Transforming Regions into High-Performing Health Systems Toward the *Triple Aim of Better Health, Better Care and Better Value for Canadians*

COMMENTARY

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ABSTRACT

A study on the impact of regionalization on the Triple Aim of Better Health, Better Care and Better Value *across Canada in 2015 identified major findings including: (a) with regard to the Triple Aim, the Canadian situation is better than before but variable and partial, and Canada continues to underperform compared with other industrialized countries, especially in primary healthcare where it matters most; (b) provinces are converging toward a two-level health system (provincial/regional); (c) optimal size of regions is probably around 350,000–500,000 population; d) citizen and physician engagement remains weak. A realistic and attainable vision for high-performing regional health systems is presented together with a way forward, including seven areas for improvement: 1. Manage the integrated regionalized health systems as results-driven health programs; 2. Strengthen wellness promotion, public health and intersectoral action for health; 3. Ensure timely access to personalized primary healthcare/family health and to proximity services; 4. Involve physicians in clinical governance and leadership, and partner with them in accountability for results including the required changes in physician remuneration; 5. Engage citizens in shaping their own health destiny and their health system; 6. Strengthen health information systems, accelerate the deployment of electronic health records and ensure their interoperability with health information systems; 7. Foster a culture of excellence and continuous quality improvement. We propose a turning point for Canada, from Paradigm Freeze to Paradigm Shift: from hospital-centric episodic care toward evidence-informed population-based primary and community care with modern family health teams, ensuring integrated and coordinated care along the continuum, especially for high users. We suggest goals and targets for 2020 and time-bound federal/provincial/regional working groups toward reaching the identified goals and targets and placing Canada on a rapid path toward the Triple Aim.*

Regionalization constitutes de facto one of the main organizing strategies of health systems across provinces and territories in Canada, beyond the five founding principles of the Canada Health Act (public administration, comprehensiveness, universality, portability and accessibility) (Government of Canada 1985).

Over the past 20 years, there has been much experimentation with regionalization across Canadian provinces. The short-lived Canadian Observatory on Regionalization reviewed these natural experiments, highlighting certain elements of regionalization with regard to the performance of provincial health systems (Lewis and Kouri 2004).

Since 2004, however, as pointed out by Marchildon (2016) in his introductory essay of this issue, there has been little systematic evaluation of the impact of the regionalization of health in Canada. As one of the several contributions to this issue on regionalization, this paper attempts to address what have been the realizations – the impact – of regionalization across Canada toward the *Triple Aim of Better Health, Better Care and Better Value* (Institute for Healthcare Improvement 2016).

Interest in the healthcare services sector has recently shifted to managing for results and to continuous quality improvement.

The regionalization of health services has progressed at different rates across provinces. Québec was an early adopter, implementing regionalization together with universal health insurance in the early seventies. Ontario, on the other hand, has only recently pursued partial regionalization through its Local Health Integration Networks (LHINs).

Interest in the healthcare services sector has recently shifted to managing for results and to continuous quality improvement. This is perhaps best exemplified by the high-performing healthcare organizations (accountable care organizations [ACOs]) in the US and the recent decision of the US Government to transform Medicare physician re-imbursement from fee-for-service to pay-for-performance (Kaiser Permanente 2015; Steinhauer and Pear 2015).

There have been recent announcements and undertakings of healthcare governance reform across Canada, such as the centralization of regional health authorities (RHAs) in Alberta, Nova Scotia and Prince Edward Island into one provincial health authority and Quebec's recent shift to a two-level regional system as of April 1, 2015. These ongoing changes underpin the timeliness and importance of examining the impact of regionalization.

We conducted a study of regionalization across Canada in 2015. A detailed report is available (Bergevin et al. 2016). We will thus present here the salient features of the report, reflect on how one might implement in the near term the vision and way forward recommended and suggest what might be useful processes at federal, provincial/territorial and regional levels to reach specific time-bound health goals and targets, thus accelerating the progress toward the Triple Aim.

This study used a rapid evidence-based approach, which included in-depth structured interviews of 30 senior Canadian health leaders from every province and 2 territories. The study participants included deputy ministers, assistant deputy ministers, two former ministers, CEOs of RHAs, academics (including one dean) and leaders from Canadian health organizations. We assured the respondents of the anonymity of their responses, which allowed them to express themselves frankly and freely.

> *Several factors made it difficult to tease out cause-and-effect relationships …*

In addition to the interviews, we conducted a scoping review of the literature on regionalization in Canada over the past decade, as well as a rapid review of the characteristics of some high-performing health systems in other countries.

The study identified *major findings*. Based on these, the study team then developed a *vision* and a *way forward* with seven *areas for improvement* toward transforming regions into high-performing systems.

This study presents several strengths: the senior positions, expertise and experience of the interviewed health leaders together with their very high response rate (94%); the consistency of the findings across Canada; the convergence of the findings from the interviews with those from the literature; and the systematic validation of the findings by study participants when the draft report was circulated for validation and feedback.

