THE USE OF POLICY-RELEVANT DOCUMENTS IN HEALTH POLICYMAKING

MOBILIZING THE USE OF POLICY-RELEVANT DOCUMENTS IN EVIDENCE-INFORMED HEALTH POLICYMAKING: THE DEVELOPMENT AND CONTENTS OF AN ONLINE REPOSITORY OF POLICY-RELEVANT DOCUMENTS ADDRESSING HEALTHCARE RENEWAL IN CANADA

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Abstract

Research objectives: 1) Develop an online repository of policy-relevant documents addressing healthcare renewal in Canada; and 2) describe the general contents of policy-relevant documents addressing healthcare renewal in Canada.

Methods: The methods for this study were iteratively developed using an approach similar to a scoping review. Documents were identified through website hand-searches and sixteen Canadian health organizations that contributed to the development of the online repository. The majority of organizations are government health ministries/departments or government-supported health organizations. The focus of the analysis was to calculate general descriptive frequencies of the distribution of documents included in the online repository, specifically: 1) the general characteristics of the documents, such as document type, publication year and jurisdictional focus; 2) document themes by national priority areas; 3) document themes by health system topics; and 4) contributing organizations.

Results: A total of 304 documents were coded for inclusion in the online repository (http://eihrportal.org). The Health Council of Canada contributed the largest amount of documents (n=60, 19%). The top three types of documents are health and health system data (n=75, 25%), situation analysis (n=72, 24%) and jurisdictional review (n=49, 16%). The top three national priority areas addressed in the documents are health human resources (n=270, 89%), quality as a performance indicator (n=210, 69%) and information technology (n=183, 60%). The least commonly addressed national priority

areas are technology assessment (n=19, 6%), prescription drug coverage (n=68, 22%) and Aboriginal health (n=87, 29%).

Conclusion: The process of developing a systematic method for identifying policy-relevant documents and retrieving useful information from these documents can be reproduced by anyone interested in using this type of evidence to inform their health policymaking. A number of implications exist for policy and research, both in Canada and in low- and middle-income countries, which have to be considered in relation to the unique nature of this type of evidence.

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Table of Contents

List of Figures and Tables

Figures

Tables

List of Abbreviations

CIHR	Canadian Institutes of Health Research
EIHR	Evidence-Informed Healthcare Renewal
HSE	Health Systems Evidence
KT	Knowledge translation
LMICs	Low- and middle-income countries
WHO	World Health Organization

Declaration of Academic Achievement

The following is a declaration that the content of the research in this document has been completed by Karolina Kowalewski and recognizes the contributions of Dr. John Lavis, Dr. Michael Wilson and Dr. Nancy Carter in both the research process and the completion of the thesis.

Introduction and Background

Health policymakers need quick and easy access to many different types of evidence that can help them to make well-informed decisions about the health system. Researchers, policymakers and other stakeholders have undertaken many initiatives to facilitate the use of evidence in health policymaking, such as producing systematic reviews, convening stakeholder dialogues and preparing evidence briefs. Much of this evidence is available online on one-stop shops that cull, synthesize and make readily available different types of evidence. However, the majority of these online repositories only focus on research evidence published in peer-reviewed journals; there is no online repository that collects and synthesizes evidence produced by other health organizations that is not published in peer-reviewed journals. This type of evidence is just as important to health policymakers; facilitating a better understanding of contextual factors related to the health system. It is particularly important in low- and middle-income countries (LMICs) where research evidence is lacking and contextual factors are especially complicated. This thesis will describe the development and contents of an online repository of documents, called policy-relevant documents, produced by various health organizations that address healthcare renewal in Canada. It can serve as a guide for other countries, including LMICs, interested in developing a similar repository. The following background will provide more information about evidence-informed health policymaking.

Evidence-Informed Health Policymaking

In 2004, the World Health Organization (WHO) produced the World Report on Knowledge for Better Health: Strengthening Health Systems, which emphasizes the need to improve knowledge translation (KT) to bridge the gap between "what is known and what is actually being done" (p. xv). According to the Canadian Institutes of Health Research (CIHR, 2012a), KT is "a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health [of a population], provide more effective health services and products and strengthen the health care system" (para. 1). This definition acknowledges the interactive and multidirectional processes that occur between knowledge producers and users, as well as the different actors and types of knowledge that are involved. Ultimately, KT helps policymakers to make decisions that improve the effectiveness, efficiency and equity of health systems (Oxman, Lavis, Lewin, & Fretheim, 2009).

KT facilitates an evidence-informed approach to policymaking. According to Oxman et al. (2009), evidence-informed health policymaking "is an approach to policy decisions that is intended to ensure that decision making is well-informed by the best available research evidence […] characterized by the fact that its access and appraisal of evidence […] is both systematic and transparent" (p. 4). The context in which policy decisions are made determines what constitutes the best available evidence; in other words, "different types of evidence are relevant to different questions" (Oxman et al., 2009, p. 4). The policy cycle framework (Figure 1), as described by Howlett, Ramesh, and Perl (2009), reveals the complicated context in which health policy is made. The

framework represents the roles of the various actors involved in policymaking and the factors that constrain and influence their efforts (i.e. ideas, interests and institutions). Evidence is just one type of idea and it is important to recognize that policy decisions are influenced by many other factors such as individuals and groups with particular values, interests and social structures. For example, Canadian health policy cannot be understood without realizing the powerful role of the medical profession in both supporting and opposing government health policies (Howlett et al., 2009). Furthermore, various external factors also influence a government's choice of policy. For instance, a lack of financial resources or international treaty obligations can limit the options available to policymakers (Howlett et al., 2009). In short, evidence-informed health policymaking must be understood in the context of the various factors that influence its process. It is important to recognize the many different types of evidence that can inform health policymaking.

Types of Evidence

In the context of health policymaking, Lomas, Culyer, McCutcheon, McAuley, and Law (2005) identify three main types of evidence. The first and most narrow type is context-free scientific evidence. This type of evidence is defined as methodologically explicit, systematic and replicable and is most closely aligned with the evidence-based medicine approach. Context-free scientific evidence focuses on the question "can it work?" versus "will it work?" and "is it worth it?" (Lomas et al., 2005). The second type is context-sensitive scientific evidence and is aligned closely with the applied social sciences. This type of evidence is adapted to the circumstances of the local context and

often addresses attitudes, implementation, organizational capacity, forecasting, economics/finance, and ethics. The last type is colloquial evidence and is dominant among decision-makers. This type of evidence is the most broad and includes the expertise, views and realities of experts and professional opinion, political judgment, values, habits and traditions, lobbyists and pressure groups, and the particular pragmatics and contingencies of the situation, such as resources. Lomas et al. (2005) explain that when evidence is defined colloquially, its inclusion is determined through relevance. Ultimately, a combination of these three types of evidence, through deliberative processes, will best enable evidence-informed health policymaking.

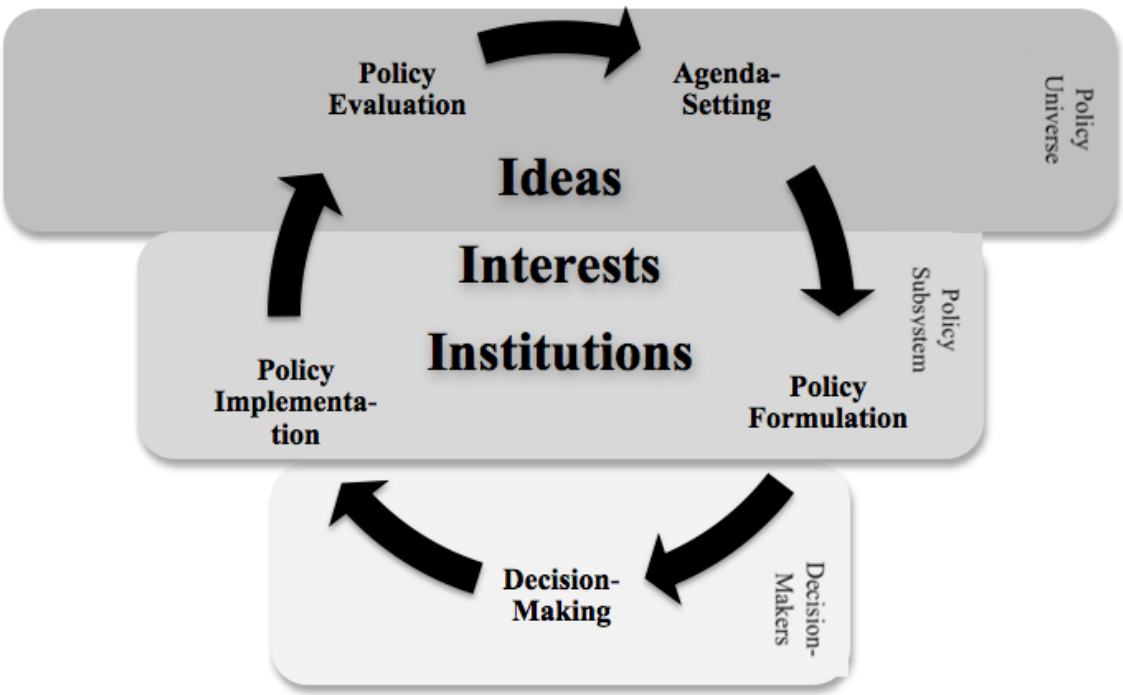


Figure 1. The policy cycle framework (adapted from Howlett et al., (2009))

Overview of KT Conceptual Frameworks

A number of different conceptual frameworks have been developed to better understand the key elements of KT initiatives.[1] Weiss (1979) developed one of the first typologies of evidence use[2] in policymaking that forms the basis of many other similar models and frameworks. She conceptualizes seven different types of evidence use: the knowledge-driven model, the problem-solving model, the interactive model, the political model, the tactical model, the enlightenment model and the intellectual enterprise model.

The first is the knowledge-driven model; derived from the natural sciences and based on the notion that basic research produces knowledge that is potentially relevant for public policy. The second, and most idealized concept of evidence use, is the problem-solving model, which posits that research offers empirical evidence that helps to identify solutions for a particular policy problem by clarifying the situation and reducing uncertainty. In this model, the producers and users of knowledge agree on the nature of the problem and the goals to be achieved and as such, communication between the two is key. The third, and arguably most promising model of evidence use, is the interactive model. Here policymakers actively and interactively seek evidence to inform their decisions. Weiss (1979) emphasizes that alongside research, policymakers draw on many other sources for evidence, such as administrators, practitioners, politicians, planners,

[1] See Mitton, Adair, McKenzie, Patten, and Waye Perry (2007) and Contandriopoulos, Lemire, Denis, and Tremblay (2010) for reviews of KT strategies in relation to policymaking.

[2] Note that Weiss (1979) uses the term "research use"; however, I will be using the term "evidence use" to emphasize the products of research and better capture the many different types of evidence, including research evidence, used in KT initiatives.

journalists, clients, interest groups, aides and friends. Unlike the previous two models, here the process is not linear but iterative, messy and dynamic, involving mutual consultations that draw on different stakeholders' talents, beliefs and understandings of the policy problem. The fourth model of evidence use is the political model, whereby evidence cannot change hardened political interests and instead, policymakers use it as a political tool to support an existing decision or destabilize opposing positions. Here, policymakers use evidence to justify rather then inform their decisions. Some people deem this type of evidence use as illegitimate but Weiss (1979) argues that if the research is not distorted or misinterpreted and all stakeholders have access to the evidence, then this model can give advocates confidence, reduce their uncertainties and provide them with ammunition in debates, standing a better chance in affecting change. The fifth model of evidence use is the tactical model; here the actual content of the evidence has no relevance but it is simply the fact that research is being done that matters. For example, governments may fund research mainly to delay action on an issue. The sixth, and perhaps most realistic model of evidence use, is the enlightenment model, which focuses on the broader concepts and theoretical perspectives of knowledge. This model is based on the notion that evidence has a gradual and cumulative influence on policymaking by shaping the way people think about social issues overtime. Values and patterns of thought derived from evidence permeate the policymaking process through diverse and indirect routes, such as mass media, and shape the way that problems and solutions are framed, potentially resulting in a paradigm shift. The last model proposed by Weiss (1979) is the intellectual enterprise model, which views research as an intellectual pursuit of society

and only one part of the interconnected intellectual enterprise between policy, research and the social context. The interactive, enlightenment and intellectual enterprise models are particularly useful for better understanding the diverse forms and sources of evidence that inform policymaking.

Nutley, Walter, and Davies (2007) reduce Weiss' seven models to better capture the continuum of evidence use by locating conceptual and instrumental uses at either end of a two-way spectrum. The spectrum ranges from awareness raising of evidence, through greater knowledge and understanding and shifts in attitudes, perceptions and ideas, to direct changes in policy (Figure 2). The continuum demonstrates the iterative and interactive nature of evidence use and the equally important role for more conceptual uses that inform rather than serve as clear steers of action for policymakers.

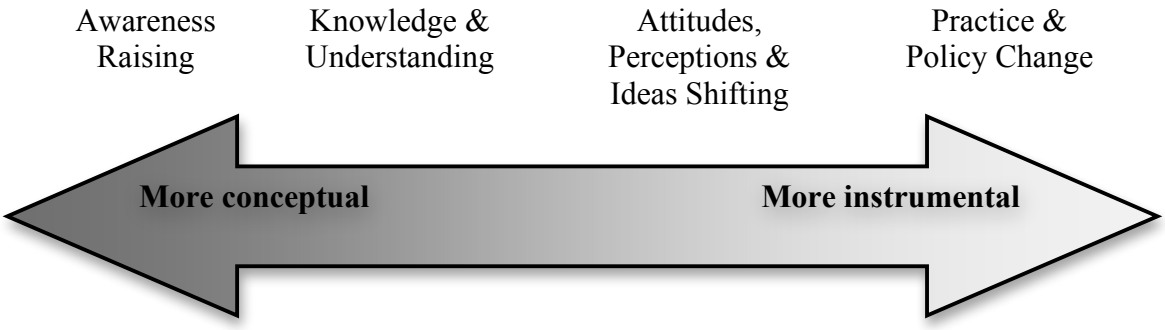


Figure 2. The continuum of evidence use (adapted from Nutley et al., (2007))

There are many different types of processes that support the use of evidence in health policymaking. Lavis, Lomas, Hamid, and Sewankambo (2006) developed a

framework that identifies the key elements of KT initiatives that link evidence[3] to policy. The framework is organized around four key elements: the general climate for evidence use, the production of relevant and synthesized evidence, activities used to link evidence to action, and the evaluation of efforts to link evidence to action. The first element addresses the general conditions that are conducive to KT initiatives, i.e., how funders, producers and users of evidence support and place value on KT activities. The second element focuses on how and what type of research is commissioned to align with the set priorities. The third element is broken down into four clusters of KT activities, which will be described in the following paragraph. The last element addresses rigorous evaluations of the above efforts to link evidence to action, which are likely to support future KT initiatives.

