



EVIDENCE >> INSIGHT >> ACTION

Issue Brief:
Strengthening Primary Healthcare in Canada

8 January 2010

McMaster Health Forum

For concerned citizens and influential thinkers and doers, the McMaster Health Forum strives to be a leading hub for improving health outcomes through collective problem solving. Operating at the regional/provincial level and at national levels, the Forum harnesses information, convenes stakeholders, and prepares action-oriented leaders to meet pressing health issues creatively. The Forum acts as an agent of change by empowering stakeholders to set agendas, take well-considered actions, and communicate the rationale for actions effectively.

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KEY MESSAGES

What's the problem?

- The overarching problem is one of limited or inequitable access to sustainable, high-quality community-based primary healthcare in federal, provincial, and territorial publicly funded health systems.
 - There has been slow but steady (if uneven) progress in improving access to cost-effective programs, services, and drugs in primary healthcare environments and in adapting health system arrangements to ensure that they support the provision of cost-effective programs, services, and drugs in these environments. Nevertheless, Canadians' access to cost-effective programs, services, and drugs is not what it could be and health system arrangements often do not support the provision of these programs, services, and drugs.

What do we know (from interviews and documentary analyses) about three viable options to address the problem?

- Option 1 – Support the expansion of chronic disease management in physician-led care through a combination of electronic health records, target payments, continuing professional development, and auditing of their primary healthcare practices
 - Key informants argued that healthcare providers must be trained early in their transition to team-based care, highlighted the importance of co-location and supports like electronic health records, and flagged the challenges associated with having primary healthcare physicians reporting to different people than other healthcare providers and with expanding team-based delivery during an economic downturn.
 - Key informants argued that success in implementing electronic health records hinges on funding or other incentives for primary healthcare physicians and teams to purchase the hardware and software to support electronic health records (such as making them a requirement for receiving target payments), training and user support (which can be done by placing an information technology specialist, who understands healthcare providers' needs and constraints, in clinics for a time-limited period), and healthcare provider champions (who are sometimes paid for their efforts).
 - Key informants noted that target payments need to be aligned with population goals, designed to reward optimal practice, and continually adjusted to reflect changing needs, new research evidence, and the responsiveness of healthcare providers.
 - Key informants did not volunteer specific views about and experiences with continuing professional development for primary healthcare providers beyond initiatives like the Practice Support Program in British Columbia and the Quality Improvement & Innovation Partnership in Ontario.
 - Some key informants suggested that clinical benchmarking – providing feedback about performance in comparison to one's peers – might work well in Canadian jurisdictions.
- Option 2 – Support the targeted expansion of inter-professional collaborative practice primary healthcare
 - Key informants noted that inter-professional collaborative care teams are less common than physician-led teams.
 - The push for team-based primary healthcare delivery has been accompanied in some jurisdictions by broader efforts to expand the scopes of practice of non-physicians. Many key informants noted that expansions in scopes of practice need to be accompanied by new funding and remuneration schemes and by proactive efforts to support non-physician providers in working to their expanded scope. A number of key informants noted that the way in which scope expansions are negotiated and supported can influence how they are regarded by physicians.
 - Key informants argued that the community health centre model is typically most appropriate for hard-to-reach populations (e.g., very poor, inner-city residents, linguistic minorities, particular ethnocultural groups) or for populations with unique needs (e.g., patients with multiple risk factors or chronic conditions).
- Option 3 – Support the use of the Chronic Care Model in primary healthcare settings, which means the combination of self-management support, decision support, delivery system design, clinical information systems, health system supports, and community resources

- While four of the six features of Option 3 were addressed above, key informants also spoke to the importance of self-management supports for patients and their families and to community resources for patients and their families. Key informants noted that self-management supports are a key feature of community health centres (and often quite innovative, such as group visits), but such supports are much less common in physician-led primary healthcare team practices. Key informants did not volunteer specific views about or experiences with resources and tools for patients in primary healthcare or about peer support groups in primary healthcare, although several key informants from community health centres note the widespread use of peer support groups in their settings.
- Many regional health authorities are responsible for integrating primary healthcare with at least some community resources but in reality they are rarely housed under the same roof in any given region, with the possible exception of community health centres. Several key informants suggested the need to harmonize policies and strategies in this regard at a more strategic or macro level first. Key informants noted that many regional health authorities are attempting to engage communities and are proactively involved in community capacity building.
- Option 4 - Promote a pan-Canadian vision for primary healthcare and a knowledge-sharing platform to support cross-jurisdiction learning arising from the execution of the vision
 - Some key informants suggested that a new pan-Canadian vision would spark activity at provincial and territorial levels and that opportunities for shared learning were always valuable.
 - All key informants seemed to agree that the diversity within and across health systems in Canada required multiple models, and that neither a one-size-fits-all approach nor a heavy-handed or prescriptive approach would work. Shared or collaborative visions for primary healthcare were considered important, but could only achieve results if they allowed for local flexibility in how they are operationalized and applied. Key informants had mixed views about the benefits of pan-Canadian timelines and targets for strengthening primary healthcare.

What implementation considerations need to be kept in mind?

- Four general messages relevant to implementation were:
 - Primary healthcare initiatives must be flexible and locally relevant if they are to be implemented and achieve desired impacts.
 - System-wide primary healthcare initiatives should start with functional/operational changes and then follow successes up with the organizational structures needed to support them. Said another way, policymakers and stakeholders should be searching for functional solutions initially, not structural solutions.
 - Supportive and visionary leadership can facilitate change for the better related to any of the options.
 - Changes in Canada's health systems are rarely fast, so policymakers and stakeholders promoting or leading primary healthcare initiatives require patience and long-term commitments.
- A number of key informants noted that primary healthcare policymakers and stakeholders need to become better at leveraging existing strategies and targets, such as waiting time initiatives, by demonstrating how strengthened primary healthcare systems can support the implementation of these strategies and the achievement of these targets. They also noted that primary healthcare initiatives need to be better aligned with other policy initiatives, such as chronic-disease management, aging at home, and long-term care, among others, and that the role of primary healthcare in each of them needs to be more clearly articulated. Said another way, they argued that primary healthcare needs to be mainstreamed (i.e., integrated) into all healthcare policies.
- Monitoring and evaluation was considered by many key informants to be a missing component of most existing policy frameworks (and implementation). A number of key informants commented that monitoring and evaluation should not be framed as an accountability or reporting exercise, but rather as a process to support improvement. One key informant commented that an orientation towards "improvement" could excite healthcare providers and managers, and would motivate them, particularly if they were supported with knowledge, tools, and resources.

REPORT

A stakeholder dialogue convened in May 2009 brought together a number of Councillors from the Health Council of Canada and select additional stakeholders. The focus of the dialogue was improving access to sustainable, high-quality community-based primary healthcare in federal, provincial, and territorial health systems in Canada. Its motivation was the questions that continue to be asked about limitations or inequities in access to sustainable, high-quality community-based primary healthcare in federal, provincial, and territorial publicly funded health systems.

The dialogue was informed by an evidence brief that mobilized both global and local research evidence about a problem, three options for addressing the problem, and key implementation considerations. Whenever possible, the evidence brief summarized research evidence drawn from systematic reviews of the research literature. While the evidence brief strived to address all Canadians, where possible it also gave particular attention to three groups:

- elderly citizens, particularly those living with multiple chronic diseases;
- Aboriginal populations (i.e., First Nations, Inuit, and Métis populations); and
- people living with mental illness.

The evidence brief acknowledged that many other groups warrant serious consideration as well, and a similar approach could be adopted for any of them.

A number of those who participated in the stakeholder dialogue in May 2009 concluded that the underlying policy issue needed to be reframed. As described in the dialogue summary: “Having originally begun the dialogue with a focus on improving access to primary healthcare, they concluded that the real issue lay in ensuring the sustainability of Canada’s publicly funded health systems through a re-orientation of community-based primary healthcare systems. The envisioned re-orientation involves moving away from primary healthcare systems built around providers and moving towards systems built around the healthcare needs of patients and their families.”

Box 1: Background to the issue brief

This issue brief draws on both a documentary analysis and key informant interviews about a problem, four options for addressing the problem, and key implementation considerations. The issue brief complements a previously published evidence brief that mobilized both global and local research evidence (primarily in the form of systematic reviews) about a problem, three options for addressing the problem (i.e., one less than addressed in this issue brief), and key implementation considerations. As with the evidence brief, the issue brief does not contain recommendations.

The preparation of the issue brief involved five steps:

- 1) convening a Steering Committee comprised of representatives from the partner organization and the McMaster Health Forum;
- 2) developing and refining the terms of reference for the documentary analysis and key informant interviews;
- 3) identifying, selecting, and interviewing key informants;
- 4) drafting the issue brief in such a way as to present concisely and in accessible language the key messages from the documentary analysis and the key informant interviews, particularly insofar as they inform an understanding of the problem, options, and implementation considerations presented in the evidence brief; and
- 5) finalizing the issue brief based on the input of several merit reviewers.

The issue brief was prepared to inform a stakeholder dialogue at which research evidence from the evidence brief and findings from the documentary analysis and key informant interviews are two of many considerations. Participants’ views and experiences and the tacit knowledge they bring to the issues at hand are also important inputs to the dialogue. One goal of the stakeholder dialogue is to spark insights – insights that can only come about when all of those who will be involved in or affected by future decisions about the issue can work through it together. A second goal of the stakeholder dialogue is to generate action by those who participate in the dialogue and by those who review the dialogue summary and the video interviews with dialogue participants.

As further described in the dialogue summary: “Drawing on the input from the evidence brief, their own knowledge and experiences, and the insights from the deliberations, a number of dialogue participants concluded that:

- there is great variation in primary healthcare systems across Canada and a lack of a common vision for a primary healthcare system;
- primary healthcare systems in Canada are underperforming relative to the systems in most of the countries to which we commonly compare ourselves;
- primary healthcare systems in Canada are not financially sustainable as they are currently designed, and perhaps these systems should not be sustained in their current forms given how they have failed to deliver the quality of care and outcomes that Canadians expect of them, and as anticipated in the two health accords of 2003 and 2004;
- Canada needs a national patient-centred primary healthcare strategy that is supported by high-level political leaders – ideally First Ministers – with a pan-Canadian vision; this strategy should articulate the structural features of primary healthcare systems that, under a pan-Canadian vision, would be commonly adopted across all federal, provincial, and territorial publicly funded health systems;
- synthesized research evidence is available, and should inform decisions about the necessary common structural features, as well as later decisions within each publicly funded health system about those structural features that meet unique local needs and are well-suited to unique local contexts;
- a broad-based national coalition of stakeholders, including those provider groups that are ready for change, should lead the push for a national primary healthcare strategy; and
- there are lessons to be learned about how best to (and how not to) build the case for such a strategy, from existing smaller-scale reform efforts in Canada which are often focused on single diseases, from other domains within Canada which have had initial success with at least one level of government, and from other countries which have demonstrated success at jurisdictional levels.”

Box 2: Domains covered in the documentary analysis and key informant interviews

The seven domains addressed in the interviews were as follows:

1. Policy and financial framework to support primary healthcare
 - Political commitment
 - Provincial or regional policy framework with clear timelines
 - Clear forward financial commitments
 - *Additional sub-domains that emerged*
 - *Need for a pan-Canadian vision*
 - *Primary Health Care Transition Fund*
2. Broad health system initiatives that explicitly support primary healthcare
 - Access, quality, and/or safety initiatives
 - Sub-sectoral collaboration (e.g., home care, mental healthcare)
 - Monitoring and evaluation
 - *Additional sub-domains that emerged*
 - *Regionalization*
 - *Expanding scopes of practice of non-physician providers*
3. Primary healthcare delivery system design
 - Attachment to a physician, physician-led primary healthcare team, or an inter-professional collaborative care team
 - Target payments for co-ordinated and proactive care
 - *Additional sub-domains that emerged*
 - *Community health centres*
4. Clinical information systems to support primary healthcare teams, providers, and patients
 - Electronic health records
 - Reminder systems
 - Clinical benchmarking
 - Patient portal
 - *Additional sub-domains that emerged*
 - *Complementary and related e-health initiatives that emerged as important*
5. Decision supports for primary healthcare teams/providers
 - Resources (e.g., guidelines) and tools
 - Continuing professional development
6. Self-management supports for patients and their families
 - Resources (e.g., guidelines) and tools
 - Peer support groups
7. Community resources for patients and their families
 - *Additional sub-domains that emerged*
 - *Community capacity building*

This issue brief picks up where the dialogue summary left off. Its purpose is to identify the lessons learned from influential doers and thinkers from across Canada and from publicly available documents from 19 countries to which Canada's primary healthcare system is commonly (or could be) compared. In keeping with the evidence brief, primary healthcare is considered to include first-contact services delivered by a range of providers. Most commonly in Canada these providers are general practitioners and family physicians. However, increasingly these providers can also include nurse practitioners, pharmacists, and telephone-advice lines, among others. Again in keeping with the evidence brief, primary healthcare is understood also to serve a co-ordination function to ensure continuity of care as patients seek more specialized services within the health system. The issue brief gives particular attention to primary healthcare teams and identifies a number of challenges being encountered (and sometimes addressed) in supporting their deployment.

The key features of the policy and system context for this issue brief are the same as those outlined in the evidence brief, and they bear repeating here:

- Canada's provincial and territorial publicly funded health systems are distinguished by a private delivery / public payment "bargain" with hospitals and physicians;
- the bargain with physicians has historically meant that most primary healthcare is delivered by physicians working in private practice with first-dollar, public (typically fee-for-service) payment;
- other healthcare providers (such as nurses and psychologists), and teams led by other healthcare providers, are typically not eligible for public payment – or at least not on terms that make independent primary healthcare practices viable on a large scale;
- similarly, for many Canadians, prescription drugs and homecare services are not eligible for public payment and, if they are eligible, it is not with the same type of first-dollar coverage provided for hospital-based and physician-provided care;
- the private practice element of the core bargain has typically meant that physicians have been wary of potential infringements on their professional and commercial autonomy (e.g., directives about the nature of the care they deliver or the way in which they organize and deliver that care); and
- Canada's federal government's direct role in health-services delivery is primarily focused on First Nations and Inuit populations, many of whom also obtain care through provincial and territorial systems.(1)

Box 3: Documentary analysis

Documents describing Canadian experiences with improving access to sustainable, high-quality primary healthcare were identified by searching the published literature, technical reports, and government documents using online databases (Medline, Health Policy Monitor), websites of non-governmental and research organizations (Canadian Health Services Research Foundation, Canadian Institutes for Health Research, Change Foundation, Manitoba Centre for Health Policy, etc.) and provincial, territorial, and federal government websites.

