

Measuring What Matters: The Cost vs. Values of Health Care

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Executive Summary

There is a clear misalignment between what Canadians value, and how Canadian health system performance is measured and funded. Canadian values have shifted substantially in recent years, towards a preference for greater autonomy and empowerment in managing their health care and management. Canadians' values reflect the desire for a more "personalized" health care system, one that engages every individual patient in a collaborative partnership with health providers, to make decisions that support health, wellness, and quality of life. Yet, health systems are focused on performance management in terms of costs, operational inputs, such as services delivered, or quality measures such as medication errors, readmissions to hospital, and mortality rates. Health system effectiveness is not evaluated in terms of delivering value to Canadians.

Canadians perceive health care as one of the most fundamentally important features of our society. There have been numerous studies of Canada's health care system, and in every work to date, the perspectives and views of Canadians have been an important frame of reference for health system renewal and reform.

This white paper builds upon the discussion of past work and considers five main questions:

1. What are Canadians' core health values?
2. How do values differ among key stakeholders within the sector, and what do they value from their unique health perspectives?
3. Are those publicly articulated values aligned with what is funded or reimbursed?
4. Are those publicly articulated values measured and incented from a health system perspective?
5. How do Canada's health care values and performance outcomes compare over time to comparator Organization for Economic Cooperation and Development (OECD) nations?

We examine the concept of "value" as a quality based on a person's principles or standards, one's judgment about what is valuable and important in life, and what a person deems important. We use the mission, vision, and value statements from health sector organizations (e.g., hospitals, community organizations, health providers, and policy makers) as the proxy for Canadians' health care values, given the public representation on boards and governance structures. Findings of this analysis suggest that values vary widely across the continuum of care in health systems. A central value of hospitals is "excellent care that achieves quality of life", through collaborative partnerships with the health team. The values of community organizations focus on empowerment and engagement to strengthen population health and social determinants of health. The values of health professionals as represented by their professional organizations advocate support for professional practice, whereby quality health care is an outcome of this advocacy and leadership.

The values of Canadians are not currently captured in health system costing data or funding models. Health system costs are focused on the “inputs” of Canadian health systems (e.g., cost of drugs prescribed, cost of hospital services) and are not associated with outcomes of health systems that may reflect or align with Canadians’ values. There is no link between costs and outcomes of health care, such as quality of life, collaborative partnerships with providers, or community empowerment. Thus, there are no direct incentive models or performance measures to account for health system outcomes that align with the values of health, wellness, or quality of life for Canadians.

Current measures of health system performance focus primarily on access to care and quality outcomes that identify hospital-related adverse events (e.g., hospital-acquired infections, mortality, falls, medication errors, and readmissions to hospital). There is very little evidence that Canadians’ values are aligned with how performance is measured or evaluated in health systems. Canadians value health, wellness and quality of life. Health systems rely on performance measures in terms of safety and risk associated with hospitalizations. This misalignment is further evidenced by the way in which CEOs are incentivized - which an analysis of executive compensation of the Quality Improvement Plans in Ontario indicates – prioritizes financial health and adverse-events, namely hospital acquired infections.

Our analysis of the values of each of the comparator OECD countries varied widely from Canadian values. Values expressed in the comparator OECD countries tend to focus more directly on healthy active living, patient choice, and health literacy, a stark contrast to Canadian values focused on excellent care, quality work environments, and community engagement.

Health system expenditures are growing in every country in the OECD comparator group, and Canada is no exception. Despite high health system costs, Canada falls behind in achieving population health and wellness outcomes compared to these other countries. Canadians value quality of life, health, and wellness; however, as a country we rely heavily on hospital based care, which may be a function of Canada’s hospital dominant system. As a country, we have not focused on healthy active living.

Next Steps and Recommendations

To achieve greater value for health system costs in Canada, we offer three recommendations to make a shift towards delivering value to Canadians in a cost effective, sustainable, and patient-centric model of health care.

Recommendation One: Align health system values with Canadians’ values to move from a system focused on managing provider performance, to a system focused on strengthening health and quality of life for Canadians.

- a) Design integrated services across the continuum of care, supported by cooperative models of health system leadership, whereby organizations and their leaders are incentivized and held accountable for achieving quality of life outcomes for the populations they serve.

- b) Give patients and families the tools to manage their own health and wellness, including complete transparency and access to personal health information, to support health decisions that achieve quality of life.
- c) Re-design health care systems to focus on healthy active living that mitigates risk of chronic illness and has the added benefit of achieving quality of life.

Recommendation Two: Align health system performance metrics and funding models with Canadian values, focusing on health and wellness as a central mandate.

- a) Create metrics that evaluate and redefine health system performance to reflect Canadians' values, including quality of life, engagement, and integrated care delivered by inter-professional health teams.
- b) Transform health system data structures, from the existing provider-centric structures, which capture health transactions in organizations, to interconnected consumer-centric data that capture each individual's care transactions across the continuum of health care services.
- c) Attach accountabilities to all stakeholders to achieve meaningful consumer engagement across the continuum of care. This includes incenting patient-provider-institution collaboration.
- d) Re-design performance measurement frameworks to focus on the positive, patient-centric outcomes of health and wellness, rather than the dominant focus on negative outcomes, such as mortality, errors, readmission rates, and adverse events.

Recommendation Three: Re-examine health workforce values relative to the needs and values of Canadians, who strive for personalized and collaborative relationships with health providers to achieve health and wellness.

- a) Re-configure health professional practice models and approaches from single discipline to inter-professional models of practice that fully engage the unique scope of practice and expertise each professional brings to the health care team.
- b) Implement an inter-professional model to coach and mentor Canadians to achieve quality of life, across the continuum of care.
- c) Align reimbursement models for health professionals with Canadians' values, such that professionals are reimbursed based on achieving best-practice quality outcomes, rather than reimbursement focused on health service transactions.

Introduction

Views and Perspectives on the Canadian Health Care System

In November 2011, the Ivey International Centre for Health Innovation (the Centre) released the second in a series of white papers entitled *Strengthening Health Systems Through Innovation: Lessons Learned*.¹ The white paper presented a comparative analysis of Canada, Australia, France, Germany, Netherlands, Switzerland, United Kingdom (U.K.), and the United States (U.S.), examining four key characteristics: governance structure and financial health models; the quality of population health outcomes; evidence of system redesign and transformation using innovation; and the role of consumers in managing health and wellness. The objective of the 2011 white paper was to identify opportunities to learn from comparator OECD countries in order to inform the dialogue and processes of the transformation of Canada's health system.

The core recommendation from the 2011 white paper was the need to transform Canada's health care system to one that places the health care consumer at its centre. To do so requires shifting health system priorities through a transformational change in the culture of health care systems in Canada. The Centre recognized that before this work could begin, there was a need to fundamentally understand the current relationship between Canadian health care values; health care costs; and health care performance at the patient, provider, organization, and system funder level. It is simply not possible to get to a consumer-based model of health care in Canada without recognizing the underlying values of Canadians from a health perspective, upon which the consumer-centric system must stand.

If Canada is to truly work towards the goal of transforming its current prescriptive health care model to one that is patient centered and consumer-centric, we have to recognize what Canadians value in their health care system. Once this is understood, it becomes much easier to identify system priorities and misalignments between Canadians' health care values and how the system is currently designed, organized, funded and evaluated.

This report suggests that it is politically possible to get there, even within a highly prescriptive governance model like Canada's. Collaborative levels of care have flourished in the UK and in Australia, both of which have similar governance models to Canada. The UK completely deconstructed their National Health Service, flipping the top-down hierarchical approach to focus on population health at the primary care level. Australia regionalized its models of primary care, so that no matter where their citizens lived, a physician was available to them 24 hours a day, seven days a week. In both cases, it is no longer a top-down management structure dictating what is done at the local level. We do not suggest that either of these approaches is what is right for Canada; we are merely proposing that an overarching prescriptive governance model need not be a hindrance to patient-centric care.

I. Purpose

It is widely believed that the views and perspectives Canadians have towards their health care system are deeply embedded in the Canadian identity. Canadians perceive health care as one of the most fundamentally important hallmark features of Canadian society, and their support for their much loved Canadian health care system is “as strong as ever”.² The hallmark features of Canadian health systems are built upon the foundational *Canada Health Act*³, which ensures that every Canadian citizen is assured of health services that are universal, accessible, portable, comprehensive, and publicly administered. There have been numerous studies of Canada’s health care system, and in every work to date the perspectives, views, and values of Canadians have been an important frame of reference for health system renewal and reform.

This white paper builds upon the discussion and dialogue of past reports by the Centre and considers five main questions:

1. What are Canadians’ core health values?
2. How do values differ among key stakeholders within the sector (i.e., health care institutions and organizations, health care professionals, and health care funders), and what do they value from their unique health perspectives?
3. Are those publicly articulated values actually what are being funded or reimbursed?
4. Are those publicly articulated values actually what are being measured and incented from a health system perspective?
5. How do Canada’s health care values and performance outcomes compare over time to comparator OECD nations?

II. Methodology

All of the analyses in this white paper were undertaken using publicly available data. In some cases the data used were for a single year when found to be largely time invariant (e.g., mission, vision, and value statements). Other data analyses were completed using longitudinal datasets to demonstrate changes over time. The research team also used a combination of quantitative and qualitative methodologies, working sometimes in teams, sometimes in isolation when it was important to provide an untainted validation of results.

To examine what Canadians and the key stakeholders in the health sector (e.g., health care institutions and organizations, health care professionals, and health care funders) articulate as important and valued from a health perspective, we performed a qualitative analysis of the mission, vision, and value (MVV) statements for major health organizations; provider groups; and health care funders in Canada. The inclusion criteria for this analysis was that the group of interest had to have a website that includes the MVV statements for the organization and must provide health care services that are funded by provincial ministries of health. For organizations and associations, private sector organizations that do not offer publicly funded services were not included in this analysis, as one of the foundational assumptions of this analysis was the principle of public administration of health care in Canada. All organizations that offer publicly funded health services are governed by Boards of Directors, which include (sometimes exclusively) members of the public who represent

the communities served by the organization. Thus, the values embedded in organizational mission, vision, and values were deemed to offer important insights into the values Canadians hold towards health systems. The MVV statements were collected at a single point in time for each of these groups across Canada.

In addition to MVV statements, we examined numerous historic reports, polling data, and two in-depth studies using “workbooks” completed by Canadians to first be informed of the health system issues and challenges. We then selected solutions that would be considered most acceptable to respond to these challenges. For the purpose of this analysis, the solutions identified by Canadians are assumed to be embedded in the value frameworks of Canadians.

To determine Canadian health care funding and costs, we first gathered and then analyzed the breakdown of provincial health care spending. This included determining the major areas of health care funding and determining the spending over time in each of these areas. These data are publicly available through the Canadian Institute for Health Information (CIHI).

System performance was examined by determining and comparing health system performance indicators used by policy makers and system funders to manage and understand health system costs and performance outcomes. We gathered these metrics from publicly available data sources at the organization and system funding level (e.g., accountability agreements). This also included gathering and analyzing health care CEO contracts to determine whether there was an alignment between the health care values of Canadians and the ways in which upper level managers in health care organizations are incented from a compensation basis.

Finally, the performance of Canada’s health system relative to other countries in the OECD group was examined relative to the cost and the value (i.e., outcomes) of Canada’s health system. Longitudinal data were available from the OECD and from the World Bank, and we gathered data on the OECD countries’ health care values from the websites of the national governments for each of the countries and from additional publicly available sources. The quantitative analysis used regression analysis to identify the most influential drivers of health care cost to allow us to better understand the health care performance achievements of other countries. We undertook this analysis with the goal of providing additional resources to Canadian policy makers in terms of what Canada can learn from high performing countries and how costs and value are achieved in these comparator jurisdictions.

What Do Canadians Value?

Defining Value

Values are idiosyncratic and unique to each individual and organization as they are influenced by, and emerge over time based on experience. To analyze the underlying health care values of individuals and groups, there must first be a clear definition of “value”.

While the term “value” has many definitions, we are interested in the concept of value as a quality based on a person’s principles or standards, one’s judgment about what is valuable and important in life, and what a person deems important.⁴ Values are learned throughout childhood and are often influenced by parents, teachers, religion, social networks, and society more broadly. People’s values are often a function of how they were socialized, both formally in school and informally by family, friends, and communities.⁵

Canadians’ values towards health care come from experience with health and wellness or the experience of parents, family, or others in their social network. To begin to answer the question, “what do Canadians value in their health care?” it is important to first distinguish important assumptions regarding values. Firstly, values towards health care vary widely between individuals based on personal experiences with the health care system. The Canadian public, the “consumers”, hold values towards health care that are based on their experiences with health care professionals, their exposure to health services and systems, and their personal “lens” through which values are expressed. For example, individual Canadians value their ability to access health care when they become ill so that they will be able to get the help they need to recover and regain their health. Thus, for the patient/consumer, health values are an expression of the “lens” of the person’s interactions with health care providers –such as the nurse, the physician or the emergency department – and the meaning those interactions have for the individual and family. Canadians clearly view health care as something of great importance and desirability and something well worth the money necessary to fund the system, as it serves an important purpose and meaning in their lives.

Health professionals, on the other hand, view health care in terms of their ability to practice and care for patients in a timely and effective manner. They are key stakeholders in the health care system, and as such, their values are oriented towards how the system provides their livelihood, how the system enables them to care for patients, and the efficiency with which they are able to practice. Health professionals’ values may be influenced by education and training, socialization within their scope of practice, and the patient population for which they care. Health professionals practice in very knowledge-intensive, highly complex work environments. They bring extensive knowledge to their practice based on years of training and education. Thus, health professionals’ values reflect the context in which they operate within the health system as a work environment, in which they provide care and services to patients.

Any consideration of values must be contextualized to reflect whose values are being examined and how their values are influenced by knowledge, understanding of health care,

and their exposure to and experience with the health system. The health consumer values their health and wellness, and their ability to access health care when needed. Health professionals value health care in terms of their ability to practice, earn a living, and enjoy a reasonable quality of work life as they care for patients and deliver health care services. Health system values are often viewed from the lens of health system leaders who hold responsibility for health services at the system level, which must be managed within a defined budget allocation. Thus, affordability and sustainability of the system, and ensuring that the demands for health services are met, are the primary focus and mandate of health system leaders. Key stakeholders at the system level are most often policy makers, whose responsibility is to manage the system and allocate funding to enable the system to provide health services to Canadians within the financial means of a fixed global budget. Thus, values of leaders and managers of health systems must be considered within the context of their role in leading and overseeing the system.

The cost of health care versus the values underlying health care must be examined from within the unique and very diverse perspectives of patients/consumers, health care organizations, health professionals, policy makers and system funders - each of which holds values that are based on their experience and socialization towards health care in Canada.

Current Knowledge of Canadian Health Care Values

To date, there have been many studies of the Canadian health care system, in an effort to achieve a cost-effective and highly productive health care system that aligns with Canadian values. As Canadian health care values are so intrinsically grounded in the *Canada Health Act*, we provide a brief summary of it below. We also provide highlights of the major studies of the Canadian health system to provide a back-drop for our analysis of what Canadians value.

Canada Health Act

The *Canada Health Act* (CHA)³ establishes criteria and conditions for health insurance plans that must be met by provinces and territories in order for them to receive full federal cash transfers in support of health. Provinces and territories are required to provide reasonable access to medically necessary hospital and doctors' services. The CHA also discourages extra-billing and user fees. Extra-billing is the billing of an insured health service by a medical practitioner in an amount greater than the amount paid, or to be paid, for that service by the provincial or territorial health insurance plan. A user fee is any charge for an insured health service other than extra-billing that is permitted by a provincial or territorial health insurance plan and is not payable by the plan.

The federal government provides cash and tax transfers to the provinces and territories to support health systems through the Canada Health Transfer. To support the costs of publicly funded services, including health care, the federal government also provides equalization payments to less prosperous provinces and territorial financing to the territories.

As far back as 2000, Canadians have been expressing the need for innovation in prevention and community based care. Although the CHA did not take "universal coverage" to include

the aforementioned “preventive health programs and community-based initiatives”⁶, “home care, long-term care, dental care [, or] prescription drug therapies (unless provided in hospitals)”⁶, it was unclear as to what exactly Canadians interpreted “universal coverage” to include. To date, universal coverage for health services has not funded preventive health programs, home care, dental care, or prescription drugs. However, there is considerable variation across the provinces/territories as to the extent to which such costs as out-of-hospital prescription medications, physical therapy, long-term care, dental care, and ambulance services are covered.

Medically necessary services are not defined in the CHA. It is up to the provincial and territorial health insurance plans, in consultation with their respective physician colleges or groups, to determine which services are medically necessary for health insurance purposes. If it is determined that a service is medically necessary, the full cost of the service must be covered by the public health insurance plan to be in compliance with the CHA. If a service is not considered to be medically required, the province or territory need not cover it through its health insurance plan.

The first step to examining what Canadians value involved reviewing existing studies, commissioned reports, and data as a baseline for the analysis of MVV statements in Canada’s health system organizations, policy makers and funders. This critical review of existing reports included polling data and key reports that included or examined Canadian values towards health care.

Polling Research Examining Canadian Health Values

In the majority of research to date, polling data has been used to capture what Canadians value, and it has examined the perspectives and thinking of Canadians relative to health care. The most recent results overwhelmingly demonstrate that Canadians are very proud of their health care system and value health care very dearly. However, in recent years Canadians have come to realize that the viability of the health care system is a growing challenge that this country faces. Satisfaction with health care has been decreasing steadily over time, and Canadians are increasingly aware that the future of the system may be in jeopardy.

Early studies suggest that Canadians view each of the five principles of the CHA as very important; however there are variations in the degree to which Canadians value each of the five principles (Figure 1). Over the period of 1991 to 2000, universality was viewed with the highest of importance, followed by accessibility and portability. The values of quality and access are “the two key principles of the health care system to which most Canadians are deeply attached”.⁷ Access refers most often to “timely access” to health care services.

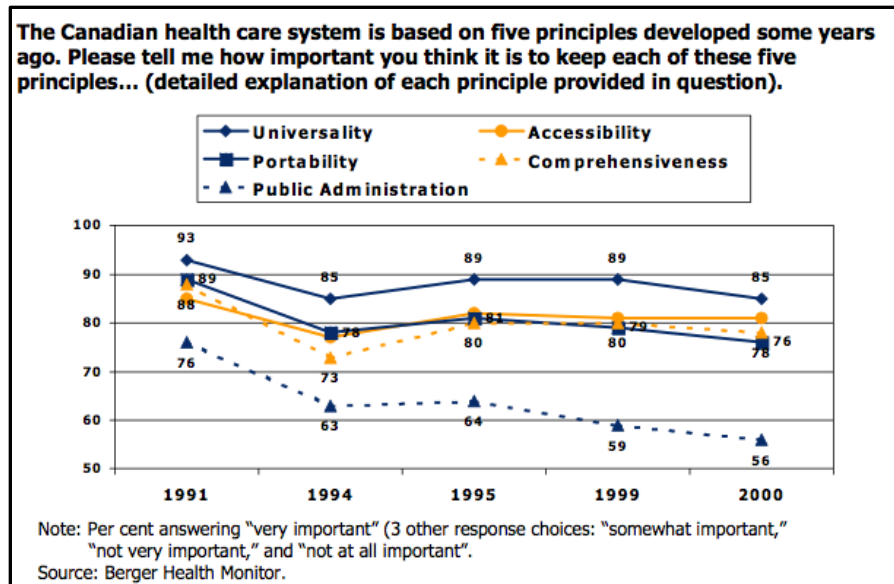


Figure 1: Support for the principles of the *Canada Health Act*: 1991-1999 (Source: Mendelsohn M. Canadians' thoughts on their health care system: preserving the Canadian model through innovation. Commission on the Future of Health Care in Canada; June 2002. Figure 45, Support for the principles of the Canada Health Act: 1991-999; p.47.)