The four clusters of KT activities are producer push efforts, efforts to facilitate user pull, user pull efforts and exchange efforts. Producer push efforts emphasize strategies used by producers of evidence to communicate their messages. An example is a media release for a systematic review that identifies actionable messages arising from the review. Efforts to facilitate user pull aim to optimally package and present high quality, relevant evidence that is easily accessible by policymakers. Lavis et al. (2005) identified factors such as timeliness, local applicability and user-friendly presentation as increasing the prospects for evidence to inform policymaking. One-stop shops are particularly useful resources for policymakers to easily and rapidly access various types of evidence. Many

[3] Here again the term "evidence" is used instead of "research" for the same reason described in footnote 2 above.

online databases of this sort exist, including the Cochrane Library, Health-Evidence.ca and Rx for Change, to name a few. Health Systems Evidence (HSE), another one-stop shop, will be described in greater detail below, as it is the only online repository that targets health policymakers addressing macro-level questions pertaining to health system arrangements. The third cluster of KT activities outlined by Lavis et al. (2006) is user-pull efforts that create structures and processes whereby evidence is actively valued, sought and used by policymakers. Moat and Lavis (2012) identify the Support Tools for Evidence-Informed Health Policymaking (STP) as useful guides that help policymakers understand all aspects of evidence-informed policymaking. The last cluster of KT activities is exchange efforts that foster deliberative processes and partnerships between the producers and users of evidence. These activities integrate researchers into the policy process and policymakers into the research process. Given the realities of the policymaking process, the complexities of the research-policy relationship and the limitations of any one of the above four activities, the most effective KT initiatives will be those that use all four approaches simultaneously (Lavis et al., 2006).

Health Systems Evidence

As previously mentioned, HSE (http://www.healthsystemsevidence.org) is one of several one-stop shops that facilitates the use of evidence in health policymaking. However, unlike other resources of this kind, HSE is the only continuously updated online repository targeted at health policymakers "interested in how to strengthen or reform health systems or in how to get cost-effective programs, services and drugs to those who need them" (HSE, 2012, para. 1). HSE provides syntheses of research evidence

(e.g., overviews of systematic reviews, systematic reviews) that are supplemented with linkages to many other types of documents that can help policymakers make well-informed decisions, such as economic evaluations and descriptions of health system reforms. HSE enables policymakers, researchers and other stakeholders to rapidly identify the best available evidence on a given topic related to governance, financial and delivery arrangements in health systems, and implementation strategies within health systems. The repository also provides users with quality ratings of the records, a list of countries where studies included in the records were conducted, as well as links to user-friendly summaries, scientific abstracts and full-text reports. HSE is also accessible in seven major languages. This unique one-stop shop is a true effort to facilitate user-pull; effectively catering to the complex nature of health policymaking.

Evidence-Informed Healthcare Renewal Initiative

Many institutions have emphasized the importance of using evidence to inform policymaking. In Canada, the Evidence-Informed Healthcare Renewal (EIHR) initiative has been created to support the producers and users of evidence to work collaboratively to "translate evidence for uptake into policy and practice to strengthen Canada's healthcare systems" (CIHR, 2012b, para. 1).[4] In October 2011, the EIHR initiative convened the first EIHR Roundtable with participants from forty-one various federal, provincial, territorial

[4] The focus on healthcare renewal and health systems strengthening has dominated Canadian health systems thinking since the 2003 First Ministers' Accord on Health Care Renewal, which established an agreed vision, principles and action plan, amongst all levels of Canadian government, for a sustainable, publicly-funded health care system (Health Canada, 2006).

and independent health organizations. The objectives of the EIHR Roundtable are as follows: convene organizations involved in healthcare renewal to share experiences on their research and knowledge development agendas; provide an opportunity for governments to learn about and reflect on the research and knowledge development agendas and evidence needs/gaps; provide an opportunity to identify potential synergies and opportunities for collaboration; and work together to ensure the collective outputs of the organizations' work are available and accessible to the public and health system leaders through a public knowledge platform (CIHR, 2012c). In relation to the last objective, the EIHR Roundtable chose to collaborate with the HSE team at McMaster University to create the EIHR Portal, "a continuously updated repository of policy-relevant documents that address 'healthcare renewal' in Canada" (CIHR, 2012d, para. 1). The development and contents of the EIHR Portal is the focus of this study.

Rationale

Despite numerous KT efforts, many health policies are still not well-informed by evidence. At the global level, Oxman, Lavis, and Fretheim (2007) found that synthesized research evidence is rarely used for developing WHO recommendations. Instead, recommendations often rely heavily on expert knowledge. Poorly-informed policies result in ineffective, inefficient and inequitable health systems and are likely why many countries have yet to realize the health-related Millennium Development Goals (Oxman et al., 2009; United Nations, 2012). At the national and sub-national levels, LMICs must spend their limited health budgets wisely to tackle substantial health burdens; along the same lines, high-income countries also face resource constraints due to growing

healthcare demands from an aging population and increasing healthcare costs arising from new health technologies (Oxman et al., 2009). Better use of evidence to inform health system decisions is necessary to help manage these problems. However, to be more effective, current KT initiatives that facilitate evidence-informed health policymaking must give greater regard to other types of evidence that increase the representation of all stakeholders' perspectives and ultimately, result in more comprehensive understandings of complicated health system problems and solutions (Nutley et al., 2007). This is particularly important in LMICs where relevant research evidence is not as abundant in comparison to high-income countries and the health system contexts present unique challenges that need to be understood and addressed by health policymakers. The implications of KT initiatives should be drawn out for LMICs so that they can implement more informed health policies; I will present the implications of this study for LMICs in the discussion.

The scope of sources and nature of evidence used to inform health policy can be broadened by including policy-relevant documents produced by key decision-making bodies, government-supported health organizations, health professional associations and other independent health organizations. These types of documents include policy and legislation, strategic plans, position papers, performance reviews and national health accounts, amongst many other types. They offer a wealth of information to health policymakers, researchers and other stakeholders, such as the important background and contextual information necessary to effectively formulate and implement a health policy, program or service. These documents can also be used across jurisdictions to help frame a

health problem and provide alternative solutions to address the problem. Researchers can use this type of evidence to identify gaps in policy and practice and to contextualize their research findings within policy priorities. But perhaps the ultimate value-added of these types of documents is their local applicability, as this is a major limitation of much conventional research evidence (Lavis et al., 2005; Lewin et al., 2009). Well-informed health policy decisions should include all types of evidence to offer the most comprehensive understanding of the technical, social and political factors that affect health policymaking.

Although policymakers can and often do use these documents to inform their decisions, their value is not systematically recognized in the evidence-informed health policymaking process. There is a need to facilitate the accessibility and uptake of this type of evidence by policymakers, researchers and other stakeholders. There is also a need to examine the sources, nature and content of this type of evidence to better understand it's value for KT initiatives broadly and evidence-informed health policymaking specifically. Ultimately, KT efforts need to expose the untapped potential of this context-rich source of evidence.

Overall Goal of the Study

This study aims to mobilize the use of policy-relevant documents that address healthcare renewal in Canada in the context of evidence-informed health policymaking.

Research Objectives

The objectives of this study are to:

1. Develop an online repository of policy-relevant documents addressing healthcare renewal in Canada, including a taxonomy of types of policy-relevant documents, eligibility criteria for policy-relevant documents and a coding framework that extracts useful information from these documents for policymakers.
2. Describe the general contents of policy-relevant documents addressing healthcare renewal in Canada.

Methods

The methods for this study were iteratively developed using an approach similar to Arksey and O'Malley's (2005) scoping review. The process of conducting a scoping review served as a useful guide for the development of the online repository of policy-relevant documents addressing healthcare renewal in Canada. The second research objective aligned well with the more traditional goal of a scoping review; "to map *rapidly* the key concepts underpinning a research area and the main sources and types of evidence available" (Mays, Roberts, & Popay, 2001, p. 194; emphasis in original).

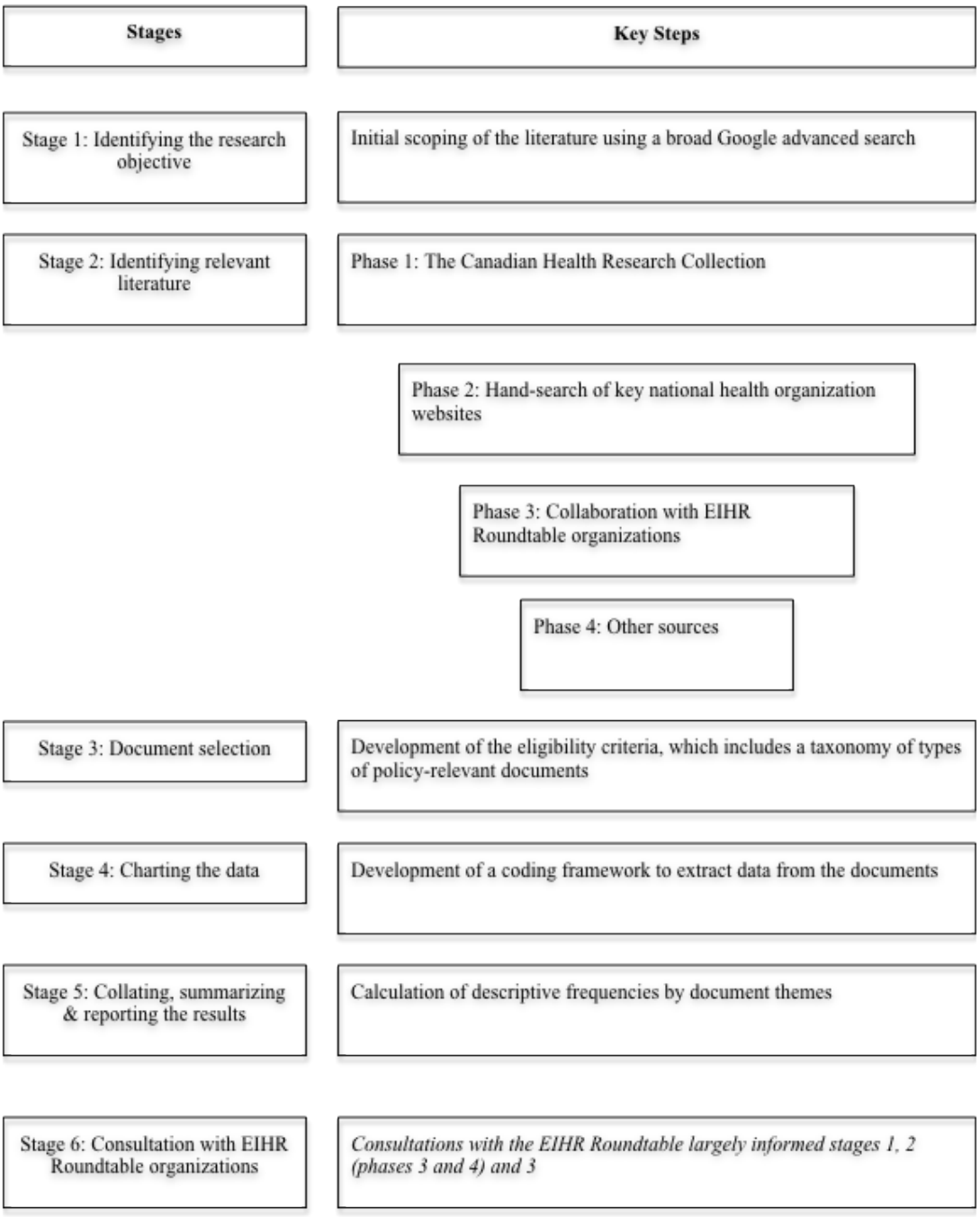


Figure 3. Overview of the modified scoping review approach

The Arksey and O'Malley (2005) scoping review framework suggests five stages: identifying the research objective; identifying relevant studies; study selection; charting the data; and collating, summarizing and reporting the results.[5] An optional sixth stage involves consultation with stakeholders to ensure the identification of all relevant material. Figure 3 presents an overview of the overall approach taken in this study. It highlights the iterative search process that became progressively more limited and resulted in the most efficient method to identify and retrieve the literature (phases two, three and four). The figure also notes the stages at which the EIHR Roundtable participated in the development of the EIHR Portal.

Identifying the Research Objective

At the outset of the study, the objective was to determine if policy-relevant documents related to health systems could be systematically identified and retrieved using an Internet search engine and broad search terms. Arksey and O'Malley (2005) explain that at the outset, wide definitions and general search terms and eligibility criteria should be used. This ensures the identification of a breadth of literature; decisions about how to set parameters on large numbers of references are made once some sense of the volume and broad scope of the topic has been gained (Arksey & O'Malley, 2005). A broad Google advanced search was conducted to gain a sense of the different types of documents and their sources. A scan of the results revealed that many different types of

[5] Note that the fifth stage of the scoping review was modified to collate, summarize and report on the general contents of the documents identified and not the results within the documents themselves.

documents are available on the Internet from a number of different sources (see Appendix A). However, the breadth of the search produced a large number of results that included many irrelevant documents. This initial scoping revealed that a more targeted search strategy was necessary to feasibly and efficiently identify and retrieve these types of documents.

Fortunately, the opportunity arose to collaborate with the EIHR Roundtable. As previously described, the Roundtable is made up of forty-one federal, provincial, territorial and independent Canadian health organizations, of which sixteen agreed to contribute documents to populate an online repository of policy-relevant documents that address healthcare renewal in Canada (see Appendix B). The Roundtable members were also consulted regarding the eligibility criteria for these types of documents, which helped to narrow the research objective and ensure that the results are of broad interest and usefulness to different stakeholder groups in Canada. After consultation with the EIHR Roundtable, the research objective was narrowed to focus on policy-relevant documents that address healthcare renewal in Canada.

