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**Evidence Brief:**  
**Creating Community-based Specialty Clinics in Ontario**

22 May 2013

#### McMaster Health Forum

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The evidence brief was reviewed by a small number of policymakers, stakeholders and researchers in order to ensure its scientific rigour and system relevance.

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## KEY MESSAGES

### What's the problem?

- Many procedures, tests and assessments could be provided in the community, but are not. Examples of procedures could include (but are not limited to) ophthalmological procedures, orthopedic surgery procedures, urological procedures, and general surgical procedures, among others.
- However, creating community-based specialty clinics to provide such services requires careful consideration of three key health system features:
  - existing delivery arrangements constitute a fragile ecosystem with many interdependencies, including those involving specialists who engage in a variety of hospital service and education roles in (at least partial) exchange for access to the facilities needed to provide procedures, tests and assessments;
  - several key financial arrangements with hospitals are being modified simultaneously, most notably the transition from historically derived global budgets to a combination of global budgets, a funding allocation derived from a (largely) anticipated service-volume model, and a set of prospective payments for select procedures (the latter of which could easily apply to specialty clinics); and
  - governance arrangements are already very complex, with different legislation or regulations governing care depending on what (e.g., anesthesia) or where (e.g., hospitals or 'independent health facilities') care is provided, and with policy governing the handling of transitions in where care is provided.

### What do we know about three elements of a comprehensive approach to address the problem?

- Element 1 – Make a commitment to prospective specialty clinics about the 'rules of the game'
  - We found little synthesized research evidence that addressed this element, including the seven possible types of service bundling (which we have labelled 'focused factory,' single sub-specialty clinic, single specialty clinic, multi-specialty targeted clinic, multi-specialty general clinic, one-stop specialty clinic, and one-stop integrated specialty clinic). The most salient synthesized research evidence addressed consumer engagement in identifying services that specialty clinics could provide.
- Element 2 – Commission specialty clinics through a process that ensures transparency and accountability
  - We found synthesized research evidence about some benefits of establishing requirements for reporting about adherence to price, volume and quality criteria, and about potential harms (where the evidence about widening racial disparities in healthcare is mixed), however, there was inconsistent or limited evidence about many other potential benefits and harms. We found little synthesized research evidence about the types of organizations that would be eligible to be commissioned (which we have labelled Local Health Integration Network-governed clinic, hospital-governed clinic, day hospital, hospital-aligned clinic, independent but hospital-linked clinic, and independent clinic.)
- Element 3 – Ensure that an efficient governance mechanism is in place for commissioned clinics
  - We found little synthesized research evidence that directly addressed any of the four sub-elements, including the four possible types of focus for legislation/regulations (which we have labelled specialty clinic governance, clinic-based secondary and tertiary care governance, comprehensive secondary and tertiary care governance, and regional governance). The most salient synthesized research evidence addressed the benefits of care coordination and specialist outreach clinics (which relate to clinical governance) and specific types of quality-improvement interventions (which relate to the governance of quality), as well as stakeholders' views about and experiences with 'dual practice' (i.e., working in both the public and private sectors, which again relates to clinical governance).

### What implementation considerations need to be kept in mind?

- Potential barriers to creating community-based specialty clinics in Ontario can be identified at the level of patients/citizens (e.g., they may resist an initiative that could involve a greater likelihood of being offered 'optional' upgrades with limited marginal benefit), providers (e.g., nurses and other providers may resist changes to policies governing the handling of transitions in where care is provided), organizations (e.g., hospitals may resist the 'loss' of a significant proportion of their revenue), and systems (e.g., policymakers may lack the resources to support the one-time costs of this transition).
- Potential windows of opportunity, on the other hand, can apply to all elements of an approach to creating specialty clinics (e.g., the difficult fiscal situation can be conducive to new ways of doing things).



## REPORT

Ontario's Action Plan for Health Care called for "right care, right time, right place" (p. 10) and specifically for "moving procedures into the community" (p. 13).(1) To support the implementation of this commitment, the ministry of health has taken several steps. The ministry has supported one midwifery-led birth centre in Ontario (on Six Nations of the Grand River territory) and announced in March 2012 plans for two more. The ministry may also announce another type of community-based specialty clinic in the coming months.

The ministry is now considering how to support the creation and planned growth of not-for-profit, community-based specialty clinics that can provide some or all of the high-volume surgical procedures, diagnostic tests, and select clinical assessments that historically have been provided in hospitals. The procedures that could be provided in community-based specialty clinics include cataract and many other surgical procedures, the diagnostic tests include echocardiograms and colonoscopies among many others, and the clinical assessments include a range of services for patients with multimorbidity or the frail elderly, among others, that build on or leverage existing primary care delivery models and public health programming.

The organizations that are currently involved in funding or delivering the procedures, tests and assessments that could be provided in the community include:

- 14 Local Health Integration Networks (LHINs), which fund the hospitals that now provide these services and support integration efforts in their respective regions; and
- 211 hospital sites that provide these services, of which 155 are hospital corporations (e.g., Cambridge Memorial Hospital) and 56 are hospitals operating under an umbrella corporation (e.g., Hamilton Health Sciences' General site).(2)

Some of these hospital corporations operate their own free-standing specialty clinics (e.g., Stoney Creek Campus, St. Joseph's Healthcare Hamilton) separate from their 'traditional hospital,' while some hospitals effectively operate as specialty clinics (e.g., Hotel Dieu Hospital in Kingston and Shuldice Hospital in Toronto).

### Box 1: Background to the evidence brief

This evidence brief mobilizes both global and local research evidence about a problem, three elements of a potentially comprehensive approach to addressing the problem, and key implementation considerations. Whenever possible, the evidence brief summarizes research evidence drawn from systematic reviews of the research literature (and occasionally from single research studies). A systematic review is a summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select and appraise research studies, and to synthesize data from the included studies. The evidence brief does not contain recommendations, which would have required the authors of the brief to make judgments based on their personal values and preferences, and which could pre-empt important deliberations about whose values and preferences matter in making such judgments.

The preparation of the evidence brief involved five steps:

- 1) convening a Steering Committee comprised of representatives from the partner organization, key stakeholder groups and the McMaster Health Forum;
- 2) developing and refining the terms of reference for an evidence brief, particularly the framing of the problem and three elements of a potentially comprehensive approach to addressing the problem, in consultation with the Steering Committee and a number of key informants, and with the aid of several conceptual frameworks that organize thinking about ways to approach the issue;
- 3) identifying, selecting, appraising and synthesizing relevant research evidence about the problem, approach elements and implementation considerations;
- 4) drafting the evidence brief in such a way as to present concisely and in accessible language the global and local research evidence; and
- 5) finalizing the evidence brief based on the input of several merit reviewers.

The three elements could be pursued simultaneously or in a sequenced way, and each element could be given greater or lesser attention relative to the others.

The evidence brief was prepared to inform a stakeholder dialogue at which research evidence is one 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.

Also, two types of organizations are already involved in the delivery of procedures, tests and assessments in the community (when they do not involve overnight stays):

- 939 ‘independent health facilities,’ of which 904 provide specific classes of diagnostic tests (e.g., diagnostic imaging, nuclear medicine tests, pulmonary function tests and sleep-study tests), and 35 provide surgical/therapeutic procedures (e.g., abortion, dialysis, and laser dermatologic, gynecologic, ophthalmologic, plastic and vascular surgery) or diagnostic procedures (i.e., MRI/CT and PET/CT scans)(3) for which the organization receives a facility fee in addition to the professional fee charged by the attending physicians (with the exception of the 10 providing diagnostic procedures, which are globally funded); and
- 276 ‘out-of-hospital premises’ that provide cosmetic surgery, endoscopy and interventional pain management under the administration of a variety of types of anesthesia,(4) but for which the organization does not receive a facility fee.

Some of these organizations, such as Kensington Eye Institute (an ‘independent health facility’), function in many ways as a prototypical example of a community-based specialty clinic.

This evidence brief has been prepared to inform deliberations about how the ministry can create community-based specialty clinics in Ontario. The brief addresses issues such as:

- how to identify, set criteria for and bundle the procedures, tests and assessments that could be provided in specialty clinics while not imperilling the hospitals that have historically provided them;
- how to commission specialty clinics; and
- how to govern commissioned specialty clinics.

The evidence brief does not address issues such as the effectiveness and cost-effectiveness of particular procedures, tests and assessments.

## Box 2: Equity considerations

A problem may disproportionately affect some groups in society. The benefits, harms and costs of elements of a potentially comprehensive approach to addressing the problem may vary across groups. Implementation considerations may also vary across groups.

One way to identify groups warranting particular attention is to use “PROGRESS,” which is an acronym formed by the first letters of the following eight ways that can be used to describe groups†:

- place of residence (e.g., rural and remote populations);
- race/ethnicity/culture (e.g., First Nations and Inuit populations, immigrant populations and linguistic minority populations);
- occupation or labour-market experiences more generally (e.g., those in “precarious work” arrangements);
- gender;
- religion;
- educational level (e.g., health literacy);
- socio-economic status (e.g., economically disadvantaged populations); and
- social capital/social exclusion.

The evidence brief strives to address all Ontarians, but (where possible) it also gives particular attention to two groups:

- people of low socio-economic status; and
- people with multiple morbidities.

Many other groups warrant serious consideration as well (e.g., people living in rural/remote communities), and a similar approach could be adopted for any of them.

† The PROGRESS framework was developed by Tim Evans and Hilary Brown (Evans T, Brown H. Road traffic crashes: operationalizing equity in the context of health sector reform. *Injury Control and Safety Promotion* 2003;10(1-2): 11–12). It is being tested by the Cochrane Collaboration Health Equity Field as a means of evaluating the impact of interventions on health equity.

## **THE PROBLEM**

Many procedures, tests and assessments could be provided in the community, but are not. However, creating community-based specialty clinics requires careful consideration of three key health system features:

- existing delivery arrangements constitute a fragile ecosystem with many interdependencies, including those involving specialists who engage in a variety of hospital service and education roles in (at least partial) exchange for access to the facilities needed to provide procedures, tests and assessments;
- several key financial arrangements with hospitals are being modified simultaneously, most notably the transition from historically derived global budgets to a combination of global budgets, a funding allocation derived from a (largely) anticipated service-volume model, and a set of prospective payments for select procedures; and
- governance arrangements are already very complex, with different legislation or regulations governing care depending on what (e.g., anesthesia) or where (e.g., hospitals or ‘independent health facilities’) care is provided, and with policy governing the handling of transitions in where care is provided.

Below we address each of these issues in turn.

### **Many procedures, tests and assessments could be provided in the community, but are not**

There are many examples of procedures, tests and assessments that could be provided in the community, but are not. Examples of surgical procedures could include (but not be limited to) cataract and other ophthalmological procedures, hand, upper limb and other plastic surgery procedures, hysterectomy and other gynecological surgery, knee arthroscopies and replacements and other orthopedic surgery procedures, prostatic surgery and other urological procedures, fistula placement and other vascular surgery, abdominal and other general surgical procedures, among others. Examples of diagnostic tests could include (but not be limited to) echocardiograms and colonoscopies, among others. Finally, examples of assessments could include (but again not be limited to) those defined by the need for integrated care in a defined patient group (e.g., patients with multimorbidity or the frail elderly).

As noted previously, some hospital corporations in Ontario operate their own free-standing specialty clinics (e.g., Stoney Creek Campus, St. Joseph’s Healthcare Hamilton), other hospitals effectively operate as specialty clinics (e.g., Hotel Dieu Hospital, Kingston), and both ‘independent health facilities’ and ‘out-of-hospital premises’ also effectively operate as specialty clinics, just not at scale for the types of surgical procedures, diagnostic tests, and select clinical assessments that might be optimal. We return in the next section to the issue of whether some or all of these types of organizations could be considered to be community-based specialty clinics, and thereby part or all of the response to the commitment to “moving procedures into the community.” No continuously updated inventory exists to inform discussions about the difference between what the Ontario health system has now and what it could have, although focused work in the area of cataract procedures has been carried out by the Provincial Ophthalmology Task Force,<sup>(5)</sup> and some work has been done for the services to be funded in future through the ‘quality-based procedure’ approach (which is

### **Box 3: Mobilizing research evidence about the problem**

The available research evidence about the problem was sought from a range of published and “grey” research literature sources. Published literature that provided a comparative dimension to an understanding of the problem was sought using three health services research “hedges” in MedLine, namely those for appropriateness, processes and outcomes of care (which increase the chances of us identifying administrative database studies and community surveys). We specifically conducted searches using these hedges for ‘independent sector treatment centres’ in the United Kingdom, and for ‘centres of excellence,’ ‘day procedure units,’ and ‘day hospitals’ in Australia. Published literature that provided insights into alternative ways of framing the problem was sought using a fourth hedge in MedLine, namely the one for qualitative research. Grey literature was sought by reviewing the websites of a number of Canadian and international organizations, such as the Institute for Clinical Evaluative Sciences, Ontario Health Quality Council, Canadian Institute for Health Information, Health Council of Canada, European Observatory on Health Systems and Policies, Health Evidence Network, Health Policy Monitor, and Organisation for Economic Co-operation and Development.

Priority was given to research evidence that was published more recently, that was locally applicable (in the sense of having been conducted in Canada), and that took equity considerations into account.

described later in the evidence brief). Moreover, service-capacity planning often takes into consideration demographic and technological shifts, but not shifts in the site of service delivery (e.g., availability of specialists to cover emergency rooms, in-patient consultations, operating rooms and resident teaching).

Other jurisdictions have witnessed the creation of specialty clinics with varying degrees of being ‘community-based.’ For example:

- in Quebec, ‘specialized medical centres’ have been approved by the ministry of health and social services to provide cataract extraction and intraocular lens implantation, hip and knee replacements, as well as other specialized medical treatments, in many communities across the province;
- in B.C., a ‘day hospital’ (Jim Pattison Outpatient Care and Surgery Centre) was purpose-built in Surrey, B.C., as a public/private partnership involving Fraser Health (a regional authority that is analogous to a LHIN in Ontario);
- in the U.S., specialty hospitals, which are often physician-initiated, compete with ‘traditional hospitals,’ often by focusing on highly remunerative services for well-insured patients;
- in Australia, day procedure units (located in ‘traditional hospitals’), day hospitals (when no overnight stay is required) and centres of excellence (where high-volume services are provided by a particular sub-specialty, such as orthopedic surgery) can all provide specialty services;
- in the U.K., ‘independent sector treatment centres’ (ISTCs) were commissioned by the National Health Service (NHS) and provide services using (typically) non-NHS staff in order to reduce the waiting times in the NHS that existing hospitals seemed unable to address;(6) and
- in Europe more generally, there is an active debate about the future role of hospitals and about the emergence of specialty clinics.(7)

In Ontario, the assumptions underpinning the proposed creation and planned growth of community-based specialty clinics that can provide surgical procedures, diagnostic tests and select clinical assessments, include that the specialty clinics will:

- provide high volumes of services with outcomes (and costs) that are at least comparable to hospitals and possibly better (or lower) than low-volume facilities;
- be not-for-profit entities; and
- be funded using prospective payments for select episodes of care (called quality-based procedures, or QBPs, in Ontario, which are addressed in a later sub-section).