Canadians view health care as a significant challenge for Canada, and they are also fully aware of the lacklustre performance of Canada's health system (Figure 2). While Canadians clearly value the health system as the most significant priority facing this country, they are disappointed in the performance of health systems across the country.

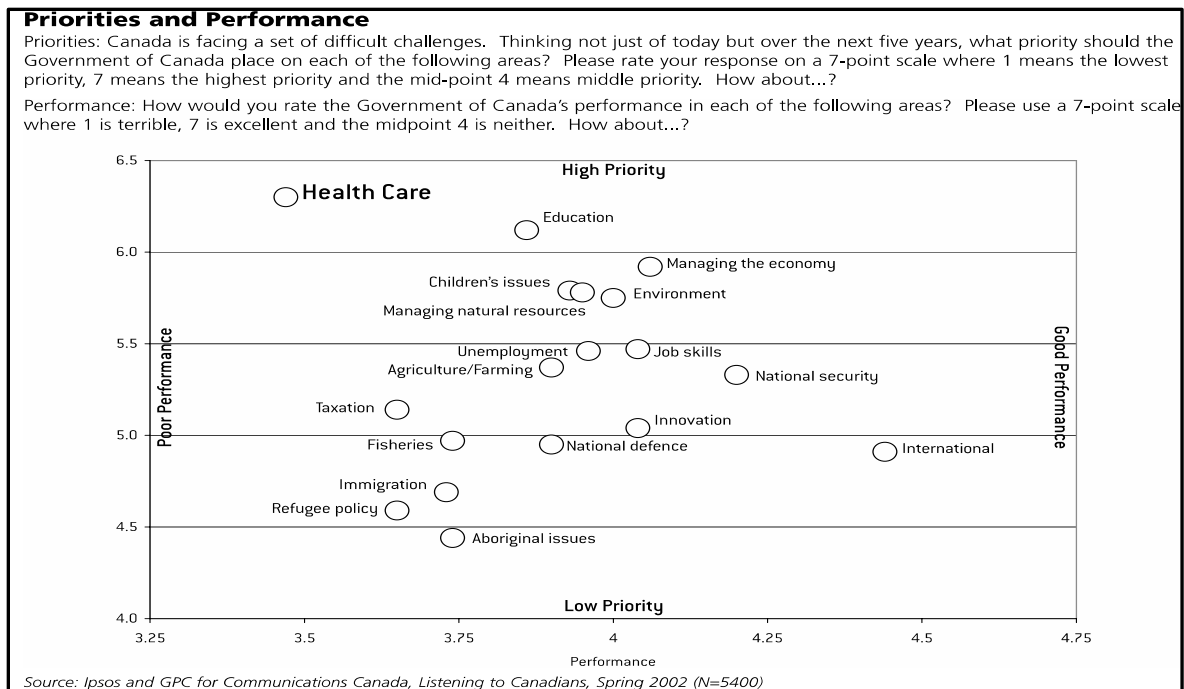


Figure 2: Health care: High priority, low performance (Source: Soroka, SN. Canadian perceptions of the health care system: a report to the Health Council of Canada. Toronto: Health Council of Canada; 2007 Feb. Figure 5, Priorities and polling; p.25.)

Canadians value the health care system and are well aware of the challenges health care systems are facing, particularly the challenges in quality and sustainability. In Sokora's (2007)² review of Canadian views, which captures polling data from 2002 to 2007, Canadians identify the need for substantive and timely change in the Canadian health system. The question becomes, how can the needed changes be implemented in a manner that is consistent with Canadian values?

Mendelsohn⁷ also found very strong support for most of the principles (comprehensiveness, universality, portability, and accessibility) of the CHA. In this review, Canadians supported increasing the quality of the health care system even in the face of increasing costs. Canadians support funding more services, such as those promoting wellness as opposed to just disease prevention (Figures 3, 4); implementing socialized pharmacare; and above all else, ensuring the "provision of adequate numbers of doctors, nurses, and specialists across the country"^{7 p16}.

Summary of Support for Scenarios

Q: How do you feel about

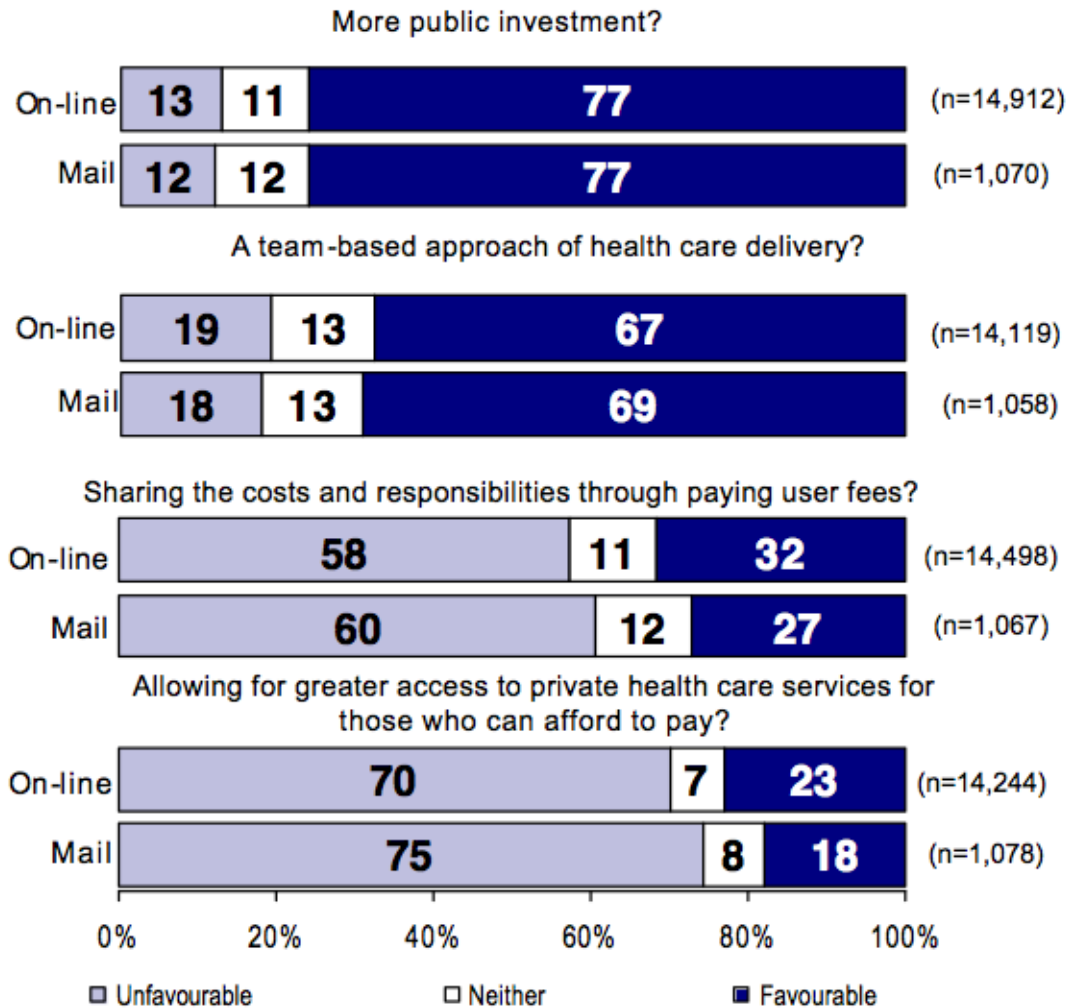


Figure 3: Canadians' view of what health care systems should be funding (Source: Jackson K, Zagon S, Jenkins R, Peters J. Public Input on the Future of Health Care: Results from the Consultation Workbook. Commission on the Future of Health Care in Canada; 2002 Nov. Figure 6.15, Summary of support for scenarios; p. 44.)

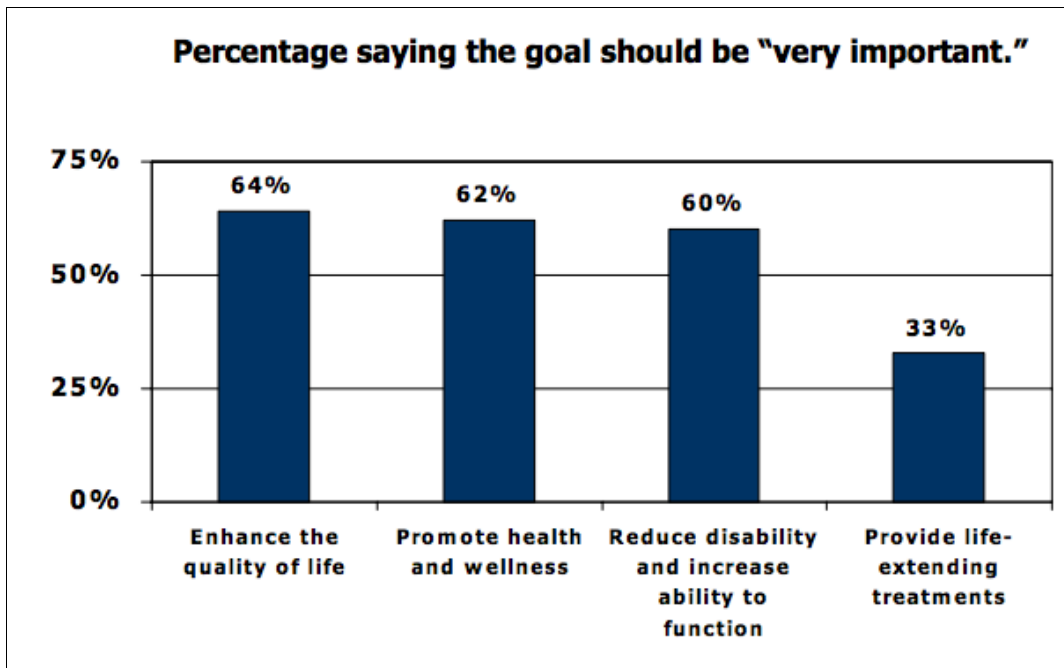


Figure 4: How important should each of the following goals be for the health care system? (Source: Mendelsohn M. Canadians' thoughts on their health care system: preserving the Canadian model through innovation. Commission on the Future of Health Care in Canada; 2002 June. Figure 87, How important should each of the following goals be for the health care system; p. 68.)

Qualitative and quantitative research have consistently shown that Canadians believe the job of the health care system is not only to treat disease, but also to be actively engaged in implementing strategies that improve the overall health of Canadians.

Health system change in Canada has been dominated by dialogue on the challenges of health care systems: the growing costs, which are outpacing GDP and economic growth; and the aging population, which is expected to require increasing health care services as it ages. These challenges are not unique to Canada, but Canada has not made the progress that many other OECD countries have made. Much of the dialogue in the media and in the research focuses on the growing costs and demands for services. However, there is far less discussion of possible solutions, with one exception: in nearly every document or discussion of health system change, Canadians express the view that more funding for more accessible services (reduced wait times) is needed, as long as the additional funding comes with increased accountability and efficiency. When asked to identify what funding sources should be considered, 19 per cent of Canadians supported restricting the range of services that are offered, 65 per cent supported cutting other government services to direct funding to health care, and 43 per cent supported a health care tax linked to income in order to increase health care spending (Figure 5). In a recent by Deloitte identified that "while 32 per cent of Canadians report increased household spending on health care products and services (for some as high as 20 per cent per month), only 39 per cent feel they are well-prepared to handle future health care costs."⁸

There was no evidence in these studies that Canadians are aware of the very high funding levels per capita in Canada when compared with health system costs in other OECD countries.

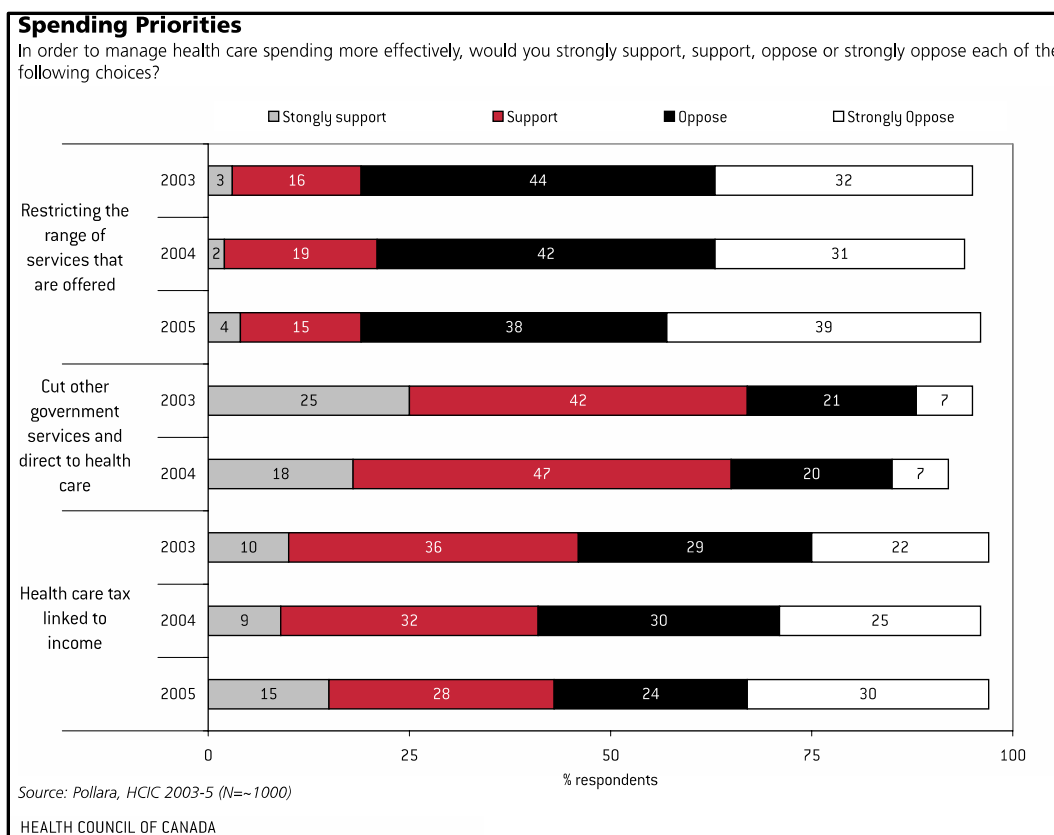


Figure 5: Canadian spending priorities to manage health care costs (Source: Soroka, SN. Canadian perceptions of the health care system: a report to the Health Council of Canada. Toronto: Health Council of Canada; 2007 Feb. Figure 24, Spending priorities; p.34.)

The willingness to increase taxes and cut or restrict other services to secure additional funding to support health care speaks to the highly valued nature of health care among the majority of Canadians. In fact, much has been written about health care renewal, health system sustainability and health system costs. There are extensive reviews and economic analyses of health care systems in Canada, which are beyond the scope of this white paper. However, the cost of health care is a dominant theme across all of the literature. When asked about how to strengthen Canadian health systems, the majority of Canadians believe that more money is needed along with fundamental change in the system. Yet, when compared with other countries Canada has among the highest expenditures on health care per capita.

Key Reports on Health Systems and What Canadians Value

Key reports were generated by the federal Commission on the Future of Health Care in Canada,^{6,12} and the Health Council of Canada, which examined changes in Canadian's views between 2002 and 2007². There have also been non-government sponsored reports done by Maxwell in 2002 and the Canadian Medical Association.¹⁰

A. Romanow Commission

One of the most extensive reviews of Canadian values towards Health Care was the Romanow Commission, which was charged with the task of addressing “the disagreement over [the] interpretation [of] the Canada Health Act”. In the words of the appointed Commissioner Roy Romanow: “the Canada Health Act needs to be debated to ensure it still expresses the values of Canadians”⁶.

What Canadians value was a major focus of Romanow's investigation. The task of the Commission was to focus on “evidence-based” and “values-driven”⁶ data in conducting this review. Canadian values were expressed in relation to what Canadians value and what solutions were consistent with their values. Importantly, the Romanow report forced Canadians to *choose* between their values and the facts about health system performance and sustainability. In accordance with this goal, the section on Canadians' health care values focused on key issues relative to the cost versus the value of health care in Canada, namely:

- “What are the fundamental values that should underpin the Canada Health Act?”^{6 p19}
- Are the principles sufficient to achieve the priorities Canadians have (value) for improved quality of care and better, timelier access to health services?

The Commission's final report, *Building on values: The Future of Health Care in Canada*, recommended maintaining a system based on the core values of equity, fairness and solidarity.¹¹ It recommended the CHA be modernized, strengthened and expanded to include additional services, such as targeted home care and prescription drugs. Romanow recommended additional funding to support these changes to Canadian health systems, but it did not recommend major shifts or transformational change to achieve alignment with patients. In fact, Simpson¹² points out that not only was additional funding recommended, Canada spent \$41-billion of additional funding in health care, which has achieved no substantive gains in health system quality or performance.

B. Health Council of Canada

The creation of a national Health Council was one of the recommendations of the Romanow Commission. In 2007, the Health Council of Canada commissioned a report on “Canadian Perceptions of the Health Care System”² as an update of the Romanow report. In particular, it synthesized public opinion polling data from 2002 to 2006 including polls by Ipsos Canada, Decima Research, Environics Research Group, Innovative Research Group Inc., Ekos Research Associates Inc., Pollara Inc., and The Strategic Counsel, among others.^{2 p3}

In their report, the Health Council of Canada highlighted an increasing concern among Canadians for the viability and sustainability of Canada’s health care system.⁷ There was a growing concern among Canadians for the future of health care, viewed as the single most important problem facing Canada today.² Canadians value universality to such a high degree they often overlook the fact that Canada’s health care system is actually not universal; 40 per cent of the costs are actually out of pocket. Although Mendelsohn⁷ found shifts over time of Canadians’ perceptions (e.g., the quality of their health care system), he found only two significant shifts in their *values* towards the system, preferring greater personal autonomy and empowerment, and the desire to make choices on their own in a wide range of areas (Figure 6). These findings are similar to the more recent Deloitte study, which found that consumers want to own more of their health information and want electronic tools to manage their own care, as well as their family’s care.⁸

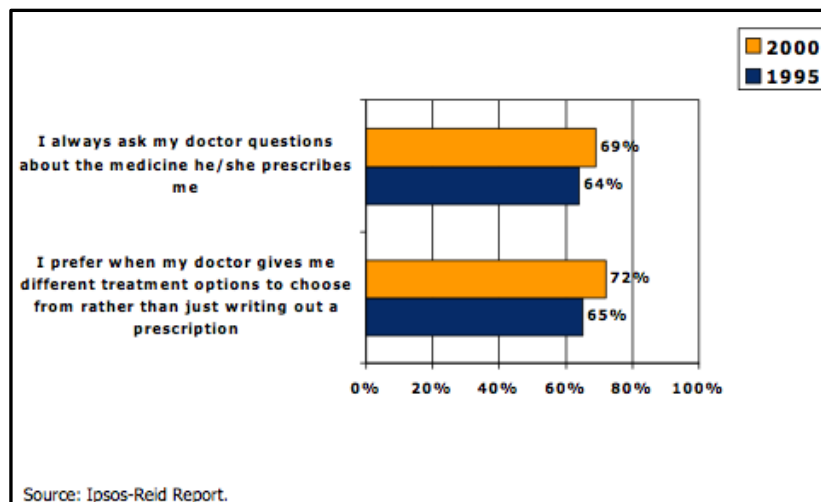


Figure 6: Growing empowerment (Source: Mendelsohn M. Canadians’ thoughts on their health care system: preserving the Canadian model through innovation. Commission on the Future of Health Care in Canada; 2002 June. Figure 34, Growing empowerment; p.41.)