Identifying Relevant Literature

The identification of relevant literature occurred in four iterative and gradually more limited search phases. The first and second phases of this stage were conducted before consultations with the EIHR Roundtable began and helped to gain a sense of the literature. The third and fourth phases were conducted in collaboration with the EIHR Roundtable and were critical to the development of the online repository. The first phase

targeted the Canadian Health Research Collection electronic database, which is a collection of publications from Canadian research institutes, government agencies and university centres working in the area of health and medical research. The second phase was a hand-search of key national health organization websites. The third phase involved a collaborative effort between the EIHR Roundtable and the research team[6] in the identification of documents produced by EIHR Roundtable organizations. Lastly, other sources such as listservs and internal referrals from the research team augmented the identification of relevant literature.

All searches were limited to documents produced between January 2003 and June 2012.[7] The start date of 2003 was chosen for two main reasons. First, this was the year of the First Ministers' Accord on Health Care Renewal, signifying a major political shift in focus and support for healthcare renewal in Canada. Second, the time span of ten years enabled the comparison of document content across five-year periods but also ensured that the documents are still relevant in the current political context.

Phase one: the Canadian Health Research Collection. The Canadian Health Research Collection electronic database was identified as a potential source of policy-relevant documents. A scan of the publishers in the collection revealed that a large number of key health organizations are represented in the database. A list of relevant publishers was produced and a preliminary search by publisher was conducted to

[6] The research team always refers to myself, along with individuals at the McMaster Health Forum and the McMaster Program in Policy Decision-making.
[7] Note that documents produced pre-2003 and referred by an EIHR Roundtable organization were included.

determine the volume of documents in the database (see Appendix C). Out of 159 relevant publishers searched, 3,157 documents were identified. However, upon screening the titles of the search results for four key Canadian health publishers (Health Canada, Public Health Agency of Canada, Statistics Canada and Canada Health Infoway), I deemed that the Canadian Health Research Collection database is not a comprehensive source for policy-relevant documents. First, it did not capture a number of key documents that were already deemed relevant by the research team based on knowledge of the Canadian health system (e.g., 2003 First Ministers' Accord on Health Care Renewal). Second, it is not continuously updated (e.g., only one annual report out of several from an organization is included and it is not the most recent) and therefore, it is incomplete, particularly in regard to more recent publications.

After screening the 367 document titles from the four key publisher searches, I decided that the remaining 2,790 search result titles would not be reviewed. Ultimately, the decision was guided by the lack of resources (i.e., time) to review all titles when it would be necessary to also hand-search the publishers' websites. Fortunately, this phase of the search process was not without benefit because the list of publishers identified through the Canadian Health Research Collection database was largely used to inform the selection of key national health organization websites hand-searched in phase two.

Phase two: hand-search of key national health organization websites. Thirty key national health organization websites were hand-searched for policy-relevant

documents, identifying a total of 918 documents (see Appendix D).[8] The types of organizations searched varied from government health departments and agencies (e.g., Health Canada, Public Health Agency of Canada), to government-supported health organizations (e.g., Health Council of Canada), to health professional associations (e.g. Canadian Medical Association) and other health advocacy groups (e.g., Canadian Doctors for Medicare).

The website hand-searches followed the website searching strategy outlined in Brien, Lorenzetti, Lewis, Kennedy, and Ghali's (2010) scoping review of health system report cards. The websites were searched in the most systematic way possible, while allowing for some variation in the search strategy to respond to different website structures. It is common for websites to provide publication links, which provide a central repository of an organization's published documents. For websites without any publication links, Brien et al. (2010) suggest to check all of the links for relevant material. I assessed all documents for eligibility based on title screenings.

Similar to the first phase, the number of documents identified by the website hand-searches was also large (n=918). Again, it was deemed necessary to somehow further limit the identification of relevant literature.

Phase three: collaboration with EIHR Roundtable organizations. Phase three significantly narrowed the search approach. Member organizations of the EIHR

[8] A list of key provincial and territorial health organizations was also produced but time and the shift in focus at phase three of the search process did not permit the hand-search of these organizations' websites (see Appendix E).

Roundtable agreed to collaborate with the research team in the creation of the EIHR Portal, Canada's most comprehensive and "continuously updated repository of policy-relevant documents that address 'healthcare renewal' in Canada" (CIHRd, 2012). As a result, sixteen EIHR Roundtable organizations became the key sources for identifying these types of documents (see Appendix B).

Table 1. General characteristics of EIHR Roundtable organizations

Type of organization	**Organization name**	**Jurisdictional coverage**
Government health ministry / department	Health Canada	National
	Manitoba Health	Provincial
	Northwest Territories Department of Health and Social Services	Provincial
	Nova Scotia Department of Health and Wellness	Provincial
	Ontario Ministry of Health and Long-Term Care	Provincial
Government health agency / program	Canadian Institutes of Health Research	National
Government-supported health organization	Alberta Innovates – Health Solutions	Provincial
	Canadian Agency for Drugs and Technologies in Health	National
	Canadian Health Services Research Foundation	National
	Canadian Institute for Health Information	National
	Health Council of Canada	National
Health professional association	Canadian Nurses Association	National
Health sector association	Association of Canadian Academic Healthcare Organizations	National
	Canadian Healthcare Association	National
Independent health organization	Canadian Patient Safety Institute	National
	Institute of Health Economics	National

Out of the sixteen contributing EIHR Roundtable organizations, five have provincial jurisdictional coverage (Table 1). The majority of organizations are government health ministries/departments or government-supported health organizations.

Seven of the thirty organization websites hand-searched in phase two were those of the sixteen EIHR Roundtable organizations. I conducted a hand-search of the remaining nine organizations' websites.[9] The results of the hand-search complemented the efforts of the EIHR Roundtable. More specifically, a list of documents identified through the hand-search of each organizations' website was sent to those EIHR Roundtable organizations that were late in submitting their document referrals to help facilitate the identification of relevant documents for inclusion in the EIHR Portal. The EIHR Roundtable organizations were asked to rank the documents by priority level. They ranked documents from zero to three, zero being don't include, one being low priority, two being medium priority and three being high priority. All high and medium priority documents moved on to the document selection stage.

Phase four: other sources. In an attempt to capture the breadth of healthcare renewal documents, continuous scanning of listservs, as well as internal referrals from the research team, contributed to the identification of relevant literature.

[9] Alberta Innovates – Health Solutions; Canadian Institutes of Health Research; Institute of Health Economics; Canadian Patient Safety Institute; Institute of Health Services and Policy Research; Manitoba Health; Nova Scotia Department of Health and Wellness; Northwest Territories Health and Social Services; Ontario Ministry of Health and Long-Term Care.

Document Selection

The inclusion/exclusion criteria were devised iteratively throughout the four phases of the search strategy. Arksey and O'Malley (2005) explain that unlike systematic reviews, the inclusion/exclusion criteria for scoping reviews are often devised *post hoc* based on greater familiarity with the literature. The EIHR Roundtable was consulted extensively during the development of the criteria and specifically, during the development of the taxonomy of document types, which was devised by JL and myself. The initial scoping of the literature that was conducted in phases one and two of the search strategy, described above, largely informed the development of the taxonomy of document types. The main inclusion criteria was that the document was referred by an EIHR Roundtable organization[10] and addresses healthcare renewal, which is defined as renewing, reforming or strengthening governance, financial and delivery arrangements within health systems. The document also had to meet the criteria for one or more of a list of twenty-four document types (Table 2). Documents published in or after 2003 were preferred but key documents published pre-2003 were also included if they are highly salient to Canadian healthcare renewal (e.g., Canada Health Act). The following types of documents were excluded: e-newsletters, one-stop shops, podcasts and videos, peer-reviewed journal articles, derivative products of relevant healthcare renewal documents, annual reports that only describe basic activities and outputs, or present audited financial statements and

[10] Documents referred by the research team were also included if they met all of the other inclusion criteria.

opinion pieces that only present one individual's opinion on issues related to healthcare renewal.

Two independent reviewers (KK and SC) assessed for eligibility all documents identified in search phases three and four. The same two reviewers also assessed the eligibility of those documents identified in search phase two that were sent to EIHR Roundtable organizations for approval to include in the EIHR Portal.[11] Both reviewers read the full documents and then met to reconcile any discrepancies in assessments of eligibility.

Table 2. Taxonomy of policy-relevant document types

Type of document	Criteria and example (with link to full text)
a. Citizen/patient input	• Describes citizens'/patients' views about and experiences with healthcare renewal or with a policy issue or domain related to healthcare renewal • Canadian perceptions of the health care system
b. External evaluation	• Describes the findings of an external evaluation of a large-scale healthcare renewal effort • Report of the Manitoba Regional Health Authority External Review Committee
c. Framework	• Provides a framework that policymakers, stakeholders and researchers can use to undertake or monitor progress in healthcare renewal • Evergreen: A child and youth mental health framework for Canada
d. Government discussion paper	• Describes a government's considerations related to healthcare renewal or a policy issue or domain related to healthcare renewal • *No example yet identified from Canada*
e. Government legislation	• Articulates the law that provides the government authority to make regulations regarding healthcare renewal[1] • Canada health act

[11] Any documents not identified by an EIHR Roundtable member had to be approved by the EIHR Roundtable.

f. Government policy	• Describes a set of decisions or commitments to pursue courses of action aimed at achieving defined goals related to healthcare renewal[2] • *No example yet identified from Canada*
g. Government position paper	• Describes a government's plans for, or progress in, healthcare renewal (e.g., strategic plan related to healthcare renewal or annual reports[3] related to healthcare renewal) • Together we can: The plan to improve mental health and addictions care for Nova Scotians
h. Government strategic plan for the health sector	• Describes a government's plan for the health system as a whole, including any statements about health system goals and health sector development programs, that provides the context for healthcare renewal • Building on our foundation 2011-2016: A strategic plan for the NWT health and social services system
i. Government/third party accord	• Describes a joint commitment by a government and a third party (e.g., pharmaceutical or healthcare insurance company) to support healthcare renewal • *No example yet identified from Canada*
j. Guidance	• Provides systematically developed recommendations to policymakers and stakeholders about how to undertake or monitor progress in healthcare renewal • Time for transformative change - A review of the 2004 Health Accord, Standing Senate Committee on Social Affairs, Science and Technology
k. Health and health system data	• Provides analyses of health (and health determinants) and health system data that provide the context for healthcare renewal • Health indicators 2012
l. Health expenditure review	• Provides data on public spending in the health sector in comparison to other social sectors and against effectiveness, efficiency, equity and sustainability (and other healthcare renewal) parameters[4], either on its own or as the health chapter of national public expenditure reviews, and in a way that provides the context for healthcare renewal • *No example yet identified from Canada*
m. Health system research priorities	• Describes research priorities for healthcare renewal for the jurisdiction • Listening for direction III: National consultation on health services and policy issues 2007-2010
n. Intergovernmental accord	• Describes a collective government commitment to healthcare renewal • 2003 First Ministers' Accord on Health Care Renewal

o. Intergovernmental communiqué	• Describes a collective government statement related to healthcare renewal • Premiers Propose Alternative to Prime Minister's Offer
p. Jurisdictional review	• Describes what two or more jurisdictions are doing with respect to a policy issue or domain related to healthcare renewal • Experience with medical savings accounts in selected jurisdictions
q. Literature review	• Summarizes the research literature about healthcare renewal or a policy issue or domain related to healthcare renewal but doesn't meet the criteria for a systematic review, which is a type of document already included in HSE • Urban physical environments and health inequalities: A scoping review of interventions
r. National health account	• Provides information on the flow of all health funds from financing sources to end users in a health system[4] in a way that provides the context for healthcare renewal • National health expenditure trends, 1975 to 2011
s. Options framing	• Provides a summary to policymakers and stakeholders of what's known about options for how to undertake or monitor progress in healthcare renewal • Physician payment mechanisms: Overview and options for Canada
t. Performance review	• Describes the performance of one or more jurisdictions against explicit healthcare renewal objectives • Progress report 2012: Health care renewal in Canada
u. Situation analysis	• Describes an analysis of a current policy issue or domain related to healthcare renewal within a single jurisdiction • Optimal prescribing and medication use in Canada: Challenges and opportunities
v. Stakeholder input	• Describes a stakeholder's views about and experiences with healthcare renewal or with a policy issue or domain related to healthcare renewal • At the tipping point: Health leaders share ideas to speed primary health care reform
w. Stakeholder position paper	• Describes a stakeholder's recommendations for, or contributions to, healthcare renewal • CNA's preferred future: Health for all
x. Toolkit	• Provides tools that policymakers, stakeholders and researchers can use to undertake or monitor progress in healthcare renewal • A framework and toolkit for managing ehealth change: People and processes

[1] Adapted from Health Canada
[2] Adapted from WHO EURO
[3] Annual reports will be excluded if they simply describe basic activities and outputs and present audited financial statements
[4] Adapted from Health Systems 20/20

Charting the Data

Two independent reviewers (KK and SC) extracted information from the documents assessed as eligible for the EIHR Portal using a coding taxonomy developed for HSE (Wilson et al., Manuscript under review). The taxonomy was adapted to accommodate the extraction of this information (see Appendix F). The HSE taxonomy allows for the charting of data about health system topics, specifically, governance, financial and delivery arrangements and about implementation strategies within health systems (see Appendix G). These topics fall under the six broad building blocks of health systems as defined by the World Health Organization (2007): service delivery; health workforce; health information system; medical products, vaccines and technologies; health systems financing; and leadership and governance. Prior to the beginning of this study, JL, MW and KM operationalized these topics to include more detailed sub-topics relevant to evidence-informed health policymaking (Wilson et al., Manuscript under review). The product was the HSE taxonomy, which is used to code documents in HSE and was adapted to code documents in the EIHR Portal.

The documents were also coded for national health system priority areas, as identified in the 2003 First Ministers' Accord on Health Care Renewal. The 2003 First Ministers' Accord on Health Care Renewal is the only national process that defined

national priority areas for the Canadian health system. The current accord expires in 2014. The two independent reviewers also extracted descriptive characteristics, such as document type (i.e., the twenty-four types described in the inclusion/exclusion criteria), jurisdictional focus and general citation information.

Two individuals (LW and AM) entered general citation information into Reference Manager Version 10. This information was exported into the HSE online data entry interface where members of the research team entered the remaining extracted information. I coordinated the EIHR Roundtable document submissions using an Excel database.