Several factors made it difficult to tease out cause-and-effect relationships and to isolate the contribution of regionalization to overall improvements in health and healthcare: the lack of relevant healthcare performance data disaggregated at the regional level and the weakness of current information systems; the absence of formal evaluations of regionalization across Canada and in many cases the lack of meaningful annual reporting on performance; the multiple changes in the structure, functions and numbers of regions that have occurred since the beginning of regionalization across provinces, thus precluding an observation period sufficient to draw satisfactory conclusions; the fact that much of the literature is in the form of expert opinion and lacks quantitative evidence; and the lack of a true comparison group, although some would argue that Ontario, not having formally regionalized, could act as a comparator.

Major Findings

Origins of modern district health systems/regionalization

Following the Declaration of Alma-Ata on Primary Health Care in 1978, national governments sought to implement primary healthcare for their populations (World Health Organization 1978). This has led to a body of work on district health systems with ministries of health appointing district health management teams for each health district covering a population of around half a million (World Health Organization 2016). The emergence of "regions" across Canada generally corresponds to the WHO's definition of "districts," which is the usual international terminology for such health structures.

As Marchildon attests, all provinces except Ontario have undergone some degree of centralization of local health structures to RHAs, thus moving to a two-level system consisting of ministries of health and RHAs. This has been achieved by dissolving the boards of local health institutions and placing these institutions under the RHAs (Marchildon 2013). Over time, many provinces have also reduced the number of regions. A brief description of regional health systems in each province/territory is presented in the report.

Regionalization in context

Although life expectancy in Canada has increased from 78 to 81 years of age over the past 7 years (Organisation for Economic Cooperation and Development 2011) – it is now only 2 years behind that of Japan – "Canadian healthcare continues to be an underachiever" (Lewis 2015). Table 1 presents data for Canada, France (a high

performer) and the United States (our neighbour) on four important performance measures of the health system from a patient's perspective. Nine percent of Canadian senior citizens spent over $2,000 out-of-pocket in the previous year compared to 0% in France. Only 45% could get a same- or next-day appointment with a doctor or nurse when needed (83% in France). Only 41% could access after-hours care (compared with 69% in France). And 39% of older Canadians had to use the emergency department in the past two years compared with only 15% in France (Osborn et al. 2014).

Table 1. Four health system performance measures from a patient's perspective

Issue	France	Canada	US
Spent $2,000 or more out-of-pocket in the past year	0%	9%	21%
Could get same- or next-day appointment with doctor or nurse when sick or needed care	83%	45%	57%
Access to after-hours care	69%	41%	55%
Emergency department use in the past two years	15%	39%	39%

Source: Commonwealth Fund 2014. International Health Policy Survey of Older Adults in Eleven Countries (Osborn et al. 2014).

Under the *Affordable Care Act* (ACA), the United States is making rapid progress in reforming its health system. Population coverage is expanding and the growth in America's healthcare spending is slowing. Increasingly, ACOs are emerging and offering more integrated and coordinated care at lower costs (The Economist 2015a, 2015b; Townsend 2013). High-performing health organizations such as Kaiser Permanente and Intermountain Healthcare provide many useful lessons for healthcare across Canada. Many of the senior leaders participating in the study raised the need to learn from such high-performing American organizations; key points included:

- access to client-centred care, clients taking charge of their own health destiny and health and wellness promotion;
- coordination and integration of services;
- support of electronic health records and integrated information systems, together with mobile applications for patients/clients;
- integration of physicians into the accountability of care with performance-based funding and relevant modes of remuneration; and
- inclusion of financial coverage of essential drugs, particularly in the ambulatory and home care settings.

Towards a two-level system

In recognition of the usefulness of regions, there has been a convergence of regionalization models across Canada with most provinces moving toward a two-level system, in which the ministry of health provides policy, financing and overall governance and oversight, and in which RHAs are responsible for regional governance (in line with provincial policies), management and service delivery for a given territory and population. Ontario's system is structured between a two-level and a three-level system: the province has maintained local hospital boards, has a strong focus on access and quality and has instituted Local Health Integration Networks (LHINs), which carry out certain integration and coordination functions but are not regions in the true sense of the word. The two-level system has proven very functional in several provinces, including British Columbia. As of April 1, 2015, Québec also moved to a two-level system; its 34 RHAs are called Centres intégrés de santé et de services sociaux (CISSS), nine of which are designated as university affiliated (CIUSSS).

Optimal size

Several study participants expressed the view that the size of regions is relevant to their functioning. A population size between 350,000 and 500,000 was deemed optimal, with travel times within the region not exceeding three to four hours. This is consistent with the approach recommended by the WHO and other multilateral agencies (Tarimo 1991; World Bank 1993). Different services are optimally organized and delivered on different scales, and thus for different population sizes: local for primary healthcare, regional for secondary care and provincial for tertiary care.