Similarly, the study showed Canadians valued greater empowerment and are insisting on a central role in managing their own health information. In addition, 25 per cent of Canadians prefer physicians who act as health coaches by providing guidance to help them make their own decisions, while 33 per cent of consumers still prefer physicians who act as medical authorities that use their own expertise to recommend the best health care approach.⁸

C. Maxwell's Citizen's Dialogue on Health Care Values (2002)

In a detailed study of Canadians' health care values, Maxwell (2002)⁹ created workbooks that presented three key issues to randomly selected participants, requiring them to make decisions on choosing between economic realities of sustainability of health care and their deeply held views of what is most valued in health care. When faced with difficult choices, Canadians identified solutions that are assumed to be based on what Canadians genuinely value. The critical challenges presented to Canadians were: "rising costs, growing dissatisfaction among the public with the quality of care, and the uneven coverage provided by the public system."^{9 p9} The dialogue and workbook completion involved 12 sessions held across the country with about 40 citizens in attendance at each session.

The Maxwell report found that Canadians viewed health care as a public good, a shared responsibility and "an asset to be passed on to future generations."^{9 p23} They value accountabilities and standards of stewardship from all stakeholders. Canadians felt that managers of health care systems had a responsibility to manage health care efficiently and effectively, and that system funders should invest in the long term health of populations through education and prevention programs. The context of these value statements in the Maxwell report is more focused on the health system, rather than the individual; however, there was a focus on the values of shared decision making and investment in long term prevention and population health, rather than acute disease-focused care and solutions, which is a dominant focus of Canada's health care system.

D. Annual National Report Card on Health Care - Canadian Medical Association

There have been a few non-governmental publications that have used polling data to examine the public "mood" toward health care. The most prominent is the Canadian Medical Association's (CMA) series of annual "National Report Card[s] on Health Care," based on annually-commissioned Ipsos Reid surveys.¹⁰ In the most recent CMA study, Canadians suggested the establishment of an ombudsman, a health charter that "outlines the rights and responsibilities of patients,"^{10 p11} and a thorough publication of quality outcomes. This is consistent with the values of Canadians towards shared decision making. Publishing quality outcomes and establishing an ombudsman and health charter are strategies that

Qualitative and quantitative research have consistently shown that Canadians believe the job of the health care system is not only to treat disease when patients walk through the door of a hospital, but also believe that the health care system has a responsibility to be actively engaged in implementing strategies that improve the overall health of Canadians.

support and augment the opportunity for Canadians to engage in decisions about health care services, and the quality of patient outcomes. This report highlights the values Canadians place on being informed, which enables patients and families to engage health professionals “on a level playing field,” in a partnership with health care professionals, in order to make decisions regarding care.¹⁰

The Mission, Vision, and Values in the Canadian Health Sector

A mission statement has been considered to be a statement of purpose that distinguishes an organization from others, defines the scope of its operations in product (service) and market terms, and captures the organization’s unique and enduring purpose. Mission, vision, and value (MVV) statements are reviewed and revisited on a regular basis during strategic planning activities in most organizations. In health systems and organizations, one would expect to see patient-centric mission statements followed by linkages between patient measures, system funding, performance measures, and compensation systems for the top management team.

The analysis of MVV statements were completed for four types of organizations:

1. acute care organizations (hospitals), which provide acute care services;
2. community care organizations (e.g., community health centres, primary care teams, CHCs, CFHTs, NP-led clinics, AHACs), which offer services in communities, including primary care or chronic illness management;
3. health professionals, including physician and nursing organizations; and,
4. policy makers/funding organizations who set policy or implement policy and funding decisions (e.g., regional health authorities, LHINs in Ontario).

One of the hallmark features of the CHA is a publicly administered health system. As a result, organizations in the health system (e.g., hospitals, community care organizations, regional health authorities) are governed by a board of directors, which includes representatives of the community the organization serves. For each of these groups, the governing board establishes the MVV as the foundation upon which strategic initiatives and priorities are implemented relative to health care service delivery. The public membership of governance structures of health organizations offers an important opportunity to analyze the MVV statements to determine the underlying values of Canadians who represent the communities served by the organization. As a result, we suggest that the MVV statements of health organizations in Canada are a proxy for Canadian’s health values.

1. Values Evident in MVV Statements of Acute Care Organizations (hospitals)

We examined the MVV statements that were publicly available for 125 acute care hospitals in Canada. Patterns and themes across these organizations revealed insights into what Canadians value. Recall that Canadian values towards health care are based largely on experience and exposure to health care services, rather than direct knowledge and understanding of the complexities of the health care system. Our analysis identified five

main themes: Excellent Care that Achieves Quality of Life; Quality Work Environments; Discovery and Innovation that is Foundational to Excellent Care; Respected (Person Centered) Culture and Heritage; and Health System Sustainability. It is important to note that prevalence and priority of each of these themes is varied across the hospital sector.

Acute Care Organizations Theme One: Excellent Care that Achieves Quality of Life

The theme “excellent care” is the most prevalent theme throughout the MVV statements, and in some cases, it was the only theme identified by the hospital. Canadians define this value for excellence in terms of their relationship with health professionals and the quality of hospital services.

In the MVV statements, excellent care referred to two specific sub-themes: “collaborative care partnership focused on quality of life” and “quality care that achieves integration of care and accountability”.

Collaborative Care Partnership

“Successful relationships with patients as partners in decisions”

“Family participates as a member of health care team”

“Consideration and courtesy with patients and families”

“Mutual respect, communication, partnership, and support”

a) Collaborative care partnership focused on quality of life

For Canadians, excellent care means a collaborative partnership between patients and their families and the health care team, whereby human dignity is honoured and respected and the goal of care is to achieve the highest possible quality of life. Canadians value collaborative relationships with providers, whereby they are partners in decision-making and relationships with the health care team are respectful, caring, compassionate, and trusting. The most common values expressed focused on this relationship with care providers.

Excellence in care included achieving optimal independence, highest possible quality of life, and maintaining dignity at all times.

The value of excellent care was intimately linked with quality of life. Canadians clearly value quality of life as the central goal of their collaboration with health care teams. A collaborative partnership between patients and care providers engages patients and families as equal partners in making decisions, and allows for participation in care services to support patients to achieve dignity and quality of life.

Quality of Life Outcomes Examples

“Highest possible quality of life”

“Human dignity, human rights honour the individual”

“Achieve optimum independence”

b) Integrated and accountable quality of care

Value sub-theme: Quality of Care

“Safety, integrated care”

“Fully integrated care”

“Accountable to high standards”

“Access to specialized care”

*“Commitment to excellence in care,
shared vision of excellence”*

The second feature of excellent care is the highly valued, “quality of care”. Quality of care for Canadians means safe, integrated, coordinated, person centered, and accessible care. The value towards quality is consistent with a substantial number of studies that identify Canadian’s awareness of the importance of quality in health care services. Many Canadian hospitals identified quality of care first and foremost in their MVV statements. It is important to note that every agency that mentioned quality of care also

identified person-centred care as a sub-theme. Canadians view quality in terms of coordinating care across transitions, maintaining safety, and achieving accountability to the highest standards of care. The MVV statements do not define “high standards”.

The most significant finding in the MVV analysis was the meaning of excellence in care being defined by the collaborative relationships between patients and health providers, and quality of care being an integral part of excellence defined by integration and coordination of care. These findings may reflect the experiences of Canadians who may not realize the impact of the lack of coordination of care until they experience it personally. These MVV statements identify excellence, defined by care that is collaborative, with patients and families who work together to coordinate and integrate care for patients and families in a manner that is accountable. It is not clear if the accountability for care excellence is achieved using the collaborative partnership with patients and families as the vehicle to achieve a shared accountability, or if accountability for excellent care is assumed by the hospital organization. There are few insights from the MVV statements as to how integration and coordination are measured in hospital performance, demonstrating a disjunction between the value statements and performance measurement.

Acute Care Organizations Theme Two: Organizational Reputation

The second theme of value statements in the MVV was not focused on patients or excellent care, but rather on the “organizational reputation” of the hospital. There were two sub-themes of values attributed to the hospital’s reputation: community image and profile, and quality work environments. This theme was organizationally-based, focusing on both the internal and external identity of the organization. This theme may reflect the very heartfelt and personal identify that Canadians have for their local hospitals, which contribute to community identity and credibility. Values linked to hospital organizations captured a deep commitment to the image and profile of the hospital and the importance of quality hospital workplaces that enable staff to be highly successful in working as a team to provide excellent care for the communities served by the hospital. In essence, the hospital

environment may be an extension of the communities in which they are located, and as such, are a source of pride as a positive place of employment for community members.

a) Community image and profile

This sub-theme features values towards the importance of external image of the hospital and how it is an extension of the reputation of the community the hospital serves. The “community image and profile” value reflects the credibility and identify of the community that is served by the hospital. Reputation and image of an organization instills a sense of confidence in the ability of the health organization to serve its constituent stakeholders. Within this sub-theme is an understanding of the importance of reputation and communications between the hospital and the community. Reputation of the hospital is linked to a sense of accountability to the community for meeting the needs and expectations of community members.

External Image and Profile

“Building our reputation for excellence in the community and beyond”

“Meets and exceeds community expectations”

“Contribute to sustainable health system through formal and informal partnerships”

“Unquestioned leader national and international”

Communities in Canada are fiercely protective of their health organizations, particularly hospitals, which are deeply rooted in community identity. Canadians value local health care services and they value the reputation and profile the hospital brings to the community. MVV statements suggested that hospitals bring a credible and positive image in communities. The reputational value hospitals bring to communities is linked to accountability and belief that hospitals have a responsibility to be accountable to the local populations it is mandated to serve. It is important to recognize that in some cases the organization’s external reputation and profile may not be reflective of the current status of the facility (either in a positive or a negative way). However, there is

little evidence that organizational reputation, specifically quality work environment, is cross-validated or measured relative to organizational performance.

b) Quality work environments

The theme “quality work environments” reflects an underlying value regarding the internal work environment of hospitals. This was a substantive theme throughout the majority of organizations that held the view that in order to provide excellent care, health care professionals must have work environments that support quality care. Within this sub-theme, the MVV statements highlighted three features of quality work environments: teamwork, culture, and employee health and wellness.

Table 1: Features of quality work environments

Value	Concepts captured	MVV examples
<p>Team Culture</p> <ul style="list-style-type: none"> • Team relationships • Team functions 	<p>Team Relationships</p> <ul style="list-style-type: none"> • Professionalism • Courtesy • Respect • Integrity • Honesty • Cooperation • Justice and excellence • Inclusion • Diversity • Empowerment • Pride and integrity <p>Team Functions</p> <ul style="list-style-type: none"> • Communication • Decision making • Partnerships 	<p><i>“Promote human relations professionals and harmonious, full consideration and courtesy”</i></p> <p><i>“Teamwork, working together, respecting differences”</i></p> <p><i>“Reciprocity and cooperation of various disciplines”</i></p> <p><i>“Smooth communication to manage complexity, transparency”</i></p> <p><i>“Collaborative decision making power”</i></p> <p><i>“Contributing to a culture of inclusion and diversity”</i></p> <p><i>“Strengths of people and partnerships”</i></p> <p><i>“Empowers staff to work together in a respectful caring manner in a culture of pride and commitment”</i></p> <p><i>“Integrity, honesty, equitable, cooperation, justice, excellence”</i></p>
<p>Employee health and wellness</p>		<p><i>“Supporting employees in achieving and maintaining a healthy lifestyle”</i></p> <p><i>“We invest in our team, our organization, and our network”</i></p>

The quality work environments value is once again defined by shared decision making and oriented towards partnerships. This links back to the values towards excellent care, which identify collaborative partnerships of care. The value of collaborative decision making is a pattern throughout the two most dominant themes of excellent care and quality work environments, which are defined as an organizational culture that values collaborative partnership among the team and the patients and families they serve.

Acute Care Organizations Theme Three: Excellence through Discovery and Knowledge Translation

The theme of “excellence through discovery and knowledge” defines Canadians’ health values as linked to how Canada is defined by Canadians: as a country that succeeds through innovation and the generation of new knowledge. Innovation is identified in the MVV statements to a very limited degree. It is related primarily to developing new knowledge as an outcome of research to support excellent care. Innovation is not described as a need or value for health system change and transformation.

MVV statements included in this theme also identified the link between discovery and translating new knowledge or best evidence into quality of care and innovation. Within this theme is an inherent bias towards the importance of ongoing organizational learning through research, education and training. There was a focus on new knowledge as a necessary condition for “best care” and recognition of the importance of sharing knowledge by supporting training and education that would allow the new knowledge to be applied directly to care delivery. Innovation is stated in some of the MVV statements; however, is not a common value in hospitals generally.

Discovery and Knowledge Translated into Best Care

“Translate new knowledge into best care”

“Dissemination of knowledge through research and education”

“Advance and share knowledge”

“Engaging in knowledge translation and sharing our expertise globally”

Acute Care Organizations Theme Four: Respected “Cultural” or “Heritage” Values

Cultural Values

“Sacredness of life, mind, body and soul”

“Cultural diversity, culturally sensitive”

“Community heritage of cooperative spirit”

The theme “cultural” or “heritage” values reflect Canadians’ understanding of how care is provided, which is foundational to traditional cultural or heritage values within the community. This theme includes values related to culture and faith, and in some cases religious doctrine. This captures the very early

origins of health care systems, which were originally an important role of religious institutions in most communities. Common across the religious perspectives is an understanding of the importance of dignity, respect for diversity, and respect for life. Healing and personhood are the primary values within the cultural heritage values theme. This theme captures the diversity of Canadians and reflects the influence of multicultural diversity values that are captured within health service organizations, such as Canadian hospitals. Culture or heritage values were most commonly featured in hospitals with a religious affiliation or a specific cultural heritage.

Acute Care Organizations Theme Five: Health System Sustainability

Health System Sustainability Values

“Use our resources efficiently to sustain a viable health care system”

“Sustainability, effectiveness, efficiency, accountable for results”

“Contributing to a sustainable health care system through formal and informal partnerships”

The theme “health system sustainability” was unique to acute care hospitals and Canadian Health Authorities in this study. This theme reflects an understanding that part of providing quality care requires the agency to reflect the economic issues within the health care system. This theme also demonstrates the awareness that hospitals are part of a larger health system and are accountable for the effective, efficient

use of resources to achieve health outcomes within a sustainable economic model. Sustainability is acknowledged in value statements as being a key challenge for the health system. In the majority of hospitals, effective and efficient use of resources was identified in MVV statements. This theme identifies the value placed on the importance of a sustainable health system.

II. Values Evident in MVV Statements of Community Organizations

The analysis of MVV statements from community organizations presents a stark contrast to the MVV statements of acute care hospitals. While values embedded in hospital MVV statements focused on excellence and quality work environments, community organization MVV statements focused on engaging and mobilizing their constituent communities to be empowered to meet population health needs. While hospitals are focused on providing care and service to individual patients, community agencies are focused on empowering communities and populations to engage in meeting health needs. Within the value statements of community organizations, we discovered three dominant themes that focus very directly on the health and wellness of the populations living within communities served by the organization: community governed/community centered care, equity and accessibility, and integrated health care. There is a strong focus on community engagement among community organizations. These organizations value and strive for community governance and ownership, where communities being served are directly engaged in the work of the centre, assume responsibility for the centre on boards of directors, and develop a sense of ownership over the centre and its work. This community empowerment approach is the basis for achieving responsiveness to meeting community needs and ensuring a level of community participation in health and wellness that is meaningful and measurable.

Community Value Theme One: Community Governed/Community Centered

Many of the MVV statements actually use the term “governed”; however, the descriptive values refer more conceptually to community engagement or community involvement. The focus of the community governed values is on the cultural “fit” of the centre with the needs of the community. Another feature captured under this value included being responsive to community populations in a way that is tailored to the specific population health needs of communities. This often involved prioritizing health outcomes for the most vulnerable populations and ensuring there is equitable access for all members of the community. Finally, this theme reflects the value of inclusive, equitable, and accessible community participation.

Table 2: Descriptors of community governed/community centered care

Value concepts	Illustrations of value statements
Community Governed	<p><i>“Community is engaged in the centre, reflects community needs”</i></p> <p><i>“Rooted in communities”</i></p> <p><i>“Communities develop a sense of ownership over ‘their’ centres”</i></p> <p><i>“Community governance ensures that the health of a community is enhanced by providing leadership that reflects diverse communities”</i></p>
Community Engagement (Responsive and inclusive)	<p><i>“Responsive to the needs of respective communities”</i></p> <p><i>“Advance health and wellness of our community in everything we do”</i></p> <p><i>“We actively seek ways to include and welcome members of our communities to participate in meaningful ways”</i></p>

Community Value Theme Two: Equity and Accessibility

The second distinct theme emerging in the values of community agencies is the importance of “equity and accessibility” to care. This theme is founded upon principles of social justice that recognize the broader context of health as being linked to social determinants of health, overcoming the systemic barriers to accessing health and wellness care, and achieving equitable access to care for all populations served by the organization. This finding is consistent with recent research that identifies the predominant influence of social determinants on health

<p>Equity and Accessibility</p> <p><i>“Engages widest possible variety of views, backgrounds, and abilities to promote creative and effective programs, policy positions and decision making”</i></p> <p><i>“Improve access, participation, equity, inclusiveness”</i></p> <p><i>“Eliminate system barriers to full participation”</i></p>

outcomes, yet health systems focus the majority of their measures and evaluation on the influence of health services on population health outcomes.¹³ The MVV statements offered few, if any, defined measures for measuring the impact of a population health approach to community health outcomes. Strategies identified to remove systemic barriers include advocating for healthy policy to create the conditions for equity, and accessibility that overcomes oppression in communities across the country.

Community Value Theme Three: Integrated Health Care

Integrated Care Values

“Interdisciplinary teams working in collaborative practice, in a spirit of cooperation and shared leadership”

“Strong connections with health system partners to ensure integration”

“Develop best practice approaches for serving population needs”

“Comprehensive, coordinated primary health care for their communities encompassing primary care illness prevention and health promotion”

The final theme that was evident in the community organizations, but was not a dominant theme, was the “integrated health care” approach, using a population health framework. The focus of this value was on key components of population health and wellness of communities, including health promotion and illness prevention. The core strategy for achieving integrated, comprehensive care is based on the use of interdisciplinary teams who employ collaborative partnerships and shared leadership with the community population they serve. The value focused on the integration of care is unique to the community sector, which clearly recognizes social determinants of health and clearly envisions the integration of health care services with social services to achieve

population level health and wellness outcomes. This strong focus on clients and the conditions in communities that influence health is idiosyncratic to the community sector; it was not noted in any other segment of our MVV analysis. Similarly, there was no evidence that this integrated population health value of community organizations is captured in performance measures in health systems. It is important to note that while collaboration is highlighted, it is mainly in respect to team relationships, rather than patient-provider relationships, although a number of MVV statements in community organizations did specifically reference patient-centered care.

Both hospital and community organizations valued integration, yet value completely different approaches to health care. While hospitals focus on individual patient care, community agencies focus on community population health. Health system performance accounts primarily for hospital outcomes; however, community outcomes are less developed. No performance outcomes focused on social determinants of health.

III. Values Expressed in MVV Statements of Health Professional Organizations

Health professionals lead and operationalize patient care services within health care systems. They have significant experience with specialized populations of patients, or communities and have substantive insights into the health needs of the populations they serve. However, health professionals view health systems from the perspective (or context) of their ability to practice and care for patients (quality of work life) as well as earn their livelihood. Thus, values of health professionals are, by necessity, a reflection of their roles within the health system as key stakeholders in the delivery of health care services. This analysis utilized the MVV statements of the Canadian Medical Association, the Canadian Nurses Association, and MVV statements from the respective 12 provincial medical and nursing associations in order to identify the values of health professionals in Canada.

The values that are evident in the organizations representing health care professionals (physicians and nurses) were found to be similar for both physicians and nurses across Canada. The primary focus of the MVV statements are the professions themselves: leading and advocating for professionals and supporting the integrity of their professional practice. There was only one province (New Brunswick) that identified health of the population as the primary focus of their mission and vision, stating: “The health of New Brunswick residents is the top priority for New Brunswick’s physicians.”