The limited available synthesized research evidence on these topics indicates that:

- outcomes were comparable in hospitals and specialty clinics for select surgical procedures (according to several old, medium-quality systematic reviews),(8-10) with the exception of specialized care for ovarian cancer for which outcomes are better in specialty clinics (according to one old, medium-quality systematic review);(11)
- outcomes were argued to be better in hospitals for colposcopies (according to one old, medium-quality review conducted specifically for Ontario),(12) but no other directly relevant diagnostic tests or assessments have been subjected to a systematic review of the research literature;
- outcomes were better for radical cystectomy and gastric cancer surgery in high-volume facilities than in low-volume facilities;(13;14)
- outcomes are typically better in not-for-profit hospitals (according to one old, high-quality systematic review)(15) and in specialty clinics providing hemodialysis (according to one old, high-quality systematic review);(16)
- costs (i.e., payments for care) are typically higher (according to one old, high-quality systematic review)(17) or similar (according to one old, medium-quality systematic review)(18) in for-profit hospitals compared to not-for-profit hospitals, but comparisons of costs in hospitals and costs in specialty clinics have not been subjected to a systematic review of the research literature; and

- outcomes in hospitals and specialty clinics paid using prospective budgets are comparable to those paid using other funding approaches (although this was found in only one old, medium-quality review, and a systematic review-in-progress will likely not be published until early fall 2013).(19)

For those who want to know more about the systematic reviews from which these key messages were drawn (or obtain citations for all of the identified reviews), a fuller description of the systematic reviews is provided in three appendices:

- for comparisons of outcomes between hospitals and specialty clinics and between high- and low-volume facilities, see Appendix 1;
- for comparisons of outcomes and costs between for-profit and not-for-profit hospitals and specialty clinics, see Appendix 2; and
- for comparisons of outcomes in hospitals and specialty clinics paid using prospective budgets versus other funding approaches, see Appendix 3.

Keeping in mind these assumptions and findings, there are many possible rationales for creating community-based specialty clinics in Ontario (or said in other ways, many possible objectives against which the transition could be monitored and evaluated, and many possible criteria for deciding which services can be provided in the community). A summary of the possible rationales, the anticipated and observed benefits and harms, and possible approaches to mitigating the risk of harm is provided in Table 1. The safest statement that can be made based on this assessment is that, if the design and implementation of a transition to specialty clinics is well supported, there are likely to be improvements in access and the patient experience, there may be improvements in the provider experience and reductions in cost, and quality and outcomes are likely to be comparable. More conclusive statements would require one or more focused systematic reviews of all of the studies that have examined benefits and harms. While other possible benefits (or harms) could be identified, such as further consolidating bulk purchasing of supplies and services, these benefits (or harms) could be realized without creating specialty clinics.

**Table 1: Possible rationales for providing many procedures, tests and assessments in the community**

Possible rationales	Anticipated benefits or harms	Observed benefits or harms based on select single studies addressing relevant services	Possible approaches to mitigating the risk of harm (if applicable)
Improve access	Potential for higher service volumes with purpose-designed facilities	Observed lower utilization rates of U.S. specialty hospitals (compared to general hospitals) among African Americans,(20) but no consistent difference in utilization rates in U.K. independent sector treatment centres (ISTCs) by socioeconomic status(21)	Consider equity of access explicitly in approving the locations and establishing the accountabilities of specialty clinics (and possibly a single intake mechanism in each region or sub-region)
Improve the patient experience	Potential for higher satisfaction among patients and caregivers in ease of finding where to go, in speed of care, in customer service, and in linkages with primary care and public health organizations	Observed higher satisfaction among patients in both U.K. ISTCs and U.S. specialty hospitals(21;22)	Consider requiring routine measures of the patient experience in all settings
Improve the provider experience	Potential for higher quality of working life among providers in purpose-designed facilities with appropriate staff working up to their full scope of practice and caring for more satisfied patients and caregivers	Observed mixed views among providers with experience in both the U.K. National Health Service (NHS) and ISTCs,(23;24) as well as a reduction in suitable cases for training of and in cases performed by residents in NHS hospitals,(25;26) but not in U.S. general hospitals(27)	Consider requiring periodic studies of the provider experience (both in specialty clinics and hospitals) and requiring specialty and family practice residents, as well as other trainees, to rotate through both types of organizations

Improve health (or quality of care)	Potential for better health outcomes (or higher quality of care) in high-volume clinics	Observed slightly better health outcomes for some services (e.g., orthopedic procedures) in U.K. ISTCs and in high-volume U.K. and U.S. clinics,(21;28-31) no differences or a mixed picture in health outcomes or guideline adherence for some other services in the U.K. and U.S.,(22;32-34) slightly worse health outcomes for one service (hernia repair) in U.K. ISTCs(21), and higher rates of incomplete colonoscopies in office settings in Ontario(35)	Consider requiring reporting about adherence to appropriateness criteria, staff training/team development, and clinic accreditation in all settings(36)
Reduce costs	<p>Potential for lower public costs if a quality-based procedure funding model is used and pricing is set using optimal clinical pathways in efficient clinics (and not as a relatively high percentile of current cost per case or weighted case)</p> <p>Potential for higher public costs if there is an increase in rates of inappropriate use or if many services currently being provided under select* circumstances are provided under a new arrangement that involves paying a facility fee</p> <p>Potential for lower private costs if patients and caregivers face shorter times off work and shorter travel times</p> <p>Potential for higher private costs if there is an increase in rates of selling optional upgrades with limited marginal benefit (e.g., some cataract lenses)</p>	No relevant studies identified	<p>Consider requiring reporting about adherence to appropriateness criteria</p> <p>Consider restricting advertising about optional upgrades with limited marginal benefit</p>

\*Services are provided in hospital but the hospital is covering the 'facility fee' (e.g., staff time, sterilization costs) out of their core budget, or physicians are covering part of this fee through their professional fees (e.g., colonoscopies); or services are provided out of hospital but physicians are covering the 'facility fee' through their professional fees.

However, creating community-based specialty clinics requires careful consideration of existing delivery, financial and governance arrangements.

### **Existing delivery arrangements constitute a complex ecosystem with many interdependencies**

Existing delivery arrangements for surgical procedures, diagnostic tests and select clinical assessments are highly complex with many interdependencies. Hospital-based specialists, for example, rely on hospitals for access to operating suites, equipment and staff, among other things. Hospitals, in turn, rely on these specialists to provide in-patient coverage and/or consultation, emergency-room coverage and/or consultation, and education (when the hospital is an academic teaching centre), which some individuals group together as 'clinical governance.' (Hospitals in smaller communities may rely on specialists from larger communities to provide procedures, tests and assessments on select days each week or month, and the specialists may be happy to do so if they face limitations in their access to operating suites, diagnostic equipment or other supports at their 'home' hospital.) Specialty clinics, on the other hand, may rely on hospitals for access to diagnostic services and for accommodating referrals of high-risk patients and emergency transfers (whether or not they do so under the terms of a formal arrangement). Dental surgeons provide a cautionary tale of what can happen when a specialty becomes disconnected from a hospital that can accommodate referrals and transfers. Specialty clinics operating as 'independent health facilities' and 'out-of-hospital premises' also rely on the College of Physicians and Surgeons of Ontario for safety and quality oversight,(3;4) as soon will (under the terms of a pilot program) specialty clinics providing endoscopy, mammography and pathology services. (Also Accreditation Canada has now developed standards for

community-based speciality clinics that provide surgery with anesthesia).(37) Similarly, birth centres rely on the College of Midwives of Ontario for safety and quality oversight. Physicians offering procedures, tests and specialty assessments in their private offices, on the other hand, face no such oversight of their offices (as distinct from their individual professional behaviours) and may have electronic medical records that permit little to no information sharing with hospitals or specialty clinics. Moreover, concerns have been raised about the increasing number of services being provided by physicians who have not had the type or extent of training experienced by those physicians who have historically provided the services.(38)

Where the complexities also exist, but the interdependencies are often lacking, is at the interface between specialty care and primary/community care (e.g., Family Health Teams, Community Health Centres) and between specialty care and public health (e.g., public health units). Health Links was recently launched as one effort to create these interdependencies in ways that directly support high users of the health system.(39)

Any effort to move specialty services into the community would need to be attentive to these complexities and interdependencies, retain the functionality that is essential to achieving the objectives of the move, and (ideally) add new functionalities and create more of the right types of interdependencies.

### **Several key financial arrangements with hospitals are being modified simultaneously**

Several key financial arrangements with hospitals are being modified simultaneously, most notably the transition from historically derived global budgets to a combination of global budgets (30% of funding by 2014/15), a funding allocation derived from a (largely) anticipated service-volume model (called the Health Based Allocation Model, or HBAM, for 40% of funding at the present time and going forward), and a set of prospective payments for select episodes of care (called quality-based procedures, or QBPs, for 30% of funding by 2014/15).(40) The QBP funding model is particularly germane to specialty clinics because it would provide the basis for funding any type of organization that could become a specialty clinic. The model has several key characteristics:

- it is built around an optimal clinical pathway for each episode of care that is based on the best available research evidence (as identified and interpreted by a clinical expert advisory group), and on coordinated care by the right providers at the right times in the right places (as established by the hospital receiving the funding);
- it provides a single payment for all of the services in the full clinical pathway or in a discrete part of the clinical pathway (except those provided by physicians) regardless of the true costs of any given episode of care (as set, for now, based on a given percentile of current cost per case or weighted case, but that may be set in future based on full costing of an optimal clinical pathway), albeit within ‘corridors’ of the hospitals’ projected base funding during the implementation phase; and
- it mandates process and outcomes measurements.(40)

The QBP funding model was applied in 2012/13 to cataract surgery, hip and knee replacements, and dialysis for chronic kidney disease, and in 2013/14 to endoscopy and systemic chemotherapy for cancer, and to care for chronic obstructive pulmonary disease, congestive heart failure, hip fracture, non-cardiac vascular disease and stroke.(40) The other financial arrangement with hospitals that is being considered for change involves the possibility of outsourcing hospital laboratory services as part of a laboratory services funding re-design, which could lead to significant reduction in hospital laboratory budgets.(41)

Two other salient financial arrangements are with the physicians who are paid professional fees to provide surgical procedures, diagnostic tests and specialty assessments, and with the ‘independent health facilities’ who are paid facility fees to support the operating suites, equipment and staff that would have been provided in hospitals for these medically necessary services (whereas with ‘out-of-hospital premises’ delivering what are considered to be non-medically necessary services, these fees are paid by patients).

A final key financial arrangement is between hospitals and the provinces’ nine purchasing agents that negotiate the prices at which hospitals purchase supplies (e.g., cataract lenses) and services (e.g., food and

preparation). There are potential opportunities in the further consolidation of purchasing arrangements (to further reduce prices and price variability), however, this could be pursued whether or not services are moved from hospitals to speciality clinics. There are also potential opportunities in extending the groups for whom the purchasing agents are negotiating prices to include those organizations that already provide such services, such as ‘independent health facilities’ (to broaden the impacts of the price reduction across the sector).

The initiative to create specialty clinics would then also need to be attentive to the financial arrangements that already exist (e.g., capital planning framework) and that are also being modified simultaneously in the sector, seeking synergies where possible (e.g., QBP funding, facility fee payments and bulk purchasing) and avoiding overwhelming the sector (e.g., by pursuing both a dramatic expansion of specialty clinics and a bold laboratory services funding re-design at the same time).

### **Governance arrangements are already very complex**

Governance arrangements for the provision of surgical procedures, diagnostic tests and specialty assessments are already very complex, with different legislation or regulations governing care depending on what (e.g., anesthesia) or where (e.g., hospitals or ‘independent health facilities’) care is provided. Most notably:

- hospitals (including those operating their own free-standing specialty clinics and those effectively operating as specialty clinics) are governed under the terms of the Public Hospitals Act (which requires appeal processes for operating-suite allocations, among many other processes) and are required to develop, approve (at the level of their boards’ quality committees) and make available to the public an annual quality-improvement plan under the terms of the Excellent Care for All Act;
- select hospitals effectively operating as specialty clinics (e.g., Shouldice Hospital) are governed under the terms of the Private Hospitals Act;
- ‘independent health facilities’ are governed under the terms of the Independent Health Facilities Act and related policies from the College of Physicians and Surgeons of Ontario;
- ‘out-of-hospital premises’ are governed under the terms of regulation 114/94 of the Medicines Act and related policies from the College of Physicians and Surgeons of Ontario; and
- hospitals and specialty clinics that use radiation are governed under the terms of the Healing Arts Radiation Protection Act.

As noted previously, physician offices are not governed under the terms of legislation or regulations per se, even though the physicians and other health professionals working in them may be providing the same procedures, tests and assessments as those being provided in hospitals, ‘independent health facilities,’ and ‘out-of-hospital premises.’ The introduction of specialty clinics could require the adoption or adaptation of one or more of these governance arrangements as well as the adaptation of others. The question of who governs specific organizations (in this case, who would direct the affairs of the organization and hold any contracts with commissioners) within these legislative and regulatory mandates is a different one. For example, hospitals are typically governed by a community board except under the rare circumstances when a ‘supervisor’ is appointed by the minister.

Legislation also exists to govern the handling of transitions in where care is provided, including the Labour Relations Act (1995) and the Public Sector Labour Relations Transition Act (1997). The bottom line for any movement of services from hospitals to community-based specialty clinics is that specialty clinics are likely to need to assume the terms of existing collective agreements and collective-bargaining processes following the transfer of unionized staff (whether or not they had any unionized staff at the time that they began providing the services). This legislation raises a number of issues, including: 1) whether existing (or potential) specialty clinics would be willing to begin providing services given that the transfer of staff from a unionized setting may lead to the assumption of new collectively bargained obligations (regardless of their size); 2) what flexibility the specialty clinics would have to design care pathways that allow all providers to work up to their full scope of practice; and 3) whether small specialty clinics could face financial challenges in the unlikely event that they have to hire labour lawyers to address problems that emerge under the terms of existing agreements.

### **Additional equity-related observations about the problem**

In our review of the research evidence, we found no systematic reviews focusing specifically on people of low socio-economic status or people with multiple morbidities, and only one systematic review contained any studies that included these prioritized groups (and only two of the 52 studies contained in this old, low-quality review focused on people of low socio-economic status).(42)

As already noted, a study in the U.S. identified lower utilization rates of U.S. specialty hospitals (compared to general hospitals) among African Americans.(20) While particular ethnocultural groups were not prioritized for the equity analysis, and while the particular case of African Americans in the U.S. may have only some parallels in Canada, this study does suggest the need for reflection about the particular issues faced by vulnerable populations in seeking the types of procedures, tests and assessments that could be moved to the community.