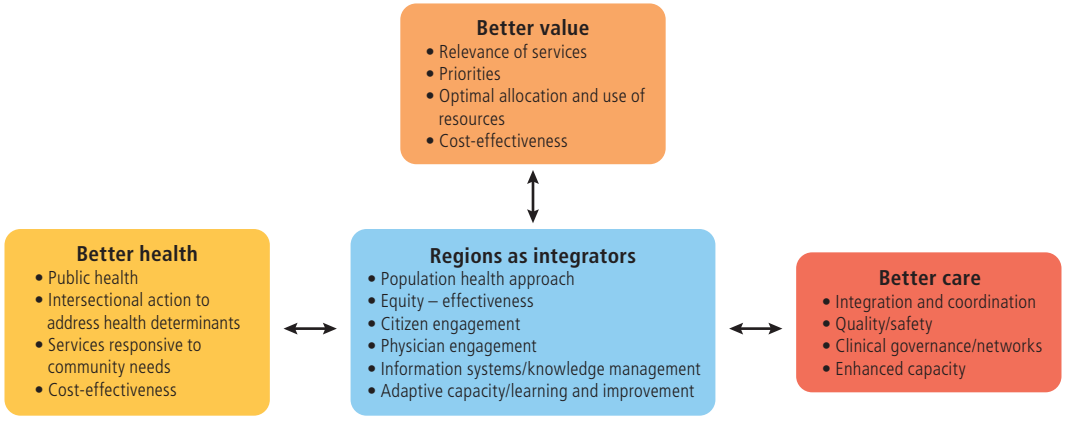
Better health, care and value: Better than before but variable and partial

There was a strong consensus among study participants that regionalization has contributed positively – albeit variably – to improving the health status of Canadians through an enhanced population health approach with better care, strengthened public health and an intersectoral approach to address the determinants of health. Regions act as integrators toward health improvement (Figure 1). However, the potential contribution of regionalization to better health has not been fully realized.

Regionalization has contributed to improved care through enhanced knowledge of the needs of communities and populations; an evidence-based approach to the provision of care; the development of needs-based regional service delivery plans; the regrouping of services for better quality, improved results and lower unit costs; and enhanced governance and managerial capacity. Our study has revealed a more integrated and coordinated approach to care with a better allocation of resources toward community, home and long-term care. Regional service delivery plans, specialist outreach and telehealth have additionally improved access to specialized services in the rural areas of regions. The results across Canada and within provinces are variable and there is still considerable room for improvement.

As regionalization has often been implemented in the context of budgetary constraints, it is not evident that regionalization per se has contributed to reducing costs. It can be said though that regionalization has contributed to enhancing the efficiency of the healthcare system. Examples include: rational and evidence-based regional service delivery plans better responding to the needs of communities; the re-allocation of resources toward the community, ambulatory and long-term care;

Figure 1. Regions as integrators toward health improvement



the regrouping of clinical services toward enhanced expertise, quality (reduced complications) and lower unit costs; the strengthening of primary healthcare including, in some cases, through the move away from fee-for-service physician remuneration; the reduction in management costs in some areas; and a long-term reduction in the pressure on emergency departments and hospitals arising, on the one hand, from stronger primary and community care, and on the other hand, from the improving health status of the population through better care, enhanced public health and intersectoral action. Here again, there is considerable room for improved efficiency while improving effectiveness and quality of care.

Citizen engagement: Both pluses and minuses

The impact of regionalization on citizen engagement was reported to be mixed and at times more negative than positive. On the positive side, the enhanced population health and intersectoral approaches have increased attention to the needs of communities and facilitated dialogue with elected municipal officials and community representatives. Specifically, efforts have been made to engage indigenous peoples in the governance of their health systems, particularly in British Columbia and Quebec. On the negative side, the dissolution of hundreds of local hospital, health centre and other institutional boards through their consolidation into one RHA has greatly diminished the involvement of citizens in the governance of their health institutions.

Incomplete results-driven program approach, with unclear goals, targets and weak monitoring systems

Despite health expenditures of the order of $200 billion in 2014 (>$6,000 per Canadian, 11% of GDP) (Canadian Institute for Health Information 2015), healthcare is often managed without the essential elements of a quality program approach: goals and objectives are often vague or absent, as are targets and baselines; monitoring systems are weak; theories of change and logical frameworks are incomplete; and emphasis on evidence-based interventions is variable.

Engagement of physicians: Improving but variable and weak

Although there has been important progress in the engagement of physicians as leaders, in clinical governance and in clinical networks, our study revealed very weak engagement of physician clinicians with regard to the health system, and regionalization in particular. Many study participants commented that the budget envelopes for physician services and for drugs – two very large components of health budgets and important drivers of the costs of the system – are not within the budget envelopes of RHAs. Most mentioned the need for far greater accountability of physicians for individual patient outcomes, service utilization and system performance; in this context, many referred to the high-performing healthcare systems, to the emerging results from ACOs in the United States and to examples from other countries. The modes of engagement, contracting and remuneration of physicians were recognized by study participants as one of the major obstacles to improving the performance of regional health systems across Canada.

Patient-centred primary healthcare: Variable across Canada and weak relative to other countries

There was consensus among the majority of study participants that access to timely, quality primary care is one of the major issues facing regional health systems across provinces and regionalization in particular. This was highlighted by the Commonwealth Fund

2014 survey, which showed that only 45% of Canadian seniors could obtain a same- or next-day appointment with a doctor or nurse when needed, compared with 83% in France. Similarly, 39% of Canadian seniors used the emergency department in the past two years compared with only 15% in France (Table 1), evidence of failure of the health system to decrease the recourse to hospital-based care (Osborn et al. 2014; Tannenbaum 2014; Marshall 2015).