The three most common or predominant values across all of the provincial organizations focused on leadership, advocacy, and integrity of professional practice.

Health Care Professionals Value Theme One: Leadership

Leadership is a commonly held value among health professionals. Leadership for physicians was focused on leading quality in health care systems, whereas leadership in nursing differed as it focused on leading nursing’s contribution to advancing individual and public health. In both instances, the MVV statements addressed the values of the leadership of professionals in leading health systems. The ultimate goal or outcome of their leadership was linked to health systems (i.e., quality of care for physician values) or health outcomes among individuals or populations (i.e., nursing values). In all organizations representing health professionals, the focus of leadership was on advancing quality of care, either through leading quality in health services or advancing health care professional roles to achieve quality outcomes. Inter-professional approaches to care, integration of care, and collaborative partnerships with patients and families were not apparent in the MVV statements of health professionals.

Health Care Professionals Value Theme Two: Advocacy

Advocacy Value Statements

“Advocate for a patient-centred approach to provision of quality care”

“Advocate the highest standards of health care”

“Advance the scientific, educational, professional and economic welfare of all members of the medical profession”

“Ensuring adequate supply of physician resources to meet health needs”

Advocacy is a very strong value theme across all health professionals' MVV statements. Advocacy is focused on supporting public policy, supporting the quality of work life for health professionals, and advocating for health by educating or raising awareness with the public. Specifically, physician groups valued workforce integrity, which included protecting continued access to health professionals. The majority of advocacy value statements focused on the integrity and strength of the health professional workforce that the organization represented. There were only two

provinces that specifically identified a focus on patients or a patient-centred approach to care as a core element of their advocacy. The dominant focus was on the workforce perspective of health professionals, which was linked to public policy.

Health Care Professionals Value Theme Three: Professionalism

The third value among health professionals focuses on professional practice or professionalism, which addresses the importance of competence, knowledge and maintaining the integrity of the discipline. Physicians and nurses have differing examples of what they value in a successful professional practice: physicians focus on professional unity, practice standards and equity while nurses value practice outcomes such as the delivery of quality care that is safe, competent, knowledgeable and strives for excellence. Nursing organizations also place value on interdisciplinary collaboration that prioritizes collaboration with other members of the health team. Professional practice was most often viewed from the perspective of internal context within the discipline. We only found one example of value attached to being “connected to clients”. When organizations of other members of the health team were examined, the findings were similar.

Professionalism Values

“Accountability, adaptability, transparency and excellence in the conduct of its affairs”

“Trust, fairness, and integrity in the relations among members, staff and with stakeholders”

The values examined within the MVV of health professional organizations are focused largely on the integrity and role of the health professional workforce and its leadership role in health systems. There is substantial evidence that the values of health professionals reflect a more inward focus or lens towards the health care system, rather than the health of the populations they serve. There is only very brief mention of the public or population served by the health system, such as “informing the public”, “increasing awareness” or “educating the public”, which reflects a very prescriptive approach to working with the Canadian public to achieve population health. There was no evidence in the MVV statements of health professional organizations that patients or populations were a central focus of health professional values. Rather, the values focused directly on advocating and leading health systems, which then achieve health outcomes for the populations they serve.

The physician value statements focused most specifically on their own practice and professional advocacy and leadership role. Nurses focused more heavily on accountability and scope of practice, as well as advocating for the nursing discipline. Collaboration with patients and families is not identified in any of the health professional organizations, nor was there any value placed on collaborative partnerships with patients and families (as described in the hospital MVV statements), or on the inter-professional approaches to advocating for social determinants of health, as identified in community organizations.

Table 3 summarizes the value themes of health system professionals

Table 3: Value themes of health system professionals

Value	Physicians	Nursing
Leadership	<ul style="list-style-type: none"> • Lead quality in health system • Promote quality health care, lead provision of quality care 	<ul style="list-style-type: none"> • Lead nursing roles to advance individual and collective health • Leader in public awareness
Advocacy	<ul style="list-style-type: none"> • Quality of work life and wellbeing • Policy • Professional practice • Advocates for the public 	<ul style="list-style-type: none"> • Engage strategic partnerships to influence public policy, • Promote healthy public policy, • Speak out on issues impacting nurses
Professionalism	<ul style="list-style-type: none"> • Practice Integrity • Relationships, respect and integrity • Workforce integrity 	<ul style="list-style-type: none"> • Safe, quality care, competent, knowledgeable, “excellence” • Practice viewed from within, mentions “connected to clients” only once
Interdisciplinary Collaboration	<ul style="list-style-type: none"> • Not identified as a value 	<ul style="list-style-type: none"> • Views collaboration relative to interaction with other system players • Values interdisciplinary approach to patient care

IV. Values Evident Among Health Care Policy Makers and System Funders

The MVV statements from policy makers and system funders from across Canada were included in this analysis to identify the values perspectives of health system decision makers. This analysis included MVV statements from the national government, provincial governments and groups to which decisions for elements of health spending has been devolved (e.g., regional health authorities, LHIN's). In essence, this group of MVV statements incorporates system-wide decision makers in Canadian health care. The CHA requires that health systems are publicly administered. Therefore, in some circumstances the composition of boards for these decision making organizations may include public representatives. For example, in Ontario, there are very specific guidelines on who can serve on the Local Health Integration Network (LHIN) boards; no health professionals are permitted to serve, and the majority of board members are comprised of community members within the geographic region served by the LHIN.

The results of this analysis revealed similarities to the MVV statements of the hospital boards in that the focus of the MVV statements included values focused on patient care as well as values focused on the health system. The two most dominant themes in this analysis were “patient experience” and “health teams”, although there were also values of health system stewardship, innovation and collaboration.

Policy Organizations and System Funders Value Theme One: Patient Experience

The patient experience theme was focused very consistently on providing whole person care that is compassionate, respectful, fair, and meets the needs of patients and their families. This dominant value focused on patient care is similar to the values underlying acute care organizations across the country, and it reflects the health needs of the individuals served by the regional health system. The focus on population health was noticeably absent, even though these same health system funders oversee community

Patient Experience Values

“Meet needs of patients and families”

“Respect, engagement and focus on people”

“Recognize all people and their needs have value”

“Reaching out and genuinely caring for others”

organizations throughout their regions. The similarity is likely a reflection of the composition of boards of directors from members of the communities. Thus, the perspectives that community members bring to the board, relative to patient care, is based on their experiences with health services in their own communities, and tends to have a more dominant focus on individual, hospital-based care, rather than population health and wellness more commonly associated with community organizations.

A very interesting, but much less frequent, dimension of patient experience was reflected in value statements that acknowledged patients’ roles in managing their own health and wellness and having a personal responsibility to make informed, participatory decisions.

This sub-theme of patient care was infrequent, described only in four organizations across Canada. In one organization, the right to make decisions was also linked to collaborative relationships with health care professionals and health system integration.

Health Team Value Examples:

“Work in an environment of trust as team members and partners in care”

“Recognize each other’s contributions to achieve common goal”

“Rely on ethical accountable leadership, open communication and creative teams to promote program innovation and resource management”

Policy Organizations and System Funders Value Theme Two: Health Teams

The second most prevalent theme in the MVV statements among funders and decision makers was the management of the health system, with particular emphasis on the health team and how they function. Without exception, every MVV statement identified similar health team values of integrity, accountability, honesty, respect, courage, and trust. Many of these values were described relative to

how team members are valued and work together in clinical settings, which had some similarities to the quality of work life values of acute care organizations. The focus on inter-professional team work to achieve population health outcomes was noticeably absent from the MVV statements in policy maker organizations. This theme was similar to the acute care organizations, which also focused on quality of work life and quality of work environments. However, the subtle difference with this theme was the focus on the role of health teams relative to health system accountability and sustainability relative to resource stewardship.

Policy Organization and System Funders Value Theme Three: Health System Stewardship

The third theme focused on the responsible management of the Canadian health care system and is best described as “health system stewardship”. The fundamental qualities of stewardship often included the necessity for accountability and integrity when balancing the allocated resources and the sustainability of the health system. An interesting facet of this theme was the task of finding the balance between resources and meeting the health needs of the regions served by the policy maker organization. It was explicit in these value statements that the “prudent” and judicious expenditure of resources was highly valued. Of particular interest in these statements was the absence of any link between expenditures or allocation of resources and the goal of achieving specific population health outcomes by providing health services

Health System Stewardship

“Responsible use and care of the resources entrusted to us”

“We take responsibility for our actions and commitments, monitor, measure and communicate openly, manage resources effectively and efficiently”

“Accountability and prudent expenditure of public funds”

within reasonable costs that the system can sustain. Thus, the cost versus value proposition was not evident in funder organizations.

Policy Organizations and System Funders Value Theme Four: Innovation and Collaboration

Innovation was a less common theme in the MVV statements of a number of health system funders, and when present, it varied in how it's conceptualization. Generally, innovation was perceived as new thinking, new ideas, sharing new knowledge, and ways to be a catalyst for change. On only one occasion was innovation linked to leadership, with a focus on striving to be leaders through innovation and quality improvement. Leading innovation was not

linked to specific stakeholders such as health professionals or policy makers.

<p style="text-align: center;">Innovation and Collaboration</p> <p><i>“Striving to be leaders through innovation and continuous quality improvement”</i></p> <p><i>“Catalyst for change”</i></p> <p><i>“Improving health of communities through collaboration, cooperation and meaningful partnerships”</i></p> <p><i>“Collaboration is working together and encouraging participation.</i></p>
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Collaboration was also a value theme in MVV statements for health system funders. It was different than the collaboration mentioned in the acute care MVV statements in that collaboration was primarily identified relative to the team and how they work together, rather than collaboration with patients or populations as evidenced in hospital or community organizations. On only one occasion was collaboration referenced relative to partnerships with patients as partners in care as it was described in acute care organizations.

Table 4: Comparison of values findings relative to organization or key stakeholder group

Value theme	Acute care organizations	Community groups	Health care professionals	Health care policy organizations and system funders
<i>Theme 1</i>	Excellent Care: (a) Collaborative Care Partnerships with Patients (b) Integrated and Accountable Quality of Care	Community Governed and Engaged	Leadership	Patient Experience
<i>Theme 2</i>	Organizational Reputation (a) Image and Profile (b) Quality Work Environments	Equity and Accountability	Advocacy	Collaborative Health Teams
<i>Theme 3</i>	Excellence through Knowledge and Discovery	Integrated Care	Professionalism	Stewardship
<i>Theme 4</i>	Respected Culture and Heritage			Innovation and Collaboration
<i>Theme 5</i>	Health System Sustainability			

Key Findings

- Values are shaped by experiences over time and reflect the “lens” through which health care is viewed. The findings of this analysis suggest that values are unique to stakeholders within the different sub-sectors of the health system. The values embedded within hospitals, community organizations, health professionals or health system funders are diverse and tend to reflect the experiences, perspectives, and views of the individuals within each of these distinct sub-sectors within the population.
- Canadians view health care as something of great importance and desirability, well worth the money necessary to fund the system. Health care serves a very important purpose and meaning in the lives of Canadians; however, Canadians are also aware of the challenges health systems face.
- Canadians support increasing the quality of the health care system even in the face of increasing cost, and in particular, express values towards the funding of services focused on promoting wellness and quality of life. Canadians believe the job of the health care system is not only to treat disease, but to improve overall health of Canadians, and they believe that a fundamental change in the system is needed, in particular the investment in long term prevention to strengthen population health.
- Significant shifts in Canadian values over time have resulted in preference for greater autonomy and empowerment and the desire to make decisions, manage their own health information, and engage health providers as partners “on a level playing field” in managing their own health and wellness.
- Mission, vision, value statements among the health sector stakeholders offer a proxy for values towards Canada’s health care systems.
- Hospital values identify excellent care that achieves quality of life as central value, including a collaborative partnership with health providers, focused on achieving the highest possible quality of life for Canadians. Organizational reputation of hospitals is viewed as a reflection of community identity and image, and reflects the values towards accountability of hospitals to the communities they serve. Quality work environments are highly valued as a key ingredient necessary to support quality health care services, augmented by new knowledge and innovation to support quality health care services. Cultural and heritage values that respect diversity and community spirit are acknowledged as a value within hospital MVV statements. The responsible and accountable use of resources is valued as a necessary component of health system sustainability.
- Community organizations value empowering communities and populations to meet health needs in ways that are tailored to their unique needs. Community based organizations differ from hospitals in their distinct focus on empowering communities and populations, rather than a focus on individualized care to patients and families, which was dominant in hospital organizations. Community organizations value the link between social determinants of health and overcoming barriers to health and wellness care to achieve equitable access to health services in communities. Achieving integrated and

comprehensive care is envisioned as engaging inter-professional teams to partner with the population they serve to strengthen population health and wellness.

- Health professionals express values that reflect their unique role as key stakeholders in providing care. They also view the health system as a workplace that shapes and influences their professional practice. A dominant focus of the values of health professionals is leading and advocating for health systems that support professional practice, whereby quality health care is an outcome of this advocacy and leadership. In all health professional organizations, values of leadership focused on advancing quality of care through leading health service delivery or advancing health professional practice roles to achieve quality outcomes. Inter-professional approaches to care, integration of care and collaborative partnerships with patients in communities were less clearly evident.
- Policy organizations and system funder values focused on meeting individual patient care needs, very similar to hospital values in this analysis. Population health values were less apparent in these organizations. Values that reflect patient engagement and management of their own health and wellness were apparent in only a small number of policy or funder organizations. Values focused on the central role of the health team's collaboration to balance meeting the health needs of the regions within the resources available to do so was clearly evident in these organizations. Once again, team collaboration to achieve patient engagement and empowerment, or population health outcomes was not evident. Innovation and collaboration were evident in these values as a strategy for sharing knowledge and being a catalyst for change.

Values are deeply embedded in the perspective and position of Canadians. Community values that are focused primarily on community empowerment and engagement, population health, and social determinants of health are not evident in the hospital mission, vision, and value statements. Yet, hospitals and community organizations both serve the same communities they are geographically located in, just from vastly different, value-based perspectives. Integration and coordination of care is referenced in both hospital organizations and community organizations; however there was no evidence that these two sectors envision each other as partners in working together to achieve integrated, coordinated care. Rather, each holds values focused on their specific and distinct mandate, with no reference made to their position or role in the larger health system context, whereby patients and families are part of a community and population, and each sub-sector plays an important role in achieving population health and wellness. The possibility exists that these distinct values within the organizations are influenced or shaped by health governance or funding models. The following section will examine the alignment between Canadian values relative to performance measures, cost, and funding models.

How are Canadians' Values Aligned with Health System Spending and Costs?

Health care spending in Canada has been rising steadily for well over the past three decades. Figure 7 below details trends in Canadian public and private health care spending from 1975 to 2011. While both public and private health care spending has increased, it is the public sector expenditures where increases have been more dramatic. This is an important distinction, as public sector spending is supported by the general tax base, while private sector spending is associated more with individual choice. Actual drivers of health care spending in Canada are explored in greater detail in section five of this white paper to allow for international comparisons.

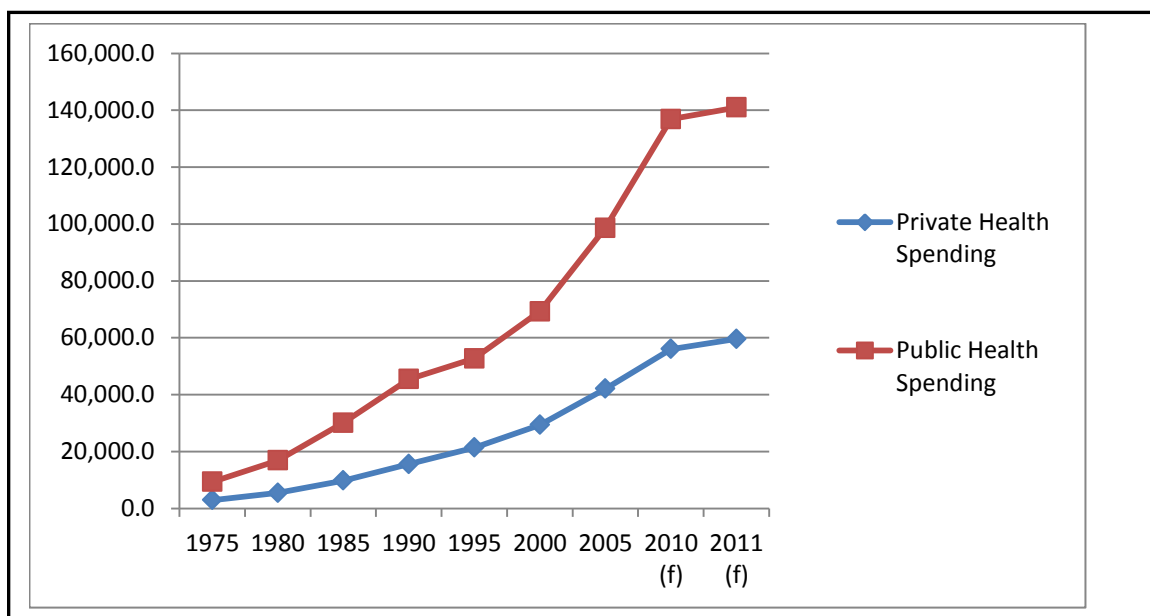


Figure 7: Health care spending in Canada (1975 – 2011, in Cdn \$ billions) (Source: Canadian Institute for Health Information, National health expenditure trends 1975-2011. Ottawa: CIHI, 2011. Data Tables)

Definition of Health Care Costs and Funding

In Canada, the provincial and territorial governments have the constitutional authority to create health insurance plans to support the delivery of health care. Insured services include inpatient and outpatient services in hospitals or medically required physician services, which have been deemed to be medically necessary. Service delivery costs are invoiced directly to the provincial insurance plan; patients do not contribute any portion or co-payment for the services they receive. Provinces and territories may also offer "additional benefits" under their respective health insurance plans, which are funded and delivered on their own terms and conditions. These benefits are often targeted to specific population groups (e.g., children, seniors, social assistance recipients), and costs may be partially or fully covered by the province. These services vary across different provinces and territories, but common

examples include prescription drugs, dental care, optometric, chiropractic, and ambulance services. In addition, the federal government has intervened in provincial health care systems by using its constitutional “spending power”, which enables it to make a financial contribution to provinces under the condition that specific programs are offered under provincial jurisdiction. Such federally funded programs are generally subject to provincial compliance with certain requirements determined by the federal government.

In order for provincial and territorial governments to receive their full transfer payment under the *Canada Health Act*, there are nine requirements that provincial and territorial health care plans must meet. These include five criteria, two specific provisions and two conditions. The five criteria relate to insured health services and include public administration, comprehensiveness, universality, portability and accessibility. The two provisions aim to ensure there are no user charges or extra-billing for insured health services. Finally, the two conditions apply to insured health services and extended health services and are applicable to the provision of information from the provinces and territories and their recognition of federal contributions.