Collating, Summarizing and Reporting the Results

The data was summarized to present a descriptive epidemiology of policy-relevant documents addressing healthcare renewal in Canada that are contained in the newly created EIHR Portal. Unlike a systematic review, a scoping review does not seek to aggregate evidence (Arksey & O'Malley, 2005). Instead, the focus of the analysis was to calculate general descriptive frequencies of the distribution of the documents included in the EIHR Portal. Specifically, the analysis profiled: 1) the general characteristics of the documents in the EIHR Portal, such as document type, publication year and jurisdictional focus; 2) document themes by national priority areas; 3) document themes by health system topics; and 4) contributing organizations. It is also important to note that the analysis did not seek to assess the quality of evidence, as this is not the intent of a scoping review (Arksey & O'Malley, 2005).

This stage of the scoping review framework was also modified to report on the results of the development of the EIHR Portal. Although the development of the EIHR Portal has been described in this methods section, the results will summarize data on the contributions of the EIHR Roundtable organizations and the strengths and limitations of the two primary document identification methods.

Results

A total of 304 documents were coded for inclusion in the EIHR Portal (http://eihrportal.org), which launched at the end of June 2012. As is evident from the flow diagram (Figure 4), the identification and selection of eligible policy-relevant documents addressing healthcare renewal in Canada occurred iteratively and as a result of the concerted efforts of various stakeholders. 391 documents identified by the website hand-searches were sent to EIHR Roundtable organizations to consider; these documents included only those identified from an EIHR Roundtable organization website. 228 documents were assessed as eligible by the EIHR Roundtable organizations.[12] An additional 107 unique submissions from EIHR Roundtable organizations were included and assessed for eligibility by two independent reviewers (KK and SC).[13]

[12] An additional 84 documents from the Canadian Health Services Research Foundation (ranked as low and medium priority) were also assessed as eligible but not included due to time constraints; only high priority documents were included from this organization (as opposed to both medium and high priority documents from all other organizations).
[13] An additional six documents were identified by other sources to increase the breadth of document types.

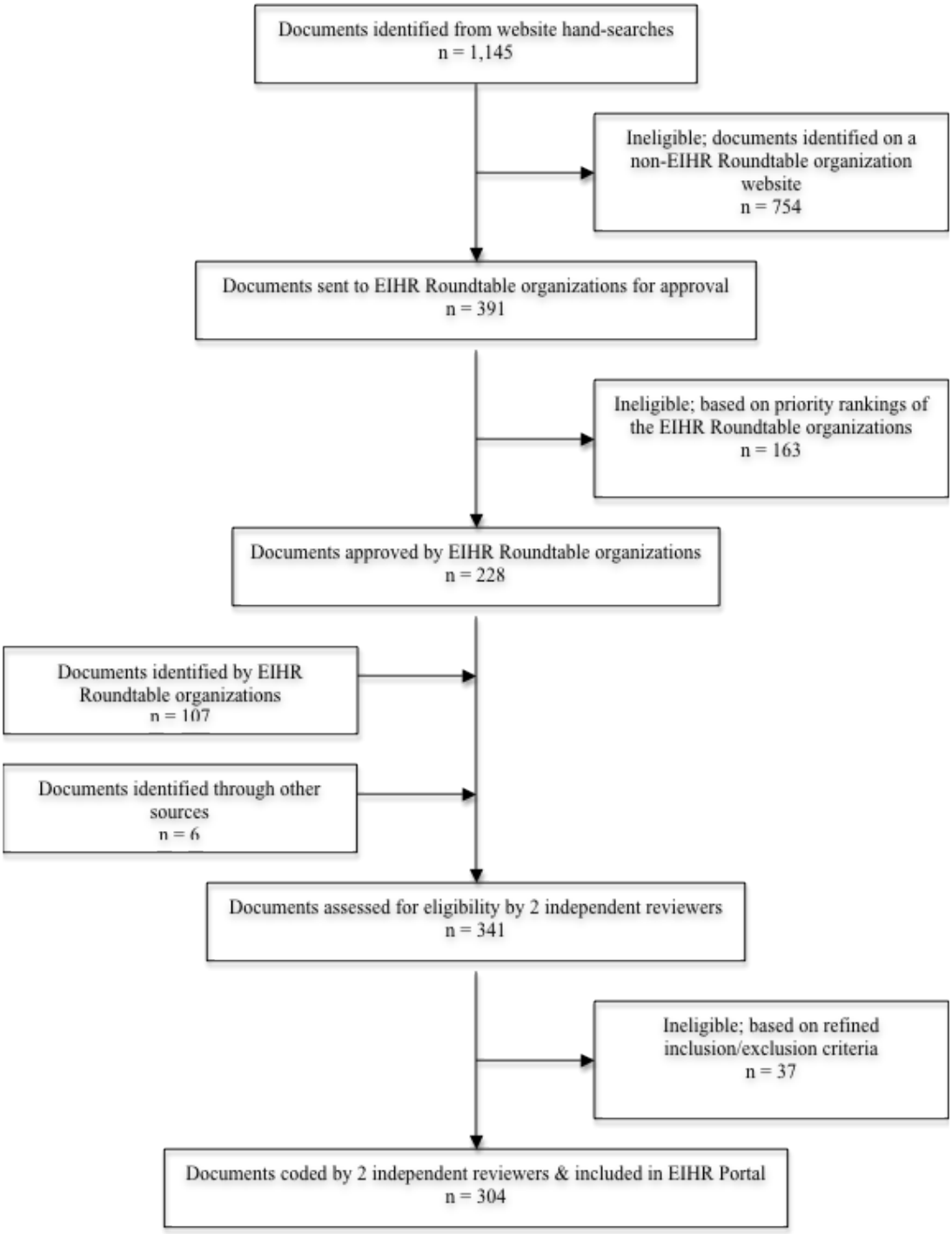


Figure 4. Flow diagram of the results from the critical search phases

The Health Council of Canada contributed the largest amount of documents (n=60, 19%). This is not surprising given that the organization's role, to report on the progress of Canadian healthcare renewal, aligns perfectly with the focus of the EIHR Portal (Table 3).

Table 3. Contributions of EIHR Roundtable organizations, n=319[1]

Organization name	**Number of documents approved & identified (%)**
Health Council of Canada	60 (18.8)
Canadian Nurses Association	50 (15.7)
Canadian Health Services Research Foundation	46 (14.4)[2]
Canadian Institute for Health Information	41 (12.9)
Ontario Ministry of Health and Long-Term Care	25 (7.8)
Canadian Healthcare Association	19 (6.0)
Institute of Health Economics	14 (4.4)
Alberta Innovates – Health Solutions	13 (4.1)
Health Canada	13 (4.1)
Canadian Patient Safety Institute	8 (2.5)
Association of Canadian Academic Healthcare Organizations	7 (2.2)
Canadian Institutes of Health Research	7 (2.2)
Manitoba Health	7 (2.2)
Northwest Territories Department of Health and Social Services	6 (1.9)
Nova Scotia Department of Health and Wellness	3 (0.9)
Canadian Agency for Drugs and Technologies in Health	0

[1] The total does not correspond with the total number of documents approved and identified by EIHR Roundtable organizations (n=335) because a pilot phase included organizations that are not yet official EIHR Roundtable members and are not included in the table; however, documents that they submitted were included in the analysis

[2] This organization referred an additional 84 documents (ranked as low and medium priority), which were not included due to time constraints; only high priority documents were included (as opposed to both medium and high priority documents from all other organizations)

Table 4 compares the strengths and limitations of the two primary document identification methods, the website hand-searches and the EIHR Roundtable submissions. Both methods have a number of strengths and limitations; if resources permit, a combination of the two is optimal. Of course, the context in which the methods are implemented ultimately determines the best course of action for identifying these types of documents. For example, website hand-searches would be completely ineffective in a country where the Internet is not an accessible resource.

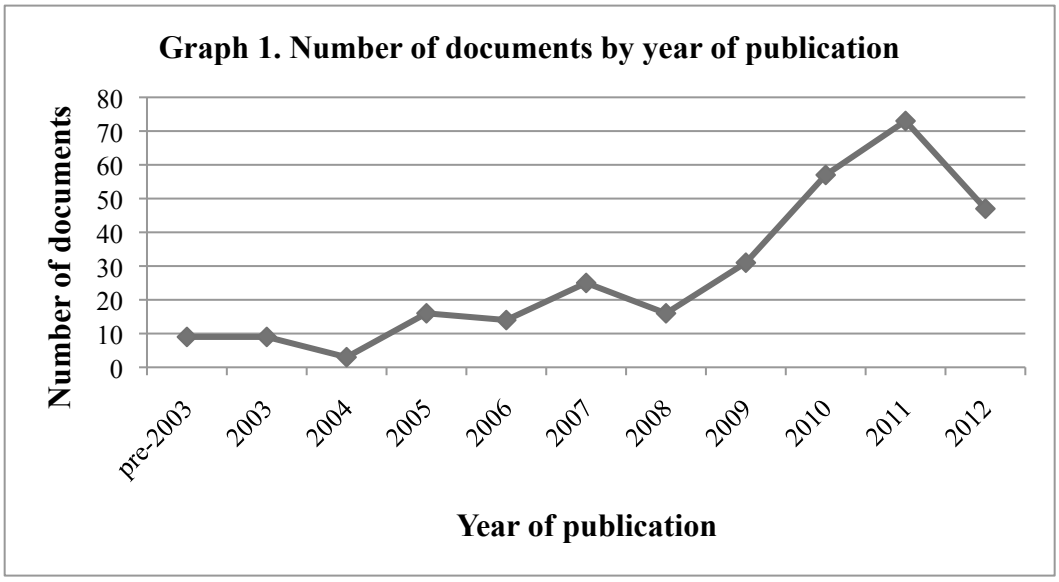
Table 4. A comparison of the strengths and limitations of the two primary document identification methods

	Document identification method	
	Website hand-searches	**EIHR Roundtable contributions**
Strengths	• Structured search using clearly defined inclusion/exclusion criteria eliminates bias • Not constrained by organizational politics	• Identify documents that may be hard to locate or not publicly available[1] • Identify documents that are relevant to the organization and likely useful to other similar organizations
Limitations	• Website layouts and content vary making it difficult to systematically search the sites for relevant documents • Time intensive • Websites may not contain all relevant documents; e.g., older documents, which have been archived, or newer documents, which are not yet publicly available • Documents may be difficult to locate/access depending on website layouts and if logins are required	• Bias to refer certain documents over others; e.g., documents addressing "trendy" topics • Not representative of all relevant stakeholders • Dependent on organizations having the time to identify and submit documents • Management of submissions is resource-intensive

[1] Documents that are not publicly available were stored on a server located at McMaster University

General Characteristics of Documents

The majority of documents were published between 2008 and 2012. Graph 1 reveals the rise in healthcare renewal document publications. Although it seems that there has been a drop in publications in 2012, it has to be noted that the search only included documents published up to and including June 2012. 81% (n=245) of documents focus on Canada as a whole;[14] the majority of province-focused documents address healthcare renewal in Ontario. No documents focus on British Columbia, New Brunswick, Prince Edward Island, Newfoundland, Yukon or Nunavut. The top three types of documents are health and health system data (n=75, 25%), situation analysis (n=72, 24%) and jurisdictional review (n=49, 16%). There is no representation of health expenditure reviews, government discussion papers, government policies and government/third party accords (Table 5).



[14] Note that documents that did not specify a jurisdictional focus were coded as Canada for jurisdictional focus.

Table 5. General characteristics of documents, n = 304

Characteristics	Number of documents (%)			
	pre-2003 (n=9)	2003 to 2007 (n=67)	2008 to 2012 (n=224)	Total (n=304)[1]
Jurisdictional focus				
Canada	7 (77.8)	63 (94.0)	173 (77.2)	245 (80.6)
British Columbia	0	0	0	0
Alberta	1 (11.1)	1 (1.5)	5 (2.2)	7 (2.3)
Saskatchewan	0	0	2 (0.9)	2 (0.7)
Manitoba	0	0	7 (3.1)	7 (2.3)
Ontario	0	2 (3.0)	28 (12.5)	32 (10.5)
Quebec	1 (11.1)	0	0	1 (0.3)
New Brunswick	0	0	0	0
Nova Scotia	0	1 (1.5)	2 (0.9)	3 (1.0)
Prince Edward Island	0	0	0	0
Newfoundland	0	0	0	0
Yukon	0	0	0	0
Northwest Territories	0	0	7 (3.1)	7 (2.3)
Nunavut	0	0	0	0
Type of document[2]				
Health and health system data	0	14 (20.9)	61 (27.2)	75 (24.7)
Situation analysis	1 (11.1)	13 (19.4)	58 (25.9)	72 (23.7)
Jurisdictional review	1 (11.1)	14 (20.9)	33 (14.7)	49 (16.1)
Literature review	2 (22.2)	12 (17.9)	26 (11.6)	40 (13.2)
Stakeholder position paper	0	12 (17.9)	24 (10.7)	37 (12.2)
Guidance	7 (77.8)	1 (1.5)	23 (10.3)	31 (10.2)
Stakeholder input	1 (11.1)	8 (11.9)	20 (8.9)	30 (9.9)
Performance review	0	6 (9.0)	19 (8.5)	26 (8.6)
Government position paper	2 (22.2)	3 (4.5)	17 (7.6)	22 (7.2)
Citizen/patient input	2 (22.2)	5 (7.5)	13 (5.8)	20 (6.6)
Options framing	0	0	10 (4.5)	10 (3.3)
Toolkit	0	0	5 (2.2)	5 (1.6)
External evaluation	0	0	8 (3.6)	8 (2.6)

Framework	1 (11.1)	2 (3.0)	5 (2.2)	8 (2.6)
Health system research priorities	0	0	2 (0.9)	2 (0.7)
Intergovernmental accord	0	2 (3.0)	0	2 (0.7)
Government legislation	1 (11.1)	0	0	1 (0.3)
Government strategic plan for the health sector	0	0	1 (0.4)	1 (0.3)
Health expenditure review	0	0	0	0
Intergovernmental communiqué	0	1 (1.5)	0	1 (0.3)
National health account	0	0	1 (0.4)	1 (0.3)
Government discussion paper	0	0	0	0
Government policy	0	0	0	0
Government/third party accord	0	0	0	0

[1] Total includes four documents that did not have a year of publication, which were not included in the year range calculations, therefore, the total number does not always equal the sum of the year range totals
[2] Documents could be coded as multiple types of document

Document Themes by 2003 First Ministers' Accord on Health Care Renewal National Priority Areas

Many of the documents addressed a number of national priority areas as identified in the 2003 First Ministers' Accord on Health Care Renewal (Table 6). The top three national priority areas addressed in the documents are health human resources (n=270, 89%), quality as a performance indicator (n=210, 69%) and information technology (n=183, 60%). The least commonly addressed national priority areas are technology

assessment (n=19, 6%), prescription drug coverage (n=68, 22%) and Aboriginal health (n=87, 29%). Although more attention is being paid to these issues, evident in the increasing number of documents addressing these topics across the three time points (Table 6), they are still not addressed as frequently as the other national priority areas.