Documents describing international experiences with improving access to sustainable, high-quality primary healthcare were identified by searching the Health Policy Monitor website (www.hpm.org), which publishes twice-yearly descriptions of health policy and reform activities in 19 high-income countries besides Canada.

Additional documents were identified by reviewing the reference lists of documents obtained through our searches and by contacting experts in jurisdictions where documents were difficult to identify (or obtain).

Documents were selected for review if they addressed one or more of the seven domains described in Box 2.

One individual extracted key messages from each document and, in consultation with a second individual, analyzed the documentary data thematically within each of the seven domains (and related sub-domains) using a constant comparative

Both the key informant interviews and documentary analysis drew on the organizing framework that underpins the most holistic primary healthcare model available to proactively support access to and use of a range of cost-effective programs, services, and drugs (the Chronic Care Model). These six features, which hereafter we refer to as primary healthcare system features, include:

- self-management support (i.e., empowering and preparing patients to manage their health and health care);
- decision support (i.e., promoting clinical care that is consistent with scientific evidence and patient preferences through, for example, embedding evidence-based guidelines into daily clinical practice and supporting their implementation through continuing professional development);
- delivery system design (i.e., assuring the proactive, culturally sensitive delivery of effective, efficient clinical care and self-management support by inter-professional teams);
- clinical information systems (i.e., organizing patient and population data to facilitate effective, efficient care through, for example, an electronic health record that supports timely reminders for providers and patients and the monitoring of the performance of primary healthcare teams and the system in which they work);
- health system supports (i.e., creating a culture, organization, and mechanisms that promote safe, high quality care, which can include visibly supporting comprehensive system change that moves beyond “silos” for acute care, primary healthcare, public health, home care, and mental healthcare); and
- community resources (i.e., mobilizing community resources to meet the needs of patients even though these resources are not formally part of health systems).(2)

Box 4: Key informant interviews

To augment and interpret the key messages identified through the document analysis, telephone interviews were conducted with policymakers, stakeholders, and researchers knowledgeable about primary healthcare reform activities in Canada and internationally. Canadian key informants were drawn from all Canadian federal, provincial, and territorial jurisdictions and from a range of settings (governments, regional health authorities, primary healthcare organizations, healthcare provider associations, and universities, among others). International key informants were drawn from two common comparator countries, namely the United Kingdom and the United States.

In total, 64 key informants were invited to be interviewed and 40 accepted and were interviewed. Ten individuals declined to be interviewed, but of those ten, three referred us to a more appropriate person. Fourteen did not respond to our interview request. The interviews were conducted during a period in which many policymakers and stakeholders were dealing with an H1N1 outbreak, which likely contributed to some individuals declining to be interviewed or not responding to the interview request.

The interview guide covered seven domains, including the six primary healthcare system features (described in the main body of the text) and the policy and financial frameworks available to support primary healthcare. The focus of the questions was lessons learned about whether and how activity in these seven domains was contributing to improving access to sustainable, high-quality primary healthcare in Canada. Typically two to three particular sub-domains were the focus of specific questions within each domain.

One individual conducted all interviews and, in consultation with a second individual, analyzed the interview data thematically and used a constant comparative method to adjust the prompts contained in the interview guide and to refine the identification and interpretation of emerging themes.

Ethical approval for the key informant interviews was obtained from McMaster University.

A copy of the interview guide is available upon request.

THE PROBLEM

The evidence brief concluded that the overarching problem is one of limited or inequitable access to sustainable, high-quality community-based primary healthcare in federal, provincial, and territorial publicly funded health systems. It identified three key features of the problem, namely:

- Chronic diseases now represent a significant share of the common conditions that the primary healthcare system must prevent or treat.
- Canadians' access to cost-effective programs, services, and drugs is not what it could be, either when they themselves identify the need for care or (more proactively on the part of healthcare providers) when they have an indication or need for prevention or treatment, particularly chronic disease prevention and treatment.
- Health system arrangements have not always supported the provision of cost-effective programs, services, and drugs. Many Canadians do not: 1) have a regular physician or place of care; 2) receive effective chronic disease management services; or 3) receive care in a primary healthcare practice that uses an electronic health record, faces any financial incentive for quality, or involves a nurse. What is more difficult to determine is the proportion of physicians who receive effective continuing professional development for chronic disease management and the proportion of primary healthcare practices that: 1) are periodically audited for their performance in chronic disease management; 2) employ physician-led or collaborative practice models; and 3) adhere to the most holistic primary healthcare model's (the Chronic Care Model's) six features.

The recent publication of a survey of primary healthcare physicians in Canada and ten comparator countries reaffirmed many of these features of the problem.(3)

While focused primarily on options for addressing these problems and on implementation considerations, the documentary analysis and key informant interviews did identify slow but steady (if uneven) progress in improving access to cost-effective programs, services, and drugs in primary healthcare environments and in adapting health system arrangements to ensure that they support the provision of cost-effective programs, services, and drugs in these environments. However, the overall picture that emerged from the documentary analysis and key informant interviews was consistent with the key messages about the problem that were highlighted in the evidence brief.

THREE OPTIONS FOR ADDRESSING THE PROBLEM

Many options could be selected to address the problem of limited or inequitable access to sustainable, high-quality community-based primary healthcare in federal, provincial, and territorial publicly funded health systems. To promote discussion about the pros and cons of potentially viable options, three were selected for more in-depth review in the evidence brief. They ranged from:

- 1) building on the strong base of physician-led primary healthcare by supporting the expansion of chronic disease management in physician-led care through a combination of electronic health records, target payments, continuing professional development, and auditing of their primary healthcare practices;
- 2) building on promising pilot team-based models of primary healthcare by supporting the targeted expansion of inter-professional collaborative practice; and
- 3) undertaking a major series of reforms to support the use of the Chronic Care Model in primary healthcare settings, which means a combination of strategies focused on self-management support, decision support, delivery system design, clinical information systems, the health system, and the community.

The focus of the evidence brief was on what is known about these options.

The focus of this issue brief, on the other hand, is the lessons learned about each of these options from the documentary analysis and key informant interviews. The issue brief also includes a new, fourth option, namely:

- 4) promoting a pan-Canadian vision for primary healthcare and a knowledge-sharing platform to support cross-jurisdiction learning arising from the execution of the vision.

In this section of the issue brief, particular attention is given to the major findings from the documentary analysis and key informant interviews as they relate to each of the four options. These findings were typically expressed by a number of key informants and the summary of these findings typically does not include jurisdiction-specific examples. The detailed findings from the documentary analysis and key informant interviews, which include more nuanced comments from key informants and a number of jurisdiction-specific examples, are described in the Appendix.

Summing up at least some of the major themes that emerged, one key informant noted:

“There are many learning opportunities from these other jurisdictions – provinces in Canada, the UK, Australia – but it’s that execution that seems to be lacking. That isn’t any one part of the system’s fault. It needs the commitment of government policy to drive it, it needs a machine at the local or regional level to co-ordinate it, and at the local level it needs a community to own it.”

Option 1 – Support the expansion of chronic disease management in physician-led care through a combination of electronic health records, target payments, continuing professional development, and auditing of their primary healthcare practices

This option has a number of elements, including:

- increasing the proportion of patients who have a regular primary care physician;
- increasing the proportion of primary care physicians involved in a physician-led team;
- increasing the proportion of primary care physicians offering an array of chronic disease management programs and services;
- increasing the proportion of primary care physicians using electronic health records to support chronic disease management programs and services;
- increasing the proportion of physicians who receive target payments for chronic disease management programs and services;
- increasing the proportion of physicians who receive effective continuing professional development for chronic disease management; and
- increasing the proportion of physicians whose primary healthcare practices are periodically audited/accredited for quality chronic disease management.

The evidence brief summarized the global research evidence as follows:

- “Chronic disease management, electronic health records, physician-level and provider-level financial incentives (i.e., target payments), and continuing medical education in general and educational meetings in particular improved processes and/or outcomes of care (although the quality of the systematic reviews supporting these statements is mixed).
- Financial incentives had unintended effects in four studies.
- Costing studies of electronic health records predicted substantial savings.”

This high-level summary does not do justice to the wealth of synthesized evidence on these topics, however, the evidence brief describes this synthesized evidence in much greater detail.

The documentary analysis and key informant interviews identified a number of additional perspectives on this option. Interview questions related to three domains addressed this option most directly: Domain 3 (primary healthcare delivery system design), Domain 4 (clinical information systems to support primary healthcare teams), and Domain 5 (decision supports for primary healthcare teams/providers).

Within Domain 3 – **primary healthcare delivery system design** – a number of key messages emerged related to ensuring attachment to a physician, physician-led primary healthcare team, or an inter-professional collaborative care team:

- Many key informants emphasized the importance of patients being attached formally to a physician, another type of healthcare provider or a team, and they see teams as an important element of strengthening primary healthcare. Many provincial and territorial governments are advocating team-based healthcare delivery.(4;5)
- All jurisdictions appear to have experimented with team-based delivery, and some commentators have noted that existing teams are often physician-led and do not fully integrate other healthcare providers for full interdisciplinary collaboration.(6) One key informant argued that primary healthcare physicians should remain central to primary healthcare delivery, and that efforts should focus on how to provide them with the incentives needed to work with other healthcare providers, as well as with regional health authorities.
- Some key informants argued that team roles should be allocated according to function, not discipline. These key informants agreed that more education is needed for healthcare providers to understand the potential functions of each of their colleagues, and that policies must enable flexible functioning. Other

key informants emphasized the importance of raising awareness about team-based care and building demand for team-based care among patients and communities.

- Key informants also pointed to the need to balance the recognition that newer graduates who have trained in Canada need little enticement to join teams, on the one hand, and the reality that many older physicians need as much enticement as possible and many non-physician healthcare providers need workable funding models, on the other hand.
- Key informants argued that healthcare providers must be trained early in their transition to team-based care in order to work effectively as part of a team and to be satisfied with the work. The governments of British Columbia and Saskatchewan, for example, have invested in team facilitators and trainers.(7;8)
- Key informants also highlighted the importance of co-location and supports like electronic health records.
- Key informants flagged the challenges associated with having primary healthcare physicians reporting to different people than other healthcare providers and with expanding team-based delivery during an economic downturn.
- Comparator countries, including Denmark, Israel, New Zealand, Spain, and the United Kingdom, have introduced similar reforms to increase team-based primary healthcare delivery. While these teams include a range of healthcare providers, they are almost always led by primary healthcare physicians.(9-15) As in Canada, team-based delivery is often heralded as an ideal approach, particularly for patients with complex or chronic illnesses. Common characteristics of successful teams have been argued to include strong management, clear communication, and a supportive culture.(9;11)

Additional key messages emerged related to target payments for co-ordinated and proactive care:

- Many Canadian jurisdictions provide some type of target payments (or financial incentives more generally) to primary healthcare providers, some of which are for co-ordinated and proactive care (e.g., prevention and management of chronic conditions), and others of which are for relocation to underserved communities and enrolment of unattached patients.(7;16) Key informants noted that target payments need to be aligned with population goals, designed to reward optimal practice, and continually adjusted to reflect changing needs, new research evidence, and the responsiveness of healthcare providers.
- Most key informants believe that incentives achieve results and that at least some primary healthcare providers (such as physicians and pharmacists in Alberta) would not provide particular services without incentives.
- Non-financial incentives such as benchmarking (discussed further below) are used in some comparator countries to achieve similar results. Several key informants indicated that benchmarking is likely to work in the Canadian context as well.
- Comparator countries have implemented financial and non-financial incentives targeted at healthcare providers. Australia, Denmark, Germany, and New Zealand aim to encourage the provision of care for the management of chronic diseases, and the enrolment of patients in chronic disease management programs.(10;12;15;17) New Zealand also offers target payments to primary healthcare physicians who deliver healthcare services to marginalized populations.(18) The United Kingdom has introduced a number of performance incentives related to practice organization, patient satisfaction, and the provision of extra services.(19) The United Kingdom's "payment by result" system allows patients to choose their healthcare provider based on publicly available quality indicators. However, information asymmetries and limited provider availability has limited the application of this system.(19)

Within Domain 4 – **clinical information systems to support primary healthcare teams, providers, and patients** – a number of key messages emerged related to electronic health records:

- All Canadian provinces and territories are actively pursuing efforts to develop and strengthen electronic health records – both infrastructure and planning – with financial support from Canada Health Infoway. That said, provinces and territories are at different stages in implementing electronic health records, with British Columbia at or near full implementation, Ontario having a goal of full implementation by 2015,

and Newfoundland being in the planning stage.(16;20) Moreover, the contents of these electronic health records appear to vary across jurisdictions as well.