Our contemplation of health care costs and funding details health care spending (which we consider to be health care costs). We graph overall spending totals by category from 1975 to 2011 in Figure 8. As Canada’s health care system is based on a socialized medical regime, we do not explore the relationship between public and private sector health care spending. However, as evidenced in Figure 7, private sector health care spending in Canada has also risen over recent years. This may be due to the fact that provincial and territorial governments have been fully or partially delisting services that have been previously covered under the insurance plan (e.g. chiropractic and optometric services in Ontario), necessitating greater levels of out-of-pocket spending for Canadians. The main comparatives of health care costs include federal transfers, GDP, implicit price indices, and purchasing power parities.¹⁴

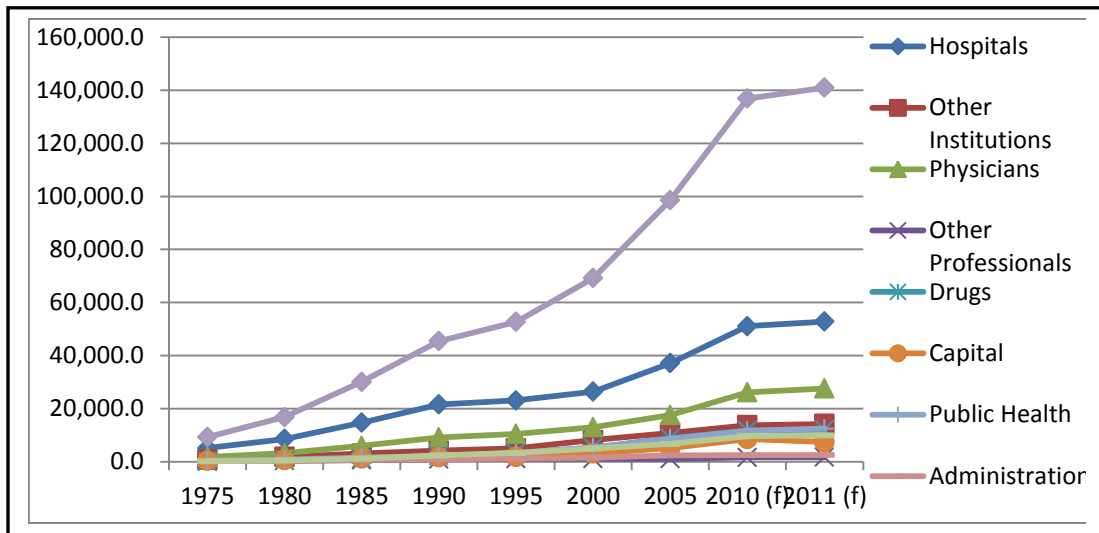


Figure 8: Public sector health costs in Canada by use of funds (1975 to 2011, in Cdn \$ millions) (Source: Canada Institute for Health Information. National Health Expenditure Trends: 1975 – 2011. Ottawa:CIHI;2011. Table A.3.3.1, Public Sector Health Expenditure by Use of Funds, Canada, 1975 to 2011; p. 136-141.)

Analysis of Health Care Costs

Health care costs in Canada are related to what we can immediately see or experience as health consumers (e.g., equipment, pharmaceutical costs, treatment costs, human resources). The main categories of costs that are measured include hospitals, other institutions, physicians, other professionals, home care, drugs, and other expenditures. There is little or no evidence of costs related to long term health and wellness, prevention, or quality of life outcomes, which are more complex to measure, and are not specific to one of these cost centres. Table 5 provides a detailed description of costs included in each of these categories.

Table 5: Description of health spending components

Item	Description
Hospitals	All hospital expenses, including drugs dispensed in the hospital
Other institutions	Expenses for residential care facilities, such as nursing homes, facilities for people with special needs (developmental or physical), and alcohol or drug rehabilitation
Physicians	All physician remuneration, except for those on salary (through block funding), e.g., those in hospitals or public health agencies
Other professionals	Chiropractors, dentists, denturists, naturopaths, optometrists, osteopaths, physiotherapists, podiatrists, private nurses
Home care	Home care professional services, such as nursing, physiotherapy, social services; also, non-professional services, such as homemaking and support, transportation and respite care
Drugs	Prescription, non-prescription and capital health supplies
Other expenditures	Public health, capital, administration, prostheses, aids and appliances, health research, and miscellaneous health care

The health care system offers few, if any, measures or cost outcomes that reflect health, wellness or quality of life, which are more difficult to measure. Unfortunately, costs are not examined across the continuum of care, but rather are viewed within the more narrow perspective of acute care. In addition, the absence of cost measures associated with alternative therapies, prevention and health promotion programs, makes it impossible to capture the impact of cost savings across the continuum of care.

The Relationship between Canadians' Values and Health System Costs

We compared the top categories of health care costs in 2009 (total spending) to the top values as articulated by Canadians. It is clear from examining spending patterns that Canada funds health care organizations and health professionals, not health services or quality of health outcomes that reflect Canadians' values. This is due to the fact that the Canadian health care system is input-focused; we measure the total costs of inputs and equate this to total expenditures, often ignoring opportunity costs or benefit savings. In addition, the value or impact of resource utilization in health system is not examined, despite

the importance of values embedded in health systems. For example, Table 6 profiles the structure of health costs in Canada and aligns it with the overall values embedded within health systems. There is no clear articulation of the costs when compared to the values embedded in health systems. For example, the engagement and empowerment of communities in their respective community agencies, or the collaborative partnership with health providers in hospitals to achieve quality of life outcomes are not captured in how health system costs are measured and evaluated. In other words, the costs of the inputs are clearly evident; the value of what these investments achieve is less clear.

Table 6: Costs vs. Values

Categories of Health Costs in Canada (Total Spending - 2009) ¹⁴	Canadians' Health Values			
	Acute Care	Community	Health Professionals	System Funders
Hospitals (21.9%) Pharmaceuticals (16.2%) Physicians (13.6%) Other Professionals (10.5%)	<ul style="list-style-type: none"> • Collaborative Care Partnerships • Quality of Life • External Image • Quality work – Team Environments • Discovery and Knowledge Translation • Cultural/ Heritage Values • Health System Level Sustainability 	<ul style="list-style-type: none"> • Community Governed • Community Centered • Equity and Accessible • Integrated Health Care 	<ul style="list-style-type: none"> • Leadership • Advocacy • Professionalism 	<ul style="list-style-type: none"> • Patient Experience • Health Teams • Health System Stewardship • Innovation and Collaboration

One measure that is commonly used to examine the “value” of a new treatment or service is the incremental cost-effectiveness ratio (ICER). This ratio is made up of data on costs and effectiveness for a new treatment, which are incremental to the status quo. No matter how low the extra cost per unit of effectiveness gained, implementation of the new treatment will require more resources to be allocated to the area of care concerned, since this measure only examines the cost of adding the new treatment to the health system, rather than examining potential value of using new treatments to re-design health services to achieve value. An opportunity cost will be incurred because those resources will not be available to pursue some other activity on behalf of some other group of patients. Whether the program should be implemented will depend on its size, from where the resources to fund it are expected to come, and the benefit associated with other potential uses of those resources. Thus, it is inappropriate to recommend funding of an intervention solely on the basis of it having a low ICER (which currently happens often).¹⁵

Recently, provincial and territorial governments have been publicly stating their goal of transitioning to patient-centred health systems, which link health system funding to patients' needs, rather than system characteristics. Activity-based funding involves a patient classification system for defining health operations and services. Broadly, this is already in place for payment to health care professionals. A large part of how health care professionals are funded is directly related to the care they provide to individual patients through a fee-for-service model. Physicians bill provincial and territorial health services a standard amount for the service rendered, and volume is the primary driver of this type of funding. Quality of services outcomes is not measured or achieved with a fee-for-service model. However, provinces and territories are increasingly trying to incentivize physicians to join primary care groups, a more interdisciplinary collaborative model where physicians are paid a fixed salary for each enrolled patient, regardless of the number of times a patient visits. The goal is for patients to receive more holistic care focused on health and wellness. However, there are no incentive models or measures to account for care outcomes that align with the goals of health and wellness.

At the health professional level, individual patient billing, while the norm for largely private sector-provided services, such as dental, is not available or permitted for most insured health care services. As a result, most Canadians have no idea of the cost of the health services they are utilizing, and therefore are unable to select health services based on cost and value.

Any shift to a more patient-centric funding model will likely be most difficult for institutionally provided health care services. Traditionally, provincial and territorial systems have used historic funding models to allocate funds to health care institutions, such as hospitals. Hospital funding includes a base funding amount, additional funding for priority programs and often recognition of population pressures in specific geographic regions. Little of this traditional funding model is tied specifically to individual patient needs or values, such as quality of life.

A few provinces and territories have begun the shift to a patient-based funding model. Currently, Alberta uses activity-based funding to define resources allocated to long-term care. Activity-based funding is already applied to hip and knee joint replacement, dialysis and other chronic nephropathy treatments, and cataract surgery. In addition, Ontario has announced an overall shift to a patient-based payment (PbP) strategy. In Ontario, hospitals currently receive funding through fixed global budgets that are largely determined by historical factors. In many cases, this funding does not reflect the populations that hospitals now serve or the types of patients that receive care. The goal of the PbP model is to shift models so that funding follows the patient, which can be achieved by linking hospitals' funding with the level of services and quality of care that they actually deliver. It is designed to manage fast growing areas of the province by ensuring they receive an appropriate share of funding to meet their needs and that funding reflects the best clinical evidence. The PbP model develops a cost profile for every patient based on their clinical diagnosis, type of treatment received, and the characteristics of the hospital where they received their care. Internationally, the UK already uses activity-based funding for most of its acute care services.

Outside of these few examples, there is little evidence that health system funding is linked directly to, or travels with, a patient within Canada's health care system. There is also no link between funding models and population health outcomes. Indeed, it is clear from comparing the costs and values in Table 6 that values across the spectrum of acute care and community agencies favour health outcomes of either the individual patient or community, whereas priorities for health care funding are structured and focused on the services provided by health care organizations and health care professionals. While there has been public dialogue about moving funding towards supporting integration and coordination of care, and incenting collaboration amongst health care professionals to shift to a more patient-centric model, a significant shift must occur within the Canadian health care system funding structures in order to align current health care values with health care costs. Funding structures must focus on funding health and wellness outcomes, rather than services rendered, to drive system change towards patient-centric models of care focused on what Canadians truly value, such as quality of life, health and wellness of the Canadian population.

Key Findings

- Provincial health systems identify and define the health services that are deemed “medically necessary”, which ensure that inpatient and outpatient care and hospital care and physician care are accessible to all citizens. Additional benefits may be included in each province; however, these are distinct and vary from province to province.
- Health care costs in Canada reflect what Canadians can immediately see or experience as health consumers. These costs are categorized and measured as in terms of three types of costs: a) institutional (e.g., costs related to hospitals, other care facilities, home care); b) health providers (e.g., physicians, other professionals); and c) health products (e.g., drugs, prostheses).
- Costs are not structured to represent the full continuum of care: those related to alternative therapies, health promotion or prevention programs are not generally distinguished in health cost data.
- Comparison of costs with Canadian values reveals that the values Canadians hold towards health care are not captured in health system cost data. Health system costs are focused on the “inputs” of the Canadian health systems (e.g., how many physician consultations, the cost of drugs prescribed, and the cost of hospital services); costs are not associated with outcomes of health systems that may reflect or align with Canadian values.
- Efforts to measure cost relative to value are not common in Canadian health systems. One minor exception is the “incremental cost-effectiveness ratio”, used to identify effectiveness of specific new treatments. This measure does not account for values associated with outcomes of the new treatment, and it does not reflect the potential for new treatments or products to be leveraged to achieve value by re-designing health services within health systems.

- Costs in Canadian health systems capture the funding required for delivering services or paying physicians to provide care. Thus, cost structures are not linked to outcomes or the effectiveness of the services provided, either from an individual health outcome perspective or a population health perspective.
- There is no interface between Canadians' values (e.g., collaborative models of practice designed to achieve quality of life, or community empowerment to achieve population health, quality of work life for health professionals) and how health services are funded, which entails using global budgets to deliver a pre-determined suite of prescribed services. Thus, there are no incentive models or measures used to account for health system outcomes that align with the values of health, wellness, or quality of life for Canadians.
- Patients have no means of engagement or access to information about the cost of health services and thus, have little awareness of the cost versus the value proposition for health care. The complete lack of awareness of costs also limits Canadians' ability to judge or consider the cost versus the value of health services.
- There are trends towards changing funding models, which may begin to align costs, or funding structures with patient centric measures or indicators. Alberta and Ontario are implementing patient-based payment strategies, which may offer greater opportunity to link health system costs to population health outcomes based on quality of health services provided to patients.

The costs of health systems in Canada are structured around the key organizations and the health providers who deliver services and prescribe treatments or products to patients seeking care. There is no link between the costs of organizations (e.g., hospitals or community agencies), the costs of physician services, and the outcomes of health care for patients, such as quality of life, collaborative partnerships with providers, or other values expressed by Canadians. Thus, health system costs in Canada are a function of the "inputs" in the system and the services delivered by organizations or health providers; costs are not defined by the valued outcomes produced by the system for Canadians. In order to determine funding levels provided to health systems, funders assess the performance of health systems to determine the extent to which services are provided to populations across the country. A number of measures are used to determine performance of health organizations and health systems more broadly. These measures are utilized by funders to determine the level of funding provided to each health organization or group of health providers (e.g., physicians). Using the adage, "follow the money", the next section will examine health system performance measures, which are linked to funding, and will compare measures of health system performance in Canada to their alignment with Canadians' values. The narrow focus of current funding structures on health organizations, providers, and products precludes Canadians from understanding or identifying the value of health system costs. Thus, there are few opportunities, if any, for Canadians to be aware of, or judge whether Canadian health systems are delivering on the value proposition that the Canadian public strives to achieve.

How are Canadians' Values Aligned with Measures of Health System Performance?

Key Performance Measures

In the 2003 National Health Accord¹⁶, 18 performance indicators were agreed upon to be mandated by all provincial and territorial jurisdictions. In order to evaluate and measure health system performance, national agencies report on these and other comparable indicators to the public. The Canadian Institutes for Health Information (CIHI) *Health Indicators 2011*¹⁷ report and Health Canada's, *Healthy Canadians 2010*¹⁸ provide the most recent comparative indicator data.

There is a great deal of effort being made to develop measures of health system performance across many jurisdictions in Canada, and much of this work is based on the premise that in order to allocate funding, measures of performance are used to support funding decisions. In other words, "follow the money" measures that assess performance become important evidence to support funding allocation decisions. In such a system, performance measures become a very competitive driver for organizations, which all compete for health resources based on their performance outcomes. This intense competition for funding among organizations and providers may limit the ability of health systems to quickly and effectively move towards integrated and coordinated models of care that are highly valued by Canadians, since such a transition would require collaboration and cooperation among health provider organizations that are more familiar with a competitive dynamic. Thus, in order to effectively manage a health care system, leaders and decision makers must find ways to measure system effectiveness and performance in terms of measuring the degree to which health systems deliver value to the Canadian public. In particular, creating measures of performance that can identify value outcomes of collaboration and cooperative approaches to integrated health care services will be a considerable challenge for Canadian health systems for years to come. The following is an examination of measures of health system performance that considers how performance is measured relative to what Canadians value.

Measurement of health system performance in Canada is changing, as provincial and territorial health systems strive to transition from a highly health-provider-centric (i.e., physician, organization) model of health care towards a more patient-centric (i.e., quality outcomes) model for health care systems. Much of this work on measuring health system performance will continue to evolve, and at the moment it is considered somewhat of a "moving target". Early trends in achieving this transition are evident in Ontario, which is working towards measures of quality outcomes of health care systems that move beyond the traditional model of measuring volumes of health services delivered, in favour of measuring patient outcomes and quality. The following section will attempt to capture the current development of health system performance measurement and will examine these trends relative to the values of Canadians, described earlier in this paper.

While all jurisdictions report to the public, the level and detail of reporting, particularly health system reporting, varies significantly. This is due in large part to the capacity of each

jurisdiction to collect, interpret, and report on health data. As noted by the Health Council of Canada in their 2012 progress report, “provinces and territories have developed their own reporting mechanisms tailored to their own needs, whether for planning, measuring performance, or accountability. These have resulted in a range of reporting systems that account for the use of public funding, the status of health care reform, health outcomes, and the health status of the population”.^{19 p19} Health system performance measures in Canada are clearly linked to funding and allocation of health resources in each jurisdiction. Thus, the challenges of moving from a traditional model of measuring performance in terms of services provided, to a system that examines performance in terms of patient outcomes and quality of life are substantial, complex and will continue to evolve over time.

I. Key National Performance Measures

CIHI defines health system performance measures in terms of eight domains: acceptability, accessibility, appropriateness, competence, continuity, effectiveness, efficiency, and safety. Each domain identifies a number of indicators that measure various aspects of quality of health care, as determined by CIHI. It is important to note that we are only considering health system performance indicators; there are several other domains that CIHI includes in their indicator framework that capture health status, non-medical determinants of health and community, and health system characteristics. There are increased public reporting requirements by institutions, specifically in the areas of quality improvements and employee and care provider surveys. In a recent report, *Healthy Canadians 2010: A Federal Report on Comparable Health Indicators*,¹⁸ 52 indicators were used to measure and profile the health of Canadians. Of these measures, only two directly engage patients or consumers: one asks people to rate their health, and the other asks about satisfaction with health services. The remaining 50 indicators are heavily focused on hospital outcomes; prevalence of disease, such as cancer; and mortality rates due to illness, injury or disease. The current performance measures and health indicators are more closely linked to health services outcomes and disease, rather than patient experience. Currently, CIHI has a pan-Canadian group dedicated to working towards developing a standardized national patient satisfaction tool. Table 7 provides a summary of what is measured nationally through CIHI for health system performance.

Table 7: National health system performance measures

Indicators
1. <u>Adverse or “Unexpected” Events:</u> Hospitalized hip fracture event Wait time for hip fracture event Proportion of women delivering babies in acute care hospitals by Caesarean section Ambulatory care sensitive conditions
2. <u>Repeated Readmission Rates:</u> Patients with repeat hospitalizations for mental illness Self-injury hospitalization 30-day acute myocardial infarction readmission 30-day medical readmission 30-day surgical readmission 30-day obstetric readmission 30-day pediatric readmission 30-day readmission for mental illness
3. <u>Mortality Rates</u> 30-day acute myocardial infarction in-hospital mortality 30-day stroke in-hospital mortality Potentially avoidable mortality Avoidable mortality from preventable causes Avoidable mortality from treatable causes

In July 2012, after extensive consultations with federal, provincial and territorial health system stakeholders, CIHI also put forward a report proposing a model for measuring health system efficiency. The next step will be for CIHI to use the model to look at health system efficiency at the regional level.

II. Key Provincial and Territorial Performance Measures

As health systems change and evolve towards a more patient-centric measure of health system performance, each province and territory is developing performance measures that reflect core initiatives and priority programs. All jurisdictions in Canada must report to the public, with varying degrees of detail, on health system performance in order to meet the principles of the CHA for public administration. For example, Health Quality Ontario (HQO) has worked to establish a number of indicators/measures for each sector and publicly reports on them annually, whereby quality is defined in terms of nine domains. Ontario's

Wait Time Strategy was originally developed to improve access to five key health services by reducing wait times for cancer surgery, cardiac procedures, cataract surgery, hip and knee replacement, and MRI and CT scans. The strategy has since expanded to include all surgeries and time spent in emergency departments (ED). These data are made available online, close to real time. Additional examples of this trend toward public accountability is the Saskatchewan Health Quality Council, which has a strong public reporting strategy that showcases a number of special reports on a variety of themes and sectors online.

Additionally, each province and territory will have a series of measures tied to their accountability structures. These measures tend to include both outcome and process measures and may also include some indicators linked to provincial strategies. The province of Alberta identifies Albertans' satisfaction with health care services personally received in the province within the past year. Satisfaction with health care services is dependent on several factors, such as visits to physicians; visits to the emergency departments; use of home care services; external influences, such as perception and experience of others; and information received. Satisfaction is an important measure, as it supports quality improvement and the objective of delivering high quality, patient-centred care. Measures of patient satisfaction like these continue to develop across a number of jurisdictions as health system performance transitions towards more patient-centred quality outcome measures.

Institutional Performance Metrics

There have been a number of projects designed to measure the performance of Canada's health care organizations. CIHI has recently made data from the Canadian Hospital Reporting Project (CHRP) publicly available. This is a national quality improvement initiative providing hospital decision makers and policy makers with results from approximately 600 hospital facilities in Canada. It provides 21 clinical and nine financial indicators that measure clinical effectiveness, patient safety, appropriateness of care, accessibility, and financial performance. Table 8 provides the indicators for each category.