### **THREE ELEMENTS OF A POTENTIALLY COMPREHENSIVE APPROACH TO ADDRESSING THE PROBLEM**

Many approaches could be selected as a starting point for deliberations about creating community-based specialty clinics in Ontario. To promote discussion about the pros and cons of different ways forward, we have selected three elements of a potential approach: 1) make a binding long-term commitment to prospective specialty clinics about the ‘rules of the game’; 2) commission specialty clinics through a process that ensures transparency and accountability; and 3) ensure that an efficient governance mechanism is in place for commissioned specialty clinics.

These three elements were identified and selected through a process of consultation with the Steering Committee and with 28 key informants. The elements could be pursued simultaneously or sequentially, or sub-elements could be drawn from each element to create a new (fourth) element. They are presented separately to foster deliberations about their respective sub-elements, the relative importance or priority of each, their interconnectedness and potential of (or need for) sequencing, and their feasibility.

In this section of the evidence brief, we review available data and research evidence about each element in turn. Our review yielded relatively little data and research evidence dealing specifically with specialty clinics. However, we included data and research evidence that could provide relevant insights and spur reflection about each element as it could pertain to creating community-based specialty clinics. We also identify salient issues related to each element that could be the focus of deliberations.

#### **Box 4: Mobilizing research evidence about elements of a potentially comprehensive approach to addressing the problem**

The available research evidence about elements of an approach to addressing the problem was sought primarily from Health Systems Evidence ([www.healthsystemsevidence.org](http://www.healthsystemsevidence.org)), which is a continuously updated database containing more than 2,500 systematic reviews and more than 1,500 economic evaluations of delivery, financial and governance arrangements within health systems. The reviews and economic evaluations were identified by searching the database for reviews addressing features of each of the approach elements and sub-elements.

The authors’ conclusions were extracted from the reviews whenever possible. Some reviews contained no studies despite an exhaustive search (i.e., they were “empty” reviews), while others concluded that there was substantial uncertainty about the element based on the identified studies. Where relevant, caveats were introduced about these authors’ conclusions based on assessments of the reviews’ quality, the local applicability of the reviews’ findings, equity considerations, and relevance to the issue. (See the appendices for a complete description of these assessments.)

Being aware of what is not known can be as important as being aware of what is known. When faced with an empty review, substantial uncertainty, or concerns about quality and local applicability or lack of attention to equity considerations, primary research could be commissioned, or an element could be pursued and a monitoring and evaluation plan designed as part of its implementation. When faced with a review that was published many years ago, an updating of the review could be commissioned if time allows.

No additional research evidence was sought beyond what was included in the systematic review except where otherwise noted. Those interested in pursuing a particular option may want to search for a more detailed description of the element or for additional research evidence about the element.

## Element 1 – Make a binding long-term commitment to prospective specialty clinics about the ‘rules of the game’

This element involves making a binding long-term commitment to prospective specialty clinics about the processes for identifying, setting criteria for and bundling the procedures, tests and assessments that could be provided in the community. Its sub-elements include:

- 1) establishing a method to **identify** procedures, tests and assessments that could be provided more cost-effectively and in sufficient volume in specialty clinics;
- 2) establishing a method to **set appropriateness criteria** for procedures, tests and assessments (both to avoid overuse of specialty clinics, such as for colonoscopies in patients at high risk of complication or perforation, and underuse);
- 3) establishing a method to **set price, volume and quality criteria** to be met for procedures, tests and assessments (where price may include both a professional fee and a facility fee); and
- 4) establishing a method to **bundle** procedures, tests and assessments to support the phased implementation of specialty clinics.

A commitment to the ‘rules of the game’ does not, of course, mean that these methods cannot evolve over time in response to lessons learned, or be adjusted quickly in response to issues as they arise, just as the approaches to supporting hospitals have evolved over time and are adapted in particular circumstances.

For each of these sub-elements, one key issue is whether the work is done entirely within the ministry of health, within the ministry of health but with the input of key ministry-supported agencies (e.g., Health Quality Ontario), within the ministry of health but with the input of ministry-convened clinical expert advisory groups (as it is doing now for the clinical pathways related to quality-based procedures), or by an independent group (as with the Alberta Bone and Joint Institute in the province of Alberta).

For the final sub-element, which relates to bundling services, we have identified seven possible types of bundling, descriptive labels for each, and functioning examples in Ontario (or other jurisdictions) to spur deliberation about whether some or all of these types of bundling would be optimal (Table 2).

**Table 2: Possible types of service bundling, with select examples**

Type of bundling	Descriptive label	Functioning examples in Ontario (or in other jurisdictions)
1. One or very few services (e.g., hernia repairs)	‘Focused factory’	<ul style="list-style-type: none"> <li>• Shouldice Hospital (Toronto, Ontario)</li> <li>• (Specialized medical centres in QC)*</li> </ul>
2. A number of services provided by a single sub-specialty (e.g., ophthalmology)**	Single-subspecialty clinic	<ul style="list-style-type: none"> <li>• Kensington Eye Institute (Toronto, Ontario)</li> <li>• Holland Orthopaedic and Arthritic Centre (Toronto, Ontario)</li> </ul>
3. Many services by a single specialty (e.g., surgery)**	Single specialty clinic (e.g., surgi-centre)	<ul style="list-style-type: none"> <li>• Queensway Health Centre’s Surgicentre (Etobicoke, Ontario)</li> <li>• (Ambulatory surgery centres in the U.S.)</li> </ul>
4. Many services by a number of specialties but in a targeted clinical domain (e.g., cancer)	Multi-specialty targeted clinic	<ul style="list-style-type: none"> <li>• Regional cancer centres (Ontario)</li> <li>• (Independent sector treatment centres in the U.K.)</li> <li>• (Specialty hospitals in the U.S.)</li> <li>• (Centres of excellence in Australia)</li> </ul>
5. Many services by a number of specialties across a wide variety of clinical domains	Multi-specialty general clinic (e.g., ambulatory care centre or day hospital)	<ul style="list-style-type: none"> <li>• Hotel Dieu Hospital (Kingston, Ontario)</li> <li>• Stoney Creek Campus, St. Joseph’s Healthcare Hamilton – formerly Centre for Ambulatory Health Services (Stoney Creek, Ontario)</li> <li>• Women’s College Hospital (Toronto, Ontario)</li> <li>• (Jim Pattison Outpatient Care and Surgery Centre, Surrey, B.C.)</li> <li>• (Day hospitals, Australia)</li> </ul>

6. All secondary and tertiary care that can be provided safely without an overnight stay (if that is deemed a key requirement)	One-stop specialty clinic	<ul style="list-style-type: none"> <li>• None identified</li> </ul>
7. All secondary and tertiary care that can be provided safely without an overnight stay and that is delivered with strong integration with primary/community care and with public health	One-stop integrated specialty clinic	<ul style="list-style-type: none"> <li>• None identified</li> </ul>

\*Services include a cataract extraction and intraocular lens implantation, or a hip or knee replacement, however, the legislation provides for the addition of other services by regulation of the provincial government.(43)

\*\*While other specialties (e.g., anesthesia) are involved, the nature of the services is defined primarily by a single specialty.

We found little synthesized research evidence that addressed any of the four sub-elements or, with respect to sub-element 4, any of the seven possible types of service bundling (Table 3). The most salient synthesized research evidence addressed consumer engagement in identifying the procedures, tests and assessments that could be provided in specialty clinics, and it found that telephone discussions and face-to-face meetings achieved more involvement than a mailed survey, but that there was little evidence to suggest that such engagement affected healthcare decisions.

A summary of the key findings from the synthesized research evidence is provided in Table 3. For those who want to know more about the systematic reviews contained in Table 3 (or obtain citations for the reviews), a fuller description of the systematic reviews is provided in Appendix 4.

**Table 3: Summary of key findings from systematic reviews relevant to Element 1 – Make a binding long-term commitment to prospective specialty clinics about the ‘rules of the game’**

Category of finding	Summary of key findings
Benefits	<ul style="list-style-type: none"> <li>• <b>Establishing a method to identify procedures, tests and assessments that could be provided more cost-effectively and in sufficient volume in specialty clinics</b> <ul style="list-style-type: none"> <li>○ An older and high-quality review exploring the effects of consumer involvement found that both telephone discussions and face-to-face meetings achieved more involvement than a mailed survey, based on the low response rate, and both resulted in changes in the views of participants.(44)</li> </ul> </li> <li>• <b>Establishing a method to set price, volume and quality criteria to be met for procedures, tests and assessments (where price may include both a professional fee and a facility fee)</b> <ul style="list-style-type: none"> <li>○ An older and medium-quality review exploring optimum organization for colposcopy service delivery in Ontario found benefits for establishing a provincial colposcopy quality control system allowing permanent/continuous monitoring of quality of care and performance evaluation.(12)</li> </ul> </li> <li>• <b>Establishing a method to bundle procedures, tests and assessments to support the phased implementation of specialty clinics</b> <ul style="list-style-type: none"> <li>○ An older and medium-quality review exploring optimum organization for colposcopy service delivery in Ontario found benefits of integrating colposcopic services as part of gynecology programs, if at university centres; developing hospital-based clinics; and performing colposcopies at hospitals or designated clinics.(12)</li> </ul> </li> </ul>
Potential harms	<ul style="list-style-type: none"> <li>• None identified</li> </ul>
Costs and/or cost-effectiveness in relation to the status quo	<ul style="list-style-type: none"> <li>• None identified</li> </ul>
Uncertainty regarding benefits and potential harms (so monitoring and evaluation could be warranted if the approach element were pursued)	<ul style="list-style-type: none"> <li>• Uncertainty because no systematic reviews were identified <ul style="list-style-type: none"> <li>○ <b>Establish a method to set appropriateness criteria for procedures, tests and assessments (both to avoid overuse of specialty clinics, such as for colonoscopies in patients at high risk of complication or perforation, and underuse)</b></li> </ul> </li> <li>• Uncertainty because no studies were identified despite an exhaustive search as part of a systematic review <ul style="list-style-type: none"> <li>○ Not applicable</li> </ul> </li> </ul>

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	<ul style="list-style-type: none"> <li>• No clear message from studies included in a systematic review <ul style="list-style-type: none"> <li>○ <b>Establishing a method to identify procedures, tests and assessments that could be provided more cost-effectively and in sufficient volume in specialty clinics</b> <ul style="list-style-type: none"> <li>▪ An older and high-quality review exploring the effects of consumer involvement found little evidence on the effects of consumer involvement in healthcare decisions at the population level.(44)</li> </ul> </li> </ul> </li> </ul>
Key sub-elements of the approach if it was tried elsewhere	<ul style="list-style-type: none"> <li>• None of the identified reviews provided information about key sub-elements</li> </ul>
Stakeholders' views and experiences	<ul style="list-style-type: none"> <li>• None of the identified reviews provided information about stakeholders' views and experiences about the sub-elements</li> </ul>

## Element 2 – Commission specialty clinics through a process that ensures transparency and accountability

This element contains four sub-elements:

- 1) identifying the types of **organizations** that would be eligible to be commissioned and any restrictions that would be binding on these organizations;
- 2) selecting between formal **procurement** procedures and requests for proposals and the group(s) responsible for developing/issuing them;
- 3) establishing what **infrastructure investments** would be covered;
- 4) designating the organization(s) responsible for conducting **local ‘impact assessments’** (in terms of patients by virtue of its proposed location, and in terms of providers and organizations in terms of its clinical governance, education, finances, etc.); and
- 5) establishing the requirements for **reporting** about adherence to price, volume and quality criteria, as well as any other performance measures.

For the first part of the first sub-element, which involves identifying the types of organizations that would be eligible to be commissioned, we have identified six possible types of organizations, descriptive labels for each, and functioning examples in Ontario (or other jurisdictions) to spur deliberation about whether some or all of these types of organizations would be eligible (Table 4). Some of the key choices relate to:

- whether a physician group is considered ‘not-for-profit,’ including those that provide much higher returns to senior members of the practice than to entry-level physicians for equivalent amounts of work, and hence whether such a group is eligible;
- whether the not-for-profit arm of a for-profit company (if legally permissible under provincial or federal legislation) is considered ‘not-for-profit’ and hence is eligible;
- whether community governance (as exists within hospitals and some community-governed ‘independent health facilities,’ such as abortion clinics) would be required of all eligible organizations;
- whether hospitals are eligible, which would offer the advantage that they already have a well understood set of delivery, financial and governance arrangements that need to be considered and optimized, and which would also avoid the likelihood that if hospitals are no longer providing these ‘high margin’ services their average costs are likely to rise significantly and their well-developed fundraising abilities could not be harnessed; and
- whether the determination of eligibility applies at the level of the entire province or could vary by region, with region defined either by LHIN boundaries or by ‘market size’ (e.g., downtown Toronto, Greater Toronto area or ‘Golden Horseshoe’ on the one hand, and rural and remote regions on the other hand).

**Table 4: Possible types of eligible organizations, with select examples**

Type of eligible organization	Descriptive label	Functioning examples in Ontario (or in other jurisdictions)
1. Specialty clinic governed by a Local Health Integration Network (LHIN)*	LHIN-governed specialty clinic	<ul style="list-style-type: none"> <li>• None identified in Ontario</li> <li>• (Jim Pattison Outpatient Care and Surgery Centre, Surrey, B.C.)</li> </ul>
2. Specialty clinic governed alongside a traditional hospital by a single ‘hospital’ board**	Hospital-governed specialty clinic	<ul style="list-style-type: none"> <li>• Holland Orthopaedic and Arthritic Centre, Sunnybrook Health Sciences Centre (Toronto, Ontario)</li> <li>• Queensway Health Centre’s Surgicentre, Trillium Health Partners (Etobicoke, Ontario)</li> <li>• Stoney Creek Campus, St. Joseph’s Healthcare Hamilton – formerly Centre for Ambulatory Health Services (Stoney Creek, Ontario)</li> <li>• Regional cancer centres</li> <li>• (Day procedure units in Australia)</li> </ul>

3. Specialty clinic governed by a hospital board**	Day hospital	<ul style="list-style-type: none"> <li>• Hotel Dieu Hospital (Kingston, Ontario)</li> <li>• Women's College Hospital (Toronto, Ontario)</li> <li>• (Day hospitals in Australia)</li> </ul>
4. Specialty clinic governed independently but with directors from a traditional hospital	Hospital-aligned specialty clinic	<ul style="list-style-type: none"> <li>• Kensington Eye Institute (Toronto, Ontario) with involvement of University Health Network</li> </ul>
5. Specialty clinic governed independently but with a required formal relationship with a traditional hospital	Independent but hospital-linked specialty clinic	<ul style="list-style-type: none"> <li>• None identified in Ontario</li> <li>• (Specialized medical clinics in Quebec, which have an agreement of association with a hospital and regional health authority)</li> <li>• (Associated medical clinics in Quebec, which have a formal partnership agreement with a hospital and regional health authority)</li> </ul>
6. Specialty clinic governed independently but with no required formal relationship with a traditional hospital (although they may have a medical director with hospital privileges and procedures for emergency transfer)	Independent specialty clinic	<ul style="list-style-type: none"> <li>• 'Independent health facilities' in Ontario</li> <li>• 'Out-of-hospital premises' in Ontario</li> <li>• Shouldice Hospital, which operates as a 'private hospital' and does provide overnight stays (Toronto, Ontario)</li> <li>• Private physician offices that provide designated procedures, tests and assessments in Ontario</li> <li>• (Specialized medical centres in Quebec, which are either staffed only by physicians participating in the province's health insurance plan or staffed only by those not participating)</li> <li>• (Independent sector treatment centres in the U.K.)</li> <li>• (Specialty hospitals in the U.S.)</li> <li>• (Centres of excellence in Australia)</li> </ul>

\*Introducing LHIN-governed specialty clinics would involve LHINs in direct service provision on top of their existing role of purchaser.