Table 6. Number of documents by 2003 Health Accord national priority areas

National priority areas[1]	Number of documents (%)			
	pre-2003 (n=9)	2003 to 2007 (n=67)	2008 to 2012 (n=224)	Total (n=304)[2]
National priority funding areas				
Primary healthcare	7 (77.8)	29 (43.3)	108 (48.2)	146 (48.0)
Home care	7 (77.8)	27 (40.3)	85 (37.9)	119 (39.1)
Prescription drug coverage	5 (55.6)	14 (20.9)	47 (21.0)	68 (22.4)
Diagnostic/medical equipment	7 (77.8)	30 (44.8)	78 (34.8)	116 (38.2)
Information technology	8 (88.9)	41 (61.2)	131 (58.5)	183 (60.2)
Electronic health record	7 (77.8)	20 (29.9)	78 (34.8)	107 (35.2)
Other priority areas				
Patient safety	3 (33.3)	27 (40.3)	106 (47.3)	140 (46.1)
Health human resources	8 (88.9)	59 (88.1)	200 (89.3)	270 (88.8)
Technology assessment	4 (44.4)	1 (1.5)	14 (6.3)	19 (6.3)
Innovation & research	8 (88.9)	44 (65.7)	123 (54.9)	177 (58.2)
Healthy Canadians/determinants of health	6 (66.7)	19 (28.4)	86 (38.4)	111 (36.5)
Aboriginal health	8 (88.9)	15 (22.4)	64 (28.6)	87 (28.6)
Performance indicators				
Timely access/waiting lists	6 (66.7)	42 (62.7)	115 (51.3)	164 (53.9)
Quality	8 (88.9)	48 (71.6)	151 (67.4)	210 (69.1)
Sustainability	7 (77.8)	27 (40.3)	98 (43.8)	133 (43.8)
Health status & wellness	6 (66.7)	39 (58.2)	99 (44.2)	145 (47.7)

[1] Documents could be coded as multiple national priority areas
[2] Total includes the four documents without years of publication, which were not included in the year range calculations, therefore, the total number does not always equal the sum of the year range totals

Document Themes by Health System Topics

The documents were also coded by health system topics (Table 7). The most common governance arrangement addressed in the documents is policy authority, i.e., documents that describe who makes policy decisions, how, using what types of frameworks and on what terms. 83% (n=252) of documents addressed this theme. The least common governance arrangement addressed is commercial authority, i.e., who makes commercial decisions, how, using what types of frameworks and on what terms. Only 29% (n=89) of documents addressed this theme. Following from this, the most common financial arrangement addressed in the documents is financing the system, of which 41% (n=123) of documents addressed. The least common financial arrangement is incentivizing consumers, e.g., premiums, at 22% (n=68). Out of all of the health system topics, delivery arrangements were the most commonly addressed by the documents. 89% (n=269) of documents addressed by whom care is provided, i.e., the way health human resources are organized and used in the health system. Although the least common delivery arrangement addressed is with what supports is care provided, it is still addressed by more than half of all documents (n=203, 67%). Consumer targeted strategies are the most common implementation strategies addressed in the documents (n=216, 71%). The least common is organization-targeted strategies at 2% (n=5), probably given the challenge in implementing such a macro-level strategy.

Tables 8 and 9 list the three most and least common document themes by health system topics, respectively. The most common governance, financial and delivery arrangement themes addressed in the documents are accountability of the state sector

(n=201, 66%), taxation (n=92, 30%) and availability of care (n=210, 69%), respectively. The most common implementation strategy theme addressed is consumer information or education provision (n=181, 60%).

Table 7. Number of documents by health system topics

Health system topics[1]	Number of documents (%)			
	pre-2003 (n=9)	2003 to 2007 (n=67)	2008 to 2012 (n=224)	Total (n=304)[2]
Governance arrangement				
Policy authority	9 (100)	57 (85.1)	182 (81.3)	252 (82.9)
Organizational authority	8 (88.9)	51 (76.1)	178 (79.5)	240 (78.9)
Commercial authority	7 (77.8)	19 (28.4)	61 (27.2)	89 (29.3)
Professional authority	8 (88.9)	51 (76.1)	150 (67.0)	212 (69.7)
Consumer & stakeholder involvement	6 (66.7)	44 (65.7)	118 (52.7)	170 (55.9)
Financial arrangement				
Financing systems	7 (77.8)	22 (32.8)	92 (41.1)	123 (40.5)
Funding organizations	6 (66.7)	12 (17.9)	60 (26.8)	80 (26.3)
Remunerating providers	8 (88.9)	22 (32.8)	85 (37.9)	116 (38.2)
Purchasing products & services	7 (77.8)	18 (26.9)	70 (31.3)	97 (31.9)
Incentivizing consumers	7 (77.8)	9 (13.4)	51 (22.8)	68 (22.4)
Delivery arrangement				
How care is designed to meet consumers' needs	8 (88.9)	61 (91.0)	189 (84.4)	262 (86.2)
By whom care is provided	8 (88.9)	58 (86.6)	200 (89.3)	269 (88.5)
Where care is provided	8 (88.9)	50 (74.6)	172 (76.8)	233 (76.6)
With what supports is care provided	8 (88.9)	45 (67.2)	146 (65.2)	203 (66.8)
Implementation strategy				
Consumer-targeted strategy	8 (88.9)	48 (71.6)	157 (70.1)	216 (71.1)
Provider-targeted strategy	8 (88.9)	41 (61.2)	123 (54.9)	175 (57.6)
Organization-targeted strategy	0	0	5 (2.2)	5 (1.6)

[1] Documents could be coded as multiple health system topics
[2] Total includes the four documents without years of publication, which were not included in the year range calculations, therefore, the total number does not always equal the sum of the year range totals

Table 8. List of top three document themes by health system topics, n = 304

Document themes	Total number of documents (%)
Governance arrangement	
Accountability of the state sector's role in financing & delivery	201 (66.1)
Centralization/decentralization of policy authority	200 (65.8)
Management approaches	196 (64.5)
Financial arrangement	
Taxation	92 (30.3)
Lists of covered/reimbursed organizations, providers, services & products	89 (29.3)
Scope and nature of insurance plans	73 (24.0)
Delivery arrangement	
Availability of care	210 (69.1)
Package of care/care pathways/disease management	180 (59.2)
Timely access to care	163 (53.6)
Implementation strategy	
Consumer information or education provision	181 (59.5)
Provider educational material	141 (46.4)
Consumer communication and decision-making facilitation	117 (38.5)

The least common governance, financial and delivery arrangement themes addressed in the documents are stewardship of the non-state sector's role in financing and delivery (n=5, 2%), community loan funds and provider indicative budgets (n=0, 0%) and health record systems (n=23, 8%), respectively. Lastly, the least common implementation strategy theme addressed is provider local consensus process (n=5, 2%).

Table 9. List of three least common document themes by health system topics, n = 304

Document themes	Total number of documents (%)
Governance arrangement	
Stewardship of the non-state sector's role in financing/delivery	5 (1.6)
Corruption protections	6 (2.0)
Commercial liability	13 (4.3)
Financial arrangement	
Community loan funds	0
Provider indicative budgets	0
Provider prospective payment	1 (0.3)
Delivery arrangement	
Health record systems	23 (7.6)
Group care	25 (8.2)
Staff / self – shared decision-making	42 (13.8)
Implementation strategy	
Provider local consensus process	5 (1.6)
Patient-mediated intervention	5 (1.6)
Provider peer review	8 (2.6)

Discussion

The EIHR Portal, which is integrated within HSE, provides a one-stop shop for the different types of evidence that can support healthcare renewal, specifically, and evidence-informed health policymaking, generally, in Canada. The process of developing a systematic method for identifying policy-relevant documents and retrieving useful information from these documents can be reproduced by anyone interested in using this type of evidence to inform their health policymaking. Of course, the methods described here can only serve as a guide because the process depends on the context and resources available to create one-stop shops like the EIHR Portal. The implications of this for LMICs will be outlined below.

The EIHR Portal contains 304 policy-relevant documents that address healthcare renewal in Canada and can be categorized into twenty-four document types; the largest category of which is health and health system data (n=75, 25%). The documents address national priority areas identified by federal, provincial and territorial governments, such as health human resources (n=270, 89%) and information technology (n= 183, 60%). The lack of focus on certain national priority areas, such as Aboriginal health (n=87, 29%), highlights the current gaps in Canadian healthcare renewal.

The content of the EIHR Portal reflects policy legacies (Hutchison, Abelson, & Lavis, 2001) and current policy trends in Canadian healthcare renewal as well as the ideas, interests and institutions that make up the Canadian health system. Since its inception, the Canadian health system has centred on providers, particularly two types (hospitals and physicians); therefore, it is not surprising that 89% (n=270) of the documents address the issue of health human resources. This policy legacy is also strongly linked to Canada's continuous efforts to reduce waiting times by investing in supply and, to a lesser extent, demand issues. Canada has also seen a large investment in information technologies to improve healthcare delivery, which is further strengthened by the speed with which new technologies are produced. For example, in 2001, the First Ministers created Canada Health Infoway to support the implementation of various health information technologies across Canada, such as the electronic health record. An interest in electronic health records and other advanced information technologies helps to explain the minimal focus on non-electronic health record systems; which is only addressed in 23 (8%) documents.

The running theme of public versus private forms of governance and financing is present throughout the documents and reflects the ideas found in the Canada Health Act and the strong influence that this "institution" has on healthcare renewal in Canada. Currently, the role of the non-state sector is minimal in the financing and delivery of Canadian health care. Most documents focus on the accountability of the state sector (n=201, 66%) as this is rightfully a natural expectation of any publicly governed system.

Strengths and Limitations

This study has two key strengths and two key limitations. The first strength is that the results of the study present the first effort to systematically identify, gather – on the EIHR Portal – and describe grey literature documents that address healthcare renewal in Canada. Second, the study involved key stakeholders, which was pivotal to its success. Arksey and O'Malley (2005) explain that including the perspectives of those with knowledge of, and a vested interest in, the area of investigation, in this case Canadian healthcare renewal, is invaluable to the research process. The first limitation is the lack of representation in regard to the sources of documents. The scoping review aims for breadth and the identification of all relevant types of literature by searching for evidence via many different sources including, electronic databases, the Internet, existing networks and relevant organizations (Arksey & O'Malley, 2005). However, it is important to note that although the aim is for breadth, a scoping review can make no claim to comprehensiveness. As Arksey and O'Malley (2005) explain, scoping reviews are often one part of an ongoing process. In this study, both the website hand-searches and the EIHR Roundtable contributions were limited to key health organizations and the large

majority of documents in the EIHR Portal are published by these organizations. This limitation increases the potential for powerful political elites to control health policymaking (Lavis, 2002). But as the EIHR Portal is continuously updated, the range of stakeholders can be expanded. The second limitation of this study is that I did not appraise the quality of the documents included in the EIHR Portal and used for the scoping review, mainly because no systematic quality-appraising tool exists for this type of evidence. However, this limitation is pacified by the fact that all documents are published by credible Canadian health organizations, many of which have extensive resources invested in the production of this type of evidence.

The strengths and limitations of colloquial evidence, which is the type of evidence included in the EIHR Portal, are outlined in Table 10. It is important for all users of colloquial evidence to acknowledge the implications of both the strengths and limitations of this type of evidence. For example, although colloquial evidence is not constrained by peer-reviewed journal requirements, it is subsequently more difficult to locate and assess for credibility. Similarly, there is also wide variation in reporting conventions, terminology, etc., which makes comparisons across jurisdictions much more difficult. Again, health policymakers should use many different types of evidence to inform their decisions and to decrease the risks associated with the limitations of colloquial evidence and increase the benefits associated with its strengths.

Table 10. Strengths and limitations of colloquial evidence for health policymaking

Strengths	• Local applicability, relevance and timeliness • Help to understand the context in which health policies are made • Increase transparency of health organization activities when publicly reported • Identify/address gaps not filled by other types of evidence that often focus on the effectiveness of narrow health interventions and not on macro-level health system arrangements • Not constrained by peer-reviewed journal requirements and the time lag to disseminate evidence to a wide audience
Limitations	• May be difficult to locate and obtain • May be of poor quality and less reliable than other types of evidence • Credibility of content may be difficult to assess, often as a result of incomplete bibliographic information and different reporting conventions • Variations in terminology, indicators, etc. make inter-jurisdictional comparisons and policy transfers more difficult • Variations in messages may impede political action • Lengths of documents may dissuade policymakers

Implications for Health Policymaking in Canada

There are a number of implications for health policymaking that arise out of the development of a one-stop shop for policy-relevant documents that address healthcare renewal in Canada. First, the one-stop shop expands the breadth of documents available for policymakers to easily access and use to inform their health system decisions. The EIHR Portal, which provides policymakers with colloquial evidence, in combination with the other types of evidence available in HSE, facilitates the development of well-informed health policies that can be based on a truly comprehensive understanding of the local health system context. Second, well-informed policies will likely face less barriers to implementation as a result of a better understanding of various stakeholders' values and preferences in relation to policy options, the causes and magnitude of the problem

and the resources available to solve the problem. Beyond implementation, many documents in the EIHR Portal can also inform policymakers about the progress and equity impacts of specific healthcare renewal efforts in Canada. Third, and perhaps the most practical implication of the EIHR Portal for policymakers, is the dissemination of lessons learned across jurisdictions, which can eliminate reinventing the wheel. As the Director of the Planning, Research and Analysis Branch of the Ontario Ministry of Health and Long-Term Care explained, a policymaker can decrease the risk associated with a policy option that worked in another, similar jurisdiction (A. Paprica, personal communication, July 11, 2012). The EIHR Portal enables policymakers to compare health system arrangements and policy issues across jurisdictions. Comparisons can illuminate causal factors that may have gone unrecognized as well as alternative courses of action. Ultimately, comparisons can initiate action; especially in the case of a reported successful policy option and facilitate convergence on effective and efficient health system policies, programs and services.