Table 8: Canadian Hospital Reporting Project indicators

Category	Indicators
Effectiveness: (defined in terms of mortality, readmissions or adverse events)	<ul style="list-style-type: none"> • 5-Day In-Hospital Mortality Following Major Surgery • 30-Day In-Hospital Mortality Following Acute Myocardial Infarction • 30-Day In-Hospital Mortality Following Stroke • 28-Day Readmission After Acute Myocardial Infarction • Indicator: 28-Day Readmission After Stroke • 90-Day Readmission After Hip

	<p>Replacement</p> <ul style="list-style-type: none"> • 90-Day Readmission After Knee Replacement • 30-Day Overall Readmission
<p>Patient Safety: (defined in terms of falls, adverse events and traumatic injury in hospital)</p>	<ul style="list-style-type: none"> • In-Hospital Hip Fracture in Elderly (65+) Patients • Nursing-Sensitive Adverse Events for Medical Patients • Nursing-Sensitive Adverse Events for Surgical Patients • Obstetric Trauma – Vaginal Delivery with Instrument • Obstetric Trauma – Vaginal Delivery without Instrument
<p>Appropriateness of Care and Accessibility: (defined relative to access to specialized care)</p>	<ul style="list-style-type: none"> • Caesarean Section Rate: Excluding Pre-Term and Multiple Gestations • Vaginal Births after Caesarean Section • Use of Coronary Angiography Following Acute Myocardial Infarction • Hip Fracture Surgical Procedures Performed within 48 Hours: Wait Time Across Facilities
<p>Financial Performance: (defined in terms of administrative overhead, cost per individual case, resource allocation)</p>	<ul style="list-style-type: none"> • Administrative Service Expense as Percentage of Total Expense • Cost per Weighted Case • Total Hours Worked per Weighted Case in Diagnostic Services • Total Hours Worked per Weighted Case in Nursing Inpatient Service • Total Hours Worked per Weighted Case in Pharmacy Service

For non-hospital sector organizations, most institution-level measures exist and were developed for accountability purposes. As such, they are largely associated with funding

allocation. These measures tend to be a mixture of service volumes and quality outcome measures, and they are frequently aligned with provincial priorities and programs.

Outside of the hospital sector, institution-level public reporting is in its early phases. Still, there are some examples of progress in this regard. Health Quality Ontario (HQO) has developed a long-term care public reporting website that contains facility-level data on four quality outcome indicators for all homes across the province. The outcome measures selected leverage national standard resident assessments and in doing so, allow for comparability both regionally and internationally. Given the importance of care provided in the community, further efforts towards public reporting, particularly for primary care, should be a focus moving forward.

In many of the performance measurement systems in Canada, there is a tendency to measure and profile patient outcomes that are focused primarily on measures of adverse events or measures related to survival, such as mortality. The metrics identified in the national hospital project address key outcomes such as falls, hospital acquired infections, obstetric trauma, and readmissions to hospital for unresolved conditions or complications of previous hospitalizations. It is striking that hospital measures at the national level profile and focus so heavily on negative quality of outcomes, with little attention to patient outcomes such as wellness, quality of life, and satisfaction. This finding is likely due to the changing trend in health system performance measures, which is moving away from health-provider-centric metrics, towards more patient-centric metrics that are more closely aligned with values. This process is still a work in progress.

Comparison of Values and Performance Measurement

At first glance of the Canadian health systems performance measures, there appears to be little relationship to what Canadians value and how health systems measure performance. Table 9 profiles the current health system performance measures that are most closely associated with Canadian values.

Table 9: Comparison of Canadian values and health system performance metrics

Canadian Values	Health System Performance Metrics
Hospitals	
a. Excellent Care (quality of life, safe, integrated, coordinated, person-centred)	a. Quality of life - no metric Safety (infections, Falls, Pressure Ulcers, Mortality metrics); Integrated Care (Readmissions, ALC metrics) Patient Satisfaction Surveys
b. Organizational Reputation (reputation, accountability to needs)	b. Patient Satisfaction Survey question "would you recommend this hospital"
c. Discovery and Knowledge translation (for best care)	c. None
d. Heritage/Cultural values (respect diversity, culture)	d. None
e. Sustainability (efficient use of resources)	e. Total Margin, Current Ratio
Community Organizations	
a. Community governed/centred	a. No standard measures
b. Equity and Access	b. Wait times for service: ED, surgery
c. Integrated Health care	c. Readmissions to hospital
Health Professionals	
a. Leadership (lead quality)	a. No standard measures
b. Advocacy (public awareness, policy, work-life quality)	b. Staff satisfaction measures (no current standardized survey)
c. Professionalism (competence, knowledge, workforce integrity)	c. No standard measures
Health Policy Maker/Funder	
a. Patient experience (compassionate, respectful)	a. Patient satisfaction surveys currently being developed nationally (CIHI)
b. Health team collaboration (accountability, integrity)	b. Readmissions to hospital, ALC, ACSC
c. Health system stewardship (prudent use of resources)	c. Health care expenditures as a per cent of GDP
d. Innovation and collaboration	d. No standard metrics

This comparison of performance metrics and Canadians' values clearly illustrates the relative misalignment between what Canadians value and how health system performance is measured. In many instances, there are simply no metrics for Canadian values, such as innovation and collaboration, quality of life, organizational reputation, or community engagement. Although performance measures are evolving in Canada, there is a need for substantial progress in the development of measures that capture the values Canadians expect from health systems across the country.

Evidence of Financial Incentives Linked to Values in Acute Care Facilities

In the Canadian not-for-profit environment, a hospital's mission signals a common goal and purpose to funders of the organization, members of the organization, and users of the organization's services. It serves as a guide for decision-making and to "motivate and inspire employees towards common organizational goals".^{20 p132} In a hospital context, organizational goals articulated in mission statements include the recognition of the importance of various aspects of patient care. If patient care is a primary organizational goal and is more than just organizational "window-dressing", compensation systems should have been designed to align not-for-profit CEO behaviour with the achievement of patient-centric goals. Thus, patients' levels of satisfaction with their health care experience should be a predictor of CEO compensation.

In an earlier section of this white paper, we examined the MVV statements of hospitals in Ontario. We used hospitals as a proxy for communities, as their boards consist of public members rather than hospital administrators. We discovered a broad consensus among the hospitals in terms of their core values, of which there were 7:

- Collaborative Care Partnerships;
- Quality of Life (patient-centered care);
- External Image and Reputation;
- Quality work – Team Environments;
- Discovery and Knowledge Translation;
- Cultural/Heritage Values; and,
- Health System Sustainability.

If there is alignment between these values and performance metrics, then one would expect to see CEO contracts linking financial incentives to behaviour that promotes these values. In order to compare the alignment between stated health care values in Canada with health system performance measurements, we looked at the relationship between the mission, vision, and value statements of health care institutions and the contracts of the CEOs of these institutions to determine whether they were being incented to achieve their publicly stated MVV. We chose to use hospitals in Ontario as our sample because both the MVV statements and the contracts of the CEOs were publicly available at the time of this analysis. The following section examines the link between financial incentives (for hospital CEOs) and organizational performance metrics for each hospital.

Analysis of CEO Incentives

One of the more recent strategies for influencing health systems has been the use of CEO incentives to drive change and improve quality. The basis for CEO contract incentives is linked to Ontario's *Excellent Care for All* (ECFAA)²¹ legislation passed in June of 2010, which requires every health care organization, among other requirements, to develop an annual Quality Improvement Plan (QIP) that is made available to the public. In addition, the legislation requires health care organizations to link executive compensation to the achievement of targets set out in the QIP.

One of the components of the QIP requires hospitals to identify improvement targets, measures and their associated initiatives. In the QIP template, the measures column was pre-populated with a core set of recommended indicators, although hospitals could add additional indicators in order to address organizational priorities.

The list of core recommended indicators was finalized by the Quality Improvement Plan Task Group,²² and it was selected to be aligned with provincial priorities and other reporting initiatives, such as public reporting activities and accountability agreements. The core recommended indicators identified for each of the Quality Improvement Plans are summarized as follows:

Safety: Clostridium Difficile Infection (CDI), Ventilator Associated Pneumonia (VAP), Hand Hygiene compliance before patient contact, Central Line Associated Blood Stream Infection (CLI), Pressure Ulcers, Falls, Surgical Safety Checklist, Physical Restraints

Effectiveness: Hospital Standardized Mortality Ratio (HSMR), Hospital - Total Margin

Access: 90th percentile ER Length of Stay for Admitted Patients

Patient Centeredness: Patient Satisfaction Survey measures
“Would you recommend this hospital to your friends and family?”
“Overall, how would you rate the care and services you received at the hospital?”

As part of the QIP, and as a way to promote transparency to the public, hospitals are required to post their QIP publically on their organizational website. This allowed us to gather information on executive compensation for this analysis. Although the results were limited to Ontario, we believe the findings may be somewhat representative of other jurisdictions in Canada. We reviewed 143 hospital QIPs and a content analysis of the incentives or rewards in the contract was completed. All QIPs available online at the time of this study were included in the analysis.

Just over 80 percent of 143 QIPs identified specific salary incentives for performance tied to the QIP. Compensation, tied to the results of QIP targets, ranged from 0.5 per cent to 15 per cent of executive salary with the average percentage linked to the QIP being 5 per cent. Ninety per cent of organizations identified specific performance measures as part of their

executive compensation, of which the most frequently selected indicators were hand hygiene compliance before patient contact, patient satisfaction, emergency department wait times, and total margin.

The outcomes of the MVV analysis revealed a very dominant focus on excellent care, which was not defined as organizational risk mitigation, but rather defined as collaborative partnerships between health providers and patients and included an important focus on achieving quality of life outcomes for patients. The indicators selected for executive compensation, which were predominantly QIP core recommended indicators, largely do not refer to quality of life for patients, collaborative partnerships with patients and families, or quality of work life for health professionals. Thus, there is little consistency or alignment between the measures selected for executive compensation in the QIP and MVV value statements in hospitals. Surprisingly, CEOs report to the board of the organization, which is made up of community members who contribute to, or determine the MVV statements for the organization. There is a clear disconnect between the MVV statements in Canadian health care organizations and the incentives or remuneration for CEOs who lead these same organizations.

Evidence suggests that rather than incentivizing values identified within MVV statements such as quality of life, collaborative partnerships with patients and families, and creating workplace cultures supportive of these values, the QIPs are instead predominantly reinforcing strategic provincial priorities. Table 10 provides a comparison of health care values and QIP measures.

Table 10: Quality Improvement Plan (QIP) core recommended measures for 2012/2013 compared with Canadian values

QIP Measures	Canadian Values		
<ul style="list-style-type: none"> • Safety • Effectiveness • Access • Integration • Patient - Centredness 	<u>Hospitals</u>	<u>Community</u>	<u>Health Professionals</u>
	<ul style="list-style-type: none"> • Collaborative Care Partnerships • Quality of Life • External Image • Quality work – Team Environments • Discovery and Knowledge Translation • Cultural/Heritage Values • Health System Level Sustainability 	<ul style="list-style-type: none"> • Community Governed • Community Centered • Equity and Accessibility • Integrated Health Care 	<ul style="list-style-type: none"> • Leadership • Advocacy • Professionalism

Key Findings

- Health systems in Canada use sophisticated measures of performance in order to evaluate the effectiveness of health systems in delivering on the mandate of achieving health for all Canadians. These performance measures are directly tied to health system funding, which incites significant competition among providers for funding resources.
- Health performance measures are transitioning in Canada from a more traditional model that is health-provider-centric, to one that captures quality outcomes linked more directly to patients. The transition of these performance systems is evolving and will continue to do so over time.
- Current measures of health system performance focus primarily on access to care, and quality outcomes that identify primarily hospital related adverse events, such as hospital acquired infections, mortality, and readmissions to hospital.
- There is very little evidence that values are aligned with how performance is measured or evaluated in health systems in Canada. This misalignment is particularly evident relative to how CEOs are incentivized, whereby patient outcomes or patient centered care is not captured or financially rewarded in CEO contracts.
- There are substantial gaps in performance outcomes for community based care (i.e., primary care) or health professionals. Despite the values towards collaborative partnerships with health providers, or the importance of community engagement and empowerment, these values are simply not reflective of health system measures of performance or cost effectiveness.
- In Canada there is a focus on selecting measures/indicators based on what is currently available. While this is understandable given the costs and barriers to implementing changes to data infrastructure, it is analogous to searching for keys under the street lamp because that's where you can see.

Global Comparisons of Cost vs. Values

The 2011 white paper, *Strengthening Health Systems through Innovation: Lessons Learned*¹ presented a comparative analysis of Canada, Australia, France, Germany, Netherlands, Switzerland, United Kingdom (U.K.), and the United States (U.S.). The white paper examined four key characteristics: governance structure and financial health models; quality of population health outcomes; evidence of system redesign and transformation using innovation; and the role of consumers in managing health and wellness. Figure 9 describes the governance systems in each jurisdiction.

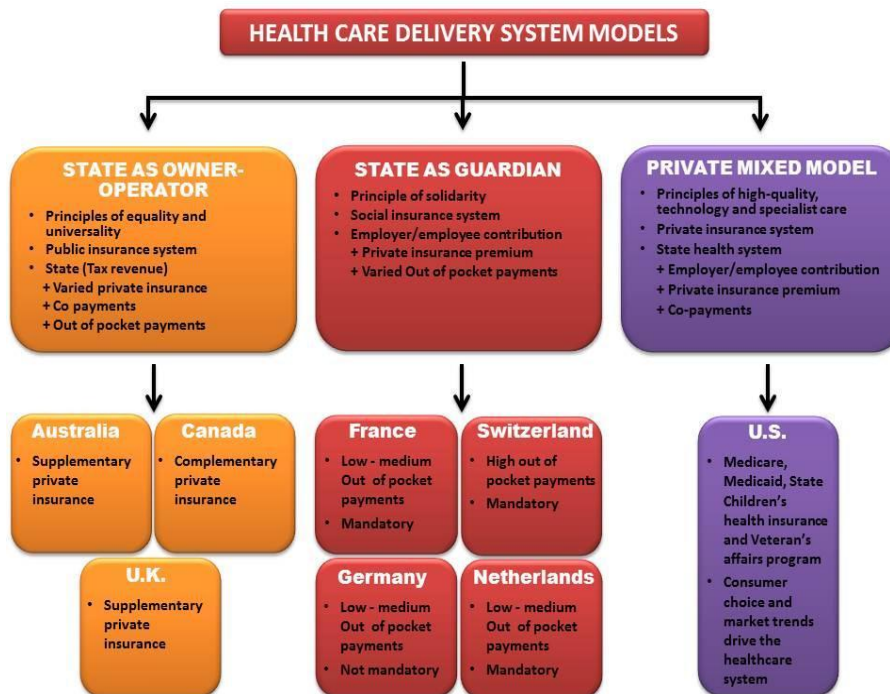


Figure 9: OECD comparator countries governance structures (Source: Snowdon A, Cohen J. Strengthening health systems through innovation: lessons learned. Western University: Ivey International Centre for Health Innovation; 2011 Nov. Figure 5, Structure and key features of the health care system of the comparator countries; p. 26.)

In this section, we review the country overviews presented in our 2011 white paper and extend the analysis to include a consideration of the value structures of the same comparator group of OECD countries. We also contrast the costs and performance of these health care systems to Canada. To do so, we use a longitudinal dataset to empirically analyze trends in cost and value of health systems in the OECD group over time and compare those findings to Canada's progress to date.

Overview of Global Health Care Systems

Australia

Similar to Canada, Australia has implemented decentralized systems in which the delivery of health care falls under the jurisdiction and responsibility of the individual states, which are the “owners and operators” of health systems, meaning state determines how resources are allocated and what services are delivered. The Australian system relies somewhat on cost-sharing and out-of-pocket payments to manage health system costs. For example, out-of-pocket payments accounted for 18.2 per cent of 2008 health expenditures in Australia. In addition, the Australian system is similar to the U.K., whereby specialists are allowed to maintain private practices outside the publicly funded system. Consumers also carry private insurance, which provides important resources for health system cost containment.

United Kingdom

The United Kingdom (U.K.) is one of three countries that practice the “State as Owner-Operator” national health system structure. In the U.K., as in Australia, physicians are allowed to have private practices. Consistent with most national health systems, the consumer is viewed as the recipient of care, rather than viewed as an active decision-maker who determines what health services they will access and what costs are negotiable. Among all of the comparator countries, the U.K. was cited the most often for the number and range of innovative approaches to health system reform and capacity building. They also report among the lowest health care expenditures per capita in all of the comparator OECD countries.

France

The French health care system requires mandatory participation by French citizens and relies on both social insurance contributions and taxes to fund the system. This is a “State as Guardian” system, whereby the state ensures that every citizen has access to a determined suite of state funded services. However, it is up to each individual citizen to choose their providers and determine how they want their services delivered by social insurance organizations. France relies on private insurance to cover cost-sharing and to supplement the national benefits package; over 80 per cent of French citizens have supplementary private insurance. The French system has a voluntary form of gatekeeping, and patients enjoy unrestricted access and free choice of GP and specialist providers. Although this has led to criticisms of the French system being rather fragmented, the French enjoy long consultation times with physicians and have the highest number of primary care physicians per capita of the eight countries. However, there are cost containment mechanisms in place, such as restrictions on what can be reimbursed by private insurance; a tightening of the drug formulary in favour of generic drugs; and a reduction in acute in-patient beds. In 2000, France was rated by the World Health Organization as having the best health care system in the world due to their commitment to universal coverage alongside high quality of care and health outcomes.

Germany

Germany has a “State as Guardian” health care model, and it is the only country using the social insurance style of approach, which allows citizens to opt out of publicly funded health care if they are able to afford private health care independently. Germany, while considered as having high expenditures relative to health outcomes, is by many accounts considered a benchmark country in terms of delivery of safe care as defined by low patient self-reports of medical error. Germany allows certain, typically high-income, citizens to opt out of social insurance for private insurance, which shifts the burden to citizens by introducing contributions to be borne by employees rather than employers as well as patient co-payments. In Germany, the vast majority of citizens are covered by their statutory health insurance scheme in which approximate health insurance funds or sickness funds compete for contracts with customers to deliver services. Consumer choice drives competition among providers.

Netherlands

Since 2006, the Netherlands has had a single system of compulsory insurance for all residents, which is administered by approximately 20 private insurers offering a universal government-defined benefits package. Recent health system reforms have resulted in a shift from wage related health funding to flat-rate contributions, which are kept low through competition. Individuals pay a flat-rate premium regardless of age, gender or health status, but there is also an income related tax contribution that subsidizes premiums for low-income groups. The Netherlands is considered, by many accounts, to be a top ranking country in health quality.

Switzerland

In 1996, Switzerland turned its system of voluntary health insurance into a mandatory social insurance system. Social insurance premiums, tax revenues and out-of-pocket spending each account for approximately one third of total health system expenditures. The system has 84 insurers offering a government defined basic benefit package, but both the premium and the deductible are allowed to vary across insurers with a minimum prescribed deductible. Citizens are thus able to lower their premiums and choose policies with higher deductibles. Moreover, approximately 10 per cent opt for coordinated, managed care plans, which, while offering restrictions on physician choice, have lower premiums. This gives the consumer an opportunity to tailor the health care services to their individual health needs and budget.

United States

The U.S. reports the highest health care system expenditure of any other country in the world. This is primarily a function of the heavy reliance on technology and over-provision of care in a heavily privatized health care system. There are features of publicly funded health care for the elderly (e.g., the Medicare program) and low income population (e.g., the Medicaid program). However, despite these programs and the very high expenditure on health care, today over 40 million Americans are considered uninsured and without access

to health care services. Health care has been a major focus of reform in recent years as the current privatized system of health care is accounting for an increasing percentage of the GDP in the U.S.