- One key informant echoed a number of other key informants in stating that electronic health records are only useful when they can demonstrate “value added.” One of the main advantages of electronic health records identified by key informants is that they can be used to generate descriptive profiles of a primary healthcare physician’s or team’s patient panel. Electronic health record systems can also facilitate appointment scheduling, electronic prescribing, and dataset linkages. Key informants noted that some Canadian jurisdictions have experimented with advance access appointment scheduling and that data linkage can make possible other types of initiatives as well.
- Key informants argued that success in implementation hinges on: 1) funding or other incentives for primary healthcare physicians and teams to purchase the hardware and software to support electronic health records (such as making them a requirement for receiving target payments); 2) training and user support (which can be done by placing an information technology specialist, who understands healthcare providers’ needs and constraints, in clinics for a time-limited period); and 3) healthcare provider champions (who are sometimes paid for their efforts).
- The interoperability of electronic health records, which is needed to make them accessible by all providers, at all levels, and possibly even by the patient, is regarded as critical by many key informants. They lamented the heterogeneity of software across healthcare providers and programs, which makes integration difficult.
- Among comparator countries Denmark is unique in having family physicians be paid, and required, to spend one hour of each work day responding to patient telephone and e-mail messages.(21) In the same country, the multiplicity of decentralized health administrative units made implementation difficult, whereas amalgamation into fewer units accelerated implementation.(21;22) In the US state of Tennessee, small practices could not implement electronic health records without support for infrastructure and technical capacity development.(23)

Key informants did not volunteer specific views about and experiences with reminder systems for primary healthcare providers, however, several key messages emerged related to clinical benchmarking:

- As pointed out above, some key informants suggested that clinical benchmarking – providing feedback about performance in comparison to one’s peers – might work well in Canadian jurisdictions.
- Internationally, but particularly in Denmark and the United Kingdom, clinical benchmarking has become a widely used strategy to improve healthcare quality.(10;19) In the United Kingdom, indicators relevant to primary healthcare are made publicly available for both healthcare providers and patients on the National Health Service website.(19)

Most key informants also did not volunteer specific views about and experiences with providing a patient interface on electronic health records (i.e., a patient portal) but one key informant argued that supporting a common personal health record (even if it was on Google’s personal health record platform) should be central to any technology-related effort to strengthen primary healthcare systems.

Additional key messages emerged related to complementary and related e-health initiatives:

- Telemedicine – the use of voice and video conferencing to connect patients and healthcare providers – can improve access to care for patients in rural and remote regions. Key informants suggested that Alberta likely hosts the most advanced telemedicine program,(24) and that Newfoundland employs teleconferencing or videoconferencing for remote areas.
- Telehealth – a telephone line that connects patients with immediate advice, generally from a nurse – is also common across jurisdictions, often at full coverage levels according to key informants. Ontario’s telehealth system includes the ability to roster unattached patients to a local primary healthcare physician who is accepting new patients.

Within Domain 5 – **decision supports for primary healthcare teams/providers** – a number of key messages emerged related to resources (e.g., guidelines) and tools:

- In terms of clinical decision supports, key informants agreed that the most interesting innovations are British Columbia's Practice Support Program and Ontario's Quality Improvement & Innovation Partnership (QIIP). British Columbia's Practice Support Program provides change-management support to primary healthcare physicians to help them redesign practices and incorporate new features of primary healthcare (e.g., electronic health records, chronic disease management, and advance access scheduling).(7) A key informant attributed the success of this program to three factors, namely: 1) the involvement of the General Practice Service Committee (and thus physician engagement and buy-in); 2) flexibility and responsiveness to local needs; and 3) involvement of local provider champions. Ontario's Quality Improvement & Innovation Partnership introduces, integrates, and spreads quality-improvement methods, advances the use of performance measurement, and builds a learning community among primary healthcare practices. A key informant attributed its success in part to the long-term financial commitment received from the government of Ontario.
- A number of Canadian jurisdictions, and individual practices within them, are using chronic care models, including the PRIISME model for diabetes management,(25) which include a variety of resources and tools.
- Key informants did not volunteer specific views about and experiences with managerial decision supports in primary healthcare.
- Among comparator countries, the United Kingdom's National Service Framework, which offers practical strategies for implementing organizational changes necessary to strengthen primary care,(19) shares some key features with British Columbia's Practice Support Program. Web-based decision support tools for cardiovascular disease and diabetes appear widely used in New Zealand,(26) and the Chronic Care model is widely used throughout the United States and some other comparator countries.(17;27)

With regards to continuing professional development:

- Key informants also did not volunteer specific views about and experiences with continuing professional development for primary healthcare providers beyond initiatives like the aforementioned Practice Support Program in British Columbia and the Quality Improvement & Innovation Partnership in Ontario.
- In terms of continuing professional development for primary healthcare managers, a number of key informants cited the Executive Training for Research Application (EXTRA) program, sponsored by the Canadian Health Services Research Foundation, as being a valuable source of leadership and management training, either for themselves or for peers and colleagues (albeit not just for primary healthcare).
- At the Primary Care Trust level in the United Kingdom, the National Health Services World Class Commissioning programme provides leadership and decision-making training for local decision-makers.(19)

Option 2 – Support the targeted expansion of inter-professional collaborative practice primary healthcare

This option is more straightforward than Option 1 in having only one major element: supporting the targeted expansion of inter-professional collaborative practice primary healthcare. The targeting could be on the basis of the health professionals and lay workers included in the model (or the scope of practice they are given within the model), the nature of the programs and services covered (e.g., health promotion and disease prevention versus acute care, mental health versus other types of care) or the target populations (e.g., elderly citizens, Aboriginal populations, or people living with mental illness), as well as guided by a value-for-money orientation.

The evidence brief summarized the global research evidence as follows:

- “Inter-professional collaborative practice teams are associated with positive outcomes for patients/clients, providers, and the system in specialized areas such as mental healthcare and chronic disease prevention and management (although the distinction between effects and associations is not made clear in the systematic reviews supporting these statements).
- Community mental health teams reduced dissatisfaction with services, hospital admission rates, and deaths by suicide but had no effect on admittance to emergency services, contact with primary healthcare, and contact with social services.
- Cost savings have been observed with inter-professional collaborative practice teams in some primary healthcare settings, such as decreased average provider and patient costs for blood pressure control and lower re-admission rates for team-managed, home-based primary healthcare.”

The documentary analysis and key informant interviews identified a number of additional perspectives on this option. One general message was that advocates of new primary healthcare models should weigh the importance of raising awareness among the general public about the need to advocate for improved access to primary healthcare (and not just to physicians) against the reality that the supply of many potential primary healthcare team members is not yet sufficient to meet potential demand. Interview questions related to two domains addressed this option most directly: Domain 2 (broad health system initiatives that explicitly support primary healthcare) and Domain 3 (primary healthcare delivery system design).

Within Domain 2 – **broad health system initiatives that explicitly support primary healthcare** – a number of key messages emerged related to expanding scopes of practice of non-physicians:

- The push for team-based primary healthcare delivery has been accompanied in some jurisdictions by broader efforts to expand the scopes of practice of non-physicians. The governments of Ontario and the Northwest Territories, for example, have expanded the scope of practice of nurse practitioners to include prescribing medications and ordering diagnostic tests.(28;29) Some key informants indicated that increasing numbers of physicians are amenable to working with other providers with expanded scopes of practice. Other key informants indicated that increasing numbers of communities with low levels of physician coverage are willing to seek care from non-physician providers with expanded scopes of practice. More generally, some key informants perceive that there is strong political and public support for scope expansion among non-physician providers, although they noted that this may be restricted to communities in which there had been significant awareness-raising about the value of non-physician providers and significant community engagement in planning efforts to improve access to primary healthcare.
- Many key informants noted that expansions in scopes of practice need to be accompanied by new funding and remuneration schemes and by proactive efforts to support non-physician providers in working to their expanded scope.
- A number of key informants noted that the way in which scope expansions are negotiated and supported can influence how they are regarded by physicians.

- Nurses and nurse practitioners are being granted greater scopes of practice in many comparator countries, often in order to decrease waiting times. In the United Kingdom, the introduction of prescribing decision rules from the National Institute for Health and Clinical Excellence (NICE) has limited the range of individual interpretation required, and thereby facilitated the opening of prescribing to nurses. Half of nurses in the National Health Service system are permitted to prescribe medications. The simultaneous introduction of a nursing Leadership Centre, which provides training and monitoring support, has limited potential unrest from other professional bodies.(19)

Within Domain 3 – **primary healthcare delivery system design** – few messages emerged related to ensuring attachment to an inter-professional collaborative care team:

- Key informants noted that inter-professional collaborative care teams are less common than physician-led teams. Saskatchewan seems to have the most interdisciplinary and integrated primary healthcare teams, which can include physicians, nurse practitioners, public health nurses, social workers, nutritionists, physical therapists, home care workers, and pharmacists (which were recently added).(8;30) Several key informants noted that inter-professional collaboration is the norm for community health centres.

Additional key messages emerged related to community health centres:

- Community health centres, while technically a type of team, are often considered unique among other team models because of their more integrated role as health and social service providers. Indeed, community health centres are arguably the most interdisciplinary and population-based delivery model in Canada, however, coverage is low across the country.(31) Key informants argued that this model is typically most appropriate for hard-to-reach populations (e.g., very poor, inner-city residents, linguistic minorities, particular ethnocultural groups) or for populations with unique needs (e.g., patients with multiple risk factors or chronic conditions). While key informants tended to agree that the more comprehensive care delivered in community health centres is, almost by definition, more expensive, the key question is whether the model is more cost-effective than others for achieving particular goals among particular types of populations, and hence where the use of the model could be expanded.

Option 3 – Support the use of the Chronic Care Model in primary healthcare settings, which means the combination of self-management support, decision support, delivery system design, clinical information systems, health system supports, and community resources

On the one hand, this option has only one major element: use of the Chronic Care Model. On the other hand, by definition it includes the six elements of the Chronic Care Model, each of which arguably includes a number of sub-elements.

The evidence brief summarized the global research evidence as follows:

- “Incorporating most or all of the Chronic Care Model improved quality of care and outcomes for patients with various chronic illnesses, and incorporating one or more elements of the Chronic Care Model improved processes of care and clinical outcomes for patients with asthma, congestive heart failure, depression, and diabetes (although the quality of both systematic reviews supporting these statements is low).”

The documentary analysis and key informant interviews identified a number of additional perspectives on this option. Interview questions related to all six domains addressed this option, but only two of these domains have not been described above: Domain 6 (self-management supports for patients and their families) and Domain 7 (community resources for patients and their families).

Within Domain 6 – **self-management supports for patients and their families** – only a few key messages emerged related to self-management supports for patients and their families:

- Key informants noted that self-management supports are a key feature of community health centres (and often quite innovative, such as their group visits), but such supports are much less common in physician-led primary healthcare team practices. A number of programs and pilot projects exist across jurisdictions, including training programs for patients and patient reminder systems.⁽³²⁾ However, key informants had relatively little to say about these supports. In comparator countries, as in Canada, self-management supports are most commonly linked to chronic disease management programs. In New Zealand, an individualized care plan is provided to patients, and co-ordinated by nurses.^(12;15)

Key informants did not volunteer specific views about or experiences with resources and tools for patients in primary healthcare or about peer support groups in primary healthcare, although several key informants from community health centres noted the widespread use of peer support groups in their settings.

Within Domain 7 – **community resources for patients and their families** – a number of key messages emerged:

- Many regional health authorities are responsible for integrating primary healthcare with at least some community resources but in reality they are rarely housed under the same roof in any given region, with the possible exception of community health centres. Several key informants suggested the need to harmonize policies and strategies in this regard at a more strategic or macro level first. Additional linkages would arise if organizations within each region (e.g., home care) have an explicit mandate to integrate primary healthcare into their planning and operations.
- Key informants identified a number of factors facilitating integration: 1) small size of regions or communities within regions (e.g., some parts of Manitoba and New Brunswick); 2) primary healthcare and community services are managed by the same vice-president or director in all regions; 3) primary healthcare physicians are supported to hire or work with healthcare providers who are more familiar with available community resources (or to “purchase” community resources); and 4) integrated electronic health records (as opposed to each healthcare and community service using their own systems).
- A number of successful examples of healthcare and community resource integration exist within comparator countries. In Denmark, case managers co-ordinate health and social services for patients requiring complex care.⁽¹⁰⁾ In New Zealand, community health workers deliver care in homes and

community centres for marginalized populations.(18) In Spain, case managers co-ordinate integrated health and social care for patients with complex conditions, and they have noted that shared information systems are essential for high levels of co-ordination.(33) The United Kingdom has integrated health and social services within regional health authorities, but commentators acknowledge that co-ordinated care is difficult when certain social services are located in different administrative structures (i.e., municipalities instead of health authorities). For special populations in the United Kingdom, Primary Care Trusts organize integrated care, sometimes outside of the local authority.(19)

One key message emerged related to community capacity building:

- Key informants noted that many regional health authorities are attempting to engage communities and are proactively involved in community capacity building. They cited region health authorities in Newfoundland, New Brunswick, Saskatchewan, and British Columbia that employ facilitators who work with the community to build capacity.

Option 4: Promote a pan-Canadian vision for primary healthcare and a knowledge-sharing platform to support cross-jurisdiction learning arising from the execution of the vision

This new (fourth) option was not addressed in the evidence brief but arose from the stakeholder dialogue at which the evidence brief was discussed.

The documentary analysis and key informant interviews identified a number of perspectives on this option. Three general (i.e., cross-domain) messages were:

- While organizations and governments are using different approaches or undertaking different activities, they are generally aiming for similar types of improvements in primary healthcare systems and with the same underlying rationale.
- Any new pan-Canadian effort must learn from experiences related to the Primary Health Transition Fund.
- Consideration should be given to establishing, as a complement to the work of provincial associations (e.g., Association of Ontario Health Centres), electronic bulletins and other information-sharing mechanisms that provide a low-cost alternative to conferences and site visits, with the focus being on lessons learned from the global research evidence and from local initiatives (e.g., primary healthcare quality-improvement initiatives).

Interview questions related to two domains addressed this option most directly: Domain 1 (policy and financial frameworks to support primary healthcare) and Domain 2 (broad health system initiatives that explicitly support primary healthcare)

Within Domain 1 – **policy and financial frameworks to support primary healthcare** – a number of key messages emerged related to political commitment:

- The Canadian federal government was seen by some key informants as having signalled its political commitment to improving access to sustainable, high-quality primary healthcare by establishing the Primary Healthcare (PHC) Transition Fund in 2000. The PHC Transition Fund distributed grants over a six-year period, primarily for demonstration projects.⁽³⁴⁾ The Canadian federal government's current political commitment to strengthening primary healthcare was seen by some key informants to be less clear than it once was. Moreover, some key informants identified that the federal government could also lead by example by improving access to sustainable, high-quality primary healthcare in a domain for which it has primary responsibility, namely healthcare for First Nations and Inuit populations.

