Has regionalization of the Canadian health system contributed to better health?

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Abstract
When the concept of regionalization was introduced, there was at best only anecdotal evidence that it would bring improvement. Two decades later, evidence of its efficacy or efficiency is still very limited. This paper addresses the history and relevant background of health care regionalization in Canada, explores real and perceived evidence that it has made health better or worse, and ends with basic principles from leadership and systems theories necessary for transforming our health care systems.

KEY WORDS: health, health care regionalization, Canada, cost savings, efficiency, health care transformation, health outcomes, systems theory, leadership

It is difficult to find a consensus definition of regionalization. In Canada, the meaning comes close to the integrated organization of health care resources and the delivery of risk-appropriate care to the total population within a geographically defined area to achieve the best outcomes in the most cost-efficient manner.

In 2004, one decade into regionalization, Lewis and Kouri wrote, “The universal theme in Canadian regionalization may well be instability,” and that statement still applies today. Currently, politicians and the public are so dissatisfied with health care outcomes that several provinces, such as Nova Scotia, Prince Edward Island, and Quebec, are gambling on going even further with regionalization and centralization, despite the lack of evidence and the near chaos it caused in Alberta. International experience indicates that lack of baseline measurements often result in “positive hindsight bias” to justify changes that were made before.

Besides “politics” and the wish to curtail costs, there was no clear vision or direction behind regionalization when it was first implemented. Over time, the purpose evolved: to create a better continuum of care through integration and better coordination of services, and to reallocate resources from acute to primary care, as well as to public health and prevention.

Evidence connecting regionalization and health outcomes

Three types of documents provide different lenses on the evidence: regular reports on health and financial indicators, opinion papers (of which there are many), and a recent qualitative report commissioned by the Canadian Foundation for Healthcare Improvement (CFHI). In 2013, the Health Council of Canada reported that hospital care rather than health continues to dominate the health care scene, and a recent qualitative report commissioned by the Canadian Foundation for Healthcare Improvement (CFHI) indicates that none of the changes made during the last decade of regionalization has transformed the health system and

65
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that the health of Canadians has improved only marginally.

Although some health indicators show improvements since the introduction of regionalization, others have not. For example, improvements include a decrease in the prevalence of smoking (from 24.5% to 17.5% between 1995 and 2009) and cardiovascular disease (from 938 to 792 per 100,000 between 1995 and 2004). However, during the same period, there was no reduction in lung and airways cancers or chronic respiratory diseases, the prevalence of hypertension increased from 12.5% to 19.4%, and obesity steadily increased in all provinces, affecting one in five Canadians. In terms of prevention, measles vaccination rates have decreased from 96% to 89% and those for diphtheria/tetanus/pertussis from 87% to 77% since regionalization.

In short, keeping in mind that health indicators are influenced by many factors, some have improved and some have deteriorated since regionalization. Although some people argue that health has improved and others submit that it is worse, the truth is that we don’t know whether regionalization has made any difference to the health of Canadians.

Using wait time for medically necessary treatment as an indicator of efficacy and efficiency does not support the value of regionalization either. The wait from referral by a primary care physician to treatment has doubled since the introduction of regionalization: from a mean of 9.3 weeks in 1993 to 18.3 weeks in 2015. If regionalization and supercentralization can improve wait times, then how does one reconcile the fact that Alberta, with the most experience in restructuring, has wait times 40% higher than the national average, while Ontario, which was the last province to introduce regionalization, is below the national average? Saskatchewan’s success in reducing wait times for surgery provides evidence that systemic change can be achieved when all stakeholders participate (providers, patients,
and government officials), an approach more inclusive than many regionalization processes. Similarly, Ontario’s numbers might be explained by the way the local health integration networks and interorganizational networks engaged more stakeholders to decrease wait times and improve health outcomes. Although evidence does not exist, one could argue that without regionalization, wait times might have been worse because the pressure on health services has also increased over the last 20 years.

Perhaps the most complete document on the value of regionalization is the report by the CFHI, which is based on interviews with 30 senior Canadian leaders in health care and backed by a review of the international literature. This mainly qualitative study confirms that there were no clearly defined objectives for the regionalization process, except for cost savings and consolidation of fragmented services across a continuum of care. Health outcomes were expected to improve as the focus of the system shifted upstream, mainly to primary care.