Of course, successful policy transfer is dependent on a number of different and largely contextual factors (Dolowitz & Marsh, 2000). Often, the ease with which a policy is successfully transferred depends on the degree of similarity between the two jurisdictions and the temporal nature of the policy itself, or the fact that policies with long timelines run counter to political short-termism (Hunter, 2009). The EIHR Portal can provide policymakers with the necessary information to help assess the former; the latter can only be addressed by cultural changes but again, a better understanding of the overall health system context is a step in the right direction.

An analysis of the general contents of the documents in the EIHR Portal also has implications for health policymaking in Canada. Based on the descriptive epidemiology of policy-relevant documents, it is evident that certain Canadian health system national priority areas are receiving more attention than others. Policymakers should ensure that all national priority areas receive fair attention and resources, especially technology assessment, prescription drug coverage and Aboriginal health, which are underrepresented in the EIHR Portal. Health human resources and information technologies can only achieve so much if they are not effective at providing drugs, programs and services to those populations most in need. Canadian health policymakers need to break free of certain policy legacies that constrain their efforts to tackle health system problems, using the most effective and efficient combination of health system arrangements and implementation strategies.

Implications for Health Policymaking in LMICs

The development of the EIHR Portal occurred in the context of a high-income country; however, the process outlined in this study can also be used as a guide for LMICs interested in creating a similar one-stop shop for policy-relevant documents addressing macro-level health system topics. Many of the previously mentioned implications also apply to LMICs; however, these countries face unique situations that make the development of a one-stop shop more challenging but arguably, that much more necessary. Health policymakers in LMICs are working with exceptionally constrained resources and great disease burdens, leaving little room for ill-informed policies. Some of the main challenges likely to face developers of an EIHR Portal-like one-stop shop are:

Internet availability, document availability, copyright issues and lack of technical expertise. In Canada, many health organizations produce policy-relevant documents that are publicly available on the Internet. The EIHR Portal drew on these resources while respecting copyright issues by providing links to documents stored on the organizations' websites and not storing them on the server located at McMaster University. In LMICs, there are much fewer health organizations that have the resources to produce such documents. It is likely that the Ministry of Health, or equivalent, is the main, or only source of policy-relevant documents. This can have implications for the representativeness of documents available for a one-stop shop. Furthermore, these documents may not be readily accessible, especially if they are not publicly available on the Internet. If a document is not publicly available on the Internet, then copyright issues become much more complicated. First, the developers of an EIHR Portal-like one-stop shop would have to obtain a hard copy of the document. Second, they would have to create an electronic copy as well as invest in a server to store the document on the Internet. Alternatively, they could request that the producing organization make the document publicly available on the Internet. Third, they would have to obtain permission from the authors to make the document available on their server if the organization wasn't able to make it available on their own website. All of these steps are resource-intensive and present major obstacles for resource-poor countries interested in developing an EIHR Portal-like one-stop shop.

All of these challenges facing LMICs emphasize the need to collaborate on resource intensive KT efforts such as a one-stop shop. Unlike high-income countries,

which can rely on local health organizations, LMICs should also collaborate with other international health organizations that produce policy-relevant documents relevant to the specific country in question and that can also provide technical expertise and other necessary resources. The risk of collaborating with these international organizations is that their policy interests may not align with the local needs and priorities of the country. Behague, Tawiah, Rosato, Some, and Morrison (2009) explain that internationally-endorsed evidence-informed policymaking is often driven by donor agendas that do not reflect local needs but instead "fad-like" political interests. Behague et al. (2009) suggest that LMICs policymakers clearly outline and agree on their health system priorities before collaborating with external groups. The goal of the one-stop shop should be to empower national-level policymakers to make the most well-informed decisions that are based on a comprehensive understanding of their local health system context.

Implications for Research

The EIHR Portal described in this study is the first of its kind. Future efforts can build on this work and expand the EIHR Portal to include documents from other health organizations in Canada or international organizations that examine healthcare renewal in Canada. In time, the EIHR Portal could also include documents that address healthcare renewal or other macro-level health system topics in other countries; the potential for inter-country collaboration is great. Future research can update the analysis of the distribution of documents once these additional documents are added to the EIHR Portal. This study also described the general contents of policy-relevant documents addressing healthcare renewal in Canada. Future research should devise a method to appraise the

quality of these documents, so that this could be reported in the EIHR Portal and policymakers would not have to rely on their own critical appraisal skills. A survey of the users of the EIHR Portal could provide valuable feedback regarding the EIHR Portal interface and ways to improve the one-stop shop.

Conclusion

Jurisdictions across Canada and around the world face many similar health system challenges. KT efforts, such as the EIHR Portal described in this study, facilitate collective problem solving across jurisdictional borders while preserving different types of evidence that enrich our way of thinking about health system problems and solutions. There is growing recognition that a range of evidence is required for evidence-informed health policymaking that address not only questions of effectiveness but also describe contextual factors, such as the ideas, interests and institutions that shape health policies. Ultimately, only through concerted efforts that facilitate wholly informed policies can we effectively tackle the persisting inequalities that plague individual health systems and subsequently global health.

References

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology, 8*(1), 19–32.

Behague, D., Tawiah, C., Rosato, M., Some, T., & Morrison, J. (2009). Evidence-based policy-making: The implications of globally-applicable research for context-specific problem-solving in developing countries. *Social Science & Medicine, 69*, 1539–1546.

Brien, S.E., Lorenzetti, D.L., Lewis, S., Kennedy, J., & Ghali, W.A. (2010). Overview of a formal scoping review on health system report cards. *Implementation Science, 5*(2), 1–12.

Canadian Institutes of Health Research. (2012a, May 04). *More about knowledge translation at CIHR*. Retrieved from http://www.cihr-irsc.gc.ca/e/39033.html

Canadian Institutes of Health Research. (2012b, June 27). *Evidence informed healthcare renewal*. Retrieved from http://www.cihr-irsc.gc.ca/e/43628.html

Canadian Institutes of Health Research. (2012c, June 27). *EIHR Roundtable*. Retrieved from http://www.cihr-irsc.gc.ca/e/44928.html

Canadian Institutes of Health Research. (2012d, June 27). *Evidence-informed healthcare renewal (EIHR) portal*. Retrieved from http://www.cihr-irsc.gc.ca/e/45438.html

Contandriopoulos, D., Lemire, M., Denis, J.L., & Tremblay, E. (2010). Knowledge exchange processes in organizations and policy arenas: A narrative systematic review of the literature. *The Milbank Quarterly, 88*(4), 444–483.

Dolowitz, D.P., & Marsh, D. (2000). Learning from abroad: The role of policy transfer in contemporary policy-making. *Governance: An International Journal of Policy and Administration, 13*(1), 5–24.

Health Canada. (2006, May 08). *2003 First Ministers' accord on health care renewal*. Retrieved from http://www.hc-sc.gc.ca/hcs-sss/delivery-prestation/fptcollab/2003accord/index-eng.php

Health Systems Evidence. (2012). *Health systems evidence*. Retrieved from http://www.healthsystemsevidence.org

Howlett, M., Ramesh, M., & Perl, A. (2009). *Studying public policy: Policy cycles & policy subsystems* (3rd ed.). Don Mills, ON: Oxford University Press.

Hunter, D.J. (2009). Relationship between evidence and policy: A case of evidence-based policy or policy-based evidence? *Public Health, 123*, 583–586.

Hutchison, B., Abelson, J., & Lavis, J.N. (2001). Primary care in Canada: So much innovation, so little change. *Health Affairs, 20*(3), 116–131.

Lavis, J.N. (2002). *Political elites and their influence on health-care reform in Canada*. Retrieved from http://publications.gc.ca/collections/Collection/CP32-79-26-2002E.pdf

Lavis, J.N., Davies, H.T.O., Oxman, A.D., Denis, J.L., Golden-Biddle, K., & Ferlie, E. (2005). Towards systematic reviews that inform health care management and policy-making. *Journal of Health Services Research & Policy, 10*(Suppl 1), 53–48.

Lavis, J.N., Lomas, J., Hamid, M., & Sewankambo, N.K. (2006). Assessing country-level efforts to link research to action. *Bulletin of the World Health Organization, 84*, 620–628.

Lewin, S., Oxman, A.D., Lavis, J.N., Fretheim, A., Garcia Marti, S., & Munabi-Babigumira, S. (2009). SUPPORT tools for evidence-informed policymaking in health 11: Finding and using evidence about local conditions. *Health Research Policy and Systems, 7*(Suppl 1), S11.

Lomas, J., Culyer, T., McCutcheon, C., McAuley, L., & Law, S. (2005). *Final report: Conceptualizing and combining evidence for health system guidance*. Retrieved from http://www.chsrf.ca/migrated/pdf/insightAction/evidence_e.pdf

Mays, N., Roberts, E., & Popay, J. (2001). Synthesising research evidence. In N. Fulop, P. Allen, A. Clarke, & N. Black (Eds.), *Studying the organisation and delivery of health services: Research methods* (pp. 188–220). London: Routledge.

Mitton, C., Adair, C.E., McKenzie, E., Patten, S.B., & Waye Perry, B. (2007). Knowledge transfer and exchange: Review and synthesis of the literature. *The Milbank Quarterly, 85*(4), 729–768.

Moat, K.A., & Lavis, J.N. (2012). 10 best resources for…evidence-informed health policy making. *Health Policy and Planning,* 1–4.

Nutley, S.M., Walter, I., & Davies, H.T.O. (2007). *Using evidence: How research can inform public services*. Bristol, UK: The Policy Press.

Oxman, A.D., Lavis, J.N., & Fretheim, A. (2007). The use of evidence in WHO recommendations. *Lancet, 369*, 1883–1889.

Oxman, A.D., Lavis, J.N., Lewin, S., & Fretheim, A. (2009). SUPPORT tools for evidence-informed health policymaking (STP) 1: What is evidence-informed policymaking? *Health Research Policy and Systems, 7*(Suppl 1), S1.

United Nations. (2012). *The millennium development goals report 2012*. Retrieved from http://mdgs.un.org/unsd/mdg/Resources/Static/Products/Progress2012/English2012.pdf

Weiss, C.H. (1979). The many meanings of research utilization. *Public Administration Review, 39*(5), 426–431.

Wilson, M.G., Lavis, J.N., Hammill, A.C., Moat, K.A., Boyko, J.A., Grimshaw, J.M., & Flottorp, S. (Manuscript under review). Enhancing the accessibility and usability of systematic reviews that can inform health system policymaking.

World Health Organization. (2004). *World report on knowledge for better health: Strengthening health systems*. Retrieved from

http://www.who.int/rpc/meetings/world_report_on_knowledge_for_better_health.pdf

World Health Organization. (2007). *Everybody business: Strengthening health systems to improve health outcomes: WHO's framework for action.* Retrieved from http://www.who.int/healthsystems/strategy/everybodys_business.pdf

Appendices

Appendix A. Google Advanced Search

Table A1. Search terms and results of Google advanced search, December 2011

Search[1]	Search terms (connector: AND)[2]			Results
	Country	Health system synonyms	Policy-relevant document synonyms[3]	
1	Canada	"health system" OR "healthcare system" OR "health care system" OR "health sector" OR "healthcare sector" OR "health care sector"	policy OR program OR arrangement OR management OR organization	1,330,000
2			reform OR strengthening	765,000
3			"strategic plan" OR "working plan" OR strategy OR plan	1,410,000
4			law OR act OR legislation	1,310,000
5			accounts	1,690,000
6			expenditures OR cost OR spending	1,310,000
7			"research priorities"	17,200
8			assessment	1,290,000
9			analysis	1,290,000
10			"statement of interest"	3,560
11			report OR "performance report" OR "progress report"	1,180,000
			TOTAL	**11,595,760**

[1] Limits: English (language); .pdf (file type)
[2] Google employs synonyms automatically but to be sure, key synonyms were included as search terms
[3] Produced from a preliminary list of potential policy-relevant document types devised by JL

Appendix B. EIHR Roundtable Organizations

Table A2. List of contributing EIHR Roundtable organizations

Organization name (with link to website)	Organization mission/mandate[1]
Alberta Innovates – Health Solutions	*Support, for the economic and social well-being of Albertans, health research and innovation activities aligned to meet Government of Alberta priorities, including, without limitation, activities directed at the development and growth of the health sectors, the discovery of new knowledge and the application of that knowledge.*
Association of Canadian Academic Health Organizations	*To create an environment in which research discovery, innovation and learning benefit patients, populations, health systems and the economy.*
Canadian Agency for Drugs and Technologies in Health	*Funded by Canada's federal, provincial, and territorial governments, CADTH is an independent, not-for-profit agency that delivers timely, evidence-based information to health care leaders about the effectiveness and efficiency of health technologies.*
Canadian Health Services Research Foundation	*The Canadian Health Services Research Foundation is an independent organization dedicated to accelerating healthcare improvement and transformation for Canadians. We collaborate with governments, policy-makers, and health system leaders to convert evidence and innovative practices into actionable policies, programs, tools and leadership development.*
Canadian Healthcare Association	*The Canadian Healthcare Association is a leader in developing, and advocating for, health policy solutions that meet the needs of Canadians. The Canadian Healthcare Association (CHA) is the federation of provincial and territorial hospital and health organizations across Canada.*
Canadian Institute for Health Information	*To lead the development and maintenance of comprehensive and integrated health information that enables sound policy and effective health system management that improve health and health care.*
Canadian Institutes of Health Research	*The Canadian Institutes of Health Research (CIHR) is the Government of Canada's agency responsible for funding health research in Canada. CIHR's mandate is to "excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health-care system."*

