level.

What truly influences or speeds the spread of innovations in health systems remains unclear. CHSRF has developed an evaluation model for the Picking Up the Pace conference that will hopefully shed some light on the issue. The focus of the evaluation is on building relationships and using a multi-method approach including social network analysis in an attempt to track post-conference action, change and relationships that were fostered as a result of involvement with the conference. The results of this evaluation will be available later in 2011.

“**Innovation can be top down or arise from the “trenches.”**
Conclusion

The centrepiece of our six-point model is implementation. However we conceptualize values, systems thinking, leadership, governance, learning networks and innovation research, it is essential that implementation of innovation occur if we are to resolve the problems in our healthcare system. Working partnerships among government, health services researchers and academic health science networks are essential if innovative change is to be implemented and sustained.

Acknowledgment

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References


Lion King or Aslan: A Tale from Narnia!

COMMENTARY

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ABSTRACT

In the Chronicles of Narnia series by C.S. Lewis, Aslan the all-powerful but benevolent lion does not need to have his tail twisted; rather, he twists tails to create convergence and harmony in his dream world. In this issue’s lead article, “Twisting the Lion’s Tail: Collaborative Health Policy Making in British Columbia,” the authors discuss the problems regarding better coordination of health services research, knowledge translation and policy making. The roles of academia, health authorities and government are presently unclear, with leadership differences, power discrepancies, conflicting agendas, lag times and systemic structural complexity. Exploring these issues in British Columbia, Lindstrom, MacLeod and Levy advocate a change in perspective from practice gaps to bridging knowledge boundaries. Recommendations include networking of academia, action research and strengthening of relationships between stakeholders. However, a key cohesive element seems missing. Health technology assessment (HTA) is a formidable, dynamic driving force. With over 20 years’ experience in HTA, Canada has a number of world-class innovative agencies federally and provincially that actively involve academia to generate evidence for informed policy making. Increased use of evidence-based medicine in research and the clinic may be achieved by augmenting HTA’s scientific capacity through the creation of pan-Canadian exchange forums and by boosting the demand for knowledge translation.
The *Chronicles of Narnia* is one of my favourite series. Aslan, the powerful but benevolent lion, is the all-encompassing vital energy behind the wonderful world of Narnia, where animals talk and white magic reigns supreme. Aslan makes the Lion King look trivial; he doesn’t need to have his tail twisted; rather, he twists tails to create convergence and harmony in his dream world.

Our world, particularly our healthcare system, is a far cry from Narnia. As Lindstrom, MacLeod and Levy (2011) discuss in this issue’s lead essay, “Twisting the Lion’s Tail: Collaborative Health Policy Making in British Columbia,” health systems are complex entities displaying great difficulty at creating convergence and harmony among their many pieces and stakeholders. The authors deplore the lack of connectedness between the realms of health services research, knowledge translation and healthcare policy making. Exploring the reasons why convergence does not occur, they note that numerous stakeholders are involved – government policy decision-makers, hospital administrators, clinicians, researchers, patients and the general public – with leadership differences, power discrepancies, conflicting goals and agendas, lag times and systemic structural complexity. The roles of academia, health authorities and governments in health policy making are unclear. Observing, as other researchers have, that “the use of research evidence to support decision and health policy making has not flourished,” the authors address the need for a change in perspective.

One such framework shift would be to define and focus on research-to-practice knowledge boundaries rather than practice gaps. Sheila Jasanoff (1990) expanded upon this concept in *The Fifth Branch: Science Advisors as Policymakers*. The crucial ingredient here is “boundary work.” To create a successful relationship between science and decision-making, it is vital to ensure the capacity of researchers to negotiate a scientific space for investigation, protected from undue interference on the part of decision-makers, and at the same time establish conditions conducive to a productive interaction.

Bridging boundaries implies collaboration. As the authors further discuss in their paper, stakeholders must collaborate with academia to obtain evidence-informed policy making. The authors propose greater use of action research, involving active and early participation in a project by all stakeholders in equal partnership, and borrowing from the Plan-Do-Check-Act (PDCA) business improvement model. Also known as Plan-Do-Study-Act (PDSA) cycles, this process is transparent to researchers and decision-makers alike, and its iteration can ultimately lead to rigorous evidence-based medicine and knowledge translation, as suggested.

A central piece of the therapeutic puzzle is missing that would ensure the cohesiveness of the initiatives: health technology assessment.

The authors explore the complex issues of health services through the lens of the British Columbia (BC) system. They describe the difficulties encountered when trying to establish productive linkages between the BC Ministry of Health Services, the BC Provincial Health Services Authority and academia. The authors’ diagnosis is that the role of the Provincial Health Services Authority is not sufficiently clear, the integration with academia too challenging, and the academic centres not interdisciplinary.
enough. A therapeutic strategy is proposed that encompasses the recognition of the scientific theory of complex adaptive systems, the obligation to address policy making in the real world, the involvement in participatory investigative methods by all concerned stakeholders, and the importance of reinforcing knowledge translation through the creation of knowledge networks transferring knowledge from one set of stakeholders to another.

Although the value of strengthening the relationship between the BC Ministry of Health Services and the health services research community is acknowledged, several impediments have been identified, including time limitations and the lack of clarity regarding short- and long-term research needs on the part of the ministry. Emerging solutions call for the creation of a productive partnership between health authorities, academic health science centres and the Michael Smith Foundation for Health Research. The Provincial Health Services Authority has tried to favour “enterprise-wide research capacity” and knowledge translation in an attempt to improve health outcomes and cut costs. Academic health centres have been advised by a national task force (convened by the Association of Canadian Academic Healthcare Organizations and the Association of Faculties of Medicine of Canada) to shift from centres to networks.

These elements are all valid; yet a central piece of the therapeutic puzzle is missing that would ensure the cohesiveness of the initiatives. Lindstrom, MacLeod and Levy liken the healthcare delivery system to a static creature, constrained by inertia, whose tail needs to be twisted as per the proverbial metaphor. Our experience has shown, however, that a health technology assessment (HTA) agency is an integrating dynamic driving force. Indeed, an intermediate organization formally mandated by the government or the Provincial Health Services Authority to generate scientifically valid evidence in response to specific questions would greatly enhance the necessary convergence between the needs of decision-makers and the researchers’ capacity to respond. In other words, consolidating an HTA capacity in British Columbia would seem crucial to bringing together all the pieces of this complex puzzle. Interestingly, Canada is viewed as a world leader in HTA (Battista et al. 2009).

Even in the best of worlds, finite resources limit evaluation; perhaps the answer lies partly in creating greater forums for exchange.

HTA in Canada is a rich landscape that includes more than 20 years’ experience with the Canadian Agency for Drugs and Technologies in Health (CADTH formerly the Canadian Coordinating Office for Health Technology Assessment) as well as the Ontario Health Technology Advisory Committee and experience in Alberta. In Quebec, the Agency for Health Services and Technology Assessment (AETMIS; formerly the Health Technology Assessment Council), recently merged with the Conseil du médicament to form the National Institute for Excellence in Healthcare and Social Services (INESSS), increasing the scope of the agency to include drugs, technologies and social services. This in part mirrors the UK National Institute for Health and Clinical Excellence (NICE), while taking it a step further to include social services (Battista et al. 2009). All these agencies actively: (1) ask the questions that prompt evaluative research by
academia, and (2) act by fuelling the results to decision-makers. The challenge for the decision-makers is then to harmonize the actions of all stakeholders; the challenge for academics and clinicians is to reconcile the various bits of information with the goals of better informing patients and developing clinical diagnostic and treatment guidelines.

Of course, even in the best of worlds, finite resources in time, budgets and adequate personnel limit evaluation to only a few select services and technologies. Will those reflect the most common, the novel, the emergent, or the flavour of the month depending upon research funding and fundraising by single-disease lobbying organizations? What are the ways to increase the scientific capacity of HTA in any particular country? Perhaps the answer to these questions lies partly in creating greater forums for exchange. One such initiative might be the creation of a pan-Canadian network.

Another issue is how to increase the use of evidence-based medicine in academic research and the clinic. To foster such a culture, it would be necessary to both augment scientific capacity and boost the channels of communication of knowledge translation.

A striking feature in the world of Narnia is the depth and ease of communication between its inhabitants, as sustained by the powerful spirit of Aslan. Transposed into our healthcare system, more specifically that of British Columbia, this metaphor calls for the introduction of a simple mechanism that would foster a smooth and continuous line of communication between decision-makers at various levels of the healthcare system, including policy makers, managers, clinicians and citizens, as well as the scientific researchers who produce the evidence. Creating an HTA capacity within the province would greatly enhance a more productive communication among these key players.