One of the goals of health systems should be to enable people to remain autonomous in their homes and communities. The access of Quebecers to family physicians has been particularly problematic; this problem has been identified as urgent and important by the provincial government and has given rise to major legislative reform and negotiations by the government in 2015. As these changes have yet to be fully implemented at the time of writing, the jury is still out as to their effectiveness.

> *… Canada is at the forefront of the development of family medicine education.*

Ontario has focused on access to primary healthcare with family health teams (FHTs), community health centres and more adapted modes of contracting and remunerating family physicians. Building on Ontario's work to strengthen primary care, the Minister of Health and Long-Term Care in Ontario released *Patients First: Action Plan for Health Care* in February 2015 (Government of Ontario 2015). It is to be noted that 94% of Ontarians already have a primary care provider. Furthermore, for those 5% of patients with multiple and complex conditions, and who account for nearly two-thirds of healthcare costs, the government of Ontario has created Community Health Links to foster more coordinated and integrated care (Ministry of Health and Long-term Care 2015). While there has been progress in Ontario, much remains to be done to ensure integrated and coordinated care, given that many patients still end up in the hospital emergency department needlessly.

Other provinces are also actively working to strengthen access to primary healthcare, the cornerstone and standard point of entry to healthcare across Canada (The Conference Board of Canada 2014).

Building on a strong history of general practice, Canada is at the forefront of the development of family medicine education. The College of Family Physicians of Canada (CFPC) promotes competencies through accredited residency programs and the Certification Examination in Family Medicine (CCFP). It has also promoted "Timely Access to Appointments in Family Practice: Same-Day/Advanced Access Scheduling" and "A Vision for Canada: Family Practice – the Patient's Medical Home" (College of Family Physicians of Canada 2011, 2012) Passing the Certification Examination in Family Medicine has become a pre-requisite for family practice in some provinces. A number of provinces have begun moving – albeit slowly – toward FHTs and local health centres/family medicine centres (patients' medical homes).

Slow and variable progress on information systems and electronic health records

Regional health executives have to lead and manage their RHAs on a daily basis much in the same way a pilot might have to fly a plane with a partial instrument panel, an infrequent emergency requiring urgent action. It was noted that there exist multiple health information systems, with major difficulties in exchanging relevant information between them. There is also an important variation in the rate of

implementation of electronic health records, and the lack of interoperability between these and information systems precludes any real-time management of the health system. Several participants placed the Canadian situation in sharp contrast with that of Kaiser Permanente in the US with fully interoperable integrated information systems, allowing for real-time management of individual patients and of the system, not to mention the mobile applications for patients who become partners in shaping their health destiny.

The frequent re-organization of the healthcare delivery architecture and of regional structures and functions within provinces

Several provincial and territorial governments have implemented changes to regional structures and functions every few years. While noting that some of these changes were necessary to improve function, these frequent changes – and poorly executed change management – have caused major disruptions to the system, taking precious time away from client-focused improvements in health service delivery in order to manage the changes. This has also prevented meaningful formal evaluations of regionalization. Several respondents appreciated the fact that most provinces have now moved to a two-level system and that provincial healthcare delivery systems are now reaching a stage of stability and maturity.

Insufficient clarity in roles and responsibilities of governments/ministries of health and of regional health authorities

Over the past decade, functions have been devolved to RHAs without a commensurate readjustment within ministries of health (absence of business process reengineering), often leading to duplications of function and to a tendency by ministries to micromanage regions. All study participants appreciated the need for oversight by an elected government. Most felt that the system performed best when the government remained at arm's length from service delivery with clear communications between levels.

Inadequate financial coverage of essential drugs in ambulatory/home settings

RHAs are mandated to ensure the provision of client-centred care within communities and to promote the autonomy of clients, making the recourse to hospital care necessary only when other approaches have failed. The inadequate financial coverage of essential drugs in ambulatory care settings is a major roadblock to maintaining people in the community and to the optimal use of non-hospital services, thus contributing to the overutilization of hospital services and driving healthcare costs up. Reimbursing the cost of essential drugs in all settings would, in all likelihood, pay for itself, especially in the context of bulk negotiating and purchasing by provinces and territories. This would greatly facilitate the ability of RHAs to progress toward ambulatory, home and community care.

In summary, Canadians enjoy one of the highest life expectancies in the world. Regionalization has most likely contributed to this better health through better care, stronger public health and increasing intersectoral action to address the determinants of health. Regionalization has also most likely contributed to better value for money in health. However, we must not shy away from taking note of the serious problems confronting healthcare in Canada. Access to family physicians and to primary care is a major issue across Canada; wait times for specific procedures are very long in some provinces and go well beyond established benchmarks (Canadian Institute for Health Information 2014). Value for money could be improved considerably, especially when one compares Canada's performance with that of other countries. Canada faces real

challenges in measuring its performance in health and acting on results despite the existence of excellent knowledge organizations and academic institutions.

Given the very solid base in Canada's health system development – including the major contributions from regionalization – and the well-circumscribed nature of the issues facing healthcare across the provinces and territories, significant progress should be attainable within a few years by addressing a limited number of "system" issues.

We asked the study participants to identify what it might take to further enhance the performance of regions toward better health, better care and better value. These views have been summarized in a "way forward," to identify a vision for regionalization and to posit seven areas for improvement.