Canadian Nurses Association	*CNA is the national professional voice of registered nurses, advancing the practice of nursing and the profession to improve health outcomes in a publicly funded, not-for-profit health system by: unifying the voices of registered nurses; strengthening nursing leadership; promoting nursing excellence and a vibrant profession; advocating for healthy public policy and a quality health system; and serving the public interest.*
Canadian Patient Safety Institute	*Established by Health Canada in 2003, the Canadian Patient Safety Institute (CPSI) works with governments, health organizations, leaders, and healthcare providers to inspire extraordinary improvement in patient safety and quality.*
Health Canada	*Health Canada is the federal department responsible for helping the people of Canada maintain and improve their health.*
Health Council of Canada	*To report on the renewal of Canada's health system, focusing on best practices and innovation.*
Institute of Health Economics	*To assist decision makers in health policy and practice with the results from economic evaluations, costing and cost-effectiveness analyses, and with syntheses of findings from research in health technology assessment.*
Manitoba Health	*Manitoba Health is a department within the Government of Manitoba. The department operates under the provisions of the legislation and responsibilities of the Minister of Health. The legislation, as well as emerging health and health care issues, guide the planning and delivery of health care services for Manitobans.*
Northwest Territories Department of Health and Social Services	*Promoting healthy choices; Protecting public health; Preventing illness and disease; Protecting children and people at risk from abuse.*
Nova Scotia Department of Health and Wellness	*Working together to empower individuals, families, partners, and communities to promote, improve, and maintain the health of Nova Scotians through a proactive and sustainable health system.*
Ontario Ministry of Health and Long-Term Care	*The Ministry of Health and Long-Term Care is working to establish a patient-focused, results-driven, integrated and sustainable publicly funded health system. Its plan for building a sustainable public health care system in Ontario is based on helping people stay healthy, delivering good care when people need it, and protecting the health system for future generations.*

[1] As stated on the organization's website

Appendix C. Canadian Health Research Collection Search

Table A3. Search terms and results of Canadian Health Research Collection search, January 2012

Search	Region	Search terms (i.e. publisher)	Results
1	International	Organization for Economic Cooperation and Development	9
2		Pan American Health Organization	2
3	National	Accreditation Canada	2
4		Alzheimer Society of Canada	2
5		Assembly of First Nations	15
6		Association of Canadian Academic Healthcare Organizations	11
7		C.D. Howe Institute	9
8		Caledon Institute of Social Policy	15
9		Canada Health Infoway Inc.	17
10		Canadian Agency for Drugs and Technologies in Health	345
11		Canadian AIDS Society	10
12		Canadian Alliance on Mental Illness and Mental Health	2
13		Canadian Cancer Research Alliance	7
14		Canadian Cancer Society	8
15		Canadian Centre for Policy Alternatives	32
16		Canadian Centre on Substance Abuse	36
17		Canadian Collaborative Mental Health Initiative	12
18		Canadian Coordinating Office for Health Technology Assessment	32
19		Canadian Council on Health Services Accreditation	10
20		Canadian Doctors for Medicare	2
21		Canadian Federation for Sexual Health	1
22		Canadian Foundation for Drug Policy	1
23		Canadian Generic Pharmaceutical Association	3
24		Canadian Health Coalition	21
25		Canadian Health Information Management Association	1

26		Canadian Health Services Research Foundation	107
27		Canadian Healthcare Association	13
28		Canadian Heart Health Strategy and Action Plan	2
29		Canadian Home Care Association	19
30		Canadian Institute for Health Information	165
31		Canadian Institutes of Health Research	22
32		Canadian Medical Association	23
33		Canadian Nurse Practitioner Initiative	1
34		Canadian Nurses Association	28
35		Canadian Patient Safety Institute	53
36		Canadian Pharmacists Association	5
37		Canadian Policy Research Networks	35
38		Canadian Public Health Association	1
39		Canadian Society of Telehealth	1
40		Canadian Stroke Network	1
41		Centers for Disease Control and Prevention, National Center for Health Statistics	1
42		Centre for Aboriginal Health Research	6
43		Centre for Addiction and Mental Health	19
44		Centre for Health Evaluation and Outcome Sciences	3
45		Centre for Native Policy and Research	1
46		Centre for Research in Women's Health	5
47		Chronic Disease Prevention Alliance of Canada	8
48		College of Family Physicians of Canada	7
49		Commission on the Future of Health Care in Canada[4]	1
50		Fraser Institute	44
51		Government of Canada	9
52		Health Canada	383
53		Health Canada Applied Research & Analysis Directorate	5
54		Health Council of Canada	45
55		Health Professions Regulatory Advisory Council	4

56		Health Quality Council	45
57		Health Research Advocacy Network	1
58		Heart and Stroke Foundation of Canada	1
59		House of Commons, Government of Canada	2
60		Institute for Clinical Evaluative Sciences	50
61		Institute for Research on Public Policy	13
62		Institute of Health Economics	61
63		Medical Officer of Health	1
64		Mental Health Commission of Canada	9
65		National Collaborating Centre for Aboriginal Health	6
66		National Collaborating Centre for Determinants of Health	10
67		National Collaborating Centre for Healthy Public Policy	18
68		National Collaborating Centre for Infectious Diseases	20
69		National Coordinating Group on Health Care Reform and Women	5
70		National Primary Health Care Awareness Strategy	2
71		Pan-Canadian Public Health Network	1
72		Policy Network	8
73		Policy Research Initiative	3
74		Prairie Region Health Promotion Research Centre	2
75		Prairie Women's Health Centre of Excellence	20
76		Public Health Agency of Canada	108
77		Public Policy Forum	8
78		Statistics Canada	39
79		Wait Time Alliance for Timely Access to Health Care	6
80		Wellesley Institute	53
81		Women and Health Care Reform	6
	Sub-National		
82	Alberta	Alberta Alcohol and Drug Abuse Commission	11
83		Alberta Association of Registered Nurses	1
84		Alberta Centre for Active Living	5

85		Alberta Centre for Health Services Utilization Research	14
86		Alberta Health and Wellness	66
87		Alberta Health Services	22
88		Alberta Heritage Foundation for Medical Research	49
89		Alberta Innovates - Health Solutions	1
90		Alberta Mental Health Board	2
91		Government of Alberta	30
92		Health Quality Council of Alberta	14
93	British Columbia	ActNow BC	1
94		BC Centre for Disease Control	12
95		BC Healthy Living Alliance	3
96		BC Patient Safety & Quality Council	1
97		BC Stats	2
98		British Columbia Centre for Excellence in HIV/AIDS	2
99		British Columbia Centre of Excellence for Women's Health	13
100		British Columbia Medical Association	13
101		British Columbia Ministries of Health Services, Education, & Children and Family Development	1
102		British Columbia Ministry of Health	53
103		British Columbia Provincial Health Officer	6
104		British Columbia Provincial Health Services Authority	25
105		Government of British Columbia	6
106		Health Network of British Columbia	2
107		Healthnet BC	1
108		Office of the Auditor General of British Columbia	2
109		Public Health Association of BC	1
110	Manitoba	Addictions Foundation of Manitoba	7
111		Government of Manitoba	2
112		Manitoba Health	56
113		Government of New Brunswick	5

114	New Brunswick	New Brunswick Department of Health	26
115		New Brunswick Health and Wellness	11
116		New Brunswick Health Council	2
117	Newfoundland & Labrador	Government of Newfoundland and Labrador	5
118		Newfoundland & Labrador Department of Health and Community Services	2
119	Northwest Territories	Government of the Northwest Territories	3
120		Northwest Territories Health and Social Services	30
121	Nova Scotia	Cancer Care Nova Scotia	3
122		Government of Nova Scotia	7
123		Nova Scotia Department of Health	5
124		Nova Scotia Department of Health and Wellness	4
125		Nova Scotia Health	53
126		Nova Scotia Health Promotion	30
127		Nova Scotia Office of Health Promotion	1
128	Nunavut	Government of Nunavut	7
129		Nunavut Department of Health and Social Services	6
130		Nunavut Tunngavik Incorporated	5
131	Ontario	Action Cancer Ontario	4
132		Cancer Care Ontario	33
133		eHealth Ontario	1
134		Government of Ontario	20
135		HealthForce Ontario	1
136		Office of the Auditor General of Ontario	2
137		Ontario Agency for Health Protection and Promotion	2
138		Ontario Chronic Disease Prevention Alliance	6
139		Ontario College of Family Physicians	5
140		Ontario Health Coalition	10
141		Ontario Health Quality Council	7
142		Ontario Hospital Association	18
143		Ontario Medical Association	1

144		Ontario Ministry of Health and Long-Term Care	155
145		Ontario Ministry of Health Promotion and Sport	1
146		Ontario Public Health Association	17
147		Ontario Women's Health Council	3
148		Ontario Women's Health Network	4
149		Registered Nurses' Association of Ontario	41
150	Prince Edward Island	Prince Edward Island Department of Health	2
151		Prince Edward Island Health and Social Services	6
152	Quebec	Government of Quebec	1
153	Saskatchewan	Government of Saskatchewan	1
154		Saskatchewan Health	38
155		Saskatchewan Health Research Foundation	4
156		Saskatchewan Institute of Public Policy	7
157		Saskatoon Health Region, Public Health Services	9
158	Yukon	Government of Yukon	1
159		Yukon Department of Health and Social Services	8
		TOTAL	**3,157**

Appendix D. Website Hand-Searches

Table A4. List of key national health organization websites hand-searched and search results, April to June 2012[1]

Search	Organization name (with link to website)	Results
1	Accreditation Canada	7
2	Alberta Innovates – Health Solutions[2]	2
3	Alzheimer Society	2
4	Association of Canadian Academic Healthcare Organizations	3
5	Canada Health Infoway	29
6	Canadian AIDS Society	2
7	Canadian Alliance for Long Term Care	0
8	Canadian Cancer Society	2
9	Canadian Cardiovascular Society	7
10	Canadian Diabetes Association	47
11	Canadian Doctors for Medicare	10
12	Canadian Federation of Nurses Unions	30
13	Canadian Health Coalition	8
14	Canadian Health Services Research Foundation	117
15	Canadian Healthcare Association	36
16	Canadian Home Care Association	28
17	Canadian Institute for Health Information	197
18	Canadian Institutes of Health Research[2]	10
19	Canadian Medical Association	48
20	Canadian Mental Health Association	9
21	Canadian Nurses Association	27
22	Canadian Partnership Against Cancer	30
23	Canadian Patient Safety Institute[2]	14
24	Canadian Pharmacists Association	12
25	College of Family Physicians of Canada	36
26	Federal Healthcare Partnership	8
27	Health Action Lobby	6
28	Health Canada	70
29	Health Council of Canada	44
30	Institute of Health Economics[2]	18
31	Institute of Health Services and Policy Research[2]	9
32	Manitoba Health[2]	75
33	Mental Health Commission of Canada	15
34	Nova Scotia Department of Health and Wellness[2]	67
35	Northwest Territories Health and Social Services[2]	13
36	Ontario Ministry of Health and Long-Term Care[2]	19
37	Patented Medicine Prices Review Board	29

38	Public Health Agency of Canada	59
39	Vocational Rehabilitation Association of Canada	0
	TOTAL	**1,145**

[1] Five provincial/territorial organizations were included in phase three of the search strategy

[2] Organizations added at phase three of the search strategy

Appendix E. Canadian Provincial and Territorial Health Organizations

Table A5. List of key Canadian provincial and territorial health organizations

Province / territory	Organization name
British Columbia	Association of Registered Nurses of British Columbia
	BC Cancer Agency
	BC Care Providers Association
	BC Centre for Disease Control
	BC Mental Health and Addiction Services
	BC Patient Safety and Quality Council
	BC Stats
	British Columbia Medical Association
	British Columbia Ministry of Health
	British Columbia Nurses' Union
	British Columbia Pharmacy Association
	British Columbia Provincial Health Services Authority
	Cardiac Services BC
Alberta	Alberta Continuing Care Association
	Alberta Health and Wellness
	Alberta Health Services
	Alberta Medical Association
	Alberta Pharmacists' Association
	College & Association of Registered Nurses of Alberta
	Friends of Medicare
	Health Quality Council of Alberta
	United Nurses of Alberta
Saskatchewan	Pharmacists' Association of Saskatchewan
	Saskatchewan Association of Health Organizations
	Saskatchewan Cancer Agency
	Saskatchewan Health
	Saskatchewan Health Quality Council
	Saskatchewan Medical Association
	Saskatchewan Registered Nurses Association
	Saskatchewan Union of Nurses
Manitoba	CancerCare Manitoba
	College of Registered Nurses of Manitoba
	Doctors Manitoba
	Long Term & Continuing Care Association of Manitoba
	Manitoba Association of Health Care Professionals
	Manitoba Health[1]
	Manitoba Institute for Patient Safety

	Manitoba Nurses Union
	Manitoba Society of Pharmacists
Ontario	Cancer Care Ontario
	eHealth Ontario
	Health Quality Ontario
	HealthForce Ontario
	Ontario Association of Non-Profit Homes and Services for Seniors
	Ontario Health Coalition
	Ontario Home Care Association
	Ontario Hospital Association
	Ontario Long Term Care Association
	Ontario Medical Association
	Ontario Ministry of Health and Long-Term Care[1]
	Ontario Nurses' Association
	Ontario Pharmacists' Association
	Public Health Ontario
	Registered Nurses' Association of Ontario
	Smart Systems for Health Agency
Quebec[2]	Institut national de santé publique du Québec
	La Fédération interprofessionnelle de la santé du Québec
	Santé et Services sociaux Québec
New Brunswick	Ambulance New Brunswick
	FacilicorpNB
	Horizon Health Network
	New Brunswick Association of Nursing Homes
	New Brunswick Department of Health
	New Brunswick Health Council
	New Brunswick Home Support Association
	New Brunswick Medical Society
	New Brunswick Nurses Union
	New Brunswick Pharmacists' Association
	The Nurses Association of New Brunswick
	Vitalité Health Network
Nova Scotia	Cancer Care Nova Scotia
	Cardiovascular Health Nova Scotia
	Continuing Care Association of Nova Scotia
	Diabetes Care Program of Nova Scotia
	Doctors Nova Scotia
	Health Association Nova Scotia
	Nova Scotia Breast Screening Program
	Nova Scotia Department of Health and Wellness[1]
	Nova Scotia HomeCare Association