\*\*Hospitals that operate ambulatory care centres are classified as group V hospitals under Regulation 964 of the Public Hospitals Act, 1990.

For the second part of the first-sub-element, which involves identifying what if any restrictions would be binding on eligible organizations that apply to become a specialty clinic, we have identified one potential restriction at the patient level and two at the community level (again to spur deliberation):

- no high-risk patients can be treated in community-based specialty clinics (as was decided for independent sector treatment centres in the U.K.) and no patients with select multimorbidities can be treated in such clinics (e.g., patients who also have a significant mental illness that is not currently well managed);
- no organizations or groups in communities below a certain population size (e.g., in rural and remote areas) can apply to establish a specialty clinic unless the organization is a local hospital seeking to become a fully functioning specialty clinic, or unless the group is seeking to create a specialist outreach clinic where specialists from other communities visit on a regular basis to provide surgical procedures, diagnostic tests and specialty assessments (and unless access to care by linguistic minorities can be maintained); and
- groups in very large communities must justify how the proposed location of any specialty clinic will improve (or at least not hamper) access for marginalized populations (and how the movement of too many services from a hospital that has historically met their needs will not jeopardize their care).

For the second sub-element, again to spur deliberation, requests for proposals offer the advantage of flexibility, including the possibility of building in criteria such as location rationale, population targeting/patient selection (and measures for whether targeted populations and selected patients are being reached), minimum volumes, value for money, and use of the health equity impact assessment tool (<http://www.health.gov.on.ca/en/pro/programs/hea/>). Also, both the ministry and LHINs have significant experience with requests for proposals and providing oversight. However, Cancer Care Ontario may be unique in Ontario in having a track record of commissioning particular services (e.g., chemotherapy, chronic kidney disease) in ways that are highly attentive to the clinical and quality issues that arise with these services. Similarly, for the fourth sub-element, both LHINs and hospitals themselves have significant experience with conducting local impact assessments.

We found synthesized research evidence about some benefits for sub-element 5 (i.e., establishing the requirements for reporting about adherence to price, volume and quality criteria, as well as any other performance measures) and about potential harms (where the evidence about widening racial disparities in healthcare is mixed), however, there was inconsistent or limited evidence about many other potential benefits and harms (Table 5). We found one recent and low-quality review that concluded that the mixed evidence on the impact of an ‘internal market’ in England (which is not unlike what could be created in Ontario with hospitals and community-based specialty clinics) may be attributable to the lack of a true and well-functioning market and a lack of a stable policy environment. We also identified one older and medium-quality review that found that the leaders of major performance incentive programs in the U.S. believe that current programs were not designed to reduce disparities, and that they often lack characteristics that may be important in reducing disparities. We found little synthesized research evidence about the option sub-elements, including sub-element 1 (the types of organizations that would be eligible to be commissioned, of which we identified six, and any restrictions that would be binding on these organizations).

A summary of the key findings from the synthesized research evidence is provided in Table 5. For those who want to know more about the systematic reviews contained in Table 5 (or obtain citations for the reviews), a fuller description of the systematic reviews is provided in Appendix 5.

**Table 5: Summary of key findings from systematic reviews relevant to Element 2 – Commission specialty clinics through a process that ensures transparency and accountability**

Category of finding	Summary of key findings
Benefits	<ul style="list-style-type: none"> <li>• <b>Establishing the requirements for reporting about adherence to price, volume and quality criteria, as well as any other performance measures</b> <ul style="list-style-type: none"> <li>○ Four reviews, including one low-quality review, two medium-quality reviews and one high-quality review, found the following benefits of public reporting: <ul style="list-style-type: none"> <li>▪ quality measures are likely to improve over time;(45)</li> <li>▪ development of other quality-improvement strategies is stimulated;(46;47)</li> <li>▪ there is a small but increasing impact on consumers’ decision-making;(48) and</li> <li>▪ there is a small, although possibly increasing, effect on purchasing behaviour. (48)</li> </ul> </li> </ul> </li> </ul>
Potential harms	<ul style="list-style-type: none"> <li>• <b>Establishing the requirements for reporting about adherence to price, volume and quality criteria, as well as any other performance measures</b> <ul style="list-style-type: none"> <li>○ One recent and medium-quality review found that public reporting may have a widening effect on racial disparities in healthcare,(49) but another recent and high-quality review found inconsistent evidence about the effects of public reporting on access to care.(45)</li> </ul> </li> </ul>
Costs and/or cost-effectiveness in relation to the status quo	<ul style="list-style-type: none"> <li>• <b>Establishing the requirements for reporting about adherence to price, volume and quality criteria, as well as any other performance measures</b> <ul style="list-style-type: none"> <li>○ An older and low-quality review examining the use of performance data reports found only one published study estimating the costs of producing data for the Pennsylvania reporting system (approximately \$16 per patient discharge, at 1991 prices, to collect and report the data).(48)</li> </ul> </li> </ul>
Uncertainty regarding benefits and potential harms (so monitoring and evaluation could be warranted if the approach element were pursued)	<ul style="list-style-type: none"> <li>• Uncertainty because no systematic reviews were identified <ul style="list-style-type: none"> <li>○ <b>Identifying the types of organizations that would be eligible to be commissioned and any restrictions that would be binding on these organizations</b></li> <li>○ <b>Establishing what infrastructure investments would be covered</b></li> </ul> </li> <li>• Uncertainty because no studies were identified despite an exhaustive search as part of a systematic review <ul style="list-style-type: none"> <li>○ <b>Establishing the requirements for reporting about adherence to price, volume and quality criteria, as well as any other performance measures</b> <ul style="list-style-type: none"> <li>▪ A recent and medium-quality review examining the effects of providing a surgeon's performance data to people considering elective surgery found no relevant studies.(50)</li> </ul> </li> </ul> </li> <li>• No clear message from studies included in a systematic review <ul style="list-style-type: none"> <li>○ <b>Establishing the requirements for reporting about adherence to price, volume and quality criteria, as well as any other performance measures</b> <ul style="list-style-type: none"> <li>▪ Four systematic reviews (one of low-quality, one of medium-quality and two of high-quality) found inconsistent or limited evidence about the effects of public reporting on: <ul style="list-style-type: none"> <li>• consumer, professional and organizational behaviours;(45;47;51)</li> <li>• safety;(46)</li> </ul> </li> </ul> </li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• patient-centredness;(46;48)</li> <li>• access to care (e.g., unintended consequences like cherry-picking patients or changing ratings by manipulating patient populations),(45) although another review suggested that it may have a widening effect on racial disparities in healthcare;(49) and</li> <li>• mortality rates,(45) although one recent and medium-quality review found one study suggesting that stroke patients treated in hospitals during a period of intensive public reporting had significantly lower mortality rates than those in hospitals with limited or no reporting,(52) and an older and low-quality review found studies suggesting a sustained reduction in mortality rates after implementation of reporting performance data.(48)</li> </ul>
Key elements of the approach if it was tried elsewhere	<ul style="list-style-type: none"> <li>• <b>Selecting between formal procurement procedures and requests for proposals and the group(s) responsible for developing/issuing them</b> <ul style="list-style-type: none"> <li>○ A recent and low-quality review examining the effects of National Health Service ‘internal’ or ‘quasi’ market policies in England over the past 20 years found mixed evidence on the impact of these reforms on the quality of care, and that these reforms have not been proven to bring about the expected beneficial outcomes because of a failure to create a true and well-functioning market and a lack of a stable policy environment.(19)</li> </ul> </li> <li>• <b>Establishing the requirements for reporting about adherence to price, volume and quality criteria, as well as any other performance measures</b> <ul style="list-style-type: none"> <li>○ An older and low-quality review examining the effectiveness of public reporting practices on the quality of healthcare found that simply releasing reports into the public realm is insufficient to achieve both accountability and quality. The review concluded that it is essential that any public reporting initiative be embedded in ongoing efforts of relationship building with diverse audiences, trying to clearly understand their information needs and how they use such information, and educating them about the value and meaning of the information.(47)</li> </ul> </li> </ul>
Stakeholders’ views and experiences	<ul style="list-style-type: none"> <li>• <b>Establishing the requirements for reporting about adherence to price, volume and quality criteria, as well as any other performance measures</b> <ul style="list-style-type: none"> <li>○ An older and medium-quality review examining the effects of pay-for-performance and public reporting on racial disparities in healthcare revealed that leaders of major performance incentive programs in the U.S. believed that current programs were not designed to reduce disparities, and that they often lack characteristics that may be important in reducing disparities (e.g., collecting race and ethnicity data, emphasizing conditions of higher prevalence in minorities, rewarding improvement, and encouraging nationally prominent organizations to establish disparity guidelines and/or measures).(49)</li> <li>○ An older and low-quality review exploring the evidence about the public release of performance data revealed that, while hospitals may be responsive to publicly reported information, consumers and providers rarely search out this type of information and do not understand or trust it.(48)</li> </ul> </li> </ul>

### **Element 3 – Ensure that an efficient governance mechanism is in place for commissioned specialty clinics**

This element contains four distinct sub-elements:

- 1) extending existing **legislation/regulations**, revising existing legislation/regulations or adopting new legislation/regulations to govern specialty clinics;
- 2) deciding whether to allow **advertising** about optional upgrades and, if so, with what if any restrictions;
- 3) deciding how to support **clinical governance and educational roles** (as part of or separate from legislation/regulations)
  - a. at the provider level - e.g., requiring specialists based in specialty clinics to be credentialed by their local hospital and involved in the core functions of that hospital, including in-patient coverage and/or consultation, emergency-room coverage and/or consultation, and education (possibly by using such involvement in a given year to determine, in part, the volume of services that their organizations are able to provide the following year), and to provide care in specialty clinics only to those patients for whom the risks are acceptable;
  - b. at the hospital level – e.g., requiring hospitals to provide access to diagnostic services and to accommodate referrals of high-risk patients and emergency transfers that follow mutually agreed protocols, and encouraging them to offer a variety of services for which there are economies of scale or bulk-purchasing opportunities (e.g., translation services, finances and other central processing functions, electronic medical records and other information technology, performance measurement, continuing professional development, organization development and other quality-improvement supports, and labour relations support);
  - c. at the regional level - e.g., requiring regional programs to be involved in supporting the specialty clinics in their region, both for safety and quality (e.g., quality-improvement plans and radiation technology inspections) and when issues arise (e.g., infection control);
  - d. at the provincial level – e.g., requiring select provincial programs to be involved in supporting clinics that provide low-volume services to patients living in any part of the province, or in supporting the delivery of services in rural and remote areas (e.g., through specialist-outreach clinics); and
- 4) establishing a **quality improvement framework**, which could include the designation of who is responsible for ensuring the robustness of any given organization’s annual quality-improvement plan (such as the quality committees of hospital boards are required to do under the terms of the Excellent Care for All Act).(53)

For the first sub-element, one key issue is the focus for any new legislation/regulations. To spur deliberation, we have identified four potential types of focus, descriptive labels of each, and existing legislation/regulations in Ontario that would be affected (Table 6). While additional changes may need to be made to the Ontario Health Insurance Plan schedule of benefits, this would not require legislative or regulatory changes.

**Table 6: Possible types of focus for legislation/regulations, with select examples of existing legislation/regulations that would be affected**

Type of focus	Descriptive label	Existing legislation/regulations in Ontario that would be affected
1. Focused legislation that only addresses specialty clinics*	Specialty clinic governance	<ul style="list-style-type: none"> <li>• Not applicable but would presumably be informed by               <ul style="list-style-type: none"> <li>○ Independent Health Facilities Act (1990)</li> <li>○ Regulation 114/94 under the Medicine Act (1991, which governs out-of-hospital premises)</li> </ul> </li> </ul>
2. Comprehensive legislation that addresses all secondary and tertiary care provided in hospitals, ‘independent health facilities,’ and ‘out-of-hospital premises’	Clinic-based secondary and tertiary care governance	<ul style="list-style-type: none"> <li>• Public Hospitals Act (1990)</li> <li>• Private Hospitals Act (1990)</li> <li>• Independent Health Facilities Act (1990)</li> <li>• Regulation 114/94 under the Medicine Act (1991)</li> <li>• Public Sector Labour Relations Transition Act (1997)</li> <li>• Excellent Care for All Act (2010)</li> </ul>

3. Comprehensive legislation that addresses all secondary and tertiary care, including care provided in physician offices	Comprehensive secondary and tertiary care governance	<ul style="list-style-type: none"> <li>• All of the above</li> </ul>
4. Comprehensive legislation that addresses all secondary and tertiary care and its intersections or integration with primary care (i.e., 'medical home,' including, where appropriate, aboriginal health centres and community health centres) and public health within a regional model	Regional governance	<ul style="list-style-type: none"> <li>• All of the above plus <ul style="list-style-type: none"> <li>◦ Local Health System Integration Act (2006)</li> </ul> </li> </ul>

\*If the legislative or regulatory focus is only on specialty clinics, one key consideration will be whether to require these clinics to be governed by a community board, as is the case with hospitals.

Another way to spur deliberation about governance is to articulate principles that could govern the specialty clinics if they are backed up by an incentive system or required through legislation or regulations. Three examples of potential principles include:

- develop and work within a collaborative culture (not a competitive model) with the hospitals that provide similar services for high-risk patients (as well as many services that they uniquely can provide), that support the clinics in a variety of ways, that can both learn from and share learnings with the clinics, and that provide a significant component of one end of the full continuum of services needed by patients, while not being penalized for doing so;
- ensure patient safety by requiring minimum staffing and volumes, as well as a named medical director with explicit accountabilities and agreements with the local hospital for emergency transfers and related support (as is required of 'out-of-hospital premises');<sup>(54)</sup> and
- create a level playing field among organizations providing the same types of procedures, tests and assessments such that healthcare professionals are held to the same standards regardless of whether they are providing a particular service in a hospital, independent health facility, 'out-of-hospital premises' or their own private office (e.g., publicly reporting about adherence to appropriateness criteria, ensuring staff training/team development and participating in clinic accreditation), and such that healthcare organizations are held to the same standards of transparency and accountability (possibly including being subject to freedom-of-information requests and site inspections, among others), as well as that both professionals and organizations face a set of incentives that are aligned with health system goals.