Way Forward

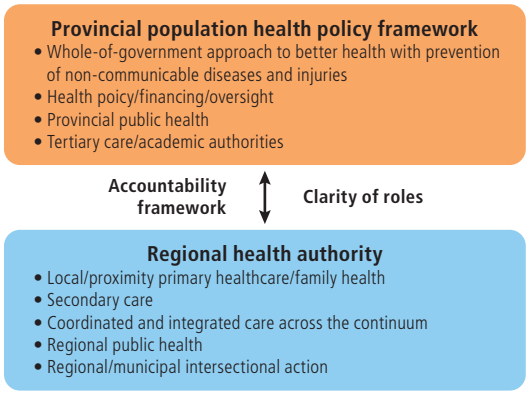
A vision for regionalized high-performing health systems in canada

Regions can provide the opportunity to achieve two aims: a high-performing health system and a territory to achieve population health improvement. By using a population health approach, regions can be powerful integrators of efforts to improve health and healthcare. On the care side, integration and coordination can best be achieved at the regional level, while simultaneously maintaining focus on specific local needs within the region.

A vision thus emerges for high-performing regionalized health systems and for territories where healthy public policies can be implemented. The realization of this vision rests on re-establishing and respecting the clarity of the respective roles and functions of provinces/territories and regions, and on ensuring the accountability of the health system's various players (Figure 2).

The *governance* function of regions is particularly important to ensure an optimal adaptation of programs and resources to the specific needs

Figure 2. Distribution of roles between provincial and regional levels



of communities and characteristics of regions, as well as to meet the realistic expectations of key stakeholder groups. Regional governance is also necessary for the regions' success in their efforts to engage and involve citizens and elected officials in health-related issues.

Two major *streams of work* are recommended:

1. A much greater focus on *population health* (including population-based planning and service delivery; and public health and intersectoral action to strengthen wellness and address the social determinants of health).
2. A renewed focus on the local level and proximity services with integrated and coordinated *primary healthcare* provided by highly accessible multidisciplinary family health teams/health centres.

Three *strategies* would underpin these areas of greater focus:

1. Visionary *executive leadership*, which advances a population health approach.
2. Stronger *physician leadership*, engagement and accountability for clinical and health system outcomes.
3. Stronger *patient, citizen and community engagement and leadership.*

Such an approach would be supported by a knowledge function through an enhanced evidence-based approach, information systems and an adaptive capacity to ensure continuous learning and quality improvement. Information would flow in real time through the system with interoperable electronic health records feeding into the population-based health information system. Physicians, managers and executives would be held accountable for results.

Financial coverage of essential drugs would be provided in ambulatory and home settings, thus further decreasing the recourse to hospital care.

Organizing services in this manner under one RHA enables the reallocation of resources between acute care, long-term care and primary care/home care/social services, thus ensuring that the system is well prepared to meet the care challenges of the future (Figure 3).

While such a vision may a priori appear unreachable or utopian, it is to be noted that high-performing healthcare organizations in the US, such as Kaiser Permanente and Intermountain and those in other countries, are approaching such a vision, at least on the care side. *Furthermore, if one were to combine the best characteristics of health regions across Canada, one would likely achieve such a vision*. Such a vision is, therefore, realistic in the near term for Canadian provinces and territories.

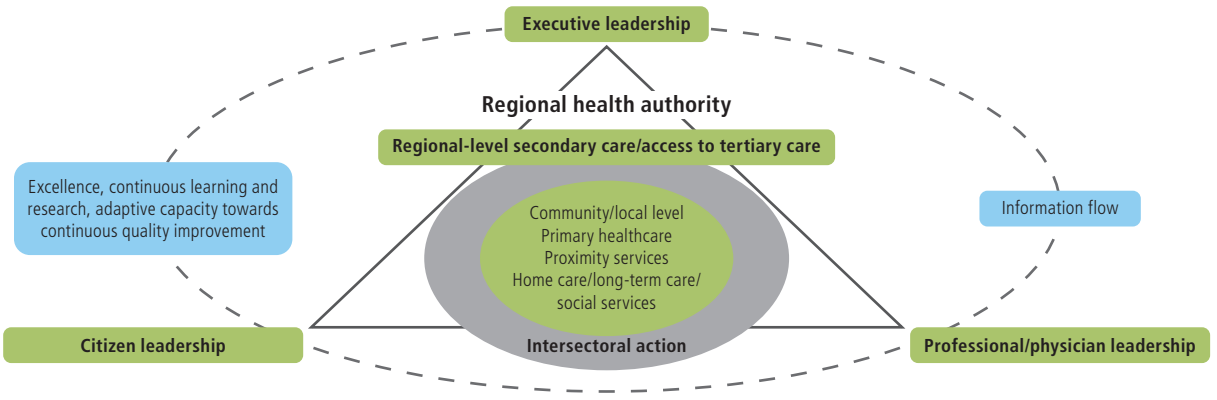
Seven areas for improvement

Stemming from the recommendations of the study participants and from further synthesis by the study team, the following are seven areas for improvement which, if implemented, would contribute importantly to achieving this vision and lead to major, rapid progress toward the Triple Aim. While these seven areas for improvement are each necessary for regions to achieve better health, better care and better value, several will require system changes beyond regionalization (Table 2).