Analysis of Health Values for Select OECD Countries

The MVV statements for the federal health organizations for each of the comparator countries were analyzed to define the values embedded in health governance organizations of OECD comparator countries. This analysis was limited to policy organizations and public declarations by the national governments in order to determine whether values in select OECD countries (Australia, France, Germany, Netherlands, Switzerland, U.K., and the U.S.) are similar or different from Canada. These values were also examined to determine whether Canadian values were similar or different from these other countries, which may reflect variation in health system outcomes.

The MVV values in each of these countries focused on one of two central themes: health and wellness of the population, or the viability and sustainability of the health system. The values in France, Germany and the U.S. focused primarily on the health system and quality of health care.

Theme One: Better Health and Active Living

The most dominant theme for Australia, France, the U.K., and Switzerland was focused on “better health and active living” for people in these countries. This included a strong focus on patient-centered care and viewing patients in a holistic way.

Theme Two: Patient Choice and Equity

The second theme in this analysis was patient choice and equity. There was a strong focus on impartial, fair, and effective health care services. There was also a focus on the responsibilities of individuals to manage their own health and wellness, and ensure they have choice in accessing health care services. The dominant focus of this theme was to ensure equity in access and availability of health services, evident in all of the comparator countries.

Theme Three: Health Literacy

This theme was less often described, but clearly has a strong fit with the dominant themes of health and wellness, patient choice, and patient engagement. Health literacy refers to the value placed on ensuring people have access to and awareness of health and wellness information to support decisions. Transparency is a sub-theme of health literacy, whereby health systems offer transparency and access to information to support patient decision making.

Theme Four: Quality Health Services

This final theme was apparent in each of the country's MVV statements, although it was dominant in only three countries, France, Germany and the U.S. This theme focused on quality (timely, evidence based, inclusive) accountability and system integration. Participation, collaboration, strategic clarity, and efficiency are all common values in the MVV statements.

The most significant finding among these countries' mission, vision, and value statements was the clear focus on health and wellness, with reference to quality of life, as well as patient choice and the role of choice in supporting people to be responsible for their own health. Table 11 provides a summary of the analysis.

Table 11: Summary of OECD comparator countries' value themes

Value Theme	Countries	Examples
Better health and active living	Australia France Switzerland U.K.	<p><i>"Better health and active aging for all"</i></p> <p><i>"We care about people and put their health and wellbeing at the heart of everything we do"</i></p> <p><i>"Promote and maintain the good health of all people"</i></p> <p><i>"Keep everyone as healthy as possible and restore the sick to health as quickly as possible"</i></p> <p><i>"Support people with a physical or mental limitation and promote social participation"</i></p>
Patient choice and equity	All	<p><i>"Strengthen people ability to make meaningful choices about their care"</i></p> <p><i>"Promote people's awareness and enable them to take responsibility for their own health"</i></p> <p><i>"Counseling and self-responsibility are clearly strengthened"</i></p> <p><i>"Ensure that there are sufficient facilities and that people have sufficient choices"</i></p> <p><i>"People should be able to call on their general practitioner, the hospital or other forms of health care on time...have a right to health care"</i></p>

Health literacy	All	<p><i>“Promote people’s awareness”</i></p> <p><i>“Continuously improve the knowledge regarding health”</i></p> <p><i>“Every citizen should have the opportunity to acquire a broad knowledge of health”</i></p> <p><i>“Enlightened insured patients are part of a health system... with knowledge about health risks”</i></p>
Quality health services	<p>France</p> <p>Germany</p> <p>United States</p>	<p><i>“Ensure the quality of the health system to strengthen interests of patients to ensure the efficiency and stabilize contribution rates”</i></p> <p><i>“Ensure the quality of professional practice”</i></p> <p><i>“Value an apolitical, impartial and professional environment”</i></p> <p><i>“Transparency, accountability and responsiveness”</i></p> <p><i>“Global approach to disease management and quality in health care”</i></p>

When OECD countries were examined for values that form the basis for health systems, there was a clear distinction between Canadian values and those of the OECD comparator countries. Active living was a strong theme in these countries, which was not evident in Canadian health sector organizations. This distinction may be culturally based, or may be linked to Canada’s predominant acute care, hospital based system, which focuses largely on “disease care” and its outcomes, rather than healthy active living. Health literacy was also a unique value to other countries, which is a strong fit with the focus on the consumer of health care services and the role of the consumer in making decisions on what health services they will engage through social insurance structures. Canada has not identified health literacy as a central value for health systems, despite it being a necessary ingredient for successful collaboration that allows consumers to manage their own personal health and wellness. Patient choice and equity was not directly identified in Canadian mission, vision, and value statements; however, it was clearly stated in community organizations in reference to community engagement and empowerment at the level of the community, but less so for individual consumers. It is evident in this analysis that Canada lags behind OECD comparator countries in creating more consumer-centric systems, whereby choice and equity are centrally important, along with a focus on healthy active living, where consumers assume responsibility for their own health and wellness.

Global Comparisons of Health Cost Drivers, Health Care Spending and Health Care Performance of Select OECD Countries

I. Health System Cost Drivers

Health care system performance and expenditure are important indicators of the economic wealth and health of a nation. Over the past decade, health systems around the world have been challenged by significant growth in health system expenditures that have outdistanced the growth in GDP. Given the recent economic challenges in many countries, there is an increasing urgency to find innovative strategies to “bend the cost curve” while at the same time provide quality health care for populations. In order to identify evidence based approaches to cost reductions, many studies have attempted to identify the most influential cost drivers of health system expenditures to achieve economic sustainability for health systems.

Although there is an increasing amount of data available on global health systems, there is a substantial amount of missing data for many countries, which limits the ability to accurately compare health system costs. A critical review of the findings of this literature has revealed there is no clear consensus on the cost drivers of health care systems in OECD countries. However, a number of studies have focused on health system financing, aging populations, access to health care professionals, and the availability of technology with conflicting results. We provide examples of recent research to demonstrate direct evidence of this point.

Studies of Cost Drivers

An early study considering 19 OECD countries was done by Gerdtham et al.²³, which examined cross-sectional data from 1987. The results indicated that the main drivers of health expenditures per capita were the percentage of public financing to total expenditures, the share of inpatient care expenditures to total expenditure, and the use of fee-for-service as the dominant remuneration model for outpatient care.

Aging populations and income (GDP) have long been considered drivers of increasing demands on health systems, and therefore drivers of health expenditures. These relationships, however, remain controversial. Morgan and Cunningham⁴ examined health expenditure data in one Canadian province, British Columbia (BC), to identify whether an aging population was really a cause for the soaring health expenditures. Findings revealed that the impact of aging on health expenditures in BC accounted for less than 1 per cent of costs, suggesting that aging is not a significant driver of health system costs. Recently, Baltagi and Moscone⁵ used co-integration analysis and studied the effects of income and the aging population. Their results showed health care is not a luxury but a necessity. These studies may have reconciled by inferring that rather, the younger age group puts more burden on HCE, which was not considered specifically by Mohan. Contrary to this, Gerdtham et al.²³ concluded that health care is a luxury.

A number of studies have examined the use and availability of technology as a driver of health system expenditures. Baker et al.⁶ argued that the availability of technology motivates

and encourages high rates of utilization and therefore, is a driver of health system costs. Similarly, the USA Congress Budget Office (CBO) reported in 2008 that increasing technology availability will increase usage and hence health expenditures.²⁷ Van Elk, Mott and Franses⁸ concluded that there is a long-term positive relationship between health expenditures and GDP, aging, and relative price of health care, rather than technology by itself.

Clearly, there are substantial differences in the current views on the major cost drivers of health expenditures. Despite decades of research using large OECD databases, there remains no clear evidence of the factors that contribute to the rapid growth (time trend that is not accounted for by variables such as GDP, aging, technology, etc.) of health system expenditures globally. Likewise, there is no substantive evidence of factors that improve health outcomes at the population level. The challenges in the current state of the science on health system costs are related to variability in how data is collected in each of the OECD countries, the inherent latent factors specific to each country, as well as highly prevalent challenges of missing data on a number of key health system indicators.

In the absence of any consensus on what drives expenditures in health systems, our objective was to examine how health system performance indicators in Canada compare with other OECD countries in order to inform the analysis of Canada's performance relative to other developed countries. This analysis will rank Canada among the same eight countries examined in the Centre's 2011 white paper, in terms of key performance indicators over the past decade. While we examined trends in health systems in two time intervals: the 10-year period from 2000 to 2010, and the more recent five-year period from 2005 to 2010, we only report on the 10-year trend, as the trends in the more recent five year period were nearly identical to those uncovered over the last decade.

II. Health System Expenditures

There have been a number of academic studies that have looked at health system spending in OECD countries,^{29,30,31} as well as a number of reports from policy organizations (e.g., The Commonwealth Fund³²), and the media. The purpose of our analysis was to examine the growth trends in health expenditures in Canada relative to these other countries. We analyzed health system data collected by the OECD, which begins in the 1960s and continues through to the present. It includes health system spending and health indicator data, although there is frequent missing data throughout the dataset, depending on the availability of data for each indicator in any given year.

Although there was a consistent increase in health expenditures in Canada (Figure 7), this was true across all of the OECD countries we studied. The growth in public health care expenditure per capita (PPP) in the period 2000 to 2010 for the selected eight countries is depicted in Figure 10. Canada's median public health expenditures of \$2417 (US, PPP) rank as the fourth highest expenditure, with the United States leading all of the countries in this analysis. The U.K. and Australia report the lowest level of public expenditures. In all of these comparator countries, although expenditure starting points may vary greatly from country to country, the rate of increase does not. Expenditures were measured in PPP (standardized

currency) so that comparisons between countries would be based on a common currency measure, rather than variation in annual GDP.

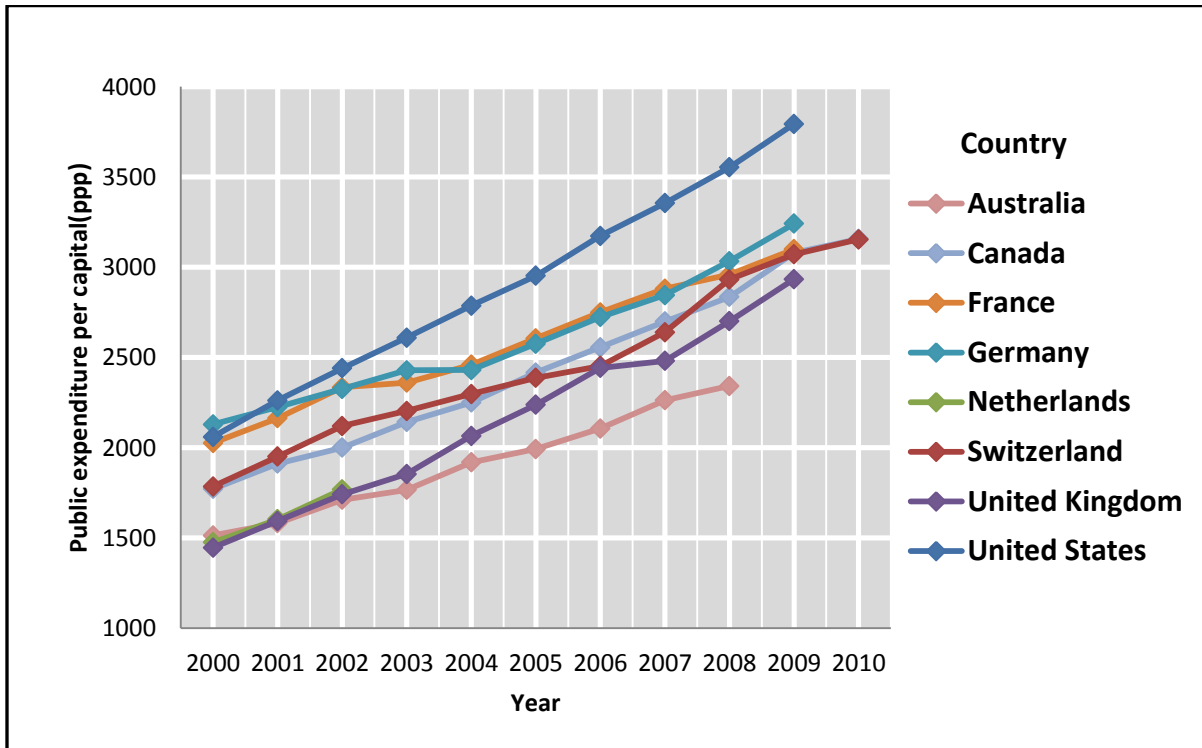


Figure 10: Rate of growth of public expenditures on health care (Source: Data from OECD and World Bank)

While our comparisons in Figure 10 focus on the rate of growth of public expenditure per capita, Figure 11 provides the same comparison from 2000 to 2010 for total expenditure in health care per capita. Once again, the United States is far ahead of all of the other comparator OECD countries in terms of total expenditure in health care per capita, while Canada’s median expenditure of \$3442 (US, PPP) over the 10-year period ranks third highest. Total Expenditure as a percentage of GDP was not analyzed in this study due to the variability of GDP in many countries over the ten year period.

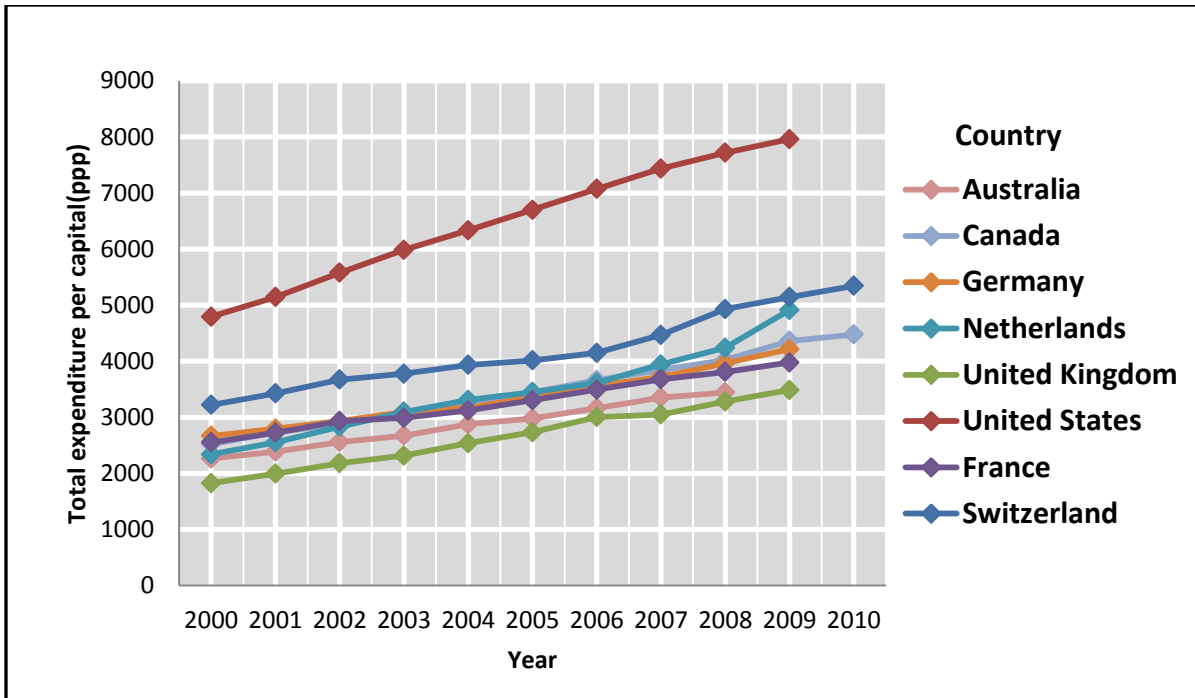


Figure 11: Rate of growth of total expenditure in health care (Source: Data from OECD and World Bank)

In terms of private expenditures on health services, Canada had a median of \$503 (US, PPP), which is the fourth highest position among OECD countries, behind the U.S., Switzerland, and Australia. Figure 12 illustrates private expenditures per capita on health care. Growth in private expenditures on health services has been consistent over the past decade among the OECD countries, with the exception of Switzerland, which has experienced the greatest increase in private expenditures, particularly since 2006. In Switzerland, there is a more open regulatory environment, where clinics offering multiple services are opened and operate with very little oversight. In addition, the Swiss population has among the highest wealth in the world; thus the very high private expenditure in Switzerland is consistent with the high wealth of their population.

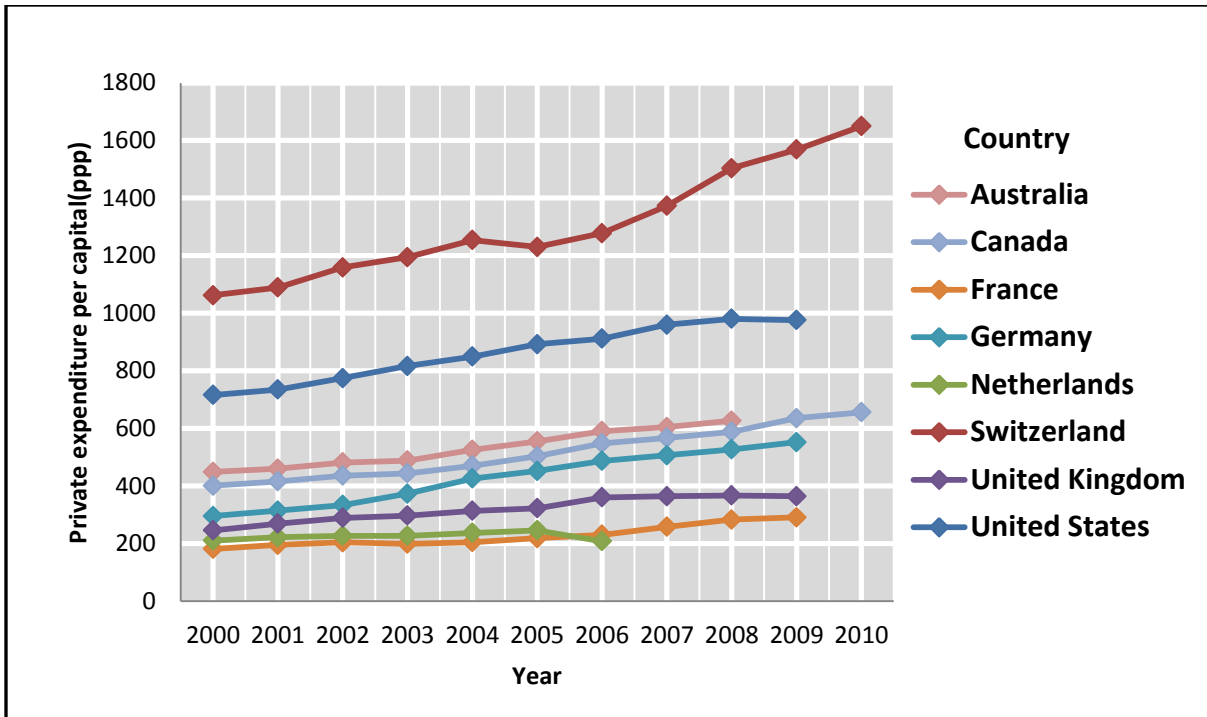


Figure 12: Growth in private expenditures on health services (Source: Data from OECD and World Bank)

We examined spending growth across our sample of OECD countries in three areas: total expenditure, public spending, and private spending. This comparison is based on a generalized regression model, whereby AR(1) error terms were used and linear trend (growth rates) of the various expenditures were estimated. We then ranked countries by the speed of growth in these expenditures (Table 12). Canada has the fourth fastest growth all of these types of expenditures. The U.S. occupies first place, except in private expenditure, for which Switzerland is the fastest growing over the decade of 2000-2010.