Additional key messages emerged related to having a provincial or regional policy framework with clear timelines:

- British Columbia is somewhat unique in having a strategy document specific to primary healthcare strengthening. The British Columbia Primary Healthcare Charter was developed collaboratively with stakeholder groups, and it outlines seven priority areas, specific goals, timelines, and measurable indicators to guide system change.⁽²⁰⁾
- Some jurisdictions, such as Manitoba, are in the process of renewing their policy framework for primary healthcare, which had first been developed in support of activities funded by the PHC Transition Fund. Key informants from some other jurisdictions suggested that their provincial policy frameworks were rich in goal statements, but weak on substance. These key informants noted the importance of devoting greater attention to operationalizing (and then implementing) these policy statements. Several key informants also argued that the presence of a dedicated primary healthcare division in ministries of health, as exist in jurisdictions like New Brunswick and Québec, can support primary healthcare strengthening when the division has strong leadership capacity and a clear vision.
- A number of key informants noted that provincial and territorial strategies and plans (regardless of their focus) are typically most successful when they are converted into operational plans containing specific timelines and targets.

Additional key messages emerged related to clear forward financial commitments:

- A number of key informants noted that provincial and territorial strategies and plans (regardless of their focus) are typically most successful when they are matched with financial commitments. A complementary observation made by some key informants was that organizational change needs to be coupled with changes in financing/incentive mechanisms. Several key informants argued that federal government commitments appeal to provincial and territorial governments when they are matched by dedicated funding, as they were when the PHC Transition Fund was still active. These key informants suggested that new federal strategies and plans will not be taken seriously without the funding to back them up.

Additional key messages emerged related to the need for a pan-Canadian vision:

- Some key informants suggested that a pan-Canadian vision was *not* needed by provincial and territorial policymakers, and that their awareness of the issues and initiatives in other jurisdictions was adequate.
- A number of key informants argued that the 2003 First Ministers' Accord provided a vision of sorts for primary healthcare in Canada.⁽³⁵⁾
- Other key informants suggested that a new pan-Canadian vision would spark activity at provincial and territorial levels and that opportunities for shared learning were always valuable. Many agreed that, at a minimum, a common definition of primary healthcare was needed to support shared learning (and most certainly would be needed for any goal beyond supporting shared learning).
- All key informants seemed to agree that the diversity within and across health systems in Canada required multiple models, and that neither a one-size-fits-all approach nor a heavy-handed or prescriptive approach would work. Shared or collaborative visions for primary healthcare were considered important, but could only achieve results if they allowed for local flexibility in how they are operationalized and applied. For this reason, many key informants were more amenable to broad goals related to primary healthcare. Other key informants suggested placing emphasis on the common pillars of primary healthcare, which parallels the language used by the PHC Transition Fund.
- Key informants had mixed views about the benefits of pan-Canadian timelines and targets for primary healthcare strengthening.
- Key informants seemed to agree that any pan-Canadian primary healthcare initiative would have to be supported by additional funding. While many key informants indicated that economic constraints were the best levers for change – and one key informant noted that “the reality check is that we have to use better the resources in the system... redirect them and use them more efficiently” – these constraints are felt differently across provinces and do not necessarily set the stage for a pan-Canadian effort.
- Numerous key informants cited other pan-Canadian activities and efforts targeted at primary healthcare strengthening. One notable effort to establish a national co-ordinating committee for primary healthcare renewal is being championed by the Canadian Working Group on Primary Healthcare Improvement, with staff support being provided by the Canadian Health Services Research Foundation. Such a committee, comprised of stakeholders from across the country, could help to channel the groundswell of funding and activity around primary healthcare.

Additional key messages emerged related to the PHC Transition Fund:

- Key informants noted that drawing lessons from the PHC Transition Fund experience should inform any future pan-Canadian efforts at primary healthcare strengthening. They noted that its impacts were perhaps more limited at the system level than at the individual level (with telehealth being an example of an exception to this general rule), that in some respects it remained a “job half done” (in having generated insights that were never meaningfully disseminated and acted upon), and that it had demonstrated the importance of creating a forum for pan-Canadian stakeholders to come together and solve problems collectively.
- In terms of the PHC Transition Fund's impacts, many key informants noted that it had limited impacts at the system level in the sense that promising initiatives were often continued or built upon in a piecemeal manner, not a systematic manner, after funding had ended. A few key informants singled out telehealth initiatives as being an exception in that these investments had taken root with lasting legacies. A number of key informants noted that the PHC Transition Fund's impacts were felt more keenly at the level of

individuals, many of whom have since entered leadership positions as a result of their involvement in local PHC Transition Fund activities.

- When discussing the PHC Transition Fund as being a “job half done,” key informants lamented the lack of evaluation of PHC Transition Fund projects, the lack of lesson drawing within projects (particularly cross-jurisdiction projects) but especially across projects, and the lack of widespread dissemination of the lessons that were identified. Insights into why the adoption of electronic health records was slow were cited as an example of a missed opportunity for dissemination.
- Several key informants observed that process elements of the PHC Transition Fund were among the key insights that could be drawn from the experience. First, some key informants argued that it had demonstrated the importance of supporting well-functioning forums for pan-Canadian stakeholders to come together and solve problems collectively. The forum that emerged somewhat organically after the creation of the PHC Transition Fund (and only later was formally supported) ensured both that PHC Transition Fund priorities were reflective of the needs of stakeholders across the country and that those stakeholders involved in the provincial/territorial/federal advisory committee developed relationships with one another that persisted offline and after the end of the PHC Transition Fund. However, some key informants noted that continuing communication among these individuals is often unstructured and may not include all relevant stakeholders. Second, some key informants also argued that the PHC Transition Fund had demonstrated the importance of providing a forum and leadership capacity while not directing the agenda. In this case, it was the federal government that did this but this need not be the case in future. Third, some key informants argued that the sizable but targeted funding of the PHC Transition Fund increased accountability and motivation. Another key informant argued that the funding was also effective because it addressed a shared interest: “people will come to the table if it’s useful for them.”

Within Domain 2 – **broad health system initiatives that explicitly support primary healthcare** – a number of key messages emerged related to regionalization – as an additional sub-domain – that would be important to address in any pan-Canadian vision:

- A general trend towards the re-centralization of planning, funding, and accountability has been observed in a number of provinces over the last few years.
- A number of comparator countries (e.g., Denmark and Finland) have witnessed a similar trend towards re-centralization.
- Regional health authorities’ roles and accountabilities with respect to primary healthcare vary by jurisdiction. While most regional health authorities are not involved in primary healthcare planning and delivery at the regional level, or in the payment of primary healthcare physicians, exceptions do exist.
- Key informants had mixed views as to whether primary healthcare strengthening could best be supported by having a vice-president or a division of primary healthcare in each regional health authority or by having primary healthcare integrated within all divisions in each regional health authority. The former option, particularly if the division is co-led by a clinical director and a non-clinical director, as is done in one key informant’s region, was said to facilitate communication with the primary healthcare physician community. The latter option was said by one key informant to have improved the visibility of primary healthcare in the region. This key informant argued that regional health authorities “can’t afford to put up barriers between portfolios.”
- Key informants also had mixed views as to whether primary healthcare physicians would ever agree to being paid by regional health authorities rather than through their provincial health insurance plan (or government).
- A number of key informants identified the central role of primary healthcare physicians in healthcare delivery as the “bottleneck” in realizing the potential of regionalization. Key informants were infrequently able to determine whether regionalization helped or hindered primary healthcare strengthening, but most did agree that frequent organizational change made their work difficult. Several key informants argued that structures and processes that currently facilitate communication and collaboration between provincial governments and regional health authorities need to be extended to include primary healthcare leaders. British Columbia’s trilateral General Practice Services Committee was cited by several key

informants as a successful example of where such arrangements have been extended to include primary healthcare leaders (in this case with those leaders drawn from the British Columbia Medical Association).

- The United Kingdom is an example of a comparator country where local bodies, in this case Primary Care Trusts, have a clear role and clear accountabilities with respect to primary healthcare strengthening. Primary Care Trusts receive a block payment from the National Health Service and are responsible for commissioning primary healthcare physician services and funding health-promotion activities.⁽¹⁹⁾ A critique of this model is that the capitation funding mechanism being used, while adjusted for local disease burden and health needs, does not encourage innovations that might increase efficiency in the long term, despite higher short-term costs.⁽¹⁹⁾ The National Health Service supports numerous leadership and management training programs for those working in Primary Care Trusts, and the CEOs of these trusts are accountable to the Public Accounts Committee of the House of Commons. ⁽¹⁹⁾ To further devolve planning and commissioning, the National Health Service has also introduced practice-based commissioning (PBC).⁽³⁶⁾ Through practice-based commissioning, providers receive a fixed budget from Primary Care Trusts to contract services for their patients. General practitioners can keep up to 70% of their budget surplus for capital investments, thereby incentivizing cost-saving behaviours. By 2007, practice-based commissioning was being used by 93% of general practitioners, and studied practices had cut hospital referrals by 25-33%.⁽³⁶⁾

IMPLEMENTATION CONSIDERATIONS

The evidence brief highlighted potential barriers to implementing the three options while noting that little empirical research evidence could be identified with respect to these barriers or to strategies to address them (Table 1). An additional column has been added to the table in order to incorporate the fourth option addressed in this issue brief. Additional key messages related to implementation are introduced below the table.

Table 1: Potential barriers to implementing the options

Levels	Option 1 – Support the expansion of chronic disease management in physician-led care	Option 2 – Support the targeted expansion of inter-professional collaborative practice primary healthcare	Option 3 – Support the use of the Chronic Care Model in primary healthcare settings	Option 4 - Promote a pan-Canadian vision for primary healthcare and a knowledge-sharing platform to support cross-jurisdiction learning arising from the execution of the vision
Patient / individual		Some patients’ initial wariness of potential disruptions in their relationship with their primary healthcare physician(37)	Patients’ initial wariness of potential disruptions in their relationship with their primary healthcare physician(37)	
Care provider	Physicians’ (particularly older physicians) wariness of potential infringements on their professional and commercial autonomy, in light of the private delivery part of the “private delivery / public payment bargain” with physicians (1;38)		Physicians’ (particularly older physicians) wariness of potential infringements on their professional and commercial autonomy, in light of the private delivery part of the “private delivery / public payment bargain” with physicians(1;38)	Physicians’ wariness of potential infringements on their professional and commercial autonomy (particularly when monitoring and evaluation is used within an accountability framework), in light of the private delivery part of the “private delivery / public payment bargain” with physicians(1;38)
Organization		Organizational scale is not viable in many rural and remote communities	Organizational scale is not viable in many rural and remote communities	Primary healthcare organizations’ collective action problem, which limits their potential contributions to a pan-Canadian vision
System		Governments’ willingness to extend public payment to other healthcare providers and teams while maintaining public payment to physicians in light of the public payment part of the “private delivery / public payment bargain” with physicians, particularly during a recession(1;38)	Governments’ willingness to broaden the breadth and depth of public payment for primary healthcare, particularly during a recession	Governments’ willingness to make long-term commitments to a pan-Canadian vision (and government officials’ typically short tenure, which makes accountability for these commitments difficult to enforce)

The documentary analysis and key informant interviews identified a number of perspectives on implementation. Four general messages were:

- Primary healthcare initiatives must be flexible and locally relevant if they are to be implemented and achieve desired impacts.
- System-wide primary healthcare initiatives should start with functional/operational changes and then follow successes up with the organizational structures needed to support them. Said another way, policymakers and stakeholders should be searching for functional solutions initially, not structural solutions.
- Supportive and visionary leadership can facilitate change for the better related to any of the options (and across all seven domains).
- Changes in Canada's health systems are rarely fast, so policymakers and stakeholders promoting or leading primary healthcare initiatives require patience and long-term commitments.

Interview questions related to Domain 2 (broad health system initiatives that explicitly support primary healthcare) addressed implementation considerations most directly:

Within Domain 2 – **broad health system initiatives that explicitly support primary healthcare** – a key message emerged related to access, quality, and/or safety initiatives:

- A number of key informants noted that primary healthcare policymakers and stakeholders need to become better at leveraging existing strategies and targets, such as waiting time initiatives, by demonstrating how strengthened primary healthcare systems can support the implementation of these strategies and the achievement of these targets.

A key message also emerged related to sub-sectoral collaboration:

- Many key informants also noted the misalignment between primary healthcare initiatives and other policy initiatives, such as chronic disease management, aging at home, and long-term care, among others. They argued that these initiatives need to be better aligned and the role of primary healthcare in each of them needs to be more clearly articulated. Said another way, they argued that primary healthcare needs to be mainstreamed (i.e., integrated) into all healthcare policies. Designating a high-profile primary healthcare policy lead at the provincial or territorial level may be one way to do this. Another key informant suggested establishing a primary healthcare committee at the provincial or territorial level.

Additional key messages emerged related to monitoring and evaluation:

- Monitoring and evaluation was considered by many key informants to be a missing component of most existing policy frameworks. They noted that a small number of provincial/territorial strategies include target setting and annual (or quarterly) reporting, although indicators remain more heavily weighted towards measuring processes instead of outcomes. Several key informants acknowledged that defining and communicating indicators is not easy, but that action in this sub-domain will improve the accountability of regional health authorities to the province. Some key informants also noted that any given set of indicators needs to include a mix of short- and long-term indicators: most population-level goals require long-term (e.g., 10 years of) measurement, whereas politicians are interested in seeing immediate results during their terms in office.
- At the pan-Canadian level, some key informants suggested that pan-Canadian measurement standards were currently lacking, yet such standards were necessary in order to bring Canada up to the level of comparator countries that are collecting and reporting data on a number of indicators related to primary healthcare. While the Canadian Institute for Health Information and some provincial research organizations (e.g., Institute for Clinical Evaluative Sciences in Ontario) have done some work in this area,(39;40) key informants were much more likely to refer to the work of the US-based Institute of Healthcare Improvement.
- A number of key informants commented that monitoring and evaluation should not be framed as an accountability or reporting exercise, but rather as a process to support improvement. One key informant commented that an orientation towards “improvement” could excite healthcare providers and managers, and would motivate them, particularly if they were supported with knowledge, tools, and resources.