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References


Are We in a Pickle?  
Rethinking the World of Research and User Interaction

ABSTRACT

The lion’s tail and knowledge boundaries are two analogies referred to in the lead essay by Lindstrom, MacLeod and Levy. These may be helpful but require slight readjustment. Grabbing onto the lion’s tail implies one reality and one intersection point, whereas the old analogy of the blind men and the elephant shows that various perspectives are required. Integrated knowledge translation refers to user involvement throughout the research process. Participatory models are one form of integrated knowledge translation, but caution is required to help maintain the knowledge boundaries. There is the real danger of one group becoming “pickled,” or having unbalanced osmotic pressure from another group, resulting in destroyed “cell wall” boundaries. Neither researchers nor users should morph into each other but should, rather, fulfill unique roles within a respectful, trusted research relationship. Lessons learned at the Manitoba Centre for Health Policy teach us that collaborative health services research takes time, money, mutual understanding and respect (including respect from academic institutions for this paradigm of research). This requires a dedicated centre of core group scientists willing to devote the necessary time. Diffused networks may not be stable enough to maintain the long-term relationship building required for the intersection of researchers and decision-makers.
Are We in a Pickle? Rethinking the World of Research and User Interaction

Authors Lindstrom, MacLeod and Levy, in “Twisting the Lion's Tail: Collaborative Health Policy Making in British Columbia” (2011), rely heavily on two metaphors – first, the lion's tail, and second, knowledge boundaries.

Being a rather pragmatic thinker, I must confess that the lion's tail metaphor was quite difficult for me to understand (although readers more familiar with philosophic thinking may be more adept at the analogy). Basically, the authors describe the lion as reality and the lion's tail as the relationship between us who seek to know and the reality (how we come to know). Okay, so you've lost me here. I wouldn't recommend anyone ever grabbing a lion's tail. Imagine the consequences – the lion would probably bite you and presumably devour you! To understand a reality, what you need is a collaborative understanding of the realities of all players. There should be caution in assuming that there is one reality (i.e., one lion); but probably of even more concern is that, in this metaphor, there is only one tail to understand the reality. It reminds me of the oft-used example of the blind men, all trying to describe an elephant through exploring very different parts (Editor's note: see the commentary by Herbert and Best [2011] in this issue for more detail). Together, using researchers (and, even better, researchers from several disciplines) and knowledge users, we can try to understand the lion (or elephant) not by all grabbing onto the same tail but by sharing information about the lion from our unique perspectives. Many windows into reality give a stronger understanding not only of the problem but also of how to apply solutions in the real world of action.

All scientists seek to know, and there are varying paradigms in which to move toward the knowing, whether that be from quantitative or qualitative approaches. Lindstrom et al. claim the importance of participatory action research models that include stakeholders’ involvement in projects early and throughout. Patton describes “fully participatory research” in this manner: “The researcher or evaluator acts as a facilitator, collaborator, and learning resource; participants are coequal” (2002: 185). This concept is not new in health services research circles within Canada – most of us in the world of the Canadian Institutes of Health Research (CIHR) have absorbed the concept of integrated KT (knowledge translation) as proposed by Ian Graham and others (Graham and Tetroe 2007; Graham et al. 2009). Integrated KT implies a certain approach to doing research, with the knowledge users involved with the scientists in formulating questions, critiquing analyses and disseminating and applying the knowledge generated. In short, integrated KT implies user involvement in research from start to finish.

The authors of the lead essay refer to “managing knowledge across boundaries” as a new way to frame KT. I'm not so sure that this differs from the way in which most of us have interpreted integrated KT models. But the boundary analogy may add a few further insights into the importance of maintaining the integrity of roles.

The idea of knowledge boundaries certainly has its merits. Boundaries, like cell membranes, ensure that the environments within and outside the cell are separated yet connected in osmotic flows. And here is where my thoughts drifted into the process of making pickles (hence, the title of this commentary). For those among you who are “back-to-the-land” sorts of people, you will
be familiar with making pickles, especially the bread and butter kind. You chop up fresh cucumbers, and then you put salt on them and let them sit, and they become much smaller and wizened. Why? Essentially, this process kills the cell structure of the cucumber, since the heavier concentration of salt causes migration of water from the cell to the outside in an osmotic attempt to balance the solute concentrations. But balancing the concentrations is almost impossible given the saltiness of the brine. Therefore, the cell collapses, and you get pickles out of cucumbers. Participatory action research could begin to destroy the boundaries if not done very carefully. If the researcher merely facilitates, this may not produce an equal partnership, especially if the researcher negates a scientific approach. The knowledge users, on the other hand, need to ensure that context is taken into account so that the research remains true to the concerns and contextual understandings. Both need their boundaries, both need to be valued and neither can shift the osmotic balance.

It makes me think about the boundaries that we wanted to maintain when we began The Need To Know Team (CIHR-funded) in Manitoba over a decade ago, in 2001. We have a collaborative research team with high-level planners from the 11 regional health authorities (two people per region, chosen by the chief executive officers of each region), Manitoba Health and research scientists at the Manitoba Centre for Health Policy. This is well described in various research articles (Bowen et al. 2005; Bowen and Martens 2006; Martens 2011). Right from the start, we decided that our role was to share knowledge with each other – researchers sharing about research, planners/policy makers sharing about the real world of health services and population health at the front lines. We hoped not to make any of the environments too salty. We came to a balanced equilibrium as a team and did not expect one group to morph into the other group, destroy the boundaries or “pickle” the other group. As a researcher, I did not want to “become” a planner or policy maker, and they didn’t want to “become” research scientists. Rather, we both maintained our knowledge boundaries while at the same time allowing osmosis to transmit knowledge across these boundaries in respectful ways, to create a healthy balance of the salts (or the essence) in both. There have been other models in Canada that attempted to break down the boundaries (i.e., cell walls), to make the planners or policy makers into “mini-scientists.” This is disrespectful not only to the research scientists who have taken years to learn to do research, but also to the planners and policy makers who are experts in their own right and should not be expected to do research off the sides of their desks as an afterthought. Rather, the whole symbiotic relationship of healthy organisms is that there is the appropriate amount (and definitely not too much) of transference of ions between the two, so that both can remain intact and function within their realm of living. As the authors point out, “research should inform practice and practice should inform research.”

In our experience at the Manitoba Centre for Health Policy, after two decades of doing integrated KT with both the provincial government and the regional health authorities, we have come to appreciate that the key element is relationship building (Bowen et al. 2005; Bowen and Martens 2006; Martens 2011; Martens and Roos 2005). The model...
described in this paper certainly emphasizes relationship building in British Columbia, giving examples of the General Practice Services Committee and the increased use of what is termed “action research.” I’m not so sure that the oft-repeated mantra of Plan-Do-Study-Act quite fits the model of integrated KT research relationships. Perhaps it should be more like Study-Plan-Do-Act-Study (keep going round and round) if it were true to the idea of evidence-informed decision-making. Or maybe Ask-Study-Plan-Act-Ask Again! Interestingly enough, The Need to Know Team had this discussion just recently as we were revising our conceptual framework, and we decided together that the Plan-Do-Study-Act framework did not really work for a researcher-user collaborative integrated team model. You don’t do and then study – you study something and then put it into action after it shows promise.

The authors describe the BC Ministry as having a strong appreciation for constructive working relationships between government and academia, with the need for timely answers to immediate questions and information to assist in long-term strategic planning. They also describe a potential shift from centres to networks, with new academic healthcare organizations, more collaborative partnerships and problem-solving research mandates. I would caution the authors against adopting such diffuse structures. For academics and governments to work together productively, it takes a serious long-term relationship that requires time, money, trust, careful negotiations, guarantees of academic freedom and a commitment to working together on complex problems. From our two decades of integrated KT research relationships with both the provincial government and the regional health authorities, the Manitoba Centre for Health Policy has found that its director and research scientists need to devote huge amounts of time to these relationships. A loose network of scientists may not have the capacity, cohesiveness or desire to do this on a long-standing basis. Diffused networks may not be stable enough to maintain the necessary long-term relationship building required for the intersection of researchers and decision-makers. It requires the ongoing stability of a core of scientists dedicated to working at the boundaries. A combination of independent research and research mutually decided upon with users is essential to the success of this model, since research at the boundaries may not necessarily translate into research appreciated by peer-review panels or promotion committees. Unless there is reward on the academic side, there will not be much appetite for the time investments that this requires. The authors’ example of the General Practice Services Committee is not particularly helpful in explaining this since the committee described is more a group interested in applying research to clinical practices but not necessarily in engaging in new and groundbreaking research in health services.

University academic life often revolves around the three concepts of research, teaching and service. The authors of the lead essay use the term engaged scholarship to underscore the importance of creating environments that enable academics, society and communities to work together on complex problems. Building relationships, building capacity and providing incentives for partnerships are all worthy endeavours for the academic. Some universities (such as our Department of Community Health Sciences at the University
of Manitoba) have a long history of research involvement with the community; but other universities may be more interested in a traditional approach that says that research scientists’ chief aim in life is to publish in high-impact journals, to publish huge quantities of research and to publish quickly. The sort of research-policy paradigm that is reflected in integrated KT models does not necessarily lend itself to publishing in high-impact journals or to publishing quickly! Relationship building takes time, money, trust building, careful two-way listening and capacity building. So incentives within universities need to reflect the value of community-engaged scholarship in their recognition of excellence (i.e., tenure and promotion), and granting agencies need to do likewise. How many peer-review committees have you been on lately that valued relationship building over and above a long list of grants and publications? Not many. So although this is admirable, it requires a sea-change in the thinking of university incentivizing for the academic. (The term sea-change comes from Shakespeare’s *The Tempest* (1986/1611) in the song “Full Fathom Five” (I, ii) sung by Ariel. It denotes a major transformation.) This is not just a new approach for the academic to do research – it requires a new approach for university and academic valuing. If universities do not value the type of approaches required for knowledge boundary transfer and mutual understandings of the lion described in the lead article, we could be in a real pickle.