We found little synthesized research evidence that directly addressed any of the four sub-elements or, with respect to sub-element 1, any of the four possible types of focus for legislation/regulations or about the principles that could govern specialty clinics (Table 7). The most salient synthesized research evidence addressed the benefits of care coordination and specialist clinics (both of which relate to the clinical governance sub-element) and specific types of quality-improvement interventions (which relate to the quality-improvement framework sub-element), as well as stakeholders' views about and experiences with 'dual practice' (i.e., working in both the public and private sectors, which again relates to the clinical governance sub-element) (Table 7).

A summary of the key findings from the synthesized research evidence is provided in Table 4. For those who want to know more about the systematic reviews contained in Table 7 (or obtain citations for the reviews), a fuller description of the systematic reviews is provided in Appendix 6.

**Table 7: Summary of key findings from systematic reviews relevant to Element 3 – Ensure that an efficient governance mechanism is in place for commissioned specialty clinics**

Category of finding	Summary of key findings
Benefits	<ul style="list-style-type: none"> <li>• <b>Deciding whether to allow advertising about optional upgrades and, if so, with what if any restrictions</b> <ul style="list-style-type: none"> <li>○ An old, medium-quality review found that direct-to-consumer advertising is associated with increased patient requests for specific drugs, and increased prescribing of advertised products by physicians.(55)</li> </ul> </li> <li>• <b>Deciding how to support clinical governance and educational roles (as part of or separate from legislation/regulations)</b> <ul style="list-style-type: none"> <li>○ A recent and medium-quality review found evidence that better coordination of providers' care can save money and improve quality for patients, and that better coordination combined with other changes can further save money and raise quality of care, such as methods for improving patient handover and transfers, some models of care to prevent hospital admissions (e.g., disease management, case management and multidisciplinary team-based approaches), and other chronic care and illness prevention models.(56)</li> <li>○ An older and high-quality review found that specialist outreach clinics can improve access, outcomes and service use, especially when delivered as part of a multifaceted intervention.(57)</li> </ul> </li> <li>• <b>Establishing a quality improvement framework</b> <ul style="list-style-type: none"> <li>○ Three reviews (two older and medium-quality reviews and one recent and low-quality review) found benefits for various quality-improvement interventions: <ul style="list-style-type: none"> <li>▪ clinician- and patient-driven quality-improvement interventions (e.g., clinician-directed audit and feedback cycles, clinical decision support systems, specialty outreach programs, chronic disease management programs, continuing professional education based on interactive small-group case discussions, and patient-mediated clinician reminders) appear more effective than manager- and policymaker-driven interventions;(58)</li> <li>▪ pay-for-performance schemes directed to clinician groups and organizational process redesign;(58)</li> <li>▪ community of practice framework as a model for collaboration amongst surgeons and healthcare organization to improve quality of care and foster continuing professional development (to improve clinical outcomes, such as decreases in mortality rates, lower duration of postoperative intubations, and fewer surgical-site infections);(59) and</li> <li>▪ community health centre quality-improvement interventions (to improve processes of care for diabetes and cancer screening in the short term, but their effectiveness in the long term and regarding outcomes of care have not been demonstrated).(60)</li> </ul> </li> <li>○ An older and medium-quality review found that didactic education and passive dissemination strategies were ineffective in implementing clinical guidelines as part of quality-improvement strategies.(61)</li> </ul> </li> </ul>
Potential harms	<ul style="list-style-type: none"> <li>• <b>Extending existing legislation/regulations, revising existing legislation/regulations or adopting new legislation/regulations to govern specialty clinics</b> <ul style="list-style-type: none"> <li>○ A recent and low quality review examining the effects of NHS 'internal' or 'quasi' market policies in England over the past 20 years found that independent sector treatment centres may have negative effects on NHS surgical training.(19)</li> </ul> </li> </ul>
Costs and/or cost-effectiveness in relation to the status quo	<ul style="list-style-type: none"> <li>• <b>Establishing a quality improvement framework</b> <ul style="list-style-type: none"> <li>○ Two cost-effectiveness studies examined quality-improvement initiatives: <ul style="list-style-type: none"> <li>▪ A study examining the Tennessee Surgical Quality Collaborative using the National Surgical Quality Improvement Program (NSQIP) system to share surgical process and outcomes data revealed significant improvements in superficial surgical site infections, graft/prosthesis/flap failure, acute renal failure, and wound disruption. Findings also revealed that net costs avoided between these periods were calculated as \$2,197,543 per 10,000 general and vascular surgery cases.(62)</li> <li>▪ A study examining a quality-improving strategy in oral anticoagulation management within general practice in Belgium (i.e., multifaceted education with or without feedback reports on their performance, international normalized ratio (INR) testing by the GP with a CoaguChek device, or computer-assisted advice for adapting oral anticoagulation therapy) concluded that it was a cost-effective new organizational model.(63)</li> </ul> </li> </ul> </li> </ul>
Uncertainty regarding benefits and potential harms (so monitoring and evaluation could be warranted if the approach	<ul style="list-style-type: none"> <li>• Uncertainty because no systematic reviews were identified <ul style="list-style-type: none"> <li>○ <b>Not applicable</b></li> </ul> </li> <li>• Uncertainty because no studies were identified despite an exhaustive search as part of a systematic review <ul style="list-style-type: none"> <li>○ <b>Extending existing legislation/regulations, revising existing legislation/regulations or adopting new legislation/regulations to govern specialty clinics</b> <ul style="list-style-type: none"> <li>▪ A recent and medium-quality review examining the effects of regulations implemented to manage dual practice found no relevant studies.(64)</li> </ul> </li> <li>○ <b>Deciding whether to allow advertising about optional upgrades and, if so, with what if any restrictions</b></li> </ul> </li> </ul>

<p>element were pursued)</p>	<ul style="list-style-type: none"> <li>▪ An old, medium-quality review found no studies that have examined patient satisfaction with care or impacts on health outcomes.(55)</li> <li>• No clear message from studies included in a systematic review <ul style="list-style-type: none"> <li>○ <b>Extending existing legislation/regulations, revising existing legislation/regulations or adopting new legislation/regulations to govern specialty clinics</b> <ul style="list-style-type: none"> <li>▪ Three low-quality reviews (one recent and two older) found limited evidence about the effectiveness of a variety of interventions: <ul style="list-style-type: none"> <li>• private for-profit sector in relation to improving the utilization of quality health services by the poor;(42)</li> <li>• regulatory interventions and contracting-out for intervening with private providers in relation to improving quality or coverage of services;(65) and</li> <li>• while independent sector treatment centres in England appeared to provide equal, if not better, outcomes than NHS providers, and received higher levels of patient satisfaction, they treat a healthier case-mix of patients than NHS providers as was intended by their contracts.(19)</li> </ul> </li> </ul> </li> <li>○ <b>Deciding how to support clinical governance and educational roles (as part of or separate from legislation/regulations)</b> <ul style="list-style-type: none"> <li>▪ A recent and low-quality review revealed mixed evidence about the effects of clinical governance.(66)</li> <li>▪ One recent and low-quality review found limited evidence to indicate any positive or negative effects of dual practice.(67)</li> </ul> </li> <li>○ <b>Establishing a quality improvement framework</b> <ul style="list-style-type: none"> <li>▪ An older and medium-quality review found potential benefit for published multi-practice audits, but they are frequently used as one of a complex set of interventions, which makes precise evaluation difficult.(68)</li> <li>▪ Six reviews (four of medium quality and two of low quality) found limited evidence about the effectiveness of a variety of other quality-improvement interventions, such as: <ul style="list-style-type: none"> <li>• interventions to reduce medication errors in adult intensive care;(69)</li> <li>• manager- and policymaker-driven quality-improvement interventions (e.g., continuous quality improvement programs, risk and safety management systems, public scorecards and performance reports, external accreditation, and clinical governance arrangements);(58)</li> <li>• performance interventions for health workers;(70)</li> <li>• organizational assessment in general practice;(71)</li> <li>• performance measurement systems in health and mental health services;(72) and</li> <li>• guideline dissemination and implementation strategies.(73)</li> </ul> </li> </ul> </li> </ul> </li> </ul>
<p>Key elements of the approach element if it was tried elsewhere</p>	<ul style="list-style-type: none"> <li>• <b>Deciding how to support clinical governance and educational roles (as part of or separate from legislation/regulations)</b> <ul style="list-style-type: none"> <li>○ A recent and low-quality review revealed the importance of using targeted, peer-led feedback on the clinicians' own practice to support clinical governance models.(66)</li> <li>○ A recent and low-quality review suggests that primary care practices providing comprehensive and coordinated care confer the most benefits to patients.(74)</li> <li>○ An older and low-quality review revealed that clinical governance requires changes at three levels: 1) the individual healthcare professional; 2) primary care teams (which need to become multidisciplinary with clear understanding); and 3) primary care organizations (which need to put in place systems and local arrangements to support such teams).(75)</li> </ul> </li> <li>• <b>Establishing a quality improvement framework</b> <ul style="list-style-type: none"> <li>○ A recent and medium-quality review identified key strategies to improve patient safety in primary care, such as: documenting and collecting information about adverse events; identifying practice benchmarks and guidelines; including patients in quality-improvement strategies; placing more emphasis on educational curricula; and improving interprofessional team approaches to care and communication.(76)</li> <li>○ An older and medium-quality review found that successful clinical guideline implementation strategies should include interactive education systems and clinical reminder systems, be multifaceted, and actively engage clinicians throughout the process.(61)</li> <li>○ An older and low-quality review examining strategies commonly used to influence physician behaviour revealed that active interventions should be adopted as part of a multifaceted strategy to engage physicians to change behaviour, and that strategies that can be automated at the point of care and be made scalable over a large number of patients (e.g., computerized reminders and other forms of clinical decision support) should receive special consideration.(77)</li> </ul> </li> </ul>
<p>Stakeholders' views and experiences</p>	<ul style="list-style-type: none"> <li>• <b>Extending existing legislation/regulations, revising existing legislation/regulations or adopting new legislation/regulations to govern specialty clinics</b> <ul style="list-style-type: none"> <li>○ A recent and medium-quality review examined dual practice regulatory mechanisms proposed and implemented worldwide (e.g., complete prohibition of dual practice; restriction on private sector earnings; incentives for exclusive public practice; and raising health worker salaries) and identified barriers and facilitators to their implementation from the perspective of policymakers and health workers.(78)</li> </ul> </li> </ul>

### **Additional equity-related observations about the three elements**

In our review of the research evidence, we found no systematic reviews focusing on individuals with multiple morbidities, and only two older and low-quality systematic reviews dealing explicitly with low socio-economic status populations. The first review identified for the third element – ensure that an efficient governance mechanism is in place for commissioned specialty clinics – examined health worker performance interventions with a particular focus on resource-poor settings. The review revealed that areas with poor living circumstances and poor (health and non-health related) infrastructures may negatively influence health workers' productivity, competence and responsiveness.<sup>(70)</sup>

The second review, also identified for the third element, explored the effects of the private for-profit sector on the utilization of quality health services by the poor. The review revealed that it is not possible to conclude, based on the current body of evidence, that private for-profit sector interventions benefit the poor and improve equity.<sup>(42)</sup>

Other reviews identified for the second element – commission specialty clinics through a process that ensures transparency and accountability – examined the effects of public reporting interventions on ethnic minorities. While these reviews do not deal explicitly with our prioritized populations, they could still spur reflections about their potential impact on other more vulnerable populations. For instance, a recent and medium-quality review found that public reporting may have a widening effect on racial disparities in healthcare (through 'cherry-picking patients' who may help physicians and healthcare organizations score well, or avoiding those who may cause them to score poorly),<sup>(49)</sup> while another recent and high-quality review found inconsistent evidence about the effects of public reporting on access to care.<sup>(45)</sup> Findings from these reviews suggest that we should be mindful about the potential implications of public reporting programs, and the possible risk of widening disparities for low socio-economic patients and those with complex healthcare needs.

## **IMPLEMENTATION CONSIDERATIONS**

Given that the potential facilitators to action often seem more self-evident than the potential barriers, and that some barriers may be so important that they force a re-evaluation of whether a particular way forward is even worth serious discussion at a particular moment in time, we focus here initially on the potential barriers to creating community-based specialty clinics in Ontario. Barriers can be identified at the level of patients/citizens, providers, organizations and systems. A list of potential barriers to implementing the three elements is provided in Table 8 as a way to spur reflection about some of the considerations that may influence choices about an optimal way forward. We found few empirical studies that helped to identify or establish the importance of these barriers, so we have listed those that were identified in a range of sources (not just empirical studies) and we have not rank ordered them in any way.

**Table 8: Potential barriers to implementing the elements of a potentially comprehensive approach**

<b>Levels</b>	<b>Element 1 – Make a binding long-term commitment to prospective specialty clinics about the ‘rules of the game’</b>	<b>Element 2 – Commission specialty clinics through a process that ensures transparency and accountability</b>	<b>Element 3 – Ensure that an efficient governance mechanism is in place for commissioned specialty clinics</b>
<b>Patient/citizen</b>	Likely none	Patients may resist an initiative that could involve being asked to seek care outside (and possibly farther away than) the local hospital that they know well, or a greater likelihood of being offered ‘optional’ upgrades with limited marginal benefit (e.g., some cataract lenses)	Patients with multiple morbidities may resist an initiative that could, at least during the transition phase, increase waiting times for them (as specialists transition to specialty clinics) while they drop for patients able to be cared for in specialty clinics
<b>Care provider</b>	Specialists may resist the development and application of appropriateness criteria for their services, particularly if they perceive them to be motivated by cost reduction and not in line with their specialty associations’ guidance	Specialists may resist participating in local impact assessments  Specialists may resist becoming involved in the types of organizations that design processes giving them less of a hands-on role  Family physicians may resist changes to their referral patterns	Physicians may resist having to participate in the core functions of their local hospital and to report on appropriateness criteria, ensure staff training/team development, and participate in accreditation  Nurses and other providers may resist changes to policies governing the handling of transitions in where care is provided
<b>Organization</b>	Hospitals may resist the ‘loss’ of a significant proportion of the revenue they receive from government, particularly for ‘high margin’ services, while also grappling with other changes to their financial arrangements	Hospitals may resist competing against independent clinics in a commissioning process and in an initiative that may affect their recruitment and retention  Existing independent clinics may resist efforts to integrate electronic medical records, imaging systems and other functions	Hospitals may resist supporting specialty clinics in their region if they are not operating under their governance  Existing independent clinics may resist changes to their governance
<b>System</b>	Polymakers may not be able to make the type of binding long-term commitments needed to encourage the necessary infrastructure investments  Polymakers (and decision-makers at the regional level) may not have the experience needed to recognize when methods (e.g., price, volume and quality criteria) need to evolve or be adjusted	Polymakers may lack the resources to support the one-time costs associated with this transition (if the construction of new clinics is not undertaken as public/private partnerships or with the support of hospital foundations)  Polymakers (and decision-	Polymakers may resist changes to broad governance frameworks, particularly those that would involve extended negotiations about labour relations

	quickly  An election that leads to a change in governing party may cause this initiative to be seen as ‘owned’ by the previous governing party and hence abandoned	makers at the regional level) may not have the experience needed to recognize when commissioning approaches need to evolve or be adjusted quickly	
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The implementation of the three elements of a potential approach to creating specialty clinics can be influenced by policymakers’ and stakeholders’ capacity to take advantage of potential windows of opportunity. These windows of opportunity could facilitate or trigger the creation of community-based specialty clinics in Ontario. Some of these potential windows of opportunity apply to all elements of an approach to creating specialty clinics, whereas others are element-specific. A list of potential barriers to implementing the three elements, again not rank ordered in any way, is provided in Table 9 to spur further reflection.