REFERENCES

1. Lavis JN. Political elites and their influence on health care reform in Canada. In: McIntoch T, Forest P-G, Marchildon GP, eds. *The Governance of Health Care in Canada*. Toronto, Canada: University of Toronto Press; 2004. p. 257-79.
2. Wagner EH, Austin BT, Von Korff M. Organizing care for patients with chronic illness. *The Milbank Quarterly* 1996;74(4):511-44.
3. Schoen C, Osborn R, Doty MM, Squires D, Peugh J, Applebaum S. A survey of primary care physicians in eleven countries, 2009: perspectives on care, costs, and experiences. *Health Affairs* 2009;28(6):w1171-w1183.
4. Government of Québec. *Rapport d'Appréciation de la Performance du Système de Santé et de Services Sociaux 2009: Rapport de la Démarche de Consultation Portant sur la Première Ligne de Soins*. Québec City, Canada: Government of Québec; 2009.
5. Yukon Health Care Review. *Final Report September 2008*. Whitehorse, Canada: Yukon Health Care Review; 2008.
6. Canadian Policy Research Networks. An update on primary care reform in Canada. *Health Policy Monitor*; 2008.
7. Government of British Columbia and British Columbia Medical Association. *General Practices Services Committee: Annual Report 2007-2008*. Victoria, Canada: Government of British Columbia and British Columbia Medical Association; 2008.
8. Saskatchewan Ministry of Health. *Annual Report 2008-2009*. Regina, Saskatchewan: Saskatchewan Ministry of Health; 2009.
9. Nolte J, Tremblay M. *Enhancing Interdisciplinary Collaboration in Primary Health Care in Canada*. Ottawa, Canada: Enhancing Interdisciplinary Collaboration in Primary Health Care (EICP) Initiative; 2005.
10. Frolich A, Strandberg-Larsen M, Schiotz ML. The Chronic Care Model - a new approach in DK. *Health Policy Monitor*; 2008.
11. Wilf-Miron R, Kokia E, Gross R. Redesigning primary care services in Maccabi. *Health Policy Monitor*; 2007.
12. Centre for Health Services Research and Policy. Care Plus: Primary care for high needs patients. *Health Policy Monitor*; 2004.
13. Centre for Health Services Research and Policy. Primary health organisations: management costs. *Health Policy Monitor*; 2005.
14. Centre for Health Services Research and Policy. Intersectoral community action for health. *Health Policy Monitor*; 2006.
15. Gomez D, Ashton T. Evaluation of Care Plus Programme. *Health Policy Monitor*; 2007.

16. Ontario Ministry of Health Long-Term Care, Ontario Medical Association. 2008 Physician Services Agreement - LHIN Physician Collaboration Incentive Fund: Unattached Patients Collaboration Incentive - Allocation of 2009/2010 Funding. Toronto, Canada: Ontario Ministry of Health Long-Term Care and Ontario Medical Association; 2009.
17. Blumel M, Busse R. Disease management programs: time to evaluate. *Health Policy Monitor*; 2009.
18. Walton L. Initiatives for reducing health inequalities. *Health Policy Monitor*; 2007.
19. Change Foundation. *Integrated Health Care in England: Lessons for Ontario*. Toronto, Canada: Change Foundation; 2009.
20. British Columbia Ministry of Health. *Primary Health Care Charter: A Collaborative Approach*. Victoria, Canada: British Columbia Ministry of Health; 2007.
21. Protti D, Edworthy S, Johansen I. Adoption of information technology in primary care physician offices in Alberta and Denmark, part 1: historical, technical and cultural forces. *Healthcare Quarterly* 2007;10(3):95-102.
22. Appel M. Evaluation of the implementation of EPRs. *Health Policy Monitor*; 2005.
23. Conis E. Tennessee's e-health initiative. *Health Policy Monitor*; 2008.
24. Alberta Telehealth. What is Telehealth? Available online at: <http://www.albertatelehealth.com> [Accessed on 22 September 2009].
25. Prince Edward Island Department of Health. *Annual Report 2007-2008*. Charlottetown, Canada: Prince Edward Island Department of Health; 2009.
26. Wells S, Ashton T, Jackson R. Electronic clinical decision support. *Health Policy Monitor*; 2005.
27. Conis E. Vermont's Blueprint Chronic Care Initiative. *Health Policy Monitor*; 2008.
28. Northwest Territories Health and Social Services System. *Annual Report 2006-2007*. Yellowknife, Canada: Northwest Territories Health and Social Services System; 2008.
29. Ontario Ministry of Health and Long-Term Care. *Introduction to Nurse Practitioner-Led Clinics*. Toronto, Canada: Ontario Ministry of Health and Long-Term Care; 2009.
30. Health Council of Canada. *Teams in Action: Saskatchewan*. Toronto, Canada: Health Council of Canada; 2009.
31. Pineault R, Levesque JF, Roberge D, Hamel M, Lamarche P, Haggerty J. *Accessibility and Continuity of Care: A Study of Primary Healthcare in Québec*. Québec, Canada: Government of Québec; 2009.
32. New Brunswick Department of Health. *2007-08 Annual Report*. Fredericton, New Brunswick: New Brunswick Department of Health; 2009.
33. Casado D. Integrating health and social care. *Health Policy Monitor*; 2003.
34. Health Canada. Primary Health Care Transition Fund. Available online at: <http://www.hc-sc.gc.ca/hcs-sss/prim/phctf-fassp/index-eng.php> [Accessed on 2 October 2009].

35. Federal Provincial and Territorial Ministers of Health. *First Ministers' Accord on Health Care Renewal*. Ottawa, Canada: Health Canada; 2003.
36. Oliver A. Developments in practice-based commissioning. *Health Policy Monitor*; 2007.
37. Maxwell J, Jackson K, Legowski B, Rosell S, Yano E. *Report on Citizen's Dialogue on the Future of Health Care in Canada*. Ottawa, Canada: Commission on the Future of Health Care in Canada; 2002.
38. Hutchison B, Abelson J, Lavis JN. Primary care in Canada: so much innovation, so little change. *Health Affairs* 2001;20(3):1-16.
39. Canadian Institute for Health Information. *Primary Health Care (PHC) Indicators Chartbook: An Illustrative Example of Using PHC Data for Indicator Reporting*. Ottawa, Canada: CIHI; 2008.
40. Jaakkimainen L, Klein-Geltink J, Guttman A, Barnsley J, Zagorski BM, Kopp A et al. Indicators of primary care based on administrative data. In: Jaakkimainen L, Upshur R, Klein-Geltink J, Leong A, Maaten S, Schultz S et al., eds. *Primary Care in Ontario*. Toronto, Canada: Institute for Clinical Evaluative Sciences; 2006.
41. Vuorenkoski L. Ensuring access to public health care – follow up. *Health Policy Monitor*; 2006.
42. Oliver A. Improving access to GP services. *Health Policy Monitor*; 2007.
43. Change Foundation. *Lessons & Confessions from the Regionalized Health-Care Front: Where Can they Lead Ontario?* Toronto, Canada: Change Foundation; 2008.
44. Government of New Brunswick. *Transforming New Brunswick's Health-Care System: The Provincial Health Plan 2008-2012*. Fredericton, Canada: Government of New Brunswick; 2008.
45. Newfoundland and Labrador Department of Health and Community Services. *Strategic Plan 2008-2011*. St. John's, Canada: Newfoundland and Labrador Department of Health and Community Services; 2008.
46. Commonwealth of Australia. *A Healthier Future for All Australians: Final Report June 2009*. Canberra, Australia: Commonwealth of Australia; 2009.
47. Vuorenkoski L. Restructuring municipal services – follow up. *Health Policy Monitor*; 2008.
48. Manitoba Regional Health Authority External Review Committee. *Report of the Manitoba Regional Health Authority External Review Committee*. Winnipeg, Canada: Manitoba Health and Healthy Living; 2008.
49. Alberta Health and Wellness. *Health Action Plan - Annual Report*. Edmonton, Canada: Alberta Health and Wellness; 2009.
50. Pearson GL. Evolution in the practice of pharmacy - not a revolution! *Canadian Medical Association Journal* 2007;176(9):1295-6.
51. British Columbia Ministry of Health Services. *2009/10 - 2011/12 Service Plan Update*. Victoria, Canada: British Columbia Ministry of Health Services; 2009.
52. Manitoba Health and Healthy Living. *Annual Report 2007-2008*. Winnipeg, Canada: Manitoba Health and Healthy Living; 2008.

53. Osborne Margo Health Law & Policy. *Local Health Integration Networks: Structure, Powers and Accountability*. Toronto, Canada: The Change Foundation; 2008.

APPENDIX

The integrated findings from the documentary analysis and key informant interviews are organized according to the seven domains described in Box 2. Within each domain, we provide an overview of activities relevant to the domain, their rationale, targeting and coverage (if available), and the barriers encountered and strategies used or proposed to overcome them. Before reviewing these domain-specific findings, however, we note the following themes that emerged across a number of domains:

- While organizations and governments are using different approaches or undertaking different activities, they are generally aiming for similar types of improvements in primary healthcare systems and with the same underlying rationale.
- Primary healthcare initiatives must be flexible and locally relevant if they are to be implemented and achieve desired impacts.
- System-wide primary healthcare initiatives should start with functional/operational changes and then follow successes up with the organizational structures needed to support them. Said another way, policymakers and stakeholders should be searching for functional solutions initially, not structural solutions.
- Supportive and visionary leadership can facilitate change for the better across all seven domains.
- Changes in Canada’s health systems are rarely fast, so policymakers and stakeholders promoting or leading primary healthcare initiatives require patience and long-term commitments.
- Any new pan-Canadian effort must learn from experiences related to the Primary Healthcare Transition Fund.
- Consideration should be given to establishing, as a complement to the work of provincial associations (e.g., Association of Ontario Health Centres), electronic bulletins and other information-sharing mechanisms that provide a low-cost alternative to conferences and site visits, with the focus being on lessons learned from the global research evidence and from local initiatives (e.g., primary healthcare quality-improvement initiatives).
- Advocates of new primary healthcare models should weigh the importance of raising awareness among the general public about the need to advocate for improved access to primary healthcare (and not just to physicians) against the reality that the supply of many potential primary healthcare team members is not yet sufficient to meet potential demand.

Summing up at least some of these points, one key informant noted:

“There are many learning opportunities from these other jurisdictions – provinces in Canada, the UK, Australia – but it’s that execution that seems to be lacking. That isn’t any one part of the system’s fault. It needs the commitment of government policy to drive it, it needs a machine at the local or regional level to co-ordinate it, and at the local level it needs a community to own it.”

Box 5: Terminology

We use the general term “regional health authorities” to refer to:

- 1) Health Authorities in British Columbia;
- 2) Regional Health Authorities in Saskatchewan (where they are sometimes called Health Regions), Manitoba, and New Brunswick;
- 3) what had been called Regional Health Authorities in Alberta before they were amalgamated into the Alberta Health Services Board;
- 4) Local Health Integration Networks in Ontario;
- 5) Regional Health and Social Services Boards (Agences de la santé et des services sociaux) in Québec;
- 6) District Health Authorities in Nova Scotia;
- 7) what had been called Health Regions in Prince Edward Island before they were abolished;
- 8) Regional Integrated Health Authorities in Newfoundland; and
- 9) Health and Social Services Authorities in the Northwest Territories.

Domain 1: Policy and financial frameworks to support primary healthcare

Political commitment

The Canadian federal government was seen by some key informants as having signalled its political commitment to improving access to sustainable, high-quality primary healthcare by establishing the Primary Healthcare (PHC) Transition Fund in 2000. The PHC Transition Fund distributed grants over a six-year period, primarily for demonstration projects.⁽³⁴⁾ The Canadian federal government's current political commitment to strengthening primary healthcare was seen by some key informants as less clear than it once was. Moreover, some key informants identified that the federal government could also lead by example by improving access to sustainable, high-quality primary healthcare in a domain for which it has primary responsibility, namely healthcare for First Nations and Inuit populations.

Among Canadian provinces and territories, there is a range of articulated political commitment to sustainable, high-quality primary healthcare, but an implicit or explicit agreement about its importance. Key informants noted that all or almost all provincial and territorial strategic health plans include goals to improve some element(s) of primary healthcare. Ontario and British Columbia were highlighted as being among those jurisdictions with current high-level political commitments to strengthening primary healthcare.

Similar to Canada, many comparator countries consider primary healthcare a critical element of their health systems. Some recent political commitments in these countries have focused on waiting times in primary care. In Finland and the United Kingdom, for example, the national government has introduced legislation to decrease waiting times.^(41;42) In both cases, the legislation has led to improvements in the timeliness of access to primary healthcare, although it is not clear through which mechanisms this legislation is achieving its impacts.^(41;42)

Provincial or regional policy framework with clear timelines

British Columbia is somewhat unique in having a strategy document specific to primary healthcare strengthening. The British Columbia Primary Healthcare Charter was developed collaboratively with stakeholder groups, and it outlines seven priority areas, specific goals, timelines, and measurable indicators to guide system change.⁽²⁰⁾ One key informant considered the charter to be a "single strategic voice for primary healthcare in the province." This individual noted that in British Columbia's case an operational solution came first, and then changes to the system's structural form followed six years later.

Some jurisdictions, such as Manitoba, are in the process of renewing their policy framework for primary healthcare, which had first been developed in support of activities funded by the PHC Transition Fund. The Manitoba government's draft policy framework places primary healthcare at the centre of the health system. Key informants from some other jurisdictions suggested that their provincial policy frameworks were rich in goal statements, but weak on substance. These key informants noted the importance of devoting greater attention to operationalizing (and then implementing) these policy statements. Several key informants also argued that the presence of a dedicated primary healthcare division in ministries of health, as exist in jurisdictions like New Brunswick and Québec, can support primary healthcare strengthening when the division has strong leadership capacity and a clear vision.