**References**


Musings on Collaborative Health Policy – 15 Years On

COMMENTARY

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ABSTRACT

Strategies to facilitate an understanding of successful collaborations between researchers and policy makers in the article “Twisting the Lion’s Tail: Collaborative Health Policy Making in British Columbia” have relatively good face validity and fairly good construct validity. It’s been my experience, however, that strategies that work for one project don’t necessarily work for others and strategies that work for parts of one project don’t always work for other parts of the same project. What seems important is that health policy collaborators establish clarity on roles, responsibilities and rules of engagement for specific projects, knowing prospectively that these will vary across time and depending on the nature of a project.

“Twisting the Lion’s Tail: Collaborative Health Policy Making in British Columbia” proposes strategies to facilitate an understanding of the factors that underlie successful collaborations between researchers and policy makers (Lindstrom et al. 2011). So, let’s see if the idiom and Lindstrom et al.’s application of academic concepts have face and construct validity.

My methods are straightforward: to assess the applicability (face validity) and comprehensiveness (construct validity) of Lindstrom et al.’s proposed strategies, let’s revisit some real-world events I’ve participated in where researchers and policy makers “twisted the lion’s tail.” Fifteen years on, I’ve been privileged to work with some influential researchers and policy makers in Canada and abroad.
I’ve had many experiences conducting and funding policy-relevant health services and systems research, as well as ensuring that information from research informs efforts to improve healthcare.

Between 1999 and 2001, I was mentored by nationally recognized researchers at the Manitoba Centre for Health Policy to begin to develop my skills at listening to policy makers and crafting analyses to meet their needs for information. One project took two years instead of one! The entire analytical plan was developed and refined by our university-based team in collaboration with policy makers, though we only met face to face every four months or so. Lindstrom et al. indicate that sometimes researchers and policy makers “appear to be living in different worlds”; but in this instance, it didn’t affect the attainment of a successful outcome.

Unexpectedly, the analyses dispelled the rationales used by many policy makers to explain why the perceived supply of family physicians had shifted from a surplus to a shortage over 10 years. Disheartened that we had not discovered more viable reasons for the shift, the team did one last analysis at my insistence. In consultations one year prior, one person made a comment that I hadn’t forgotten. She said, “Ten years ago, we thought we would have enough doctors since the workforce was aging and older doctors are more productive than their younger colleagues.” That one last analysis resulted in an important discovery that has implications relevant to predictive modelling of family physician supply and to foreshadowing the potential impact of any acceleration in the rate of family physician retirement (Watson et al. 2004).

I would consider this work the most important contribution I’ve made to the creation of new knowledge, though I can only speculate on its impact in the real world. A few years later, in 2006, I silently rejoiced when we found the same results using national data and published in a top-tier journal (Watson et al. 2006). Last week, BioMedLib sent me an e-mail indicating that the article has been rating among the top 10 of its type. Admittedly, I had to Google “BioMedLib” to learn the relevance of its list!

What are the lessons for conducting collaborative research that results in an important publication – if that’s your goal? My experiences on that project underscore Lindstrom et al.’s recognition of the importance of a mutual “desire to know” and the “processes we use to frame and solve a problem.” Lindstrom and colleagues are not as explicit as I would be about the importance of taking great care as researchers to listen to policy makers and transform their observations into testable hypotheses. One person, one comment and one analysis led to an important discovery. Lastly, Lindstrom et al. are not as explicit as I would be about the relevance of passion and persistence in the pursuit of greater understanding.

In 2004, another team completed work that I would consider the most influential in which I have participated. The project took eight months instead of four! As researchers, we could have stopped the project after four months since we were close to what qualitative researchers call saturation. But our stakeholders became so engaged in the process that we continued until their enthusiasm waned. The analytical plan was developed entirely by our university-based research team, but its implementation was unexpectedly driven by
stakeholders who wanted to have their say. We were willing to release the reins. In total, we held interviews and focus groups with more than 600 primary care stakeholders.

In this instance, I do not need to speculate on the value of our work. The project involved the development of a results-based logic model for primary care that has been used across Canada and abroad (Watson et al. 2009). It is now available in English, French, Chinese and Spanish. Interestingly, I received an e-mail yesterday (i.e., seven years later) from an international development bank that wants to use the logic model to evaluate the impact of its investments in primary care. Admittedly, I enjoy receiving these types of e-mails as they trigger memories of the excitement our team felt at the level of engagement we provoked (i.e., passion and persistence).

So, what are the lessons for collaborative research that has a lasting impact – if that’s your goal? This real-world experience twisting the lion’s tail underscores Lindstrom et al.’s recognition that some policy-relevant research projects work best with participatory methods. Our team could have created a logic model without extensive consultation, but would that evaluation framework have been so widely used and robust enough to be applicable to community health centres in China (Wong et al. 2010)? What Lindstrom et al. mention, and with which I would whole-heartedly agree, is that successful policy-relevant work requires researchers to be respectful of the needs of policy collaborators and to be patient in unpredictable circumstances.

Between 2001 and 2006, I worked as the associate director of the Canadian Institutes of Health Research (CIHR) Institute of Health Services and Policy Research. My role was to listen to research users in order to fund strategic research to meet their needs for information where there was insufficient or relevant scientific evidence. In 2005, our team commissioned syntheses of international research to inform ministerial decisions about wait time benchmarks in priority clinical areas.

I would consider this project – very fun. The work done by CIHR-funded researchers was very influential to ministerial decisions in December 2005 regarding wait time benchmarks. Last week, the Canadian Institute of Health Information (2011) reported that wait times have improved since “evidence-based benchmarks of acceptable waits” were identified, though improvements were not consistent across procedures or provinces. So, I don’t need to speculate on the direct impact of that research on decisions about acceptable waits and, potentially, the indirect impact on access to healthcare in priority areas.

What are the lessons for funding or conducting collaborative research that has a lasting impact for patients across Canada – if that’s your goal? For some projects, we must breach the boundaries between researchers’ and policy makers’ different worlds to achieve a successful outcome. In 2005, the research teams that responded to the CIHR request for applications did so in rapid response, and the funded teams conducted their work at breakneck speed and completed it on time. As I recall, we posted the request for applications in March, adjudicated proposals in May and set a November due date for the results. Those research teams must have altered their work plans for 2005 and focused, instead, on the immediate needs of ministers and patients across the nation. What about the participatory nature of the collaboration? As I recall, there was no contact between the research teams and the policy makers except for one telephone call, where approximately 50 bureaucrats listened while researchers summarized their results and answered questions. Essentially, the collaboration was on the basis of timeliness, not on participatory interactions or interpersonal relations.
Our team has written about why we thought this initiative was successful (Watson et al. 2007), and in that article we highlight the relevance of strategies mentioned by Lindstrom et al. For example, Lindstrom and colleagues indicate that a successful collaboration “encompasses the interdependence of research and practice and respects different kinds of knowledge and the needs and capacity of all stakeholders.” The wait time project exemplifies mutual respect for different kinds of knowledge, but I think it highlights something not mentioned by Lindstrom et al. – that is, some policy making collaborations involve interdependence, dependence and independence simultaneously and require mutual recognition of the boundaries between researchers and policy makers to achieve a successful outcome.

Let me explain by disclosing more detail about how we averted problems. In 2005, I was told to ensure the request for applications made clear that researchers were not to recommend wait time benchmarks. I am very glad that happened because I certainly wouldn’t have thought of it at the time. This strategy averted what could have been an uncomfortable situation for researchers and policy makers by acknowledging that they have different kinds of knowledge and serve very different roles, and that they needed to be clear about and respectful of the boundaries.

Sometimes researchers are expected to create scientific evidence but not pass judgment or make recommendations. That is, sometimes decision-makers need research teams to synthesize scientific evidence using processes independent from politics and policy making. Good policy making requires a consideration of scientific evidence but also other types of knowledge such as information about societal values. In the wait time project, policy makers were dependent on contributions from researchers who conducted their work independent of the decision-making process. So, the collaborative policy making process is interdependent and simultaneously characterized by dependence, independence and a recognition of boundaries.

What did not do well in 2005 from which we can also learn? We received five executive summaries that totalled more than 70 pages. Unexpectedly, and likely to the chagrin of the researchers, my scientific director and I submitted those summaries to governments but also wrote and submitted one-page summaries we had written since ministers are accustomed to one-page briefs. So Lindstrom et al.’s discussion about living in different worlds and their advice to breach the boundaries is relevant to the wait time project in the context of communicating with target audiences in ways that align with their learning styles.

Fifteen years on, I’ve twisted enough lion tails to say that Lindstrom et al.’s proposed strategies have relatively good face validity. I’ve offered a few more valuable lessons to conclude that their proposed strategies have fairly good construct validity. Yet, these musings about my past experiences suggest that strategies that work for one project don’t necessarily work for others. To make things more confusing, strategies that work for parts of one project (e.g., don’t breach the boundaries regarding independence in offering impartial evidence) don’t always work for other parts of the same project (e.g., breach the boundaries to make your communication style fit your audience).
If this is as true for others as it has been for me, what seems important is that health policy collaborators establish clarity on roles, responsibilities and rules of engagement for specific projects, knowing prospectively that these will vary across time and depending on the nature of a project. Thankfully, I became a healthcare policy researcher at the age of 10, so I have a few more years to practise what Lindstrom et al. preach and become successful enough to determine whether their proposed strategies have predictive validity!