**Table 9: Potential windows of opportunity for implementing the elements of a potentially comprehensive approach**

Type	Element 1 – Make a binding long-term commitment to prospective specialty clinics about the ‘rules of the game’	Element 2 – Commission specialty clinics through a process that ensures transparency and accountability	Element 3 – Ensure that an efficient governance mechanism is in place for commissioned specialty clinics
<b>General</b>	<p>The difficult fiscal situation (i.e., large deficit and debt and limited economic growth), and its carry-over effects to the hospital and physician payment pools, can be conducive to embracing new ways of doing things in ways that protect achievements, address unfinished agendas, and confront new challenges</p> <p>Changes to hospital funding, particularly the introduction of quality-based procedures, help to create a more level playing field for the many types of organizations that could be eligible to be commissioned to operate as specialty clinics (and it has also spurred the creation of clinical expert advisory groups that can also support the creation of specialty clinics in their respective domains)</p> <p>Sustained focus on wait-times management and (more recently) on quality improvement has created capacities that will be highly germane to the creation of and supports to specialty clinics</p> <p>Changing demographics (e.g., an aging population that requires high volumes of specific types of services) and technologies (e.g., those that permit an increasing proportion of surgical procedures, diagnostic tests and specialty assessments to be provided effectively and, with proper supports, safely outside hospital) suggest the need for a dynamic secondary and tertiary care sector that can respond rapidly to new imperatives</p>		
<b>Element-specific</b>	A new premier may see the creation of community-based specialty clinics as an opportunity to make a decision with long-term impacts	Ministry and LHINs have invested in strengthening their commissioning processes to reap benefits and mitigate risks	<p>Physicians, hospitals and LHINs are increasingly conscious of the win-win opportunity presented by specialist physicians’ involvement in hospitals’ service and teaching, and hence are likely to take the steps necessary to ensure that an effective governance mechanism is put in place for specialty clinics</p> <p>Upcoming negotiations with the Ontario Nursing Association present an opportunity for engagement about opportunities for system transformation</p>

Three key considerations in moving forward will be: 1) whether to use this initiative as the way in to a broader conversation about how communities, particularly those in rural and remote areas (including First Nations populations and French-speakers in these areas), can get better access to specialty care ,but in a different setting than in the past (e.g., specialist outreach clinics rather than the hospitals that have historically contributed to a sense of community identity); 2) whether to establish an expert advisory group that can help

to support the final set of decisions related to creating specialty clinics, address any identified barriers, and take advantage of windows of opportunity; and 3) whether to begin with one or more pilots of new approaches or models that accelerate the move towards specialty clinics or that better integrate existing specialty clinics within a coherent system. Another, much longer-term consideration would be whether the province should participate in a multi-country, technology-scanning platform that would allow for the efficient identification of ‘disruptive’ technologies that could have significant impacts on the nature and outcomes of the procedures, tests and services that are being provided in specialty clinics or considered for a transition.

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## APPENDICES

The following tables provide detailed information about the systematic reviews relevant to the context for creating community-based specialty clinics and to each potential element of a potentially comprehensive approach to doing so. Each row in a table corresponds to a particular systematic review and the reviews are organized by approach element (first column). The focus of the review is described in the second column. Key findings from the review that relate to the element are listed in the third column, while the fourth column records the last year the literature was searched as part of the review.

The fifth column presents a rating of the overall quality of the review. The quality of each review has been assessed using AMSTAR (A MeaSurement Tool to Assess Reviews), which rates overall quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. It is important to note that the AMSTAR tool was developed to assess reviews focused on clinical interventions, so not all criteria apply to systematic reviews pertaining to delivery, financial, or governance arrangements within health systems. Where the denominator is not 11, an aspect of the tool was considered not relevant by the raters. In comparing ratings, it is therefore important to keep both parts of the score (i.e., the numerator and denominator) in mind. For example, a review that scores 8/8 is generally of comparable quality to a review scoring 11/11; both ratings are considered “high scores.” A high score signals that readers of the review can have a high level of confidence in its findings. A low score, on the other hand, does not mean that the review should be discarded, merely that less confidence can be placed in its findings and that the review needs to be examined closely to identify its limitations. (Lewin S, Oxman AD, Lavis JN, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP): 8. Deciding how much confidence to place in a systematic review. *Health Research Policy and Systems* 2009; 7 (Suppl1):S8.)

The last three columns convey information about the utility of the review in terms of local applicability, applicability concerning prioritized groups, and issue applicability. The third-from-last column notes the proportion of studies that were conducted in Canada, while the second-from-last column comments on the proportion of studies included in the review that deal explicitly with one of the prioritized groups. The last column indicates the review’s issue applicability in terms of the proportion of studies focused on the procedures, tests and assessments historically provided in hospitals.

All of the information provided in the appendix tables was taken into account by the evidence brief’s authors in compiling Tables 3, 5 and 7 in the main text of the brief.

**Appendix 1: Systematic reviews relevant to the context for creating community-based specialty clinics – Comparing outcomes between hospitals and specialty clinics and between high- and low-volume facilities**

Nature of procedures, tests or assessments	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
Surgical and related procedures - Location	Effects of performing percutaneous coronary interventions (PCI) at centres without on-site surgery on mortality rates and adverse events (i.e., emergency coronary artery bypass surgery), compared to centres with on-site surgery.(8)	No significant differences were found in mortality rates or incidence of emergency bypass surgery for PCI performed at centres without on-site surgery, compared to centres with on-site surgery.  In-hospital mortality rates and incidence of emergency bypass surgery were similar for non-primary (elective) PCI performed at centres without on-site surgery, compared to centres with on-site surgery. However, significant publication bias was noted.	2010	7/11 (AMSTAR rating from Program in Policy Decision-making)	0/15	0/15	15/15
	Effects of performing percutaneous coronary interventions (PCI) at centres without on-site surgery on mortality rates and adverse events (i.e. emergency coronary artery bypass surgery), compared to centres with on-site surgery.(9)	For primary PCI, centres without on-site surgery had no significantly increased risk of in-hospital mortality or need for bypass surgery, compared with centres with on-site surgery.  For non-primary (elective) PCI, centres without on-site surgery had no significantly increased risk of in-hospital mortality or need for bypass surgery, compared with centres with on-site surgery. However, there was substantial variation in outcomes across centres.	2009	5/11 (AMSTAR rating from Program in Policy Decision-making)	1/29	0/29	27/29

Nature of procedures, tests or assessments	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
	Effects of specialized care (i.e. type of provider and care settings) on outcomes of ovarian cancer patients.(11)	The outcomes of ovarian cancer patients are better when treatment is provided by a gynecologic oncologist or in a specialized hospital. Differences in outcomes in specialized hospitals may be due to better post-operative chemotherapy.	2006	4/11 (AMSTAR rating from Program in Policy Decision-making)	1/18	0/18	11/18
	Effects of performing diagnostic and interventional cardiac catheterization procedures in free-standing clinics on complication rates compared to catheterization in hospitals.  Characteristics of patients who have catheterization procedures at free-standing clinics versus hospitals.(10)	No substantial differences were found in complication rates of diagnostic catheterization procedures among free-standing clinics compared to hospital settings.  No studies were identified that examined the complication rates of interventional cardiac catheterization procedures in free-standing clinics.  No significant differences were found in mortality or morbidity rates of primary PCI performed at hospitals without surgical support compared to hospitals with surgical support.  Conflicting evidence was found on mortality and morbidity rates of non-primary (elective) PCI performed at hospitals without surgical support compared to hospitals with surgical support.  No studies were identified that	2005	7/9 (AMSTAR rating from Program in Policy Decision-making)	Not reported (at least 1)	0/23	17/23

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Nature of procedures, tests or assessments	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
		examined the characteristics of patients who have catheterization procedures at free-standing clinics versus hospitals.					
	Effectiveness of strategies to shift specialist services from acute hospitals to the community.(79)	The findings for surgical clinics indicate the following outcomes: improved access, variable quality (often quality would be worse than hospital care), no reduction in workload for the hospital, increased impact on general practice, increased demand with reduction in treatment threshold, and increased cost due to overall expansion in service volume. Implementation issues identified were the requirement for equipment and training of primary care workforce. The results indicate that the transfer of minor surgery to primary care resulted in significant decrements in quality of care.	Not reported	5/9 (AMSTAR rating from Program in Policy Decision-making)	Not reported	0/119	9/119
Surgical procedures - Volume	Effects of surgeon and hospital volume on mortality for radical cystectomy.(13)	There is a significant inverse association between high-volume hospitals and post-operative mortality.  One study showed a positive effect of hospital volume on long-term survival.	2010	7/11 (AMSTAR rating from Program in Policy Decision-making)	1/10	0/10	10/10

Nature of procedures, tests or assessments	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
	Effects of hospital and surgeon volume on procedure-related morbidity, mortality and five-year survival after gastric cancer surgery.  Relationship between hospital volume and proxy measures such as technology and infrastructure available to higher-volume hospitals.(14)	High hospital volume demonstrated a protective effect on procedure-related mortality from gastric cancer surgery.  Hospital volume can also represent a proxy measure for overall ability to care for complicated patients, including the number of critical care beds, number of specialized nurses, availability of ICU and preoperative imaging in the pre-, peri- and post-operative period.  Hospital volume did not have a significant impact on five-year survival rates after gastric cancer surgery.	2009	4/11 (AMSTAR rating from Program in Policy Decision-making)	1/28	0/28	22/28
Diagnostic tests - Location	Optimum organization for colposcopy service delivery in Ontario, Canada, based on outcomes relating to colposcopy training, qualifications, accreditation, maintenance of competency, delivery of colposcopy, reducing default from colposcopy clinics, and/or strategies to improve patient satisfaction or comfort.(12)	With respect to practice setting, the summary of the evidence and consensus indicate that locating colposcopy clinics in hospitals (or linking with peripheral hospitals) was recommended. Currently, Ontario colposcopic services are provided in larger group-based practices, either in hospitals, outpatient clinics, or individual office-based practices. However, the writing group recommended formal linkage of individual office-based practices with larger group practices.	2006	4/9 (AMSTAR rating from Program in Policy Decision-making)	5/16	0/16	12/16
Assessments - Location	Specific elements of organizational change (OC) interventions that increase the selected cancer screening rates, and extent	The health prevention clinic intervention demonstrated a large increase (47%) in the proportion of	2010	4/9 (AMSTAR rating from	0/11	0/11	5/11

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Nature of procedures, tests or assessments	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
	to which practices brought into the interventions. OC interventions include: use of separate clinics devoted to prevention, use of a planned care visit, designation of non-physician staff for specific prevention activities, and continuous quality improvement interventions.(80)	completed fecal occult blood tests, while having a non-physician staff demonstrated an increase in mammography (18.4%) and clinical breast examination (13.7%). The planned care visit for prevention intervention increased mammography (8.8%). Continuous quality improvement interventions showed mixed results, from an increase in performance of mammography (19%), clinical breast examination (13%), Pap smear (15%), and fecal occult blood test (13%), to none or negative change in the proportion of cancer screening rates.		Program in Policy Decision-making)			
	Influence of emergency care provided in primary or community settings on demand for accident and emergency (AE) care.(81)	One observational study from the review based in the U.S. found that free-standing emergency departments had little impact on demand. The conclusions of the review were that emergency care provided by primary care or in the community could be used as an alternative to hospital AE care. The authors state that substituting primary or community emergency care for hospital AE care is possible.	Not reported	7/10 (AMSTAR rating from McMaster Health Forum)	2/19	Not reported	19/19

**Appendix 2: Systematic reviews relevant to the context for creating community-based specialty clinics – Comparing outcomes and costs between for-profit and not-for-profit hospitals and specialty clinics**

Nature of procedures, tests or assessments	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups (people of low socio-economic status, and people with multiple morbidities)	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
Hospitals	Financial performance of U.S. for-profit, not-for-profit, and government-owned general acute hospitals since 1990.(18)	The review found diverse results in the hospital ownership literature, which it attributed to differences in authors' underlying theoretical frameworks, assumptions about the functional form of the dependent variables, and model specifications. Weaker methods and functional forms tend to predict larger differences in financial performance between not-for-profits and for-profits. The combined estimates across studies suggest little difference in cost among all three types of hospital ownership, and that for-profit hospitals generate more revenue and greater profits than not-for-profit hospitals, although this difference is only of modest economic significance. There is little difference in revenue or profits between government and not-for-profit hospitals.	2005	7/11 (AMSTAR rating from Program in Policy Decision-making)	0/40	0/40	Not reported
	Payments for care at private for-profit and private not-for-profit hospitals.(17)	Private for-profit hospitals result in higher payments for care than private not-for-profit hospitals. In five of six studies showing higher payments for care at private for-	2002	8/11 (AMSTAR rating from Program in Policy	0/8	0/8	Not reported

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Nature of procedures, tests or assessments	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups (people of low socio-economic status, and people with multiple morbidities)	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
		profit hospitals, the difference was statistically significant; in one of two studies showing higher payments for care at private not-for-profit hospitals, the difference was statistically significant. Evidence strongly supports a policy of not-for-profit healthcare delivery at the hospital level.		Decision-making)			
	Mortality rates of private for-profit hospitals and those of private not-for-profit hospitals.(15)	The meta-analysis suggests that private for-profit ownership of hospitals, in comparison with private not-for-profit ownership, results in a higher risk of death for patients.	2001	8/11 (AMSTAR rating from Program in Policy Decision-making)	0/15	0/15	Not reported
	Substantiated performance differences between private for-profit and private not-for-profit psychiatric inpatient care providers in the United States since 1980.(82)	On the basis of data collected since 1980, not-for-profit psychiatric inpatient care providers in the United States had superior performance on access, quality, cost-efficiency, and amount of charity care, compared with for-profit providers. Caution is warranted in pursuing public policies that permit or encourage the replacement of not-for-profit psychiatric inpatient care providers with for-profit providers of these services.	Not reported	1/9 (AMSTAR rating from Program in Policy Decision-making)	0/149	0/149	0/149