Table 2. Seven areas for improvement

1	Manage the integrated regionalized health systems as results-driven health programs, transforming them into high-performing health systems
2	Strengthen wellness promotion, public health and intersectoral action for health to better address the social determinants of health
3	Ensure timely access to personalized primary healthcare/family health teams (FHTs) and to proximity services
4	Involve physicians in clinical governance and leadership, partner with them in accountability for results and engage them in the required changes in physician contracting and remuneration
5	Engage citizens in shaping their own health destiny and their health system
6	Strengthen health information systems, accelerate the deployment of electronic health records and ensure their interoperability with health information systems
7	Foster a culture of excellence, learning, innovation and research and encourage adaptive capacity towards continuous quality improvement

Figure 3. Regions as integrators toward health improvement



1. Manage the integrated, regionalized health systems as results-driven health programs, transforming them into high-performing health systems
In order to achieve high performance, regionalized health systems will need to be managed as results-driven health programs with clear goals, targets, baselines, benchmarks and milestones, as well as a strong-performance monitoring system with clear indicators and support from solid real-time information systems.

These systems should be characterized by robust accountabilities and metrics: physicians, managers and executives of RHAs should be held accountable for the health outcomes, utilization and value for money of their respective clienteles/populations.

Furthermore, regions should have multi-year strategic/business plans that include regional service delivery plans (with medical staffing plans), public health and intersectoral action. They should also be held accountable for their implementation and monitoring of results.

2. Strengthen wellness promotion, public health and intersectoral action for health to better address the social determinants of health
Every opportunity to engage patients and citizens in shaping their own health destiny should be taken. This should be achieved in partnership with health professionals and by encouraging population health strategies and the adoption of healthy behaviours, preventing to the greatest extent possible chronic conditions and injuries, and promoting healthy living and aging.

Population and public health should be strengthened at regional, provincial and federal levels, while differentiating which actions are best conducted locally (and often in partnership with municipalities and community groups), and those which are better conducted regionally, provincially or federally. Intersectoral action for health at local, municipal, regional, provincial and federal levels should simultaneously be strengthened using approaches that are best suited for the issues at hand and through the engagement of elected officials, community representatives and ordinary citizens.

Recurrent funding for this investment in wellness will need to be increased. In the spirit of *Better Value of the Triple Aim* and the recurrent cost-savings approach of the report, these additional costs should be covered by the highly effective and revenue-generating interventions of increased tobacco and new sugary drink taxation.

3. Ensure timely access to personalized primary healthcare/FHTs and to proximity services
Building on Canada's strong tradition and excellence in family medicine education, every Canadian should be ensured access to timely, appropriate, comprehensive and high quality primary care. We should continue to encourage interprofessional family practice teams comprising nurse practitioners, family physicians and other health professionals with a responsive appointment system, after-hours coverage, home care/visits as needed and coordinated and integrated care, especially for those who need it most (Spitzer et al. 1974). These FHTs should ensure continuity of care and foster attachment.

Learning from high-performing organizations and from other countries, funding for these family health teams/health centres should be results-based and not simply fee-for-service (Atun 2015; Burwell 2015; Marshall 2015). Regions will need to re-focus their attention to the local level by way of proximity services (*soins de proximité*), enhanced citizen engagement and local intersectoral action in collaboration with municipalities and community groups.

4. Involve physicians in clinical governance and leadership, partner with them in accountability for results and engage them in the required changes in physician contracting and remuneration

Building on recent progress in clinical governance, physicians should be much more involved as leads for clinical services and be held accountable for the results of the clinical services they lead. Clinical governance, in this case, is optimally achieved by physician leads /co-leads, who display strong leadership and who foster motivation and teamwork. Strengthening the quality of care and clinical excellence would also require the further development of strategic clinical networks that connect individual clinical services within and across regions.

Beyond that, individual clinicians should be held accountable for their patients' outcomes and co-accountable for the performance of the health system. Modalities of contracting and remuneration will need to reflect this new reality. While provincial medical associations have resisted such approaches in the past, there is an evolution toward remuneration models other than simply fee-for-service, such as capitation as part of blended remuneration. It is to be noted that physicians in organizations, such as Kaiser Permanente, and in other jurisdictions achieve a high level of professional satisfaction and remuneration commensurate with their expertise and workload under performance-based funding.

Remuneration should be adapted to the diversity of functions: patient care including on-call coverage, management, teaching and research. One is reminded of the wisdom of Sidney Lee's *The Three-Layered Cake*, which describes a remuneration scheme consisting of three layers: basic compensation, personal incentives and system incentives (Lee SS 1974, 1975). We would do well to learn from experiences across provinces and from recent changes in the reimbursement system for Medicare in the US and other countries (Bras and Duhamel 2008; Pear 2015).

In this context, a strong argument can be made to regionalize budget envelopes for the remuneration of physicians, whether it is for family physicians operating within family health teams/centres, for family practice and specialist services in hospitals or for other specialized ambulatory services. Integrating physicians within regionalized structures and functions in this manner will ensure that integration reflects the notion of the production process within an organization – a key, but often neglected management principle (Coase 1937).