References


A Call for a New Connectivity

COMMENTARY

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ABSTRACT

“Twisting the Lion's Tail” is a valuable and timely contribution to the literature on the need to break down silo thinking and acting. If we stay within a narrow silo by suggesting that researchers generate knowledge, practitioners use the knowledge and then researchers evaluate the results, we will not get to the system thinking view articulated in the lead paper. The author hopes his observations presented in this commentary add to the conversation.

The lead paper (Lindstrom et al. 2011) provides a timely and interesting ontology, epistemology and axiology framework to help leaders think about why gaps exist between research, policy making and operational needs and perhaps how to bridge them. The authors’ key question is set out in the first line of the essay: “If the need for priority setting and coordination of health services research, knowledge translation and health policy making is so important, why doesn’t the necessary convergence occur?” Other key questions that healthcare leaders need to address are simple: What do healthcare consumers need? and How can the system respond? While these questions are simple, the issues that need to be addressed are complex.

Researchers, professionals, executives, policy makers and so on developed their careers in a silo-centred, bureaucratic model, driven by the providers’ control of health services – not the consumers’ perception of
need. In this model, behaviour is honed to enable the survival of the most politically astute.

For the past dozen years, the country has conducted an experiment, albeit unannounced as such, to test the hypothesis that we can spend our way to healthcare excellence. The experiment will soon draw to a close in the wake of the 2007–2008 economic crisis and its attendant fiscal consequences. Had the experiment been a clinical trial, would the researchers say the experiment was a success or a failure? When the United Kingdom invested massive amounts of new money in its healthcare system, it bought transformation. Would the research say this has been the case in Canada?

Not answering these and other health system issues has resulted in a growing sense of unease about the prospects for major healthcare outcome improvement, both in absolute terms and in comparison with other countries. In terms of overall population health status and quality of life, Canada fares well in international rankings. On key measures of healthcare performance – accessibility, value for money and equity – we do not distinguish ourselves. Our primary healthcare ambitions appear to have been scaled down. Discussions of appropriateness and waste are just beginning. Ideological debates dominate the op-ed pages, while concrete and proven strategies for improving performance receive little or no play. Canadian clinicians, health-care leaders and politicians visit renowned centres of excellence around the world and return full of enthusiasm for change. Yet the domestic terrain resembles a feeding and stomping frenzy by powerful elephants (continuing the animal metaphor) who continue the ritual of backing the cash wheelbarrow up to the door, where every inch of silo boundary is hotly contested despite the harm done, lives lost and sums dispensed. In addition to the metaphor used in “Twisting the Lion’s Tail.” I suggest a companion – “Let’s talk about the big elephants.”

The authors refer to the argument by Parsons that accomplishing real change at the system level is very difficult in large part due to deep, underlying principles, values and beliefs. Parsons advises that we “distinguish between reality and our ideas about reality” (2007: 408). Why is healthcare less effective, responsive and efficient than it can and should be? Though there has been progress, the pace of improvement is slow and many problems in quality, including access, remain unaddressed. If we want to accelerate change and improve performance on a larger scale, we have to do things differently. We means actors in the system – researchers, policy makers, regulatory agencies, organizations, boards and senior managers, professional groups etc. All have either a legal or moral authority to demand and promote quality care; some have both. Collectively we have the power to make healthcare accountable for quality and to implement research, policies and operational practices that are fully aligned with a quality agenda. It may not always be easy to confront the historical, structural and behavioural barriers. This requires the courage to abandon old patterns, structures and processes found to be incompatible to a patient-centred approach and the discipline to resist knee-jerk reactions to mini-crisis and fleeting fads. It begins with leading self.
Lindstrom et al. refer to such scholars as Bammer (2005), who encouraged the integration of system thinking and complexity science. To reinforce the point, achieving a true and well-functioning healthcare system depends on multiple partners acting in concert. Today, we continue to fit the world into tidy categories. Convention dictates that there is something called research, something called healthcare organizations and something else again called policy making. They look at different issues, use different language and depend on different types of expertise. Yet we will never optimize progress in any of these domains unless we begin to think of them holistically. Taken together, these core elements of our healthcare system should be tightly integrated so that it is impossible to think of any one without necessarily involving the other two. The later point is well stated in the lead paper: “A system is a set of interconnected parts that function together toward a common purpose.”

These core elements of our healthcare system should be tightly integrated so that it is impossible to think of any one without necessarily involving the other two.

Looking only at the domains that we’ve arranged neatly in the silos of research, policy and operations, we fall victim to the law of unintended consequences. We pull research levers and are surprised by the lack of traction and take up. We pull economic levers and are surprised by their unexpected effects on health or the operational environment. We pull healthcare levers and are shocked to find spiralling costs that the economy simply cannot sustain. This kind of blinkered thinking is something we can no longer afford and, more importantly, does not create added value.

Challenged by quality and safety threats, an aging population, rising costs and limited resources, we are reminded time and again that healthcare is in crisis. We collectively have libraries full of articles, research papers, royal commissions, reports and studies on healthcare challenges and opportunities. Unfortunately, many grow moss and never truly see the light of day.

Lindstrom and colleagues discuss the boundaries (silos) and a growing awareness of the need to focus on the interface or borders of boundaries that exist among a myriad of stakeholders involved in the health system, in particular the continuum from health services research to policy making. What is not taking place at the boundaries is the asking of wicked questions about system and policy in order to bring the assumptions we hold to the surface and articulate how these shape our actions and choices. Without exploring our assumptions, we will continue to be hostage to our silo indifference to failure and will therefore limit our improvement potential. When we are able to explore these assumptions with others, we have the opportunity to see patterns and differences in our collective thought. These patterns and differences can be used to discover common ground and to find creative alternatives for stubborn problems. Their value lies in their capacity to be provocative, to open up alternatives, to invite inquiry and to surface the fundamental issues that need to be addressed to make improvement leaps. Often we find paradoxes or tensions in the implicit assumptions we hold about an issue, context or organization. Wicked questions articulate these embedded and often contradictory assumptions – this is what makes them “wicked.” By engaging people in a new dialogue, wicked questions invite exploration.
into inconsistencies in thought that have held us back from achieving our purpose, and can be used to promote a search for interdependent solutions to research, policy and organizational challenges.

The healthcare system is large and complex and is inherently prone to inertia. Overcoming this would be a challenge even if Canadian healthcare were less conservative, more information rich and less structurally fragmented. It is all too easy to revisit the same issues, engage in the same conversations, appeal for money as the solution to all problems and hope that repetition will lead to a fundamentally different result. Ron Heifetz (1995), in his seminal work on adaptive leadership, points out that the test of true leaders is in how they respond to adaptive problems – those problems that challenge us to learn an entirely new way of “being” and “doing.” Most crises in human systems cannot be solved with an easy technical fix – they are adaptive problems. Nonetheless, people usually want leaders to answer with a “quick fix,” and many leaders, eager to please, respond accordingly by taking the problem on their shoulders and coming up with solution that typically alleviates a symptom, not the underlying issue. Heifetz points out that “a major pitfall of leadership is assuming that somehow you're the one who's got to come up with the answers – rather than develop the adaptive capacity, the capacity of people, to face hard problems and take responsibility for them” (1995). Adaptive leadership involves raising tough questions, rather than providing answers; it means framing the issues in a way that encourages people to think differently, rather than laying out a map of the future; it means co-creating with people their new roles, power relationships, and behaviors, rather than orienting them in a new direction and giving them a big push.

Adaptive leadership also means orchestrating conflict between the silos of research, policy and operations, rather than quelling it. Conflict is a tremendous source of creativity. Heifetz (1995) points out that leaders in the midst of adaptive change must be able to artfully guide their people through a balance of disorientation and new learning. “They need to hold the group in an optimal state of tension and disequilibrium that stimulates a quest for learning, without jarring people so much that they simply aren't able to learn.” Dissatisfaction with the status quo is the first step toward progress. Every element of my overview and assessment has been uttered a thousand times in cafeteria conversations and behind-the-back lamentations. We need to be more forthright and transparent in our dialogue and unafraid to confront some harsh truths. The language of concealment and a too-genteel discourse create complacency and dull the perception of our joint shortcomings. Having a career that spans the silos of healthcare, I ask myself these questions:

- Do government ministries and departments talk to each other in the right language to create a holistic conversation on the broader determinants of health?
- Do consumers’ “modest” expectations of healthcare delivery create funding and policy complacency?
- Do professional licensing bodies incorporate quality principles, tools and techniques as part of their core knowledge requirements?
- Do boards make it clear that the adoption of quality improvement practices is a core expectation? Do they drive improvement beyond the requirements of government and external accreditation, regulatory and licensing bodies?
- Do health science education programs emphasize inter-professional collaborative practice and teach quality theory and practice from the perspective of teamwork and interdependency?
• What is the hierarchy of values among professionals? Does quality trump other professional values such as autonomy and group loyalty?
• Do researchers perceive themselves to be part of the system? Do they subordinate their own academic interests to those of the system?