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Nature of procedures, tests or assessments	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups (people of low socio-economic status, and people with multiple morbidities)	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
	Performance differences between private for-profit and private not-for-profit U.S. health care providers published since 1980. Performance criteria included: access, quality, cost/efficiency, and/or amount of charity care.(83)	Overall, the not-for-profit providers were judged to be superior 59 %of the time, the for-profit providers superior only 12%of the time, and for the rest (29%) there was either no difference in the results or the results were mixed. Caution is warranted on policies that encourage private for-profit entities to replace private not-for-profit providers of health care services in the United States.	Not reported	2/9 (AMSTAR rating from Program in Policy Decision-making)	0/149	0/149	75/149
Specialty clinics	Effects of interventions working with the private for-profit sector to improve utilization of quality health services by the poor. Interventions included social marketing, use of vouchers, pre-packaging of drugs, franchising, training, regulation, accreditation and contracting-out.(42)	Few studies provided evidence on the impact of private for-profit sector interventions on quality and/or utilization of care by the poor. It was, however, evident that many interventions have worked successfully in poor communities, and positive equity impacts can be inferred from interventions that work with types of providers predominantly used by poor people. Better evidence of the equity impact of interventions working with the private sector is needed for more robust conclusions to be drawn.	2006	3/9 (AMSTAR rating from Program in Policy Decision-making)	0/52	2/52 (low socio-economic status)	0/52
	Whether a difference in adjusted mortality rates exists between hemodialysis patients	Hemodialysis care in private not-for-profit centers is associated with	2002	9/10 (AMSTAR	0/8	0/8	8/8

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Nature of procedures, tests or assessments	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups (people of low socio-economic status, and people with multiple morbidities)	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
	receiving care in private for-profit versus private not-for-profit hemodialysis centres.(16)	a lower risk of mortality compared with care in private for-profit centres.		rating from Program in Policy Decision-making)			
	Performance differences between private for-profit and private not-for-profit U.S. healthcare providers published since 1980. Performance criteria included: access, quality, cost/efficiency, and/or amount of charity care.(83)	Overall, the not-for-profit providers were judged to be superior 59% of the time, the for-profit providers superior only 12% of the time, and for the rest (29%) there was either no difference in the results or the results were mixed. Caution is warranted on policies that encourage private for-profit entities to replace private not-for-profit providers of healthcare services in the United States.	Not reported	2/9 (AMSTAR rating from Program in Policy Decision-making)	0/149	0/149	16/149

**Appendix 3: Systematic reviews relevant to the context for creating community-based specialty clinics – Comparing outcomes in hospitals and specialty clinics paid using prospective budgets versus other funding approaches**

Nature of procedures, tests or assessments	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
Hospital	Effects of health insurance status and insurance systems on critical care access, delivery and patient outcomes.(84)	There was no evidence of a change in the proportion of patients admitted to ICU and no significant change in mortality rates after the introduction of a prospective payment system in U.S. Medicare.	2008	6/10 (AMSTAR rating from Program in Policy Decision-making)	0/3 <sup>1</sup>	0/3	Not reported
Specialty clinics	No reviews identified.						

<sup>1</sup> This review contained 29 total studies but only 3 studies addressed the effects of introducing prospective payments

**Appendix 4: Systematic reviews relevant to Element 1 – Make a binding long-term commitment to prospective specialty clinics about the ‘rules of the game’**

Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
Establishing a method to identify procedures, tests and assessments that could be provided more cost-effectively and in sufficient volume in specialty clinics	The effects of consumer involvement and different methods of involvement in developing healthcare policy and research, clinical practice guidelines, and patient information material.(44)	Very low quality evidence (one study) suggests that telephone discussions compared with face-to-face meetings change consumer priorities for community health goals.  Both telephone discussions and face-to-face meetings achieved more involvement than a mailed survey, based on the low response rate, and both resulted in changes in the views of participants.	2005	9/11 (AMSTAR rating from <a href="http://www.rxforchange.ca">www.rxforchange.ca</a> )	0/1 <sup>2</sup>	0/1	0/1
Establish a method to set appropriateness criteria for procedures, tests and assessments (both to avoid overuse of specialty clinics, such as for colonoscopies in patients at high risk of complication or perforation, and underuse)	No reviews identified.						
Establishing a	Guidance to determine the optimum	Six reports recommended that specific	2006	4/9 (AMSTAR	3/8	0/8	8/8

<sup>2</sup> The review contained 11 studies but only 1 study addressed effects of consumer involvement on policy decisions

Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
method to set price, volume and quality criteria to be met for procedures, tests and assessments (where price may include both a professional fee and a facility fee)	organization for colposcopy service delivery in Ontario, based on outcomes relating to colposcopy training, accreditation, maintenance of competency, delivery and/or strategies to improve patient satisfaction or comfort.(12)	<p>practitioners or organizational bodies take responsibility for quality assurance and control, which could include mandating the lead clinician to develop written protocols, engaging colposcopists in audit and quality control discussions, or designating a hospital-based coordinator for quality control.</p> <p>Two documents reported the importance of a multidisciplinary approach to assuring quality and two documents recommended annual reviews for quality assurance in clinics.</p> <p>Based on overall evidence and consensus from a stakeholder meeting, establishing a provincial colposcopy quality control system was considered beneficial for permanent/continuous monitoring of quality of care and performance evaluation.</p>		rating from Program in Policy Decision-making)			
Establishing a method to bundle procedures, tests and assessments to support the phased implementation of specialty clinics	Guidance to determine the optimum organization for colposcopy service delivery in Ontario, based on outcomes relating to colposcopy training, accreditation, maintenance of competency, delivery and/or strategies to improve patient satisfaction or comfort.(12)	Studies recommended differing strategies including: integrating colposcopic services as part of gynecology programs, if at university centres; developing hospital-based clinics; and performing colposcopies at hospitals or designated clinics.	2006	4/9 (AMSTAR rating from Program in Policy Decision-making)	2/7	0/7	7/7

**Appendix 5: Systematic reviews relevant to Element 2 – Commission specialty clinics through a process that ensures transparency and accountability**

Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
Identifying the types of organizations that would be eligible to be commissioned and any restrictions that would be binding on these organizations	No reviews identified						

Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
Selecting between formal procurement procedures and requests for proposals and the group(s) responsible for developing/issuing them	Effects of NHS 'internal' or 'quasi' market policies in England on cost, efficiency, quality, innovation and provider responsiveness.(19)	<p>After the introduction of health authority (HA) purchasing in 1991, they observed that prices of hospital services varied between HAs and between geographic areas, as was intended, and that HAs lacked the ability to purchase and to influence providers as effectively as expected, particularly due to weak contracting skills and inadequate ability to market test (i.e., present services to a small sample of the intended market to test various strategies and pricing before full implementation).</p> <p>After the introduction of practice-based commissioning in 2002, they observed that incentives and infrastructure used to support commissioning are not sufficient to engage most general practitioners in commissioning, that many consortia are more interested in self-provision than commissioning, and that obstacles include the accuracy of information on patient need and treatment use.</p> <p>After the introduction of primary care trust-based commissioning in 2002, they observed that trusts lack the necessary skills to purchase effectively, that trusts do not always take full advantage of their potential power in the purchaser/provider relationship, that weak incentives exist for trust managers to break historical patterns of purchasing, and that there is a lack of community input and satisfaction with commissioning.</p>	Not reported	3/9 (AMSTAR rating from Program in Policy Decision-making)	Not reported	Not reported	Not reported

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Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
Establishing what infrastructure investments would be covered	No reviews identified.						
Designating the organization(s) responsible for conducting local 'impact assessments' (in terms of patients by virtue of its proposed location and in terms of providers and organizations in terms of its clinical governance, education, finances, etc.)	Examination of the role of government policy in coordinating large system transformation in Canada.(85)	Partnerships between the government, non-government research scientists and/or organizations such as health quality councils may be successful in ensuring accurate measurement of outcomes and progress.	2010	3/9 (AMSTAR rating from Program in Policy Decision-making)	All	Not reported	Not reported
Establishing the requirements for reporting about adherence to price, volume and quality criteria, as well as any other performance measures	The effects of the public release of performance data in changing the behaviour of healthcare consumers, professionals and organizations.(51)	Mixed results that public release of performance data changes stakeholder behaviour or improves care.	2011	8/9 (AMSTAR rating from Program in Policy Decision-making)	1/4	0/4	4/4
	The effects of public reporting of health-care quality information as a quality improvement strategy.(45)	Moderate quality evidence suggests that public reporting is associated with improvement in health-care performance measures such as those included in Nursing Home Compare.  Almost all identified studies found no or weak evidence that public reporting	2011	6/10 (AMSTAR rating from Program in Policy Decision-making)	8/198	Not reported	Not reported

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Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
		affects the selection of health-care providers by patients or their representatives.					
	The effects of stroke metrics public reporting on quality of care and patient outcomes.(52)	One study found that stroke patients treated in hospitals during a period of intensive public reporting had significantly lower mortality rates than those treated in hospitals with limited or no reporting.	2010	4/10 (AMSTAR rating from Program in Policy Decision-making)	0/2	0/2	2/2
	The effects of providing a surgeon's performance data to people considering elective surgery.(50)	No studies were found examining the effects of reporting surgeon performance data.	2009	6/11 (AMSTAR rating from Program in Policy Decision-making)	0/0	0/0	0/0
	The effects of publishing patient care performance data on improving quality of care.(46)	Synthesis of data from eight health plan-level studies suggests modest association between public reporting and plan selection.  Synthesis of 11 studies, all hospital-level, suggests public reporting stimulated quality improvement activity, though evidence on effectiveness of public reporting as a quality improvement strategy itself is mixed.	2006	5/11 (AMSTAR rating from McMaster Health Forum)	0/45	Not reported	34/45
	The effects of pay-for-performance and public reporting programs on racial disparities in health care.(49)	One study found that a major reporting program increased disparities in coronary artery bypass rates.	2006	4/9 (AMSTAR rating from Program in Policy Decision-making)	0/1	0/1	1/1

Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
	The use of performance data reports by consumers, purchasers, physicians, hospitals and other provider organizations and the effects of these performance reports on quality of care.(48)	<p>Mixed evidence suggests that publicly reported performance data has only a limited impact on consumer decision-making.</p> <p>Studies suggest possible reasons for minimal consumer use of performance data, including: difficulty in understanding the information, disinterest in the nature of the information available, lack of trust in the data, problems with timely access to the information, and lack of choice. There is evidence from descriptive studies that consumers rate anecdotal evidence from family and friends more highly than empirical evidence.</p> <p>Evidence suggests that public disclosure of performance data has only a small, although possibly increasing, effect on purchasing behaviour.</p> <p>Evidence suggests that physicians consider public disclosure of performance data to be of minimal use.</p> <p>Some evidence suggests hospitals and provider organizations are most responsive to performance data compared to other stakeholders.</p> <p>Three studies found sustained reduction in mortality rates after implementation of reporting performance data.</p>	1999	3/9 (AMSTAR rating from Program in Policy Decision-making)	0/7	0/7	7/7

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Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
	Description of the design and objectives of public reporting initiatives and effects of public reporting on the quality of healthcare.(47)	<p>Evidence suggests that a public reporting program must include objectives, a target audience, tangible products, distribution mechanisms and impacts (intended and unintended) in order to be effective.</p> <p>These were mixed results on the impact of public reporting on consumers' choice of care.</p> <p>Three studies found small improvements in quality measures during public reporting initiatives, and three other studies found that public reporting initiatives stimulated the development of other quality improvement strategies.</p>	Not reported	2/9 (AMSTAR rating from Program in Policy Decision-making)	1/13	0/13	Not reported

**Appendix 6: Systematic reviews relevant to Element 3 – Ensure that an efficient governance mechanism is in place for commissioned specialty clinics**

Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
Extending existing legislation/regulations, revising existing legislation/regulations or adopting new legislation/regulations to govern specialty clinics	Effects of regulations implemented to manage dual practice. Dual practice is defined as the phenomenon of health workers holding two or more jobs. In resource constrained low- and middle-income countries, dual practice poses an ongoing threat to the efficiency, quality and equity of health services, especially in the public sector.(64)	No studies were found which were eligible for inclusion in the review. There is a need to rigorously evaluate the effects of interventions implemented to manage dual practice among health workers.	2011	5/6 (AMSTAR rating from Program in Policy Decision-making)	0/0	0/0	0/0
	Descriptions of dual practice regulatory mechanisms proposed and implemented worldwide, and to document factors key to their implementation, either barriers or facilitators. Dual practice is defined as the holding of more than one job directly related to treating patients (which includes additional jobs held both within the health facility and outside it). Regulatory mechanisms include: complete prohibition of dual practice; restriction on private sector earnings; incentives for exclusive public practice; and raising health worker salaries.(78)	With regard to prohibition of dual practice, policymakers and health workers felt that more effective management systems to enforce and monitor were crucial in addition to improved remuneration of existing staff. They noted this approach could not succeed in the presence of gross shortages of human resources for health, but that clients or patients would find dual practice favourable because it enabled an extension of services beyond the public sector.  Financial restrictions were not favoured in the absence of strong monitoring systems and the prevailing inadequate capacity of LMICs.  Licensure restrictions tended to draw more favour from policymakers, especially if accompanied by strengthened health professional and	2009	4/10 (AMSTAR rating from Program in Policy Decision-making)	Not reported in detail (3/28 description states)	Not reported	Not reported

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Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
		<p>civil society organizations, and augmented by strict management practices and clear employment contracts with clauses on dual practice.</p> <p>Unrestricted dual practice was favourable for health workers, who felt it was their right to practice their profession under unhindered conditions, especially since it not only contributed to their income but enabled them to provide more services as a result of the extension of their working hours. Policymakers felt dual practice would be abused if unrestricted, and felt it crucial to have legal frameworks and laws to govern health professional bodies with regard to dual practice.</p> <p>Regulating private practice services and activities was deemed unlikely to succeed, especially given the inadequacy of public services. It was noted that some services not provided in the public sector could only be accessed in the private sector; it would also be unethical to restrict the skills of the few existing specialists in the public sector. Policymakers felt that perhaps having an obligatory universal health insurance would enable the provision of better public sector services, which would hopefully make private services less attractive.</p>					

Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
	Effectiveness of working with private for-profit providers to reach the poor. Interventions included social marketing, use of vouchers, pre-packaging of drugs, franchising, training, regulation, accreditation and contracting-out.(42)	<p><i>Regulation</i> Two studies were identified on regulation, but both pertained to regulation of pharmaceutical products and pharmacy services.</p> <p><i>Training</i> Training was by far the most evaluated intervention. Most interventions produced positive results for at least some outcome indicators.</p> <p><i>Contracting-out</i> Quality of care provided by three contracted hospitals was compared to that of three, paired public hospitals. Public hospitals had better structural quality of care, but contracted hospitals had better quality of nursing care in maternity and medical/surgical wards than public hospitals, similar nursing management quality, and overall higher total nursing quality. No statistically significant differences in perinatal and maternal mortality rates were found between contracted and public hospitals.</p> <p>For primary care services, overall the structural quality was similar between contracted and public providers. However, quality of care (in terms of recording blood pressure when patients seek care, or correctly treating STI cases) was worse at contracted practices compared to public health facilities.</p>	2006	3/9 (AMSTAR rating from Program in Policy Decision-making)	0/52	2/52	0/52

Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
	Effectiveness of private sector strategies for sexual and reproductive health (SRH) services in developing countries. Strategies included market-based (contracting-out, financing, franchising and social marketing, and collaboration); administrative (regulating and training); and public empowerment (informing).(65)	<p><i>Regulation</i> The little research that examines regulatory interventions suggests that regulations alone have little effect, but when combined with other interventions, they may be very effective.</p> <p><i>Training</i> Training private providers was the most common strategy (72% of studies). Training was often done in connection with some support (in-kind or financial), or as a supplement to franchising, regulating or contracting strategies. Evaluations of training for traditional birth attendants have found training to have an impact on knowledge, practice and referrals. Training of drug retailers shows a clear improvement in knowledge of providers, but tells us little about their actual practices beyond the short term. Training targeted at service providers based at private clinics show large improvements on prescribing practices among practitioners in one study, but mixed results (with some improvement in rates of knowledge and self-reported practices) in another.</p> <p><i>Contracting-out</i> There was only one study on contracting-out. The assessment of the effect of performance-based</p>	2003	3/10 (AMSTAR rating from Program in Policy Decision-making)	0/71	0/71	1/71

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Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
		contracting in improving provider performance at healthcare non-governmental organizations was mixed, in part because the small sample size makes it difficult to detect changes. The study did, however, show marked improvements in provider performance in the area of child health, and mixed performance in meeting prenatal care targets.					
	Effectiveness of England's National Health Service (NHS) 'internal' or 'quasi' market policies in England. Notable reforms include the 1991 reforms (general practitioner fundholding, health authority purchasing, and NHS trust provision) as well as the post-2002 reforms (practice-based commissioning, primary care trust commissioning, patient choice of provider, plurality of providers, foundation trusts, and payment by results and the health resource group tariff.(19)	Independent sector treatment centres (ISTCs) provide equal if not better outcomes than NHS providers, and receive higher levels of patient satisfaction; however, they treat a healthier case-mix of patients than NHS providers (as was intended by their contracts). Additionally, ISTCs may have negative effects on NHS surgical training.	Not reported	3/9 (AMSTAR rating from Program in Policy Decision-making)	Not reported in detail	Not reported in detail	Not reported in detail
Deciding whether to allow advertising and, if so, with what if any restrictions	Clinical and economic impacts (both positive and negative) of direct to consumer advertising (DTCA) on patients and clinicians.	DTCA is associated with increased patient requests for specific drugs and increased prescribing of advertised products by physicians, but no studies have examined patient satisfaction with care or impacts on health outcomes	2004	6/10 (AMSTAR rating from Program in Policy Decision-making)	1/4	0/4	0/4
Deciding how to support clinical governance and educational roles (as part of or separate from	Costs of under-coordination, effectiveness and cost of interventions to improve coordination, evidence of savings or losses to different parties, and implications of the	There was evidence that poor coordination negatively affected the poor and vulnerable, but little research into this subject or how much it may	2010	5/10 (AMSTAR rating from	Not reported	Not reported	Not reported

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Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
legislation/regulations)	evidence for different parties and for future research.(56)	cost. There was some evidence that better coordination of providers' care can save money and improve quality for patients. There was evidence that better coordination combined with other changes can save money and raise quality for particular patients. These include some methods for improving patient handover and transfers, some models of care to prevent hospital admissions (for example, some disease management, case management, and multidisciplinary team-based approaches), and other chronic care and illness prevention models.		Program in Policy Decision-making)			
	To explore different models of clinical governance, their relevance to Australian primary health care, and their potential contributions on quality and safety.(66)	Most evidence supports governance models which use targeted, peer-led feedback on the clinician's own practice. Strategies most used in clinical governance models were audit, performance against indicators, and peer-led reflection on evidence or performance. Locally relevant clinical indicator, the use of computerized medical record systems, regional primary health care organizations that have the capacity to support the uptake of clinical governance at the practice level, and learning from the Aboriginal community-controlled sector will help integrate clinical governance into primary care.	2010	2/9 (AMSTAR rating from Program in Policy Decision-making)	0/19	0/19	0/19
	To summarize the benefits of a high-quality	Primary care practices that provide	2008	2/9	Not	Not	Not reported

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Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
	primary healthcare system in terms of the system's orientation and design, organizational and process factors, physician supply, and the critical features unique to primary delivery.(74)	<p>comprehensive and coordinated care confer the most benefits to patients.</p> <p>Canada has not yet achieved a national primary care orientation in the sense of providing high quality patient-centred comprehensive care.</p> <p>Better coordination is required among the various groups that undertake primary care research and between researchers and decision-makers seeing high performing primary care in Canada.</p>		(AMSTAR rating from Program in Policy Decision-making)	reported (at least 1)	reported	
	How primary care trust groups and primary care organizations monitor the implementation of clinical governance, and the effects this may have on nursing.(75)	<p>Clinical governance is an example of coordinated policy development, which can be difficult to translate into the integrated and systematic approach to improving quality of care.</p> <p>Clinical governance requires changes at three levels: the individual health care professional, primary care teams (which need to become multidisciplinary with clear understanding), and primary care organizations (which need to put in place systems and local arrangements to support such teams).</p> <p>Leadership, teamwork and communication are as important to high quality care as risk management and clinical effectiveness. Whilst the sharing of information between</p>	2003	3/9 (AMSTAR rating from Program in Policy Decision-making)	0/7	0/7	7/7

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Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
		practices appears to be increasing, commitment for time and funding is necessary.					
	Effectiveness of specialist outreach clinics on access, quality, health outcomes, patient satisfaction, use of services, and costs. Specialist outreach clinics were defined as planned and regular visits by specialist-trained medical practitioners from usual practice locations (hospital or specialist centre) to primary care or rural hospital settings. Only outreach visits that involved patient consultations were included.(57)	The review supports the hypothesis that specialist outreach can improve access, outcomes and service use, especially when delivered as part of a multifaceted intervention. In particular, one study of specialist outreach in four surgical disciplines (general surgery, gynecology, ophthalmology and ear nose and throat (ENT) surgery) in rural Indigenous communities in northern Australia found a large increase in numbers of specialist consultations involving remote community patients (390%). This was used as indirect evidence of improved access to specialist consultation. The study also reported outreach to be less expensive per patient (AUD\$173 less).	2002	10/11 (AMSTAR rating from McMaster Health Forum)	0/9	0/9	2/9
	To review and critically discuss the findings on the subject of dual public and private practice by physicians and its effects for public health care.(67)	<p>There is limited evidence to indicate any positive or negative effects of dual practice.</p> <p>While the analyses assume that the dual practitioners' objectives are to maximize income, it remains uncertain whether dual practice is an income-maximizing combination of jobs.</p> <p>Costs of enforcing restrictions on dual practice are rarely considered. Further research is needed that compares dual practitioners and other physicians in</p>	Not reported	0/9 (AMSTAR rating from Program in Policy Decision-making)	Not reported	Not reported	Not reported

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Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
		uniform settings, investigates how the dual practitioners divide labour between the two jobs, and analyzes the costs of enforcing restrictions on dual practice.					
Establishing a quality improvement framework	Efficacy of interventions in reducing medication errors in intensive care.(69)	<p>Eight types of interventions to reduce medication errors in intensive care were identified in this systematic review: computerized physician order entry (CPOE), changes in work schedules (CWS), intravenous systems (IS), modes of education (ME), medication reconciliation (MR), pharmacist involvement (PI), protocols and guidelines (PG) and support systems for clinical decision making (SSCD). Sixteen out of the 24 studies showed reduced medication error rates. Four intervention types demonstrated reduced medication errors post-intervention: CWS, ME, MR and PG.</p> <p>The findings demonstrate implications for policy-makers and clinicians in adopting resource intensive processes and technologies, which offer little evidence to support their efficacy.</p>	2011	7/10 (AMSTAR rating from Program in Policy Decision-making)	1/24	0/24	0/24
	To analyze what types of patient safety incidents relevant to primary care have been identified, what research has been conducted on interventions that address patient safety in primary care, and which are the key themes and priorities in patient safety that emerge from the literature.	Strategies to improve patient safety include: documenting and collecting information about adverse events; identifying practice benchmarks and guidelines; including patients in QI strategies; placing more emphasis on educational curricula, and improving	2010	7/10 (AMSTAR rating from Program in Policy Decision-	5/46	0/46	30/46

Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
	The six objectives were to (1) describe the concept of patient safety as it applies to primary care; (2) provide an overview and synthesis of available findings from research on patient safety incidents; (3) identify and evaluate current evidence in the scientific literature on actions taken or strategies proposed; (4) identify current gaps in the literature; (5) identify key themes; and (6) identify opportunities and next steps for advancing patient safety in primary care in Canada.(76)	<p>inter-professional team approaches to care and communication.</p> <p>The full delineation of patient safety is frustrated by the lack of research and lack of data on the safety risks to patients who access primary care.</p> <p>Research on patient safety in primary care has focused mainly on specific aspects of the delivery of care, such as medication management, diagnosis, and communication between patients and practitioners.</p>		making)			
	Effectiveness of different clinician-/patient-driven and manager-/policymaker-driven quality improvement strategies (QIS) for optimizing health care.(58)	<p>Clinician-/patient-driven QIS were associated with stronger evidence of efficacy and larger effect sizes than manager-/policymaker-driven QIS.</p> <p>The most effective strategies included clinician-directed audit and feedback cycles, clinical decision support systems, specialty outreach programs, chronic disease management programs, continuing professional education based on interactive small-group case discussions, and patient-mediated clinician reminders.</p> <p>Pay-for-performance schemes directed to clinician groups and organizational process redesign were modestly effective.</p> <p>Other manager-/policymaker-driven</p>	2008	2/11 (AMSTAR rating from Program in Policy Decision-making)	12/97	Not reported	Not reported

Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
		QIS including continuous quality improvement programs, risk and safety management systems, public scorecards and performance reports, external accreditation, and clinical governance arrangements have not been adequately evaluated with regard to effectiveness.					
	The effectiveness of clinical guideline implementation strategies.(61)	Successful clinical guideline implementation strategies should include interactive education systems and clinical reminder systems, and be multifaceted and actively engage clinicians throughout the process.  Didactic education and passive dissemination strategies were ineffective, and cost-effectiveness studies were rare.	2007	4/10 (AMSTAR rating from Program in Policy Decision-making)	2/33	0/33	33/33
	Whether health worker performance interventions can improve performance of health workers.(70)	Poor performance is a result of health staff not being sufficient in numbers, or not providing care according to standards, and not being responsive to the needs of the community and patients.  There is limited substantive evidence on the effectiveness of performance interventions for health workers.  Successful interventions require strong government support and involvement, and commitment by all stakeholders.	2006	3/9 (AMSTAR rating from Program in Policy Decision-making)	0/15	15/15	8/15

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Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
	To identify regional collaborations in surgical practice examining practices related to quality improvement.(59)	A community of practice framework incorporating the success elements can be used as a model for collaboration amongst surgeons and healthcare organizations to improve quality of care and foster continuing professional development.  Significant improvements in clinical outcomes, such as decreases in mortality rates, lower duration of postoperative intubations, and fewer surgical-site infections were reported.	2006	4/11 (AMSTAR rating from Program in Policy Decision-making)	0/7	0/7	7/7
	To summarize Community Health Centre Quality Improvement (CHC QI) studies, systematically rate the quality of those studies, and outline 10 important areas for future CHC QI research.(60)	CHC QI interventions have been effective in improving processes of care for diabetes and cancer screening in the short term, but their effectiveness in the long term and regarding outcomes of care have not been demonstrated.	2005	4/10 (AMSTAR rating from Program in Policy Decision-making)	0/18	0/18	18/18
	To review international peer-reviewed articles relating to organizational assessment and quality improvement for GP settings.(71)	The literature represents a developing field containing different approaches to the measurement of organizational aspects of general practice.  There is a need for organizational assessment tools designed for the purpose of stimulating internal development, by paying attention to increasing motivation and ownership of the quality improvement agenda by practices.	2003	6/9 (AMSTAR rating from Program in Policy Decision-making)	0/5	0/5	5/5
	Strengths and weaknesses of the current	The literature represents evolution of	2002	6/10	22/617	Not	Not reported

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Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
	research literature discussing models, practice and effectiveness of performance measurement systems in health and mental health services, and to place the research information in the context of current policy and practice in Canada.(72)	thought: the performance measurement imperative through stages of proliferation of measures and fragmentation of effort, followed by a reassessment and reflection on the complexity of the task, and most recently a stage moving toward consensus and identifying solutions.  Performance measurement activities are more advanced in the U.S. and the U.K.  Overall, research is in its infancy, and recommendations suggest developing further frameworks and increasing effective research.		(AMSTAR rating from Program in Policy Decision-making)		reported	
	The effectiveness of published multi-practice audits from British general practice.(68)	Audit can often be moderately effective; however, it is frequently used as one of a complex set of interventions, which makes precise evaluation difficult.  Most audits showed some improvements in performance, and those using controls showed significant parameter changes.	2000	4/10 (AMSTAR rating from Program in Policy Decision-making)	0/48	0/48	48/48
	Effectiveness and costs of different guideline development, dissemination and implementation strategies; estimation of the resource implications of these strategies; and development of a framework for deciding when it is efficient to develop and introduce clinical guidelines.(73)	No relationship was found between the number of component interventions and the effects of multifaceted interventions.  There is an imperfect evidence base to support decisions about which	1998	7/11 (AMSTAR rating from Program in Policy Decision-	15/235	2/235	197/235

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Approach element	Focus of systematic review	Key findings	Year of last search	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada	Proportion of studies that deal explicitly with one of the prioritized groups	Proportion of studies that focused on procedures, tests and assessments historically provided in hospitals
		guideline dissemination and implementation strategies are likely to be efficient under different circumstances.		making)			
	To review the literature on strategies commonly used to influence physician behaviour.(77)	<p>Active interventions should be adopted as part of a multifaceted strategy to engage physicians to change behaviour.</p> <p>Strategies that can be automated at the point of care and made scalable over a large number of patients (e.g., computerized reminders and other forms of clinical decision support) should receive special consideration.</p> <p>Additional research is needed to understand the impact of physician-centred interventions, especially performance-based economic incentives, on patient outcomes and healthcare costs.</p>	Not reported	0/10 (AMSTAR rating from Program in Policy Decision-making)	Not reported	Not reported	Not reported

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