5. Engage citizens in shaping their own health destiny and their health system

As Eric Topol suggests in his book *The Patient Will See You Now*, we need to ensure that citizens are much more engaged in shaping their own health destiny in partnership with their health professional (Topol 2015). Their engagement in the governance of their local and regional health system should likewise be fostered; they should also have the opportunity to participate in local citizen/patient committees linked with their community health teams/centres, as well as in intersectoral action for wellness and the prevention of non-communicable diseases and injuries. RHAs should also further strengthen patient advocacy and representation mechanisms at all levels of the system and further strengthen the dialogue with elected municipal officials and other community representatives.

6. Strengthen health information systems, accelerate the deployment of electronic health records and ensure their interoperability with health information systems

In order to provide client-centred, integrated and coordinated care and improve the performance of the health system, electronic health

records that feed into a real-time population-based health information system should be fully deployed, as is currently being done in high-performing healthcare organizations, with the principle of *one person – one record* (electronic medical record, health information system including financial data).

While this will require additional funding during the deployment and upgrade phase, such a system should greatly improve the efficiency of health service delivery through clinical analytics, prevent duplication and unnecessary procedures, avert potentially dangerous drug interactions and support the maintenance at home and in the community of individuals, who might otherwise end up in the emergency room and require hospitalization. All this should lead to recurrent cost savings, which should ultimately recover the deployment and upgrade costs of a fully integrated electronic health records and information system.

7. Foster a culture of excellence, learning, innovation and research and encourage adaptive capacity towards continuous quality improvement
In order to foster excellence, the passion for care needs to be rekindled by involving and motivating health professionals and their professional bodies, and by fostering an approach of continuous quality improvement in all health service delivery and public health institutions. This will require effective leadership of ministries of health, RHAs and other health organizations, as well as nurturing a partnership with physicians in the context of enhanced accountability for results for their patients and the populations they serve. Accreditation mechanisms and continuous quality improvement (CQI) strategies can contribute significantly to this effort. Provincial ministries of health should hold regions accountable for these results, including use of performance-based systems, proportion of health facilities and FHTs participating in collaborative CQI and accredited.

As knowledge is global, we should learn from the best of each system, both within Canada and internationally, and address the priority issues and areas for improvement discussed here. It will be important to emphasize increased interregional and interprovincial learning and the implementation of innovations and best practices with rigorous evaluations and evidence of improved effectiveness and efficiency. The recently published Naylor Report emphasizes the need for meaningful change, the importance of innovation toward a better performing health system and the importance of well-documented experimentation (Government of Canada 2015).

We should strengthen research programs that can contribute to improving the Canadian health systems. This can be achieved through a coordinated effort of the Canadian Institutes of Health Research (CIHR), provincial research funds, academia and provincial ministries of health/regions with a view to addressing the issues and areas for improvement presented. We will need greater emphasis on and more investment in implementation research closer to the delivery of services, as well as in population health interventions, fostering a culture of learning systems.

Furthermore, high-performing ACOs in the United States and elsewhere should be studied with the specific objective of learning what could realistically be applied to the Canadian healthcare context to bring about major improvements.

As knowledge is global, we should learn from the best of each system, both within Canada and internationally …

Towards a Paradigm Shift

The recent book *Paradigm Freeze: Why It Is So Hard to Reform Health-Care Policy in Canada* leaves us with the impression that change in Canada's healthcare will be very difficult (Lazar et al. 2013).

This study provides a different conclusion. The health of Canadians is one of the best in the world, and Canadian provinces and territories are each pursuing a path to improve their healthcare systems. The vision and areas for improvement identified in this paper are straightforward and could lead to significant progress toward better health, better care and better value in only a few years, at modest one-time costs recuperated with recurrent cost savings. Money, therefore, should not be a roadblock to change.

Furthermore, there is a growing energy for change. Among others, three recent events demonstrate this phenomenon: a Policy Forum on Advancing Quality Through Regional Clinical Governance held in Toronto in March 2016 and, in May 2016, a Symposium des leaders en santé organized by the Order of Nurses of Quebec and a McGill Primary Care Policy Symposium (CAHSPR et al. 2016; McGill University Department of Family Medicine 2016; Order of Nurses of Quebec 2016). These three recent events each brought together several hundred participants and shared the theme of clinical excellence and quality through integrated, coordinated care along patient trajectories, with strong executive, professional and patient engagement.

We are proposing a turning point for Canada, from Paradigm Freeze to Paradigm Shift: from hospital-centric, episodic care toward evidence-informed population-based primary and community care delivered and coordinated by FHTs (including those within community health centres as the case may be) (College of Family Physicians of Canada 2011, 2012; McGill University Department of Family Medicine 2016). These FHTs should ensure integrated care trajectories along the continuum with strong patient and family engagement, together with the relevant specialty programs, and social and community services when needed.

Such an approach, characterized by realistic and practical clinical excellence, should contribute to maintaining people at home and in their community and decrease the recourse to emergency department and to hospital use (Reid RJ 2013) and, in the long run, lead to costs savings. It should better prepare us to meet the needs of Canada's aging population.

Realizing all at once the vision and way forward with its seven areas for improvement may appear daunting; focusing on primary healthcare is likely to be a good entry point to begin realizing this vision and to bring high returns in a few years.

How could we stimulate the change required for this paradigm shift?