Let’s twist the lion’s tail to ensure that policy making becomes vibrant and dynamic. Let’s push for horizontal connectivity and integration between the silos. Let’s launch a relentless drive on disciplined system thinking and documentation to support decision-making, given that policy leadership plays a crucial role in scanning the future – what lies ahead. Finally, let’s ensure that research, organizational priority setting and policy making are nimble and keep up with change – local, national and global circumstances – and let’s move to a new place of rapid risk analysis and recalibration.

As Peter Senge suggests, “By coming together in open and honest dialogue, we can integrate our fragmented, individual perceptions of reality into a more complete and accurate representation of our current circumstances, our shared reality” (2006).

Begin by asking, what do healthcare consumers need, and how can the system respond?

There is no status in the status quo.

References
Evidence Over Barriers: Important But Not Enough

COMMENTARY

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ABSTRACT

Overcoming the boundary conditions that impede the flow of evidence derived from research from academia to healthcare decision-makers in government and their agencies continues to be a challenge. But even the reduction/elimination of all such barriers and perfect collaboration are unlikely to yield what those of us in the “real world” yearn for, doing the right things right – policy and other decisions perfectly informed by evidence of what works and what doesn’t to achieve a defined outcome. For that to happen, the calculus of decision-makers would have to exclude or evidence would have to trump political considerations, both large P and small p, an unlikely accomplishment in British Columbia or anywhere in our so-called healthcare system. That’s reality!

Lindstrom, MacLeod and Levy (2011) posit that in British Columbia, policy decisions bearing on the organization and function of the so-called system of healthcare services are not well informed by the results of relevant research. They attribute this deficiency to a number of factors previously identified by many commentators on knowledge transfer, but they claim that failure to recognize and permeate the domain or cultural boundaries is a factor both significant and largely neglected. Three distinct cultures are referred to: government, by which they mean the BC Ministry of Health Services; health authorities, specifi-
cally the Provincial Health Services Authority (PHSA), one of six in British Columbia with responsibility for specialty agencies, programs and services and liaison with the extra-governmental sector; and academia, meaning primarily those outside government who do health services research. In addition to the familiar knowledge gap/boundary between the ministry, PHSA and academia, the authors emphasize the importance of overcoming ontological (reality – what there is to know), epistemological (how we approach reality and come to know) and axiological (the value system we use in knowing) boundaries to achieve the collaboration needed among actors in the three cultures to apply knowledge derived from research to policy and other decision-making.

That policy and other decisions by governments and their subsidiary agencies are poorly informed by evidence derived from research is well known. It is also not news that this serious and long-standing problem is far from unique to health and health services and also that it extends well beyond the borders of British Columbia and Canada. The authors’ identification of philosophical boundaries in addition to the knowledge gap itself adds more dimensions than have been appreciated heretofore to the problem of transferring knowledge “bench to bedside” or, in this case, from theory to policy and decision-making. That said, the essay would be a more important contribution to resolving this problem had the authors coupled their identification of the three theoretical boundaries with the suggestion of the following:

- Ways and means of quantifying the relative contributions of ontological, epistemological and axiological differences to the thickness of the boundaries between those who work in government, regional authorities and academia
- Practical actions that might be taken to overcome those differences, make the boundaries thinner and more permeable and thereby foster the mutual respect, co-operation and collaboration they rightly point out to be necessary if the healthcare “system” is to work better

Sadly, in the absence of any link between the problem’s sources and potential remedies, the essay constitutes but another contribution to an already voluminous literature bearing on why the results of health services research seem to inform health policy and related decisions less than we observers (especially researchers in the field) think they should. Despite its containing a section addressed specifically to “health policy making in the real world,” the essay omits mention of practical ways and means of applying the complexity theory and participatory action research recommended for use in the context of healthcare’s “complex system of interactions.” Here I am reminded of a maxim by Larry Wilson, a wise mentor and decision-maker, who frequently said when presented with arguments expressed in anything but plain language, “Fine words butter no parsnips!” (personal communication, early 1980).

The lead essay is thoughtful and erudite but written in language and in a style that will not easily cross any of the boundaries between academia and the real world out there (including folks in British Columbia’s government ministries and regional health authorities). Change is not a process readily embraced in any culture. This may be especially so by the providers of healthcare services given the many interdependent but very different “players” involved, each with its own deeply vested interests. I am thinking particularly of hospitals and physicians, the two services that have stood now for decades at the top of the pecking order under what Canada calls medicare. Kings of the hill will always resist
any change that would force them to share the hilltop. But it applies as well to the many other organizations and professions that have carved out their now well-worn niches in the collection of services we soothingly refer to as our healthcare system.

Standing in opposition to this large and diverse status quo crowd are governments and their agencies, regional health authorities among them. The latter were put in place variably in all provinces to bring decision-making closer to the coal face for many decisions of the kind that directly impact the people seeking and providing healthcare services. Interestingly, in listing the levels and cultures affected (political, bureaucratic, governing, managerial, administrative, professional and institutional) and stakeholders (politicians, civil servants, health administrators, physicians, clinicians and staff), the authors omit mention of the culture/domains of the recipients of healthcare services — patients and people seeking to avoid that status. In principle, one of the major purposes of health authorities is to enable different regions to adjust policy decisions and their implementation to meet the particular needs and preferences of the population within them. In practice, however, the relatively small operational differences that exist among regional health authorities appear to reflect the influence of those who provide healthcare and related services more than the influence of the people who receive them. The replacement of provider-centric healthcare with people-centredness is as overdue at the regional level as it is elsewhere in the system.

An example given approvingly by the authors of an attempt to bridge “knowledge boundaries” is a case in point. The General Practice Services Committee is described as being made up of four members appointed by the government and four by the BC Medical Association with the concurrence of the Society of General Practitioners. Its mandate is to find ways to support “full-service family practice.” Most of us would call what's described in the essay as comprehensive primary care. We conceive it to encompass, in addition to physicians' services, those provided by nurse practitioners, nurses, rehabilitationists, pharmacists, dietitians, counsellors etc., the services of a complete team of health professionals. Not only does none of the latter serve on the committee, it is bereft of representatives of the people served. More’s the pity. It seems the ontological, epistemological and axiological perspectives of the regional population are of little or no concern to the General Practice Services Committee.

Is it possible that the relatively feeble contribution of evidence derived from health services research in health policy and related decisions can be attributed to factors other than a failure of knowledge transfer? The authors provide a clue to at least one alternative when they refer to the axiological barriers (the value systems) among their three players, the government, regional authority and academia. Values, after all, lead on to the motives that drive decisions.

At the most senior level, ministers and other elected representatives are strongly motivated to make and support decisions that they think will enhance their chances of re-election, such as maintaining or expanding existing health services, and to avoid those likely to do the opposite, such as raising taxes. A recent editorial in The Globe and Mail ("Expanding Prisons. Buy Something Great Instead" 2011, February 19) illustrates the point; instead of spending undisclosed billions on expanding prisons, an action apparently calculated to garner votes in Canada's always-imminent federal election, the government might, for example, establish an educational endowment for every child and double the budgets of the three major research councils,
investments with solid evidence-informed payoffs but harder to sell politically and certainly yielding results well outside the time horizon of even the usual four-year election cycle. Politicians in government share the same spectrum of value systems as other Canadians, but remaining in power dominates other factors in the calculus of decision-making. Public servants, by virtue of their positions, are obliged to try to implement the decisions of and please their political masters. Health authorities, for the most part, are both de jure and de facto creatures of their provincial governments, the latter by virtue of the derivation of the funding they are granted to implement decisions. Those decisions are, in any case, highly circumscribed either by inviolable “earmarks” or foreclosed by exclusion, such as physician rates of recompense, for example. So here too the axiological perspectives of its members notwithstanding, political considerations (large P) undoubtedly matter a lot in the decisions of provincial health authorities, especially in the run-up to an election (as in British Columbia in 2011). Because disruptions in what Canadians have come to regard as publicly provided health services are nearly in the same league as tax increases as electoral “downers,” small–p political considerations are also important, even predominant, especially around election time. Providers and their media-savvy organizations know full well that when regional authorities must make decisions that might either reduce funding or even shift significant sums money from one program to another, they must avoid provoking media reports of work-to-rule by anaesthetists, strikes by nurses, longer wait lists, gurneys in the emergency room and the like. Those providers and their organizations are keenly aware of Robert Evans’s (2010) trenchant first lesson, “Every dollar of expenditure on health services (or anything else) is a dollar of someone’s income.” No provider, individual or organization will accept without a well-publicized rhetorical fight, usually of the “death-in-the-streets” genre, any decision that might result in no increase much less a decrease in their incomes.

I have no doubt that the relative impermeability of the boundaries between government, regional authorities and academia identified by the authors of the lead essay contributes to the too-modest incorporation of evidence derived from research into policy and other decisions relating to healthcare. Understanding the nature of those boundaries is a good thing that may well lead to greater collaboration between researchers and decision-makers. But it remains that as our so-called system is structured in every Canadian province, the strong self-interest of its several and varied players in preserving their incomes, power and influence will remain a dominant factor in decision-making, at least until the “system” becomes a real one with a single, effective governance focused on optimizing the health of the population. Such a transformation does not appear to be on any visible horizon. Sadly, I have become reconciled to the reality that political considerations, both large P and small p, will remain much more robust contributors to policy and operational decisions in healthcare than is evidence, no matter how effectively it is transferred or how collaborative the relationship between people in academia and government and its agencies.