A number of key informants noted that provincial and territorial strategies and plans (regardless of their focus) are typically most successful when they are converted into operational plans containing specific timelines and targets.

Clear forward financial commitments

A number of key informants also noted that provincial and territorial strategies and plans (regardless of their focus) are typically most successful when they are matched with financial commitments. A complementary observation made by some key informants was that organizational change needs to be coupled with changes in financing/incentive mechanisms. Several key informants argued that federal government commitments appeal to provincial and territorial governments when they are matched by dedicated funding, as they were when the PHC Transition Fund was still active. These key informants suggested that new federal strategies and plans will not be taken seriously without the funding to back them up.

Need for a pan-Canadian vision as a sub-domain that emerged as important

Some key informants suggested that a pan-Canadian vision was *not* needed by provincial and territorial policymakers, and that their awareness of the issues and initiatives in other jurisdictions was adequate. As one key informant commented: “Vision is not the problem.” This individual suggested that the gap at the pan-Canadian level is a “deep and clear forensic analysis of interests at play and perverse incentives that impede [primary healthcare reform].” Another key informant cautioned against “getting together for the sake of getting together,” and challenged those interested in developing a pan-Canadian vision to clearly identify an issue within primary healthcare that affects all stakeholders enough to bring them together.

A number of key informants argued that the 2003 First Ministers’ Accord provided a vision of sorts for primary healthcare in Canada.⁽³⁵⁾ One key informant noted that the provinces that were moving forward with primary healthcare initiatives were doing so in the spirit of this vision.

Other key informants suggested that a new pan-Canadian vision would spark activity at provincial and territorial levels and that opportunities for shared learning were always valuable. One key informant noted: “Moving forward has to be done with a common vision of what we’re moving towards.” Many agreed that, at a minimum, a common definition of primary healthcare was needed to support shared learning (and most certainly would be needed for any goal beyond supporting shared learning). A key informant observed that Canada was sub-standard in its approach to primary healthcare, and that the country’s primary healthcare efforts were inconsistent with the World Health Organization definition of primary healthcare and lacking as compared to other countries.

All key informants seemed to agree that the diversity within and across health systems in Canada required multiple models, and that neither a one-size-fits-all approach nor a heavy-handed or prescriptive approach would work. Shared or collaborative visions for primary healthcare were considered important, but could only achieve results if they allowed for local flexibility in how they are operationalized and applied. For this reason, many key informants were more amenable to broad goals related to primary healthcare. As one said: “A pan-Canadian vision is possible, if you take that as a set of broad, general commitments around how we re-organize that end of the system.” Other key informants suggested placing emphasis on the common pillars of primary healthcare, which parallels the language used by the Primary Health Care Transition Fund. One key informant worried that a cross-jurisdiction vision with any degree of specificity was not achievable, and that the resulting general vision would add little substance to discussions about primary healthcare.

Key informants had mixed views about the benefits of pan-Canadian timelines and targets for primary healthcare strengthening. One key informant considered this a possible route, and noted that the federal government had used this approach for waiting times and electronic health records. This key informant went on to note that timelines and targets must be set collaboratively with the provinces, must be based on research evidence, and must be evaluated. Another key informant noted that Canada Health Infoway provides an example of an exception to the general rule that federal/provincial interfaces cannot function effectively. On the other hand, another key informant suggested that targets were too problematic politically,

and that targets set at the pan-Canadian level would not be accepted by provincial and territorial governments. This key informant suggested that those interested in supporting pan-Canadian efforts instead work with provincial and territorial policymakers and stakeholders to set their own targets.

Key informants seemed to agree that any pan-Canadian primary healthcare initiative would have to be supported by additional funding. While many key informants indicated that economic constraints were the best levers for change – and one key informant noted that “the reality check is that we have to use better the resources in the system... redirect them and use them more efficiently” – these constraints are felt differently across provinces and do not necessarily set the stage for a pan-Canadian effort. One key informant considered funding necessary to ensure accountability, and to build local capacity (as did the PHC Transition Fund funding). Another key informant commented that primary healthcare initiatives cannot happen without providing adequate support to providers, which requires resources. This key informant cautioned against thinking that change could be achieved without spending more money. A third key informant argued that new funding would be needed to operationalize and implement any new vision.

Numerous key informants cited other pan-Canadian activities and efforts targeted at primary healthcare strengthening. One notable activity is the Canadian Health Services Research Foundation’s plan to support the development and functioning of a national co-ordinating committee for primary healthcare renewal. Such a committee, comprised of stakeholders from across the country, could help to channel the groundswell of funding and activity around primary healthcare. One key informant argued that what the country needs is not another vision, but rather a pan-Canadian think-tank to share information and to reduce duplication.

PHC Transition Fund as a second sub-domain that emerged as important

Key informants noted that drawing lessons from the PHC Transition Fund experience should inform any future pan-Canadian efforts at primary healthcare strengthening. They noted that its impacts were perhaps more limited at the system level than at the individual level (with telehealth being an example of an exception to this general rule), that in some respects it remained a “job half done” (in having generated insights that were never meaningfully disseminated and acted upon), and that it had demonstrated the importance of creating a forum for pan-Canadian stakeholders to come together and solve problems collectively.

In terms of the PHC Transition Fund’s impacts, many key informants noted that it had limited impacts at the system level in the sense that promising initiatives were often continued or built upon in a piecemeal manner, not a systematic manner, after funding had ended. A few key informants singled out telehealth initiatives as being an exception in that these investments had taken root with lasting legacies. A number of key informants noted that the PHC Transition Fund’s impacts were felt more keenly at the level of individuals, many of whom have since entered leadership positions as a result of their involvement in local PHC Transition Fund activities. One key informant argued that the PHC Transition Fund “created sparks” that allowed for ongoing change.

When discussing the PHC Transition Fund as being a “job half done,” key informants lamented the lack of evaluation of PHC Transition Fund projects, the lack of lesson drawing within projects (particularly cross-jurisdiction projects) but especially across projects, and the lack of widespread dissemination of the lessons that were identified. Insights into why the adoption of electronic health records was slow were cited as an example of a missed opportunity for dissemination. One key informant noted: “Pilot projects do not spread automatically. There can be a reversion once the funding stops.”

Several key informants observed that process elements of the PHC Transition Fund were among the key insights that could be drawn from the experience. First, some key informants argued that it had demonstrated the importance of supporting well-functioning forums for pan-Canadian stakeholders to come together and solve problems collectively. The forum that emerged somewhat organically after the creation of the PHC Transition Fund (and only later was formally supported) ensured both that PHC Transition Fund priorities

were reflective of the needs of stakeholders across the country and that those stakeholders involved in the provincial/territorial/federal advisory committee developed relationships with one another that persisted offline and after the end of the PHC Transition Fund. However, some key informants noted that continuing communication among these individuals is often unstructured and may not include all relevant stakeholders. Second, some key informants also argued that the PHC Transition Fund had demonstrated the importance of providing a forum and leadership capacity while not directing the agenda. In this case, it was the federal government that did this but this need not be the case in future. Third, some key informants argued that the sizable but targeted funding of the PHC Transition Fund increased accountability and motivation. Another key informant argued that the funding was also effective because it addressed a shared interest: “people will come to the table if it’s useful for them.”

Domain 2: Broad health system initiatives that explicitly support primary healthcare

Access, quality and/or safety initiatives

A number of key informants noted that primary healthcare policymakers and stakeholders need to become better at leveraging existing strategies and targets, such as waiting time initiatives, by demonstrating how strengthened primary healthcare systems can support the implementation of these strategies and the achievement of these targets.

Sub-sectoral collaboration

Many key informants also noted the misalignment between primary healthcare initiatives and other policy initiatives, such as chronic disease management, aging at home, and long-term care, among others. They argued that these initiatives need to be better aligned and the role of primary healthcare in each of them needs to be more clearly articulated. Said another way, they argued that primary healthcare needs to be mainstreamed (i.e., integrated) into all healthcare policies. Designating a high-profile primary healthcare policy lead at the provincial or territorial level may be one way to do this. Another key informant suggested establishing a primary healthcare committee at the provincial or territorial level. A key informant from British Columbia spoke very highly of the province's General Practice Support Committee, which links physicians, policymakers, and regional managers to support improvements in primary healthcare. This committee works within a broader trilateral framework involving the British Columbia Medical Association, provincial government, and regional health authorities, which two key informants indicated was important for building consensus and political buy-in.

Monitoring and evaluation

Monitoring and evaluation was considered by many key informants to be a missing component of most existing policy frameworks. They noted that a small number of provincial/territorial strategies include target setting and annual (or quarterly) reporting, although indicators remain more heavily weighted towards measuring processes instead of outcomes. Several key informants acknowledged that defining and communicating indicators is not easy, but that action in this sub-domain will improve the accountability of regional health authorities to the province. Some key informants also noted that any given set of indicators needs to include a mix of short- and long-term indicators: most population-level goals require long-term (e.g., 10 years of) measurement, whereas politicians are interested in seeing immediate results during their terms in office. One key informant argued that outcome measures rarely describe whether the patient complaint has been solved, and that solving the patient's complaint must remain the central goal of primary healthcare.

At the pan-Canadian level, some key informants suggested that pan-Canadian measurement standards were currently lacking, yet such standards were necessary in order to bring Canada up to the level of comparator countries that are collecting and reporting data on a number of indicators related to primary healthcare. While the Canadian Institute for Health Information and some provincial research organizations (e.g., Institute for Clinical Evaluative Sciences in Ontario) have done some work in this area,^(39;40) key informants were much more likely to refer to the work of the US-based Institute of Healthcare Improvement.

A number of key informants commented that monitoring and evaluation should not be framed as an accountability or reporting exercise, but rather as a process to support improvement. One key informant commented that an orientation towards "improvement" could excite healthcare providers and managers, and would motivate them, particularly if they were supported with knowledge, tools, and resources to inform and support their improvement efforts.

Regionalization as an additional sub-domain that emerged as important

A general trend towards the re-centralization of planning, funding, and accountability has been observed in a number of provinces over the last few years. In Alberta, regional health authorities were amalgamated into a single health services board in 2008.(43) The British Columbia government amalgamated 52 regional health authorities into five, plus one provincial health authority, in 2001.(43) The New Brunswick government amalgamated eight regional health authorities into two in 2008.(44) The government of Newfoundland and Labrador first amalgamated 50 regional health authorities into 14, and then in 2004 it amalgamated these 14 regional health authorities into four.(45) The governments of Prince Edward Island and Saskatchewan have also amalgamated regional health authorities.(43)

A number of comparator countries (e.g., Denmark and Finland) have witnessed a similar trend towards re-centralization. A recently published report prepared for the Australian government recommended that policy and financing be centralized, with regional authorities remaining responsible for healthcare service delivery.(46) The justification generally given for centralization in these comparator countries, which is similar to the justification provided in many Canadian jurisdictions, is that an overly decentralized health system leads to administrative inefficiencies, limits potential for economies of scale, and overextends management and governance capacity.(47) One key informant suggested that re-centralization was more politically motivated in many Canadian settings: with constituents rarely aware of the roles and accountability of regional health authorities versus their elected officials, politicians feared that unpopular decisions made by any given regional health authority would be blamed on them, thus hurting their chances for re-election.

Regional health authorities' roles and accountabilities with respect to primary healthcare vary by jurisdiction. While most regional health authorities are not involved in primary healthcare planning and delivery at the regional level, or in the payment of primary healthcare physicians, exceptions do exist. For example, Manitoba's regional health authorities are responsible for establishing primary healthcare centres.(48) Moreover, an evaluation of regionalization in Manitoba recommended that the provincial Ministry of Health accelerate the implementation of models that offer financial incentives to family physicians to integrate with other healthcare providers at the regional level, with overall co-ordination provided by the region.(48) A few key informants pointed out that some Saskatchewan regional health authorities increasingly contract directly with physicians. One key informant argued that regional health authorities in Ontario can leverage their role in funding allocation to influence Family Health Teams (regardless of whether they control their payment directly) and that their oversight of Family Health Teams is key to strengthening primary healthcare in that province.

Key informants had mixed views as to whether primary healthcare strengthening could best be supported by having a vice-president or a division of primary healthcare in each regional health authority or by having primary healthcare integrated within all divisions in each regional health authority. The former option, particularly if the division is co-led by a clinical director and a non-clinical director, as is done in one key informant's region, was said to facilitate communication with the primary healthcare physician community. The latter option was said by one key informant to have improved the visibility of primary healthcare in the region. This key informant argued that regional health authorities "can't afford to put up barriers between portfolios."

Key informants also had mixed views as to whether primary healthcare physicians would ever agree to being paid by regional health authorities rather than through their provincial health insurance plan (or government). One physician key informant suggested that they would be amenable to this, and noted that this arrangement is already in place in some regions, particularly those containing remote or underserved sub-regions. Another physician key informant noted that it was difficult to build trust between provincial governments and physicians, and that building trust would be even more difficult at the regional level. A third key informant argued that in an ideal world physicians would negotiate directly with regional health authorities, but that this

would effectively put provincial medical associations out of business (or at least require them to restructure themselves dramatically).