First, to focus the mind, we might wish to set some goals and targets for the near term. The following goals and targets are presented as examples, to begin a conversation, and are not meant to be prescriptive or exhaustive.

We suggest, to begin a discussion, the following goals and internationally comparable targets for December 2020:

1. Ensure that >90% of Canadians have access to a FHT
   - As measured by FHT rosters
   - Could get same- or next-day appointment with doctor or nurse when sick or needed care
   - Access to after-hours care

2. Ensure coordinated and integrated care for >90% of high users
- Decrease in emergency department use
- Decrease in rates of hospital admissions
- Decrease in median number of prescription drugs

A pluralist approach to continuous quality improvement supported by shared goals and metrics

We need to consider evidence-informed approaches to management of change, continuous quality improvement, diffusion of innovation and scale-up, especially in the context of organizations with highly-educated self-driven professionals for whom professional satisfaction is highly valued.

While some would argue for a bottom-up approach and others for a top-down approach to change management, success may lie in an approach that fosters working together with common goals and practical, measurable, achievable and realistic targets.

It may well be worth remembering the wisdom of the 1970 Quebec Castonguay-Nepveu Commission, which recommended a pluralist approach to primary healthcare for Quebec; local health centres could stem from, but not be limited to, a public corporation originating from a group of citizens joined by a health team; a public corporation developed under the initiative of a group of health professionals with public representation; a private corporation composed of health professionals with consultative community input (Gouvernement du Québec 1970). Ontario, with its different models of FHTs and its community health centres, is a good example of an evolving pluralist approach with a focus on collaborative continuous quality improvement with support from Health Quality Ontario (Ontario College of Family Physicians 2015a, 2015b).

At the recent McGill Primary Care Policy Symposium, Michel Clair, Chair of the 2000 Clair Commission, which recommended Family Medicine Groups for Quebec (Groupes de médecine familiale or GMF) put forward the idea of GMF 3.0. Similarly, Robert Reid presented the concept of *Medical Home v 2.0* (Gouvernement du Québec 2000; McGill University Department of Family Medicine 2016). Can we work further to better refine these concepts with the best evidence on the essential elements of an optimal FHT? Based on these, should we develop a formal process of accreditation of FHTs much as we do for other healthcare institutions?

Addressing the management of change simultaneously at the three levels of the system

In order to effect a paradigm shift and the required rapid change, significant momentum needs to be garnered by executive, professional and patient champions at the three levels of the system: federal, provincial/territorial and regional.

Following Canada's federal election in October 2015 and the election of a new Liberal government, the Prime Minister of Canada instructed the Minister of Health through her *Minister of Health Mandate Letter* to:

> "Engage provinces and territories in the development of a new multi-year Health Accord. This accord should include a long-term funding agreement …" (Trudeau 2015)

A renewed health accord is a unique opportunity to strive for the Triple Aim and to be innovation-driven and performance-based. Canada's new federal Minister of Health has already indicated that, throughout her career, she has been led by the *Triple Aim of Better Health, Better Care and Better Value* and has expressed a desire to advance these goals for all Canadians (Philpott 2016).

We propose a small, time-bound federal working group/task force composed of, at minimum, the federal Ministry of Health, the CFPC, the Canadian Medical Association (CMA), the Canadian Nurses Association (CNA) and academic and patient representatives. These various members should commit to this paradigm shift and consider how best to support this pan-Canadian change, in the context of the development of the new accord.

Each province/territory might also wish to consider creating a similar time-bound working group composed of the provincial/territorial Ministry of Health, RHAs and provincial/territorial chapters of the CFPC, CMA, CNA, faculties of health sciences, patient representatives and other key stakeholders with a view to rapidly addressing the above goals and targets.

Within regions, RHAs might set up time-bound working groups with FHTs and CHCs, patient representatives, representatives of medical specialties most involved in care trajectories, public health to foster a population-based approach, long-term facilities and other relevant key stakeholders. These working groups would rapidly address the above goals and targets, keeping in mind both population and geographic coverage, as well as addressing the needs of aboriginal communities and other groups with specific needs.

RHAs will need to be given the tools by provincial ministries of health to exercise greater leadership and governance as related to primary healthcare: a clear mandate, the budget envelopes including for physician payment and full responsibility for management and oversight. Communication between levels would foster the rapid resolution of bottlenecks. Strong clinical analytics would help measure progress. Knowledge from good, well-measured practices would be disseminated for everyone's benefit.

While this paper attempts to address the *Triple Aim of Better Health, Better Care and Better Value for Canadians*, one should not forget the fourth component of what is now referred to as the Quadruple Aim: professional satisfaction and happiness in the workplace. Until recently, Canada may not have paid sufficient attention to this fundamental component (Sikka R 2015). Improving organizations and systems that foster professional satisfaction and happiness, in part by reaching practical clinical excellence, will benefit both health professionals and the people they serve.

In order to succeed with this paradigm shift and its related management of change, we will need executive, professional and patient champions with strong leadership skills. How can we harness the leadership and identify the champions in each province and territory to transform our regions into high-performing health systems toward the *Triple Aim of Better Health, Better Care and Better Value for Canadians*? Can we envision Canada becoming a world leader in primary healthcare? We believe that we must seize the moment.

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