References


Addressing Primary Care Needs: A Participatory Approach to Collaborative Policy Development

COMMENTARY

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ABSTRACT
To clarify priorities for a continuous quality improvement patient care strategy, the Cape Breton District Health Authority (CBDHA) commissioned a collaborative and comprehensive assessment of real-world practice needs of primary care practitioners. A team of community physicians, nurses, CBDHA staff and consultants designed a questionnaire, which was completed by 44% (n = 53) of the target providers. The results were then vetted in three discussion groups of randomly selected providers (n = 21), with an overall primary provider participation rate of 49%. The most frequently cited clinical improvement needs and opportunities were enhanced team care (85%), more rapid specialist consultations on mental health problems (76%) and participation in quality improvement initiatives (71%) and audits (67%). The two principal disease targets for improved management were diabetes and mental health disorders. Ideal clinical team structure was seen to include dietitians, social workers, nurses and physicians, but this was balanced by concern as to how such teams might be trained and remunerated. Improved office efficiency was also a priority for 73% of providers, although 52% were users of electronic medical records (EMRs). Experienced EMR users were generally happy with their systems’ performance; new users, however, had great concern with low interoperability and inadequate operational support. Discussions also confirmed the opinion of 71% of the survey respondents who felt that seeing patients within one week of demand for care was appropriate and that patient expectations of more timely access were unrealistic. Motivating patients’ behaviour change and dealing with their social concerns were considered overly time consuming and were thought more appropriately managed by non-physician professionals. Overall, the high participation rate and enthusiastic discussions suggest the primary care practitioners of CBDHA are engaged in understanding their practice issues and opportunities and have a strong desire to make things better. On the other hand, innovative patient-centred changes may represent more than a small challenge if physicians do not, for example, accept that time to access is patients’ most compelling quality issue. Such value dichotomies indicate a need for better concordance of all stakeholders’ perceptions of key issues so that realistic strategic goals can be set, and met. Providers’ perception that collaboration will improve care quality highlights a specific opportunity for a care strategy that fosters and tests team-based initiatives, including patient self-management of behaviour change and flexible EMR support. In summary, primary care providers and policy makers within CBDHA believe that things can be better, and they are looking to collaborative actions guided by ongoing research to grasp that future.

To view the full article, please visit http://www.longwoods.com/content/2356.
The lead essay we wrote (Lindstrom et al. 2011) started with a capacity-building grant from the British Columbia Michael Smith Foundation for Health Research, the goal of which was to guide the BC Provincial Health Services Authority (PHSA; see http://www.phsa.ca) on improving its performance in translating research into policy. PHSA is a research-intensive organization employing approximately 1,000 researchers, benefiting from more than $25 million annually in philanthropic funds and attracting a further $120 million in grants and contracts to support the research enterprise. It is a prime example of a research and educational enterprise with the capacity to “twist the lion’s tail.”

We thank all of the commentators for their thoughtful and provocative responses to the essay and are delighted that their perspectives have contextualized and expanded on the key concepts we touched on. We are struck by the extent to which our metaphor resonated with the commentators and the ensuing modern-day bestiary that was spawned. (According to Wikipedia [2011], “Bestiaries were made popular in the Middle Ages in illustrated volumes that described various animals, birds and even rocks. The natural history and illustration of each beast was usually accompanied by a moral lesson.”) Three of the commentaries make reference to elephants, and there is a pickle thrown in for good measure! Of course, all metaphors are just that, and we appreciate that the limits have been characterized by the commentators. Battista (2011) relegates the lion to a “static creature, constrained by inertia.” The lion – reality – is neither static nor
constrained, any more than life itself is. Battista correctly points out that health technology assessment (HTA) as a “key cohesive element” is missing. The reason is that a provincial HTA strategy remains underdeveloped in British Columbia relative to other Canadian jurisdictions. We support his suggestion that one way to increase HTA capacity and exchange knowledge is to create a pan-Canadian network. However, consolidating HTA activity alone will not be adequate. While HTA has had some notable successes in Canada, its scope is too narrow to serve as the vanguard of system change.

Brown, Baker, Klein and Veillard (2011) promote a more inclusive approach to the translation of evidence into policy by re-conceptualizing policy as a guide for decision-making. They reinforce the need to “pull” rather than “push” evidence into the policy process. They suggest the need for increased synthesis of evidence from multiple rather than singular studies, and the need for greater inclusivity of evidence (intellectual capital) such as tacit knowledge and citizen engagement. We support these suggestions and agree that a much “stronger hand” is needed to manage the evidence and shift the management culture accordingly. Emphasizing a return on investment will certainly help and is consistent with the Canadian Institutes of Health Research (CIHR 2011) position, as expressed in its strategy on patient-oriented research (SPOR).

Watson (2011) muses on her experience in the real world of research and policy making. We are pleased to hear that we largely met her tests of face and construct validity. And, of course, we would like to hear whether predictive validity has been met if she would be willing to revisit this topic in a few years. We appreciate Watson’s appeal for passion and persistence and are heartened that these important values (as part of our reference to axiology) do indeed have practical relevance, as she highlighted. She reinforces the need to “be respectful of the needs of policy collaborators and to be patient in unpredictable circumstances.” Yes, but are there ever predictable circumstances in the usual healthcare cauldron?

"This is the real issue and is at the heart of our essay – moving from rhetoric to action."

Herbert and Best (2011) highlight the need to converge shared values and systems thinking. They propose a six-point framework to guide innovation and implementation through partnerships of key stakeholders. Emphasizing values is important; unfortunately, political expedience often trumps values in the world of electoral politics. That transformative leadership has emerged from our essay as a critical challenge for innovative change is encouraging. We thank these authors for expanding on our arguments using a new and interesting lens through which to view challenges. We need to clarify, however, that we were not implying that health services research involves studying “independent domains”: rather, we see them as interdependent domains. We concur with their statement that “the problem is not that we lack understanding of what must be done for good collaboration; the problem is that we don’t do it.” This is the real issue and is at the heart of our essay – moving from rhetoric to action. Herbert and Best place implementation at the centre of their six-point model, and that is exactly where it belongs. More “practice-based evidence” will definitely help, as they suggest.

MacLeod’s commentary highlights a key point in reference to what is currently not occurring at the boundaries – asking “wicked
questions” (MacLeod 2011). This is critical if, as MacLeod so persuasively states, we are to surface underlying mindsets and assumptions, particularly those that are hidden to us. The inherent paradoxes or tensions that characterize such questions do not allow quick or simple answers but require what is described as “adaptive leadership.” We wholeheartedly agree, even though we intentionally did not expand on the role of leadership, particularly transformative leadership as raised by Herbert and Best. We are pleased that the commentators have made this challenge explicit.

MacLeod’s observation that the current model is designed to enable the survival of the most politically astute underscores the need for new collaborative models. The seven questions he raises are excellent; however, perhaps an eighth should question the self-interest of professional organizations in maintaining the status quo.

Martens (2011) introduces a pickle metaphor to illustrate another aspect of knowledge boundaries. We agree with her observation that the idea of participatory research is not new in health services research; however, it is still talked about a lot more than it is practiced in many research circles. Space limitations precluded us from providing a fuller discussion around knowledge boundaries and what transpires there (the role of boundary objects). We certainly agree that any successful integration of research and policy decisions must be based on mutual trust. Perhaps this is easier to achieve in Manitoba than in British Columbia. Getting the university more engaged with research issues of practical importance does require a “sea-change.” This is a necessary step that may have been achieved in Manitoba but certainly not elsewhere. Martens opposes making planners or policy makers into mini-scientists, but surely the crux of our problem is that such individuals generally do not understand enough about the real-world complexity of healthcare and usually do not know how to frame a tractable research question. As we see it, “the essence of tyranny is the denial of complexity” (Jacob Burckhardt, historian, 1818–1897).

Sinclair (2011) protests the absence of links between the problems we raised and possible remedies. With respect to Sinclair’s observation that we failed to include the recipients of healthcare among other stakeholders, we did ensure that this important stakeholder group was recognized and included at the outset in the context of health services research. We, as other commentators have also noted, concur with Sinclair’s challenge that trumping political considerations is a mammoth (another member of the bestiary) task, one that may be unachievable in any jurisdiction. Perhaps he is resigned to inertia within the present system. The real problem is that the system does not act like a system with systemic objectives. In an ideal world it would be possible to de-politicize the healthcare system and have it protected from the vagaries of electoral politics. We agree that it is time to move from more descriptions of the problem to actions and, by extension, to participatory action research. We also agree with Sinclair’s observation that patient engagement is a critical element and that the systems we have now are, by their nature, provider centric. On this point, CIHR has spent a great deal of time talking up SPOR, making a particular argument about the “second death valley,” the gap...
between what we know and what we actually manage to achieve in changing clinical practice and decision-making (Reis et al. 2008). The “first death valley” is the gap between basic discovery research and translation into clinical recommendations. In this case, we are really talking about the second death valley, particularly the problem of making the transition in clinical practice and decision-making. However, CIHR spends relatively small amounts on applied health services research. This does little to tame the lion.