The report also confirms the lack of literature on the association between regionalization and better health, which was a major impetus for the study. Study participants agreed that regionalization had impacts beyond the original goals. They described the increased focus on public health, which, however, did not necessarily lead to better outcomes. The authors argue that regionalization boosted evidence-based decision-making with resulting improvements in quality of care, but that too is not confirmed by evidence.

The study does show that regionalization reduced fragmentation and duplication and increased partnerships. It also increased the ability of the system to respond strategically and quickly during a crisis. Regionalization facilitated the development of clinical networks.

Although system fragmentation persists despite regionalization, there are positive examples of collaborative integration and innovation, such as the Strategic Clinical Networks in Alberta and the regional Division of Family Practice in British Columbia. In some provinces, intersectoral action for health was probably also facilitated by regionalization, resulting in partnerships among police, the education sector, and community services.

Although fiscal control was an original purpose and has remained the main goal of regionalization, few examples of clear causality between decreased costs and the creation of regional structures exist. There are isolated reports of cost savings in the areas of management and administration and for negotiated cost of drugs for institutional use. Some regions have reported savings by shifting from fee-for-service to other modes of physician remuneration in primary care. However, participants in the CFHI study believed that overall cost savings could not be attributed to regionalization. For example, Alberta, the province with the largest number of regionalization events and one provincial system since 2008, still has the second highest provincial health care cost per citizen — and no proof of better outcomes.

One reason why regionalization may not be achieving its desired goals is that at least two stakeholders remain missing from the process: citizens and physicians. Regionalization has led to the loss of citizen engagement in governance and in local ownership of the health care system, despite the fact that the literature supports such engagement in health reform. The medical profession was also ignored in the regionalization process and, often, in subsequent attempts to bring about changes commensurate with the goals of regionalization. Both a literature review and the CFHI study show that integration of physicians or physician budgets was never an objective of regionalization. This has led the medical profession to disengage from regionalized structures, further limiting the accomplishments of regionalization.

What can we learn from leadership and systems theories?

Because health regions often behave as complex adaptive systems, the fundamental principles of leadership and systems theories should be applied to make regionalization work. The LEADS framework was developed with that perspective in mind. It has been accepted by many provincial and national health agencies, such as the Canadian Medical Association.
and the Canadian Society of Physician Leaders, as the framework for leadership in a caring environment, and it has been cited as the potential foundation for leadership development needs within the Canadian health system.

For example, how could the four capabilities in the “Achieve results” domain have been used in regionalization? Those four capabilities are: set direction; strategically align decisions with vision, values and evidence; take action to implement decisions; and assess and evaluate.

Realignment of the health care system requires a strategic and integrative vision, and goal setting is critical to align activities across the system. The direction for regionalization was set, and is still being set, by the provincial governments, while the regional health authorities have a separate responsibility for the execution. The Jönköping experience indicates that, together, government bodies, organizations, and clinical teams can set consistent and clear directions and achieve high performance. In Canada, not only has the vision and the direction of regionalization been skewed toward acute care and finances, but the background landscapes have also changed too frequently to see any effect of those changes. As a result, the first capability has not been adhered to.

Because the direction is unclear or changed, the second capability, “align decisions with vision” cannot be accomplished; this shows why fragmentation of the system has been perpetuated. The vision for Canada’s health system, and the link to regionalization, may well have to be redefined from the bottom up, as the 50 year old definition of medicare appears to be outdated, and a new one has never been developed. As André Picard asked, in reference to Canadians’ expectations of their health care system, “What are we trying to achieve?”

As governments struggle with budget deficits again, the direction is changing once more. A decision to go with further centralization may or may not be consistent with that vision: it certainly is not consistent with the evidence to this point. Without that evidence, and without knowing the other goals of our collective investment in health care, it is difficult to see how monetary responsibility aligns with our “patient-centred” vision of health and with our Canadian values as they relate to our health system.

“Take action to implement decisions,” the third capability, can only reflect the skewed input of undefined or poorly defined direction and strategic plans as indicated in several recent reports.