A number of key informants identified the central role of primary healthcare physicians in healthcare delivery as the “bottleneck” in realizing the potential of regionalization. Key informants were infrequently able to determine whether regionalization helped or hindered primary healthcare strengthening, but most did agree that frequent organizational change made their work difficult. Several key informants argued that structures and processes that currently facilitate communication and collaboration between provincial governments and regional health authorities need to be extended to include primary healthcare leaders. In the Northwest Territories, for example, regional health authority CEOs sit on a committee with Ministry of Health directors and make decisions collaboratively. Further, planning is undertaken in a working group structure. Finally, Ministry of Health staff has frequent contact with regional health authority staff, even traveling to the regions to provide relief. A key informant from Saskatchewan reported that regional directors of primary healthcare meet together with Ministry of Health staff eight to 10 times per year to discuss priorities, challenges, and potential action. British Columbia’s trilateral General Practice Services Committee was cited by several key informants as a successful example of where such arrangements have been extended to include primary healthcare leaders (in this case with those leaders drawn from the British Columbia Medical Association). Several key informants suggested that this model could be adopted in provinces like Ontario where a trilateral forum (involving the provincial government, regional health authorities, and the provincial medical association) is lacking. One key informant argued that regional health authorities’ community engagement initiatives had driven community demand for strengthening primary healthcare and that such initiatives needed to be scaled up. Another key informant observed that the focus of such initiatives in Ontario was never primary healthcare.

The United Kingdom is an example of a comparator country where local bodies, in this case Primary Care Trusts, have a clear role and clear accountabilities with respect to primary healthcare strengthening. Primary Care Trusts receive a block payment from the National Health Service and are responsible for commissioning primary healthcare physician services and funding health-promotion activities.⁽¹⁹⁾ A critique of this model is that the capitation funding mechanism being used, while adjusted for local disease burden and health needs, does not encourage innovations that might increase efficiency in the long term, despite higher short-term costs.⁽¹⁹⁾ The National Health Service supports numerous leadership and management training programs for those working in Primary Care Trusts, and the CEOs of these trusts are accountable to the Public Accounts Committee of the House of Commons. ⁽¹⁹⁾ To further devolve planning and commissioning, the National Health Service has also introduced practice-based commissioning (PBC).⁽³⁶⁾ Through practice-based commissioning, providers receive a fixed budget from Primary Care Trusts to contract services for their patients. General practitioners can keep up to 70% of their budget surplus for capital investments, thereby incentivizing cost-saving behaviours. By 2007, practice-based commissioning was being used by 93% of general practitioners, and studied practices had cut hospital referrals by 25-33%.⁽³⁶⁾

Expanding scopes of practice of non-physicians as a second sub-domain that emerged as important

The push for team-based primary healthcare delivery, which is discussed in Domain 3 (below), has been accompanied in some jurisdictions by broader efforts to expand the scopes of practice of non-physicians. The governments of Ontario and the Northwest Territories, for example, have expanded the scope of practice of nurse practitioners to include prescribing medications and ordering diagnostic tests.^(28;29) Some key informants indicated that increasing numbers of physicians are amenable to working with other providers with expanded scopes of practice. Other key informants indicated that increasing numbers of communities with low levels of physician coverage are willing to seek care from non-physician providers with expanded scopes of practice. More generally, some key informants perceive that there is strong political and public support for scope expansion among non-physician providers, although they noted that this may be restricted to communities in which there had been significant awareness-raising about the value of non-physician providers and significant community engagement in planning efforts to improve access to primary healthcare.

Many key informants noted that expansions in scopes of practice need to be accompanied by new funding and remuneration schemes and by proactive efforts to support non-physician providers in working to their expanded scope. For example, a key informant noted that pharmacists in Alberta have been slow to adopt an expanded role, in part because of a lack of incentives.(49;50) The government of Alberta has been experimenting with a pilot remuneration scheme to pay pharmacists for prescribing. In contrast, a key informant noted that nurse practitioners in British Columbia still have no funding structures to support them in independent practice. A key informant indicated that providers in British Columbia benefited from initial training to identify their colleagues' functions and roles, which allowed everyone to work to scope.

A number of key informants noted that the way in which scope expansions are negotiated and supported can influence how they are regarded by physicians. One key informant argued that an effort to expand the scope of practice of pharmacists in British Columbia was weakened by physician groups. Another key informant argued that having nurse practitioners in her region paid by salary meant that they posed no threat to physicians' incomes and hence were well accepted by them. A key informant argued that Québec primary healthcare physicians' general acceptance of an expanded scope of practice for nurses was in part because the Québec Federation of Family Physicians had been involved in policy planning regarding new delivery models and the roles of other providers.

Nurses and nurse practitioners are being granted greater scopes of practice in many comparator countries, often in order to decrease waiting times. In the United Kingdom, the introduction of prescribing decision rules from the National Institute for Health and Clinical Excellence (NICE) has limited the range of individual interpretation required, and thereby facilitated the opening of prescribing to nurses. Half of nurses in the National Health Service system are permitted to prescribe medications. The simultaneous introduction of a nursing Leadership Centre, which provides training and monitoring support, has limited potential unrest from other professional bodies.(19)

Domain 3: Primary healthcare delivery system design

Attachment to a physician, physician-led primary healthcare team or an inter-professional collaborative care team

Many key informants emphasized the importance of patients being attached formally to a physician, another type of healthcare provider, or a team, and they see teams as an important element of strengthening primary healthcare. Many provincial and territorial governments are advocating team-based healthcare delivery.(4;5)

All jurisdictions appear to have experimented with team-based delivery, and some commentators have noted that existing teams are often physician-led and do not fully integrate other healthcare providers for full interdisciplinary collaboration.(6) For physician-led teams, the recruitment of new primary healthcare physicians can prove critical. One key informant described an approach used in the Northwest Territories, whereby physicians wanting to re-locate to Yellowknife must complete a locum first and then be judged by other team members in terms of their fit with the existing team. What can be expected from primary healthcare physicians joining a team is also important. One key informant argued that physicians rarely change their practice styles when joining a team, but they often receive greater job satisfaction in teams because they feel they are being remunerated for their existing practice styles through bonus payments and blended capitation or salary models that allow them to spend time with their patients. One key informant noted that placing primary healthcare physicians at the centre of teams will limit opportunities for the expansion of team-based healthcare delivery, particularly in remote and underserved areas. On the other hand, another key informant argued that primary healthcare physicians should remain central to primary healthcare delivery, and that efforts should focus on how to provide them with the incentives needed to work with other healthcare providers, as well as with regional health authorities.

Inter-professional collaborative care teams are less common. Saskatchewan seems to have the most interdisciplinary and integrated primary healthcare teams, which can include physicians, nurse practitioners, public health nurses, social workers, nutritionists, physical therapists, home care workers, and pharmacists (which were recently added).(8;30) In smaller communities in that province, teams are led by nurse practitioners working with off-site physicians.(8;30) Ontario recently introduced nurse practitioner-led clinics in which nurse practitioners work with a team of other healthcare providers, including physicians. Ontario is planning to introduce an additional 25 nurse practitioner-led clinics over the coming years in underserved areas.(29) In the Northwest Territories, nurse practitioners deliver primary healthcare in most communities, with linkages to family physicians located elsewhere, much like in small Saskatchewan communities.(28) Inter-professional collaborative care is also sometimes well developed for patients with particular conditions, such as the teams in Prince Edward Island that target patients living with chronic conditions like diabetes,(25) or the teams in British Columbia and Saskatchewan that target populations with specific conditions or in underserved areas.(8;51) Several key informants noted that inter-professional collaboration is the norm for community health centres.

Key informants offered some advice about how to work through issues related to team roles and composition. Some key informants argued that team roles should be allocated according to function, not discipline. These key informants agreed that more education is needed for healthcare providers to understand the potential functions of each of their colleagues, and that policies must enable flexible functioning. One key informant commented that in an ideal team, the family physician would play a limited direct role in patient engagement, but would rather act as a resource or consultant. Some key informants argued that team composition could be decided, as it was for the Groupes de Médecine Familiale in Québec, namely by organizing focus group discussions with primary healthcare physicians, proactively engaging healthcare provider associations and political parties, pilot testing the model, and paying physician leaders to provide change-management supports to new teams. Other key informants emphasized the importance of raising awareness and building demand among patients and communities. These key informants noted that town-hall meetings and community engagement initiatives have led to greater acceptance of primary healthcare in general, and nurse practitioner-led teams in particular, as a response to physician shortages in some provinces.

Key informants also pointed to the need to balance the recognition that newer graduates who have trained in Canada need little enticement to join teams, on the one hand, and the reality that many older physicians need as much enticement as possible and many non-physician healthcare providers need workable funding models, on the other hand. Many key informants noted that newer graduates, for the most part, are keen to work in teams. The challenge comes with older physicians or with international medical graduates who have trained in non-team-based settings (who are particularly numerous in jurisdictions like Newfoundland and Saskatchewan). Many older physicians are reluctant to move away from fee-for-service remuneration and in many jurisdictions this means that they cannot join a team. Key informants noted many examples of funding models not keeping pace with developments in team-based service delivery. For example, in Newfoundland pharmacists have not integrated into community health centres because they would lose income from giving up their private pharmacies. In Nova Scotia and Québec, at least, this is not the case. Nova Scotia pharmacists are reimbursed for caring for complex patients, enabling them to participate as members of interdisciplinary teams. Québec's Groupes de Médecine Familiale are provided funding for nursing, administrative, and overhead costs, as well as being given a bank of hours to pay other healthcare providers (in addition to physicians and nurses) to participate in their team-based practices.

Training was emphasized by a number of key informants. Key informants argued that healthcare providers must be trained early in their transition to team-based care in order to work effectively as part of a team and to be satisfied with the work. The governments of British Columbia and Saskatchewan, for example, have invested in team facilitators and trainers.^(7;8) The government of Québec has supported the training of 21 nurse mentors, the development of an online network for nurses to share tools and discuss issues, transferred money to the regional health authorities for additional training, and funded three months of a regional focal person's time to support Groupes de Médecine Familiale. A few key informants also noted the importance of inter-professional training for primary healthcare leaders.

Key informants also highlighted the importance of co-location and supports like electronic health records. Some existing teams (generally those called "networks") are virtual, comprising multiple physicians in different locations who may share after-hours care and often a 24-hour nurse-staffed telephone.⁽⁶⁾ But several key informants who manage teams noted that teams work best together when they share a workspace, which facilitates informal collaboration, relationship building, group learning, and collective problem solving. A number of key informants also noted that effective team interaction hinges on the widespread use of electronic health records, which allow healthcare providers to see easily what their colleagues have been doing with the same patient. The government of Québec has also provided Groupes de Médecine Familiale with capital and overhead support.

Key informants flagged the challenges associated with having primary healthcare physicians reporting to different people than other healthcare providers and with expanding team-based delivery during an economic downturn. One key informant noted that teams in New Brunswick struggle because primary healthcare physicians report to a regional Chief of Family Medicine, whereas other healthcare providers report to the regional health authority through other executives. A number of key informants suggested that team expansion has been (and will continue to be) constrained by the higher-than-expected costs of introducing and funding new teams, particularly in the current economic situation. In Ontario, specifically, key informants suggested that the provincial government was not prepared for the level of uptake of incentives and bonus payments.

Comparator countries, including Denmark, Israel, New Zealand, Spain, and the United Kingdom, have introduced similar reforms to increase team-based primary healthcare delivery. While these teams include a range of healthcare providers, they are almost always led by primary healthcare physicians.⁽⁹⁻¹⁵⁾ As in Canada, team-based delivery is often heralded as an ideal approach, particularly for patients with complex or chronic illnesses. Common characteristics of successful teams have been argued to include strong management, clear communication, and a supportive culture.^(9;11)

Target payments for co-ordinated and proactive care

Many Canadian jurisdictions provide some type of target payments (or financial incentives more generally) to primary healthcare providers, some of which are for co-ordinated and proactive care (e.g., prevention, management of chronic conditions), and others of which are for relocation to underserved communities and enrolment of unattached patients.(7;16) Key informants noted that target payments need to be aligned with population goals, designed to reward optimal practice, and continually adjusted to reflect changing needs, new research evidence, and the responsiveness of healthcare providers. In many jurisdictions, healthcare providers are only eligible for incentives if they participate in teams.

Most key informants believe that incentives achieve results and that at least some primary healthcare providers (such as physicians and pharmacists in Alberta) would not provide particular services without incentives. One key informant noted that incentives may not work in jurisdictions where the supply side is constrained (e.g., where a healthcare provider simply cannot add a new patient due to the existing workload). One key informant also noted the potential for incentives to do harm, arguing that Ontario's incentives disrupted interdisciplinary practice by paying physicians to provide services that had been (or could be) delivered by other healthcare providers. In a complementary observation, another key informant noted that incentives would work best if targeted at teams, not single healthcare providers. Then healthcare providers could work to their scopes of practice and physicians, for example, would not be engaged in smoking-cessation programs. One key informant indicated the potential for incentives to have unintended effects. The key informant cited the perception that Québec's incentives were overly bureaucratic and burdensome, and they prevented some physicians from entering Groupes Médecine Familiale. Also, when probed, many key informants agreed that some of the desired behaviours could happen without incentives, as they do in community health centres where providers may have different intrinsic values. Also, non-financial incentives such as benchmarking (discussed further in Domain 4) are used in some comparator countries to achieve similar results. Several key informants indicated that benchmarking is likely to work in the Canadian context as well.

Comparator countries have implemented financial and non-financial incentives targeted at healthcare providers. Australia, Denmark, Germany, and New Zealand aim to encourage the provision of care for the management of chronic diseases, and the enrolment of patients in chronic disease management programs. (10;12;15;17) New Zealand also offers targets payments to primary healthcare physicians who deliver healthcare services to marginalized populations.(18) The United Kingdom has introduced a number of performance incentives related to practice organization, patient satisfaction, and the provision of extra services.(19) The United Kingdom's "payment by result" system allows patients to choose their healthcare provider based on publicly available quality indicators. However, information asymmetries and limited provider availability has limited the application of this system.(19)

Community health centres as a sub-domain that emerged as important

Community health centres, while technically a type of team, are often considered unique from other team models because of their more integrated role as health and social service providers. Indeed, community health centres are arguably the most interdisciplinary and population-based delivery model in Canada, however, coverage is low across the country.(31) Key informants argued that this model is typically most appropriate for hard-to-reach populations (e.g., very poor, inner-city residents, linguistic minorities, particular ethnocultural groups) or for populations with unique needs (e.g., patients with multiple risk factors or chronic conditions). While key informants tended to agree that the more comprehensive care delivered in community health centres is, almost by definition, more expensive, the key question is whether the model is more cost-effective than others for achieving particular goals among particular types of populations, and hence where the use of the model could be expanded. One key informant noted that community health centres seem to

attract healthcare providers with specific values that facilitate success in areas such as community involvement, patient support, and team-based care. Another key informant argued that the current funding mechanism for community health centres needed to be changed to a global budget mechanism.