Our goal of drawing attention to and generating further discourse on this important topic has been met. Consistent with the issues that commentators have highlighted, transformative leadership and bold action are required, particularly to break down the barriers between politics and the health system, action that will take us away from the banal middle ground into far more innovative territory. We conclude with one addition to our bestiary of metaphors – “Ain't nothin' in the middle of the road but yellow stripes and dead armadillos” (Jim Hightower, former Texas agriculture commissioner).

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ABSTRACT
To clarify priorities for a continuous quality improvement patient care strategy, the Cape Breton District Health Authority (CBDHA) commissioned a collaborative and comprehensive assessment of real-world practice needs of primary care practitioners. A team of community physicians, nurses, CBDHA staff and consultants designed a questionnaire, which was completed by 44% (n = 53) of the target providers. The results were then vetted in three discussion groups of randomly selected providers (n = 21), with an overall primary provider participation rate of 49%. The most frequently cited clinical improvement needs and opportunities were enhanced team care (85%), more rapid specialist consultations on mental health problems (76%) and participation in quality improvement initiatives (71%) and audits (67%). The two principal disease targets for improved management were diabetes and mental health disorders. Ideal clinical team structure was seen to include dietitians, social workers, nurses and physicians, but this was balanced by concern as to how such teams might be trained and remunerated. Improved office efficiency was also a priority for 73% of providers, although 52% were users of electronic medical records (EMRs). Experienced EMR users were generally happy with their systems’ performance; new users, however, had great concern with low interoperability and inadequate operational support. Discussions also confirmed the opinion of 71% of the survey respondents who felt that seeing patients within one week of demand for care was appropriate and that patient expectations of more timely access were unrealistic. Motivating patients’ behaviour change and dealing with their social concerns were considered overly time consuming and were thought more appropriately managed by non-physician professionals. Overall, the high participation rate and enthusiastic discussions suggest the primary care practitioners of CBDHA are engaged in understanding their practice issues and opportunities and have a strong desire to make things better. On the other hand, innovative patient-centred changes may represent more than a small challenge if physicians do not, for example, accept that time to access is patients’ most compelling quality issue. Such value dichotomies indicate a need for better concordance of all stakeholders’ perceptions of key issues so that realistic strategic goals can be set, and met. Providers’ perception that collaboration will improve care quality highlights a specific opportunity for a care strategy that fosters and tests team-based initiatives, including patient self-management of behaviour change and flexible EMR support. In summary, primary care providers and policy makers within CBDHA believe that things can be better, and they are looking to collaborative actions guided by ongoing research to grasp that future.
In the lead paper of this issue of Healthcare Papers, Lindstrom, MacLeod and Levy (2011) highlight the relative absence of the prioritization and coordinated knowledge translation of research findings into integrated and applied health policy in contemporary Canada. They pose a central question of why these processes are not regularly happening and suggest several possible answers, including overall health system complexity, and lack of clarity in leadership, goal setting and power sharing. In consequence, they suggest a need for a going-forward strategy that is collaborative and inclusive of interdependent research and practice, different types of knowledge production and the needs of all stakeholders.

Members of the Department of Population Health and Primary Care of the Cape Breton District Health Authority (CBDHA) have also perceived the value of, and desire for, a collaborative and inclusive approach to developing and implementing effective population health policy. Specifically, they have recently focused on better understanding community practitioners’ real-world challenges and experiences in improving patient care and outcomes. Their goal is to gain knowledge that will inform, and translate into, the development of clear, evidence-based strategic priorities to support practitioners and patients in a quest for a continuous quality improvement model of primary care and outcomes.

To define the key contemporary issues and opportunities for developing an optimal primary care model, a comprehensive provider needs assessment was initiated with a partnership of CBDHA staff, active primary care practitioners and the consulting assistance of the Patient Health Management Alliance. This paper outlines the template, processes and outcomes of this evidence-informed, collaborative policy development project.

**Methods**

In the fourth quarter of 2010, two community-based primary care physicians, one urban and one rural, participated in the development and validation of a project research protocol and accompanying data collection tool, in collaboration with several staff of the CBDHA Population Health and Primary Care Department and the members of the Patient Health Management Alliance consulting team. The resulting data acquisition tool took the form of a paper-based questionnaire, whose major areas of interrogation were the practice and patient profiles of community-based care providers; their current care-improvement strategies, with assessments of their impact; and the key needs and challenges to make things better for patients and practitioners. The survey questionnaire underwent pilot testing by several primary care providers within CBDHA and was reviewed by Doctors Nova Scotia to ensure relevance and coherence with other quality improvement initiatives within Nova Scotia. The finalized protocol and needs assessment survey tool were also reviewed and approved by the CBDHA Research Ethics Board.

Prior to implementation of the questionnaire data-collection phase, a project communications strategy was initiated to inform potential participants and to promote participation. Providers were informed via oral and written communications, beginning approximately one week in advance of the distribution of the survey. The questionnaire was then distributed to all of the physicians, nurse practitioners, family practice nurses and dietitians working in a primary care setting within CBDHA (n = 121).

Following the collection and collation of the questionnaire results, which were completed within four weeks of its distribution, a randomly selected sample of primary care practitioners within CBDHA were
invited to participate in one of a series of three focus groups to receive and evaluate the survey findings. For this second phase of the survey, one practitioner focus group was conducted in the rural setting of Inverness and two others in the urban area of Sydney.

Participating practitioners, both in the written questionnaire and discussion phases of the study, were made aware that the key findings and implications of the project would be fed back to them, as well as shared with the executive and staff of CBDHA for strategic planning purposes. It was also recommended by the project planners that new knowledge be promulgated via standard medical education portals, including formal presentations and publications.

Results

Practice and Patient Profiles

Forty-four percent of targeted practitioners responded to the written questionnaire, and 32% participated in the focus group discussions. Overall, 59 unique practitioners, or 49% of all of the region’s primary care practitioners, participated in one or both phases of the needs assessment project. The great majority of respondents, slightly more than 76%, were community-based primary care physicians; the remaining respondents were nurse practitioners and family practice nurses (Todd et al. 2007).

This relatively high participation rate suggests a high degree of provider interest in improving primary care. It also favours the participant sample, and the responses, as being representative of all the practitioners within CBDHA. The sense of high practitioner interest and involvement was also supported by the candid expressions of opinions and ideas for improvement voiced during the focus group sessions.

The great majority of questionnaire respondents (79%) were in urban practices in Sydney, North Sydney, Sydney Mines, Glace Bay or New Waterford, and the majority (60%) had been in primary care medicine for more than 15 years. They managed large patient populations with chronic diseases,

Table 1. Overview of primary care practitioners’ current practice patterns

<table>
<thead>
<tr>
<th></th>
<th>No/never</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>I could do better with support</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have the necessary support (tools/techniques or resources) to communicate effectively with my patients.</td>
<td>0</td>
<td>15</td>
<td>75</td>
<td>11</td>
</tr>
<tr>
<td>I measure/evaluate how adherent (compliant) my patients are with their medications.</td>
<td>0</td>
<td>15</td>
<td>75</td>
<td>11</td>
</tr>
<tr>
<td>For patients who cannot afford therapies, I know how to get them improved medication access.</td>
<td>0</td>
<td>15</td>
<td>75</td>
<td>11</td>
</tr>
<tr>
<td>I am able to easily integrate clinical practice guidelines into patient care.</td>
<td>0</td>
<td>15</td>
<td>75</td>
<td>11</td>
</tr>
<tr>
<td>I have timely access for my patients at the closest Diabetes Education Centre (DEC).</td>
<td>0</td>
<td>15</td>
<td>75</td>
<td>11</td>
</tr>
<tr>
<td>I encourage my patients with chronic disease to attend Your Way to Wellness (chronic disease self-management program.)</td>
<td>54</td>
<td>23</td>
<td>13</td>
<td>10</td>
</tr>
</tbody>
</table>
with 74% performing 100–250 patient visits per week in solo (41%), group (40%) or interprofessional (19%) practice settings. Despite this relatively high patient load, 38% of practitioners reported that they were still accepting new patients into their practice. A summary of contemporary practitioner practice patterns is illustrated in Table 1.

Current Challenges and Care Gaps
Patient load and complexity (64%) and lack of adequate resources for chronic disease prevention and management (38%) were cited as the principal practice challenges, although a large majority (71%) of practitioners felt that their patients could be appropriately seen within one week for a routine appointment or urgent-care need. Complementary to this questionnaire finding, zealous opinions of practitioners during the group sessions suggested that patient expectations of needing to be seen “the same day” or “when they want to be seen” were too high and unrealistic.

Chronic diseases, in general, and diabetes and mental health disorders, in particular (Figure 1), were the health conditions of greatest management concern among the community-based practitioners in this survey. For example, in the focused discussions, a consensus was that approximately one third of practice time was spent dealing with mental health issues.

The relative weight of the most frequently cited specific practice needs – to improve the management of diabetes and mental health disorders – are outlined in Figure 2. However, although activities such as motivating patients’ behaviour change and or dealing with social issues were highly desired (see Figure 2), they were considered too time consuming to handle within routine office visits. In general, physicians preferred that other health professionals take on those roles and challenges.