Finally, and perhaps most important, learning cannot take place without measurement. Even if goals are not clearly defined, baseline measures must be recorded and compared over time. Canada missed a unique opportunity to make intra- and interprovincial comparisons of the various models and timeframes of regionalization (Table 1). In short, if the principles of the domain “Achieve results” had been adhered to, we might have created a better chance to evaluate whether regionalization of the Canadian health system has resulted in better or worse outcomes.

Elsewhere, organizations that adhered to these principles rigorously provide examples of some of the best outcomes in the world. These and other organizations also adhered to the “Systems transformation” part of the LEADS framework. Systems thinking starts with including all stakeholders and elements of the system in the vision, planning, and execution of the change. As regionalization is imposed on a complex adaptive system, some very basic questions underlying the principles of systems thinking need to be asked, beginning with defining the characteristics of the system: What stakeholders and elements need to be in the room and how do they have to be arranged?

At least three groups of stakeholders were missing and remain missing in the attempt to make regionalization work: health care professionals in general and physicians specifically, citizens in general and patients specifically, and researchers and policymakers. First, it is well known that physicians influence the performance of the health system, including outcomes and costs, and they remain one of the main obstacles to reform. As long as physicians are not invited to be part of regionalization and health system reform, systemic and transformational changes cannot occur. Examples of successes in this respect, such as Virginia Mason, Cleveland
Has regionalization of the Canadian health system contributed to better health?

Clinic, Intermountain Health, and Kaiser Permanente, are widely published.  

Second, because expectations of citizens in general, and of patients specifically, also drive part of the cost and outcomes, those stakeholders have to be closely engaged in design and implementation for real transformation to occur.  

By doing this, the Cleveland Clinic has become one of the most successful organizations in the world as demonstrated by their health outcomes and scores on patient experience.  

Third, the research community has been overlooked too often in decision-making. Strategies to maintain closer connections among the research community, health policymakers, politicians, and ministries, as well as with providers and consumers, would likely have produced demonstrable results. It is not too late to start building those relationships, as has been suggested in several reports.  

Many more elements than the provision of acute and primary care determine health and, therefore, have to be considered to make regionalization work. Socioeconomic factors, public health care, protective interventions, and prevention were not included in the initial regionalization models.  

A recent comparative study, the first of its kind in Canada, measured the efficiency of regions in producing health gains and the factors associated with increased efficiency. The results were not surprising: outcomes were not affected by the main targets of regionalization, i.e., acute and specialized care. Instead, obesity, smoking, income, and inter-regional variations in hospital readmissions were the most important influencing factors, indicating that investment in primary care, public health, and non-medical factors is most likely to improve outcomes of treatable conditions.  

Whereas factors such as drug costs and coverage and integrated information systems have been missing, the largest element needed to make systemic reform possible has been the socioeconomic aspects of health.  

With so many stakeholders and elements missing, health system transformation cannot occur, and we must ask ourselves whether real, systemic regionalization ever took place.  

What type of leadership is needed for systemic reform?

The challenge of creating large-scale change, such as regionalization, requires levels of strategic and systems thinking and leadership development and self-leadership that supersede the capacity of many formal leaders, including physicians, who have been conditioned to approach regionalization from the perspective of expert-knowledge-based systems only (i.e., mechanical systems). The real leadership challenge, particularly for physicians, is finding an appropriate balance between responsibility, identity, loyalty, commitment, and values at the level of the individual provider, the profession, and the organization on one side, and those same factors at the level of the health care system on the other side. What Marchildon calls “the central leadership conundrum in complex systems” is how to manage those inherent tensions between the singular professional identity and the larger systemic identity. This tension can lead to demoralization and disengagement of our profession from the system, while, at the same time, physicians are expected to demonstrate servant-leadership.  

After 20 years, we don’t know whether regionalization has resulted in better health, better health care, or better value for Canadians. Data are limited, there is no information system to support and integrate what should be measured, and the already unclear set of goals changes too frequently. From a systems perspective, many stakeholders and elements that are essential for the transformation of the health care system are missing. If physicians want to be engaged in real transformation of all the systems that affect health, health care, and its value, then do we, as a profession, have the courage to take up the gauntlet of that leadership role?

References


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