One key informant noted that, in the Atlantic provinces, some community health centres came to exist following the closure of community hospitals, and they originally included former hospital providers. These community health centres sometimes struggled to adopt a model of community care. In some community health centres, it took a change in staff to enable changes in the organization's perspective. In New Brunswick, a key informant argued that training workshops facilitated the transitions from community hospitals to community health centres. These workshops were run by Ministries of Health, and champions were recruited from other community health centres. This key informant observed that these workshops needed to be offered on an ongoing basis.

Domain 4: Clinical information systems to support primary healthcare teams, providers, and patients

Electronic health records

All Canadian provinces and territories are actively pursuing efforts to develop and strengthen electronic health records – both infrastructure and planning – with financial support from Canada Health Infoway. That said, provinces and territories are at different stages in implementing electronic health records, with British Columbia at or near full implementation, Ontario having a goal of full implementation by 2015, and Newfoundland being in the planning stage.^(16;20) Moreover, the contents of these electronic health records appear to vary across jurisdictions as well. The basic set of data in an electronic health record typically includes the patient's medical record (i.e., patient complaints, diagnoses, treatments, and follow-up plans), laboratory results, diagnostic imaging, and prescription history, but it may also include patient decision aids, and provider decision supports. Several key informants noted that the diverse array of terminology used when discussing the general domain of electronic health records makes cross-jurisdiction discussions challenging. For example, such discussions may make reference to electronic medical records (which might be understood as a digital chart in a physicians' office), electronic health records (which may be seen as a more holistic representation of a patient's health and healthcare experiences), or personal health records (envisioned as something that patients themselves can create or co-create with healthcare providers and teams). What is more, each of these terms may be understood in ways different from the definitions provided in the examples.

One key informant echoed a number of other key informants in stating that electronic health records are only useful when they can demonstrate “value added.” One of the main advantages of electronic health records identified by key informants is that they can be used to generate descriptive profiles of a primary healthcare physician's or team's patient panel. These key informants believe that physicians and other team members appreciate these profiles, and use them to reflect on the types of illnesses/problems that they see. Electronic health record systems can also facilitate appointment scheduling, electronic prescribing, and dataset linkages. Key informants noted that some Canadian jurisdictions have experimented with advance access appointment scheduling. This system allows for same-day scheduling by holding a certain proportion of a healthcare provider's daily schedule open. Advance access scheduling was piloted in 17 clinics in Manitoba,⁽⁵²⁾ and is used by all community health centres in New Brunswick.⁽³²⁾ Key informants noted that electronic prescribing is starting to be used in provinces like British Columbia and Saskatchewan, however, coverage rates have not been well documented.⁽⁵¹⁾ Key informants noted that data linkage can make possible other types of initiatives as well. For example, the government of New Brunswick plans to link its electronic health record to the provincial public health surveillance system, thus enabling more rapid public health responses.⁽³²⁾

Key informants argued that success in implementation hinges on funding or other incentives for primary healthcare physicians and teams to purchase the hardware and software to support electronic health records (such as making them a requirement for receiving target payments), training and user support (which can be done by placing an information technology specialist, who understands healthcare providers' needs and constraints, in clinics for a time-limited period), and healthcare provider champions (who are sometimes paid for their efforts). One key informant attributed the rapid uptake of electronic health record software to the conditionality of incentives and bonuses on software use. One key informant noted that the government of British Columbia sends dedicated teams to train and support users, and that it has developed its training and implementation plans with the collaboration and buy-in of the British Columbia Medical Association.⁽²⁰⁾ Another key informant noted that healthcare provider champions were sufficiently motivated by a conference they attended that they introduced advance access scheduling in their community health centre. A number of key informants lamented the lack of user consultation in developing and purchasing electronic health records and the practice of pushing technology that provides no clear value added.

The interoperability of electronic health records, which is needed to make them accessible by all providers, at all levels, and possibly even by the patient, is regarded as critical by many key informants. They lamented the heterogeneity of software across healthcare providers and programs, which makes integration difficult. One key informant noted that a disagreement about approved software vendors between the provincial government and provincial medical association has complicated the implementation of electronic health records in one jurisdiction. Some provinces, like Québec, have centralized electronic health record implementation and use one consistent type of software for hospitals, laboratories, and diagnostic services, although implementation remains slow and difficult.

Among comparator countries Denmark is unique in having family physicians be required and paid to spend one hour of each work day responding to patient telephone and e-mail messages.(21) In the same country, the multiplicity of decentralized health administrative units made implementation difficult, whereas amalgamation into fewer units accelerated implementation.(21;22) In the US state of Tennessee, small practices could not implement electronic health records without support for infrastructure and technical capacity development.(23)

Reminder systems

Key informants did not volunteer specific views about and experiences with reminder systems for primary healthcare providers.

Clinical benchmarking

As described in Domain 3, some key informants suggested that clinical benchmarking – providing feedback about performance in comparison to one's peers – might work well in Canadian jurisdictions. Moreover, a key informant noted that in Manitoba physicians appeared to be motivated to change their practices based on such benchmarking. In that province, practice profiles have a comparative dimension and physicians seem to compete among themselves on the basis of these profiles.

Internationally, but particularly in Denmark and the United Kingdom, clinical benchmarking has become a widely used strategy to improve healthcare quality.(10;19) In the United Kingdom, indicators relevant to primary healthcare are made publicly available for both healthcare providers and patients on the National Health Service website.(19)

Patient portal

Most key informants also did not volunteer specific views about and experiences with providing a patient interface on electronic health records (i.e., a patient portal) but one key informant argued that supporting a common personal health record (even if it was on Google's personal health record platform) should be central to any technology-related effort to strengthen primary healthcare systems.

Complementary and related e-health initiatives as a sub-domain that emerged as important

Telemedicine – the use of voice and video conferencing to connect patients and healthcare providers – can improve access to care for patients in rural and remote regions. Key informants suggested that Alberta likely hosts the most advanced telemedicine program,(24) and that Newfoundland employs teleconferencing or videoconferencing for remote areas. Telehealth – a telephone line that connects patients with immediate advice, generally from a nurse – is also common across jurisdictions, often at full coverage levels according to

key informants. Ontario's telehealth system includes the ability to roster unattached patients to a local primary healthcare physician who is accepting new patients.

Domain 5: Decision supports for primary healthcare teams/providers

Resources (e.g., guidelines) and tools

In terms of clinical decision supports, key informants agreed that the most interesting innovations are British Columbia's Practice Support Program and Ontario's Quality Improvement & Innovation Partnership (QIIP). The former provides change-management support to primary healthcare physicians to help them redesign practices and incorporate new features of primary healthcare (e.g., electronic health records, chronic disease management, and advance access scheduling).(7) A key informant attributed the success of this program to three factors, namely: 1) the involvement of the General Practice Service Committee (and thus physician engagement and buy-in); 2) flexibility and responsiveness to local needs; and 3) involvement of local provider champions. The latter introduces, integrates, and spreads quality-improvement methods, advances the use of performance measurement, and builds a learning community among primary healthcare practices. A key informant attributed its success in part to the long-term financial commitment received from the government of Ontario. Both the BC program and Ontario partnership have dedicated clinical staff (who understand clinical practice needs) and non-clinical staff (who understand change management). Manitoba is experimenting with a program to bridge primary healthcare and specialty care more effectively with an online tool. Specialists use the tool to describe the types of patients they see, what patients should expect from their visit, and what tests they should have before their visit, as well as to feed back information to the primary healthcare physician. A number of Canadian jurisdictions, and individual practices within them, are using chronic care models, including the PRIISME model for diabetes management,(25) which include a variety of resources and tools.

Key informants did not volunteer specific views about and experiences with managerial decision supports in primary healthcare.

Among comparator countries, the United Kingdom's National Service Framework, which offers practical strategies for implementing organizational changes necessary to strengthen primary care,(19) shares some key features with British Columbia's Practice Support Program. Web-based decision support tools for cardiovascular disease and diabetes appear to be widely used in New Zealand,(26) and the Chronic Care model is widely used throughout the United States and some other comparator countries.(17;27)

Continuing professional development

Key informants also did not volunteer specific views about and experiences with continuing professional development for primary healthcare providers beyond initiatives like the aforementioned Practice Support Program in British Columbia and the Quality Improvement & Innovation Partnership in Ontario. In terms of continuing professional development for primary healthcare managers, a number of key informants cited the Executive Training for Research Application (EXTRA) program, sponsored by the Canadian Health Services Research Foundation, as being a valuable source of leadership and management training, either for themselves or for peers and colleagues (albeit not just for primary healthcare). At the Primary Care Trust level in the United Kingdom, the National Health Services World Class Commissioning programme provides leadership and decision-making training for local decision-makers.(19)

Domain 6: Self-management supports for patients and their families

Self-management supports for patients and their families

Key informants noted that self-management supports are a key feature of community health centres (and often quite innovative, such as their group visits), but such supports are much less common in physician-led primary healthcare team practices. A number of programs and pilot projects exist across jurisdictions, including training programs for patients and patient reminder systems.⁽³²⁾ However, key informants had relatively little to say about these supports. In comparator countries, as in Canada, self-management supports are most commonly linked to chronic disease management programs. In New Zealand, an individualized care plan is provided to patients, and co-ordinated by nurses.^(12;15)

Resources (e.g., guidelines) and tools

Key informants did not volunteer specific views about and experiences with resources and tools for patients in primary healthcare.

Peer support groups

Key informants also did not volunteer specific views about and experiences with peer support groups in primary healthcare, although several key informants from community health centres note their widespread use in their settings.

Domain 7: Community resources for patients and their families

Many regional health authorities are responsible for integrating primary healthcare with at least some community resources but in reality they are rarely housed under the same roof in any given region, with the possible exception of community health centres. In jurisdictions like the Northwest Territories, health and social services are under the same provincial and regional “umbrellas,” so the opportunity for fuller integration is greater. In British Columbia, integrated health networks formalize the link between primary healthcare and some community resources.⁽²⁰⁾ In Ontario, on the other hand, regional health authorities are responsible for integrating many healthcare and community resources, but they are not responsible for integrating primary healthcare and community resources.⁽⁵³⁾ Several key informants suggested the need to harmonize policies and strategies in this regard at a more strategic or macro level first. Additional linkages would arise if organizations within each region (e.g., home care) have an explicit mandate to integrate primary healthcare into their planning and operations.

Key informants identified a number of factors facilitating integration: 1) small size of regions or communities within regions (e.g., some parts of Manitoba and New Brunswick); 2) primary healthcare and community services are managed by the same vice-president or director in all regions; 3) primary healthcare physicians are supported to hire or work with healthcare providers who are more familiar with available community resources (or to “purchase” community resources); and 4) integrated electronic health records (as opposed to each healthcare and community service using their own systems). A key informant described an example of a vice-president who oversees both primary healthcare and community services in a regional health authority in Atlantic Canada (i.e., an example of the second factor). The vice-president created a leadership council of directors of all groups represented in her portfolio and found that their monthly meetings yielded tremendous progress in communication and integration (including in primary healthcare). Other key informants described examples of primary healthcare providers and teams becoming exposed to community resources through the nurses they hire (as happened in Québec where nurses know more about available community resources and have a budget to access them), the nurses and dietitians they hire (as happened in Manitoba), and the clinical case managers assigned to their primary healthcare practices (as is planned in a regional health authority in British Columbia). Another key informant suggested that integration would be vastly improved if primary healthcare physicians were responsible for holding budgets for and commissioning community resources.

A number of successful examples of healthcare and community resource integration exist within comparator countries. In Denmark, case managers co-ordinate health and social services for patients requiring complex care.⁽¹⁰⁾ In New Zealand, community health workers deliver care in homes and community centres for marginalized populations.⁽¹⁸⁾ In Spain, case managers co-ordinate integrated health and social care for patients with complex conditions, and they have noted that shared information systems are essential for high levels of co-ordination.⁽³³⁾ The United Kingdom has integrated health and social services within regional health authorities, but commentators acknowledge that co-ordinated care is difficult when certain social services are located in different administrative structures (i.e., municipalities instead of health authorities). For special populations, Primary Care Trusts organize integrated care, sometimes outside of the local authority.⁽¹⁹⁾

Community capacity building as an additional sub-domain that emerged as important

Key informants noted that many regional health authorities are attempting to engage communities and are proactively involved in community capacity building. They cited region health authorities in Newfoundland, New Brunswick, Saskatchewan, and British Columbia that employ facilitators who work with the community to build capacity. In New Brunswick, there is a strong focus on empowering communities to, as one key informant said, “do the work themselves.” The regional health authority supports the community to lobby the government for services, but also to view health as a multi-faceted process that involves all the social

determinants, not just hospitals and physicians. The regional health authority has engaged the community through needs assessments, focus group discussions, and town-hall meetings, and it has built community capacity by supporting community advisory committees. The key informant argued that a critical success factor is to include the community leaders and “movers and shakers” on these committees. In this region, community developers exist with the sole purpose to support community capacity building. One key informant gave an example of a New Brunswick community who approached the regional health authority for help recruiting a physician. Through a community-led needs assessment and a town-hall meeting to discuss the social determinants of health, they came to realize that they do not need a doctor, but instead they needed to use their health centre in different ways.

A key informant described a similar process in Saskatchewan, where regions employ “primary healthcare consultants” to work with communities to plan primary healthcare. He noted that the first contact between communities and regional health authorities is generally when a community wants to recruit a physician. The primary healthcare consultants work with the community to broaden the discussion around health and healthcare, and help the community to develop a primary healthcare plan. Staff helps to reframe primary healthcare strengthening as an equal (or more desirable) alternative to more doctors or hospital services.