	Nova Scotia Nurses' Union
	Pharmacy Association of Nova Scotia
	Reproductive Care Program of Nova Scotia
Prince Edward Island	Association of Registered Nurses of Prince Edward Island
	Health PEI
	Medical Society of PEI
	Prince Edward Island Department of Health and Wellness
	Prince Edward Island Nurses' Union
	Prince Edward Island Pharmacists Association
Newfoundland	Association of Registered Nurses of Newfoundland and Labrador
	Newfoundland & Labrador Department of Health and Community Services
	Newfoundland & Labrador Nurses' Union
	Newfoundland and Labrador Centre for Health Information
	Newfoundland and Labrador Health Boards Association
	Newfoundland and Labrador Medical Association
	Pharmacists' Association of Newfoundland and Labrador
Yukon	Yukon Department of Health and Social Services
	Yukon Medical Association
	Yukon Registered Nurses Association
Northwest Territories	Northwest Territories Health and Social Services[1]
	Northwest Territories Medical Association
	Registered Nurses Association of the Northwest Territories and Nunavut
Nunavut	Nunavut Department of Health and Social Services
	Registered Nurses Association of the Northwest Territories and Nunavut

[1] Organizations included in phase three of the search strategy
[2] Not a complete list

Appendix F. Coding Taxonomy

Taxonomy of Health System Arrangements and Implementation Strategies (Last updated by Kaelan Moat on 7 July 2012)

First author:
RefID: **Coder:**

Type of synthesis
- ☐ Evidence brief for policy
- ☐ Overview of systematic reviews
- ☐ Systematic review of effects
- ☐ Systematic review addressing other questions
- ☐ Systematic review in progress
- ☐ Systematic review being planned
- ☐ Economic evaluation
- ☐ Health reform description
- ☐ Health system description

Type of question

☐ Not effectiveness	☐ Cost effectiveness
☐ Many	☐ Description
☐ Effectiveness	

☐ **Governance arrangement**
- ☐ **Policy authority**
  - ☐ Centralization/decentralization of policy authority
  - ☐ Accountability of the state sector's role in financing & delivery
  - ☐ Stewardship of the non-state sector's role in financing & delivery
  - ☐ Decision-making authority about who is covered and what can or must be provided to them
  - ☐ Corruption protections
- ☐ **Organizational authority**
  - ☐ Ownership
  - ☐ Management approaches
  - ☐ Accreditation
  - ☐ Networks/multi-institutional arrangements
- ☐ **Commercial authority**
  - ☐ Licensure & registration requirements
  - ☐ Patents & profits
  - ☐ Pricing & purchasing
  - ☐ Marketing
  - ☐ Sales & dispensing
  - ☐ Commercial liability
- ☐ **Professional authority**
  - ☐ Training & licensure requirements
  - ☐ Scope of practice
  - ☐ Setting of practice
  - ☐ Continuing competence
  - ☐ Quality & safety
  - ☐ Professional liability
- ☐ **Consumer & stakeholder involvement**
  - ☐ Consumer participation in policy & organizational decisions
  - ☐ Consumer participation in system monitoring
  - ☐ Consumer participation in service delivery
  - ☐ Consumer complaints management
  - ☐ Stakeholder participation in policy & organizational decisions (or monitoring)

☐ **Financial arrangement**
- ☐ **Financing Systems**
  - ☐ Taxation
  - ☐ Social health insurance
  - ☐ Community-based health insurance
  - ☐ Community loan funds
  - ☐ Private insurance
  - ☐ Health savings accounts (Individually financed)
  - ☐ User fees
  - ☐ Donor contributions
- ☐ **Funding organizations**
  - ☐ Fee-for-service (Funding)
  - ☐ Capitation (Funding)
  - ☐ Global budget
  - ☐ Prospective payment (Funding)
  - ☐ Indicative budgets (Funding)
  - ☐ Targeted payments/penalties (Funding)
- ☐ **Remunerating providers**
  - ☐ Fee-for-service (Remuneration)
  - ☐ Capitation (Remuneration)
  - ☐ Salary
  - ☐ Prospective payment (Remuneration)
  - ☐ Fundholding
  - ☐ Indicative budgets (Remuneration)
  - ☐ Targeted payments/penalties (Remuneration)
- ☐ **Purchasing products & services**
  - ☐ Scope & nature of insurance plans
  - ☐ Lists of covered/reimbursed organizations, providers, services & products
  - ☐ Restrictions in coverage/reimbursement rates for organizations, providers, services & products
  - ☐ Caps on coverage/reimbursement for organizations, providers, services & products
  - ☐ Prior approval requirements for organizations, providers, services & products
  - ☐ Lists of substitutable services & products
- ☐ **Incentivizing consumers**
  - ☐ Premium (level & features)
  - ☐ Cost sharing
  - ☐ Health savings accounts (Third party contributions)
  - ☐ Targeted payments/penalties (Incentivizing consumers)

☐ **Delivery arrangement**
- ☐ **How care is designed to meet consumers' needs**
  - ☐ Availability of care
  - ☐ Timely access to care
  - ☐ Culturally appropriate care
  - ☐ Case management
  - ☐ Package of care/care pathways/disease management
  - ☐ Group care
- ☐ **By whom care is provided**
  - ☐ System - Need, demand & supply
  - ☐ System - Recruitment, retention & transitions
  - ☐ System - Performance management
  - ☐ Workplace conditions – Provider satisfaction
  - ☐ Workplace conditions – Health & safety
  - ☐ Skill mix – Role performance
  - ☐ Skill mix – Role expansion or extension
  - ☐ Skill mix – Task shifting/substitution
  - ☐ Skill mix - Multidisciplinary teams
  - ☐ Skill mix - Volunteers
  - ☐ Skill mix – Communication & case discussion between distant health professionals
  - ☐ Staff - Training
  - ☐ Staff - Support
  - ☐ Staff - Workload/workflow/intensity
  - ☐ Staff - Continuity of care
  - ☐ Staff/self – Shared decision-making
  - ☐ Self-management
- ☐ **Where care is provided**
  - ☐ Site of service delivery
  - ☐ Physical structure, facilities & equipment
  - ☐ Organizational scale
  - ☐ Integration of services
  - ☐ Continuity of care
  - ☐ Outreach
- ☐ **With what supports is care provided**
  - ☐ Health record systems
  - ☐ Electronic health record
  - ☐ Other ICT that support individuals who provide care
  - ☐ ICT that support individuals who receive care
  - ☐ Quality monitoring and improvement systems
  - ☐ Safety monitoring and improvement systems

☐ **Implementation strategy**
- ☐ **Consumer-targeted strategy**
  - ☐ Information or education provision
  - ☐ Behaviour change support
  - ☐ Skills and competencies development
  - ☐ (Personal) Support
  - ☐ Communication and decision-making facilitation
  - ☐ System participation
- ☐ **Provider-targeted strategy**
  - ☐ Educational material
  - ☐ Educational meeting
  - ☐ Educational outreach visit
  - ☐ Local opinion leader
  - ☐ Local consensus process
  - ☐ Peer review
  - ☐ Audit and feedback
  - ☐ Reminders and prompts
  - ☐ Tailored intervention
  - ☐ Patient-mediated intervention
  - ☐ Multi-faceted intervention
- ☐ **Organization-targeted strategy**

National priority area
- ☐ **National priority funding area**
  - ☐ Primary healthcare
  - ☐ Home care
  - ☐ Prescription drug coverage
  - ☐ Diagnostic/medical equipment
  - ☐ Information technology
  - ☐ Electronic health record
- ☐ **Other priority area**
  - ☐ Patient safety
  - ☐ Health human resources
  - ☐ Technology assessment
  - ☐ Innovation & research
  - ☐ Healthy Canadians/determinants of health
- ☐ **Performance indicator**
  - ☐ Timely access/waiting lists
  - ☐ Quality
  - ☐ Sustainability
  - ☐ Health status & wellness
- ☐ **Aboriginal health**
- ☐ **Priority research themes – LfD III**
  - ☐ Workforce & the work environment
  - ☐ Change management for improved practice & improved health
  - ☐ Data/information/knowledge management
  - ☐ Values-based decision-making & public engagement
  - ☐ Patient-centred care
  - ☐ Patient flow & system integration
  - ☐ Chronic disease prevention & management
  - ☐ Health system financing & sustainability
  - ☐ Emerging technologies & drugs
  - ☐ Quality & patient safety
  - ☐ Linking population & public health to health services

Theme
- ☐ Healthy aging

Domain
- ☐ **Diseases**
  - ☐ Infectious diseases
    - ☐ HIV
    - ☐ Tuberculosis
    - ☐ Malaria
    - ☐ Diarrhoeal disease

Taxonomy of Health System Arrangements and Implementation Strategies (Last updated by Kaelan Moat on 7 July 2012)

- ☐ Lower respiratory infections
- ☐ Non-communicable diseases
  - ☐ Cancer
  - ☐ Cardiovascular disease
  - ☐ Diabetes
  - ☐ Alzheimer and other dementias
  - ☐ Chronic obstructive pulmonary
- ☐ Other
  - ☐ Maternal and child health
  - ☐ Accidents
  - ☐ Mental health and addictions
- ☐ **Technologies**
  - ☐ Drugs
  - ☐ Devices
  - ☐ Diagnostics
  - ☐ Surgery
- ☐ **Sectors**
  - ☐ Primary care
  - ☐ Home care
  - ☐ Hospital care
  - ☐ Rehabilitation
  - ☐ Long-term care
  - ☐ Public health
- ☐ **Providers**
  - ☐ Physician
    - ☐ Generalist
    - ☐ Specialist
  - ☐ Nurse
  - ☐ Pharmacist
  - ☐ Allied health professional
  - ☐ Lay/community health worker

EIHR Portal-specific coding

Document type

- ☐ Health and health system data
- ☐ Health expenditure review
- ☐ National health account
- ☐ Health system research priorities
- ☐ Situation analysis
- ☐ Jurisdictional review
- ☐ Performance review
- ☐ External evaluation
- ☐ Literature review
- ☐ Framework
- ☐ Toolkit
- ☐ Options framing
- ☐ Guidance
- ☐ Citizen/patient input
- ☐ Stakeholder input
- ☐ Stakeholder position paper
- ☐ Government discussion paper
- ☐ Government position paper
- ☐ Government strategic plan for the health sector
- ☐ Government policy
- ☐ Government legislation
- ☐ Intergovernmental communiqué
- ☐ Intergovernmental accord
- ☐ Government/third party accord

Additional prompts

- ☐ **Jurisdiction name required in square brackets after title**

Jurisdiction name (if required, as indicated above):

English

- ☐ Canada
- ☐ British Columbia
- ☐ Alberta
- ☐ Saskatchewan
- ☐ Manitoba
- ☐ Ontario
- ☐ Quebec
- ☐ New Brunswick
- ☐ Nova Scotia
- ☐ Prince Edward Island
- ☐ Newfoundland
- ☐ Yukon
- ☐ Northwest Territories
- ☐ Nunavut

French

- ☐ Canada
- ☐ Colombie-Britannique
- ☐ Alberta
- ☐ Saskatchewan
- ☐ Manitoba
- ☐ Ontario
- ☐ Québec
- ☐ Nouveau-Brunswick
- ☐ Nouvelle-Écosse
- ☐ Île-du-Prince-Édouard
- ☐ Terre-Neuve
- ☐ Yukon
- ☐ Territoires du Nord-Ouest
- ☐ Nunavut

- ☐ **Duplicate in HSE** (need to use "add single article" interface to enter this record into the EIHR Portal)
  HSE Ref ID:
- ☐ **Also eligible for, but not included in HSE** (need to use "add single article" interface to enter this record into the main HSE system)
- ☐ **No public link** (need to generate link using internal server)

Appendix G. Definitions of Health System Arrangements and Implementation Strategies

Table A6. Definitions of health system arrangements and implementation strategies (adapted from HSE)

Health system arrangements and implementation strategies	Definitions and examples
Governance arrangement	
Policy authority	Who makes policy decisions, how, using what types of frameworks and on what terms; e.g., the level of government that is held accountable for health system decision-making, management and coordination of service delivery
Organizational authority	Who makes organizational decisions, how, using what types of frameworks and on what terms; e.g., who can own what types of health service organizations
Commercial authority	Who makes commercial decisions, how, using what types of frameworks and on what terms; e.g., what companies need to do in order to bring products and services to market
Professional authority	Who makes professional decisions, how, using what types of frameworks and on what terms; e.g., what health professionals need to do in order to practice
Consumer & stakeholder involvement	How stakeholders are involved and on what terms; e.g., how consumers are involved in policy/organizational decisions
Financial arrangement	
Financing systems	Mechanisms used to raise revenue for a particular health system; e.g., revenue raising through general or earmarked taxation of individuals or corporations
Funding organizations	Mechanisms used to pay for/purchase services from healthcare organizations (e.g. hospitals) within a health system; e.g., organizations receive a fixed fee for each healthcare service performed in their facilities
Remunerating providers	Mechanisms used to pay for/purchase services from, individual providers within a health system; e.g., providers receive a fixed fee for each healthcare service performed
Purchasing products & services	Mechanisms used to pay for/purchase products and services; e.g., what is covered by insurance plans
Incentivizing consumers	Financial or non-financial mechanisms to change specified behaviours of those who receive care; e.g.,

	the amount paid out-of-pocket by individuals to be enrolled in, and receive healthcare coverage from, an insurance scheme
Delivery arrangement	
How care is designed to meet consumers' needs	The approaches taken to ensure care is delivered in a way that is sensitive to the needs of consumers; e.g., how the scale of the geographical area or population that is to be covered for particular services and products is defined
By whom care is provided	The way health human resources are organized and used in the health system; e.g., how many health professionals are needed/demanded and the distribution of their supply across a health system
Where care is provided	How the physical elements of the health system are organized; e.g., alternative physical locations in which services are delivered
With what supports is care provided	The supports used to assist those providing and receiving care; e.g., how electronic health record systems are used
Implementation strategy	
Consumer-targeted strategy	Interventions targeted at the recipients of health-related programs, services and drugs in order to support evidence-informed actions; e.g., interventions which focus on the adoption or promotion of health behaviours and treatment behaviours at an individual level, such as adherence to medicines
Provider-targeted strategy	Interventions targeted at the providers of health-related programs, services and drugs in order to improve professional practice; e.g., health care providers participate in conferences, lectures, workshops or traineeships
Organization-targeted strategy	Interventions targeted at the organizations delivering health-related programs, services and drugs in order to improve organizational decision-making; e.g., organizations use an "organizational learning" approach to support evidence-informed decision-making