Concepts of team care and inter-professional practice environments, which are some-
times considered challenging or not of value and are often less-than-universally supported by physicians (Ahmed et al. 2009; Health Care in Canada Survey 2009), were remarkably well received by the CBDHA practitioners in this survey (Figure 3). Both questionnaire respondents and focus group discussants seemed to recognize that they “can’t do it all on their own” and highly supported (85%) team care as an approach to better meet patients’ needs.

Among the respondents who answered the question on team care, 47% declared they worked in a team environment with complementary skills, shared goals and planning and shared patient care (see Figure 3). However, as is also illustrated in Figure 3, there is a big difference between actual and desired team care in the degree of measured practice patterns, patient outcomes, team performance variables such as member satisfaction and interaction, and links between the clinical and team performance measures. The bottom line seems to be that, while everybody realizes the value of and desires such team care networks (Huerta et al. 2006) and measurements (Ahmed et al. 2010), few actually have the resources, or commitment, to actually develop the key practice and outcome measurements and communicate them (Hébert 2010; Montague et al. 2010).

The focus group discussants felt that the ideal team structure should include dietitians, social workers and nurses working alongside physicians. One concern of fee-for-service physicians about the creation of inter-professional teams was the financial and practice management–related responsibilities associated with hiring such health professionals on staff.

Interestingly, and unlike the very successful clinical team structure of the Improving Cardiovascular Outcomes in Nova Scotia (ICONS) disease management project (Montague et al. 2003), the recommended membership list for optimal clinical care teams did not include community-based pharmacists. This issue of optimal healthcare team structure is potentially important and deserving of more research since it appears that the structure of health teams, or care networks, may be integrally related to their efficacy in changing patient behaviours and clinical outcomes (Centola 2010).
Strategies for Improved Care

A summary of practitioners' current utilization rates of care-enhancing strategies and their sense of the impact of such strategies are displayed in Tables 2 and 3, respectively. Fifty-two percent of questionnaire respondents indicated that they were using electronic medical or health record systems. Although some experienced users were generally happy with their systems, new users expressed concern, specifically in reference to a lack of interoperability between the currently available provider systems, a lack of in-office support to address beginner learning needs and inadequate telephone-based technical support for software glitches.

A large number of practitioners indicated desire to participate in or learn more about quality improvement initiatives, including improving office efficiencies (73%), diabetic patients' collaboratives (71%), practice audits (67%) and patient recall and reminder tools (48%).

The desire for support of non-physician allied health professionals in community-based clinical activities was repeatedly vocalized during the focus group conversations. Specifically, there was a desire for the support of well-women’s clinics, well-baby immunizations clinics, mental health nurse and social worker specialists, dietitians and training and counselling in chronic disease management.

Also, in regard to priority initiatives for improving the quality of patient care and outcomes with specific diseases, practitioners repeatedly cited diabetes and mental health management as the most important targets for intervention. Suggestions on ways to improve patient care and to better support providers included enhanced CBDHA-to-provider communication – in particular, communication with rural sites and sites distant from

Table 2. Practitioners’ utilization of / interest in care-enhancing strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Already doing this %</th>
<th>Want to learn more %</th>
<th>Not interested %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient registries</strong> / lists, paper-based or EMR (e.g., stratifying my patients by age, sex, diagnosis or disease)**</td>
<td>35</td>
<td>44</td>
<td>20</td>
</tr>
<tr>
<td><strong>Patient recall</strong> / reminder tools (e.g., for follow-up appointments / reminders about routine testing / screening)**</td>
<td>44</td>
<td>48</td>
<td>7</td>
</tr>
<tr>
<td><strong>Practice audits</strong> to measure / monitor my practice patterns and patient outcomes</td>
<td>13</td>
<td>67</td>
<td>20</td>
</tr>
<tr>
<td><strong>Chronic disease management / collaborative practice financial incentives</strong></td>
<td>52</td>
<td>44</td>
<td>4</td>
</tr>
<tr>
<td><strong>Electronic medical / health record</strong> system</td>
<td>52</td>
<td>25</td>
<td>23</td>
</tr>
</tbody>
</table>

EMR= electronic medical record.

Table 3. Practitioners’ views on impact of current care-enhancing strategies

<table>
<thead>
<tr>
<th>Impact of Strategy</th>
<th>Positive %</th>
<th>Negative %</th>
<th>No impact %</th>
<th>Don’t know %</th>
<th>N/A %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice efficiency</td>
<td>51</td>
<td>9</td>
<td>17</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Patient care</td>
<td>53</td>
<td>8</td>
<td>21</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Personal satisfaction</td>
<td>58</td>
<td>8</td>
<td>15</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Patient satisfaction</td>
<td>50</td>
<td>2</td>
<td>13</td>
<td>23</td>
<td>12</td>
</tr>
</tbody>
</table>

N/A= not applicable.
Cape Breton Regional Hospital; team development opportunities; educational support for discharged patients and patients with chronic diseases; the creation of an obesity management clinic; journal clubs and workshops for electronic health system users; and increased support for locum tenens.

There is a need for a more concordant alignment of practitioners’, patients’ and policy makers’ perceptions on key issues—so that realistic strategic goals can be set.

Conclusions and Implications
The data from this study suggest that primary care practitioners and policy making authorities appear very engaged in understanding their practice issues and opportunities, and have a strong desire to make things better through collaborative policy making and implementation. On the other hand, given that many providers have been in practice for many years, the introduction of innovative patient-centred changes, such as advanced access scheduling, may represent more than a small challenge if providers and policy makers cannot come to accept that time to access is patients’ most compelling quality care issue. There is a need for a more concordant alignment of practitioners’, patients’ and policy makers’ perceptions on such key issues—so that realistic strategic goals can be set.

Although challenged to meet their individual patients’ practical and daily health and related social issues, including the need to motivate patients toward healthier lifestyle behaviours, primary care practitioners perceive an opportunity to work collaboratively to accomplish more than is possible through only their own resources. They also perceive the value of quality improvement initiatives and functional electronic care systems as complementary resources. There is a need for strategic team-based chronic care initiatives, to include patient self-management in setting and attaining behaviour change goals, with flexible electronic care support. A companion need is an ongoing assessment of the best structures for clinical teams in specific care settings to produce the best clinical results and optimal satisfaction among team members.

In relation to the possible reasons for a lack of integration among contemporary health research, policy and practice as outlined by Lindstrom and co-authors, the data from this study confirm that, even among engaged and inclusive-leaning and team-oriented provider stakeholders, there are perceptions of exclusive responsibility for, or non-sharing of, some aspects of care, such as counselling on behaviour change and the definition of optimal timeliness of access. To improve, sharing of the responsibility among all stakeholders for all aspects of care, including commonly shared goals and their communication and measurement, needs to be better addressed in going-forward strategies. In this regard, consideration of the structure of collaborative care programs, which are essentially social networks, also becomes important.

Human behaviour, including health-related behaviour, is spread through networks of social contact; and healthcare networks have evolved because of increased valuing of such collaboration in research, planning and action (Huerta et al. 2006). The added value is believed to derive from behavioural efficiencies, based on patterns of social reinforcement within a network’s structure, goals and processes (Huerta et al. 2006; Singer 2010, September 18). Recent data indicate that the structure of health networks may be
their most important functional characteristic because structure directly influences the speed and extent of dissemination of behaviour change within the networks (Centola 2010).

In particular, clustered-lattice structures of social networks, reflective of communities or neighbourhoods with overlapping and shared social ties and behaviour-influencing signals, facilitate a faster and broader spread of desired healthcare behaviours (Centola 2010). The same studies also suggest that the number of social interactions, or reinforcing communications, encouraging adoption or change of behaviour is more important than who is encouraging a behaviour (Centola 2010). This structural impact of social networks on patient health behaviours may well explain some of the beneficial outcomes seen in community-based disease management partnerships that are not causally related to more commonly associated factors such as risk scores or efficacious therapies (Cox et al. 2008). It also seems reasonable to expect that similar community-reflective network structures, and their needs-based knowledge production (Montague et al. 2007), may extend the reach and expedite the uptake of positive behaviours in health policy development and implementation initiatives.

It is, however, relevant to remember Huerta and colleagues’ caution that government, academic and private sectors in Canada were initially avidly attracted to the value proposition of health networks without much evidence; and that there was a need for more evidence before social networking became the next discarded, or discredited, new thing in healthcare management (Huerta et al. 2006). It is fair to say the need for more evidence persists. However, the evolution of collaborative models, such as the CBDHA initiative, offers real opportunities to grow that weight of evidence.

In summary, policy makers, providers, patients and academic researchers want to see positive action from collaborative policy-informing research. The time is ripe for collaborative action to identify and close the gaps between best and usual care. There are ever-clearer theoretical, structural and process models to facilitate successful and practical demonstrations of collaborative care. There is a willing foundation.

Things can be better!

Acknowledgements

We wish to thank all the primary care practitioners who took the time and effort to respond to requests for pilot testing the data tool, completing the questionnaire and/or participating in the focus groups. Their engagement made the project possible.

We would also like to express appreciation to Adele Sampson, Melissa Lee-Ross and the Cape Breton District Health Authority Primary Care Department for their insight and coordinating efforts to better understand practitioners’ real-world challenges and the companion opportunities to make things better.

References


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