Table 12: Comparison of growth in health expenditures across OECD countries

Country	Total Health Expenditure (PPP)	Public Expenditure (PPP)	Private Expenditure (PPP)
United States	1	1	2
United Kingdom	5	2	6
Switzerland	3	6	1
Netherlands	2	3	8
Germany	6	8	3
France	7	7	7
Canada	4	4	4
Australia	8	5	5

III. Health System Performance

To explore global health system performance, we examined health outcomes of Canadians as compared to our OECD comparator countries. Although the data points for health outcome indicators are limited in the OECD and World Bank data sets, there is value in understanding how health outcomes vary. We specifically looked at five categories: life expectancies, health care professionals, technology use, pharmaceutical therapies, and institutional characteristics.

1. Life Expectancies

The first health outcome is a high-level indicator for total health of the Canadian population. Life expectancy is a function of both health system effectiveness and quality, as well as other social determinants of health such as income, education, access to housing, food, and clean water.

Recently, Mohan and Mirmirani³³ analyzed longitudinal OECD data (1990-2002) for 25 countries, using life expectancy and infant mortality as an outcome of interest. This study sought to identify the most influential factors that contributed to life expectancy and infant mortality outcomes. Findings revealed that the use of technology, physician density, rates of immunization, health expenditures (total expenditure in PPP), and education were positively correlated with life expectancy. Use of inpatient bed days per capita had a negative influence on life expectancy, where the higher the inpatient use of hospitalization, the lower

the life expectancy rates. Infant mortality was most influenced by physician density, immunization rates, and education: the greater the number of physicians, the higher the immunization rate; the higher the education, the lower the rates of infant mortality.

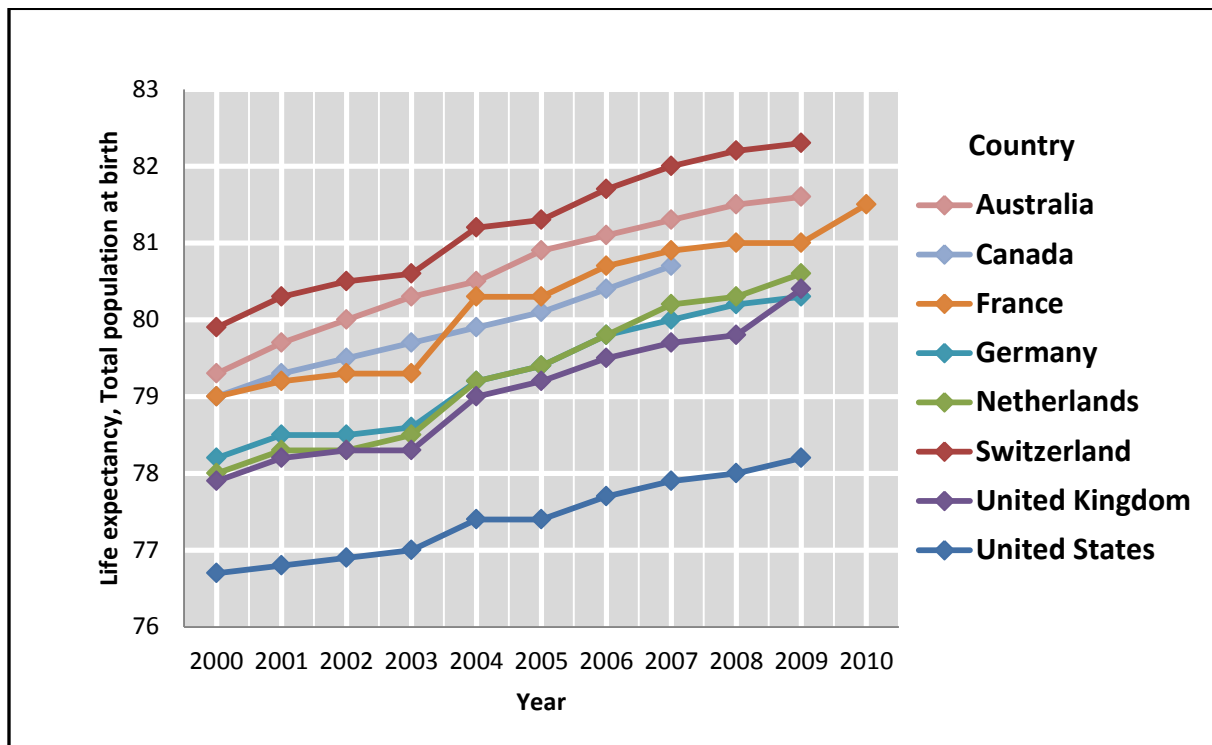


Figure 13: Life expectancy at birth (Source: Data from OECD and World Bank)

The changes in life expectancy have been similar for most countries, with the exception of France, which had the same life expectancy as Canada in 2000 and exceeded Canada’s life expectancy between 2004 and 2007. Both Switzerland and Australia have made impressive gains in total life expectancy when compared to Canada. The U.S. ranks lowest in life expectancy, despite having the highest expenditures in health care.

Value for the cost of health systems in Canada is not being achieved relative to child health, in particular infant mortality (Figure 14). Canada has not achieved the significant declines in infant mortality that other countries have achieved, such as Netherlands, Australia, the U.K., and Germany. Despite ranking among the top three countries in the OECD group on total health expenditures, Canada continues to have the second highest rates of infant mortality among these same OECD countries. This opens a deeper question of whether such relatively high infant mortalities are linked to social determinants of health.

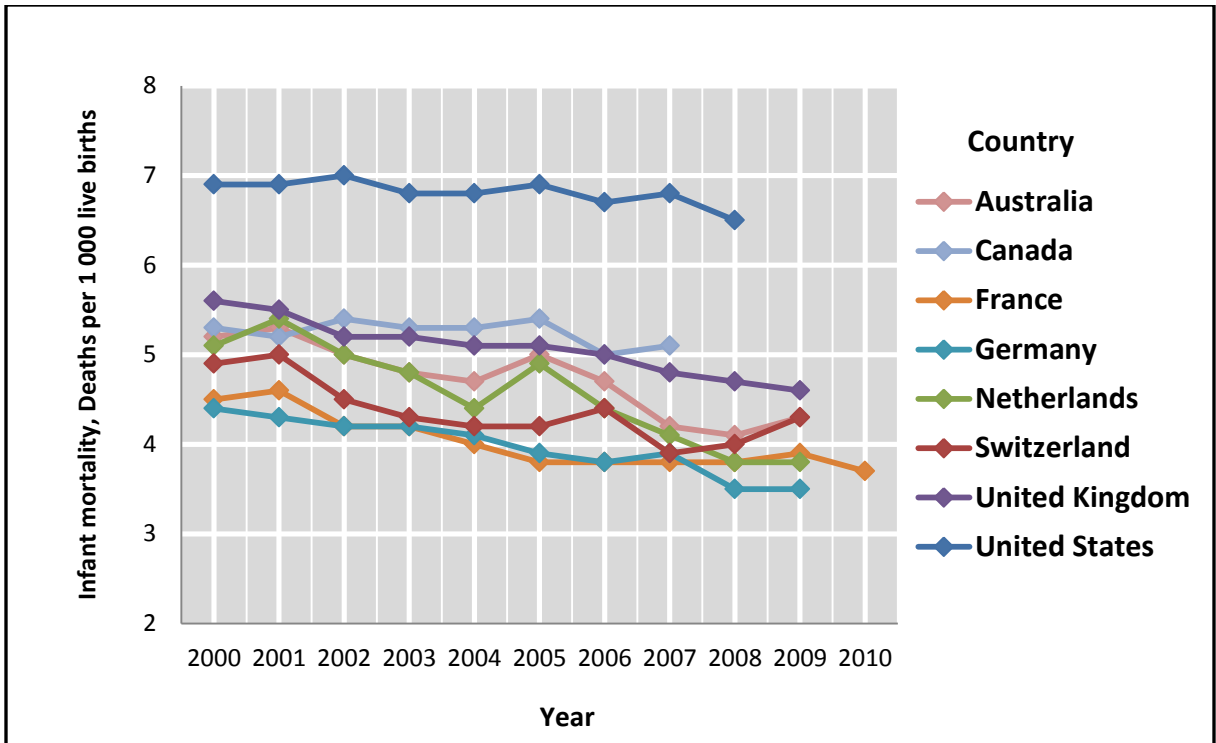


Figure 14: Infant mortality per 1,000 live births (Source: Data from OECD and World Bank)

2. Health Care Professionals

While there are many health care professionals who play an important role in ensuring the smooth operation of health care services, this analysis only included data on physicians. We hope that in a future white paper we are able to expand this analysis to include nurses and other health care professionals.

We examined physician consultations, and our consideration of technology use included looking at the influence of physician density. The pattern of physician consultations varies across the comparator countries. However, Canada and France both had steadily declining numbers of physician consultations in 2000 to 2010. The rationale for this significant decline in physician consultations is not yet clear, and it is distinct from other countries. Despite these declines, Canada ranks overall the fourth highest in physician consultations with a median number of consultations per capita of 5.9, as compared to other countries (Figure 15) over 2000 to 2010.

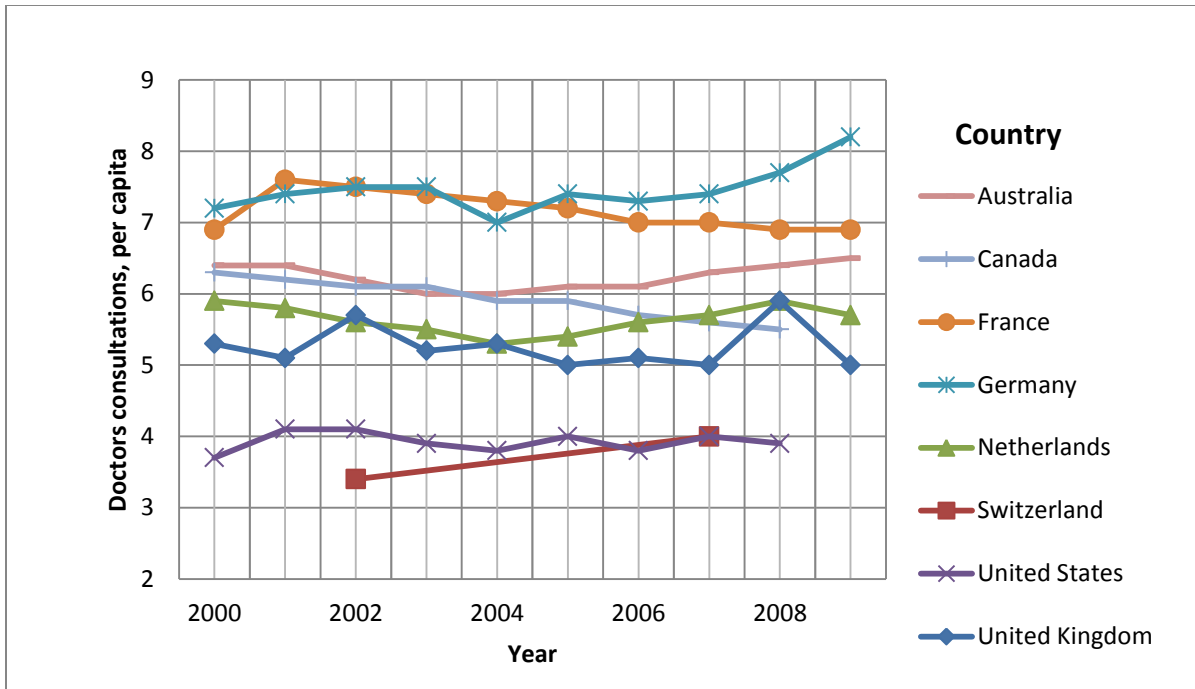


Figure 15: Number of physician consultations per capita (Source: Data from OECD and World Bank)

The U.S. and Switzerland have the lowest number of consultations, although the data for Switzerland is based on only two years of data. In the U.S., the low number per capita may be related to high numbers of citizens having limited or no health care coverage. Germany, Netherlands and Australia follow similar patterns of physician consultations, whereby after 2004, the numbers of consultations show a steady increase in these countries. Despite the continual increase in health system costs, the number of physician visits per capita in Canada has declined, suggesting that physician consultations may not be a driving influence on health system expenditures, as has been suggested in recent dialogue. The evidence suggests that escalating costs to the health system may not be influenced by MD consultations, as these have been declining substantially in recent years. A more detailed regression analysis showed that, given the time trend, higher doctor density did not result in higher rates of utilization of health services (i.e., more physician consultations).

3. Technology

This analysis looked at the decline or increase in activity in technology use as a result of technology availability. MRI use was controlled for by number of MRIs and CT use for the number of CT machines per million.

In the context of the availability of technology and use, a common conjecture is that more technology would increase utilization of physician consultations. However, our regression results revealed no evidence that either the number of MRI machines, or that of CT scans influenced their use, over the 10 year time span of this analysis.

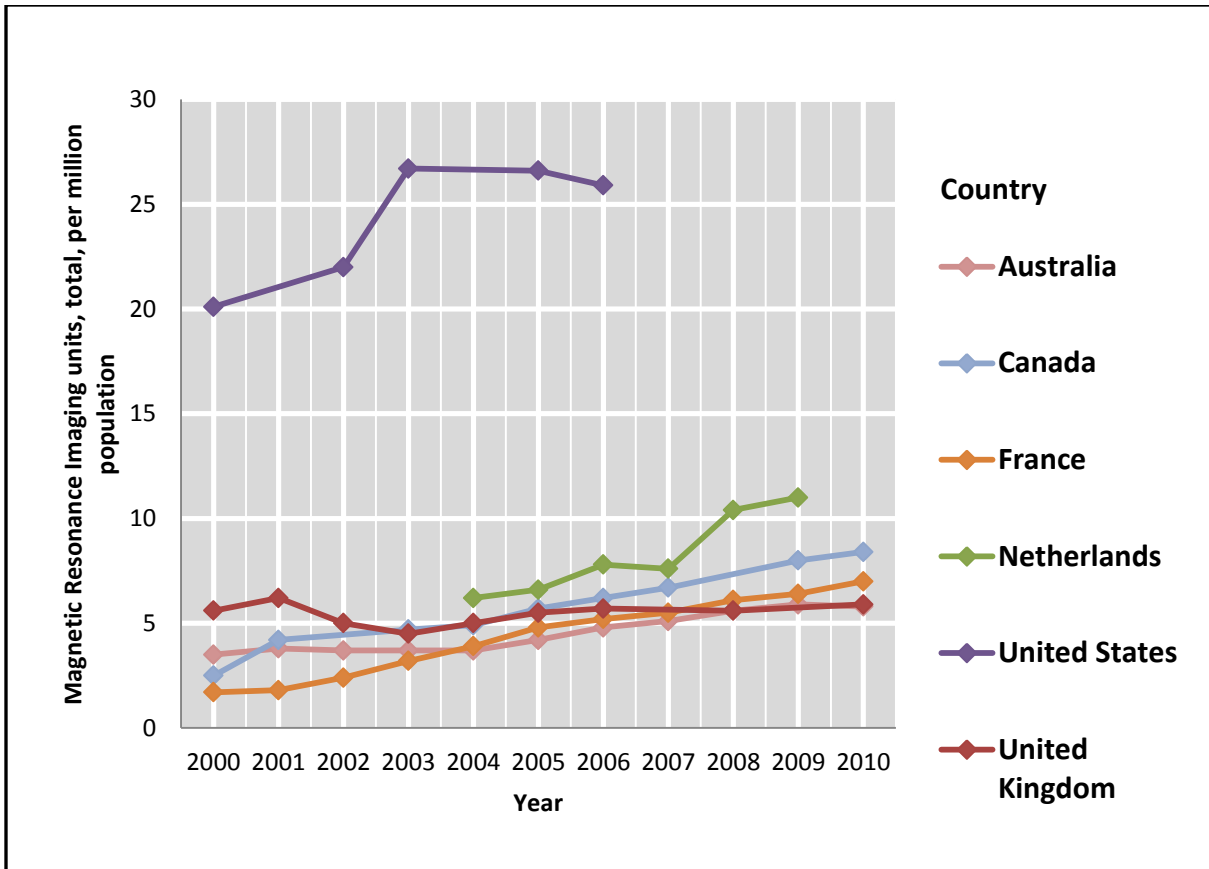


Figure 16: MRI machines per million population (Source: Data from OECD and World Bank)

Table 13: Country Rankings for Number of MRI Units and CT Scanners

	Australia	Canada	Swit.	France	Germany	Neth.	U.K.	U.S.
MRI units	6	3	NA	4	NA	2	5	1
CT scanners	1	4	3	5	NA	6	7	2

Figure 16 and Table 13 clearly demonstrate that the U.S. has far more MRI units than any other comparator country. However, it is not just about the existence of the machines, but also the average number of scans per MRI unit. Using the ratio of number of diagnostic exams done by these machines to the number of machine units as a metric for utilization, we found that Canada's utilization is exceeded only by France, while the U.S. has the lowest rate of utilization. In other words, Canada has the second highest utilization rate per machine, assuming that all machines are equally used (Figures 17-18). It is important to note that this analysis does not take into account geographic dispersion.

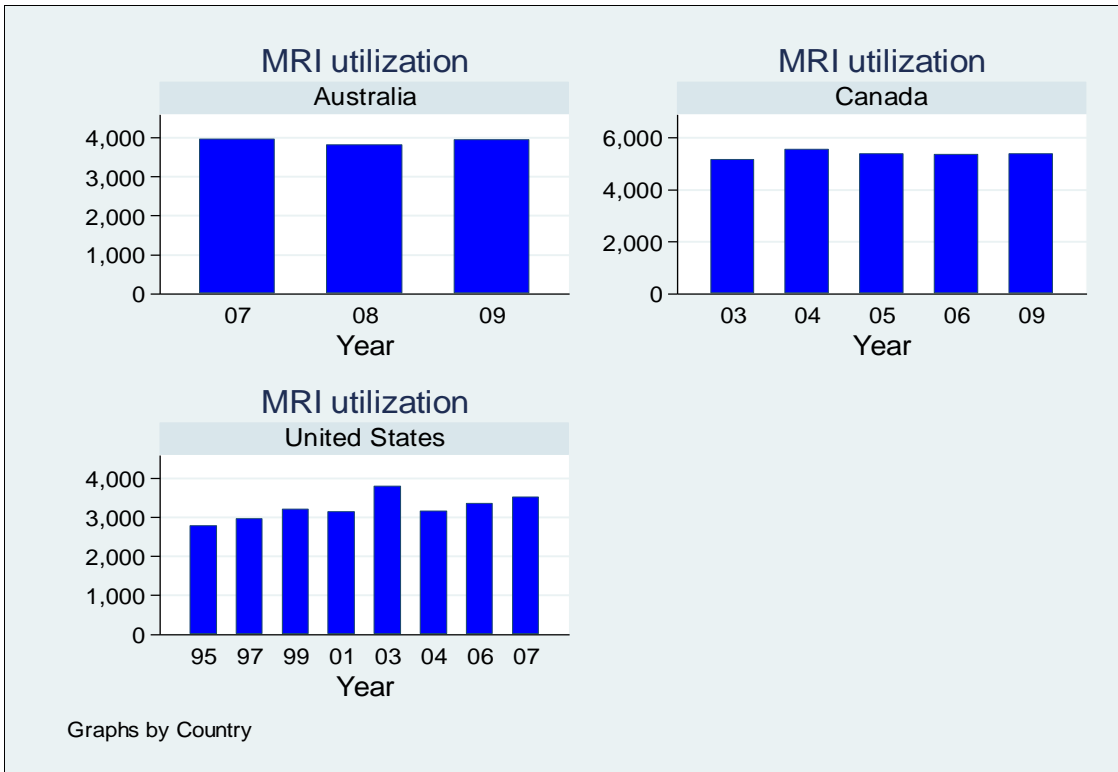


Figure 17: Number of MRI exams per unit (Source: Data from OECD and World Bank)

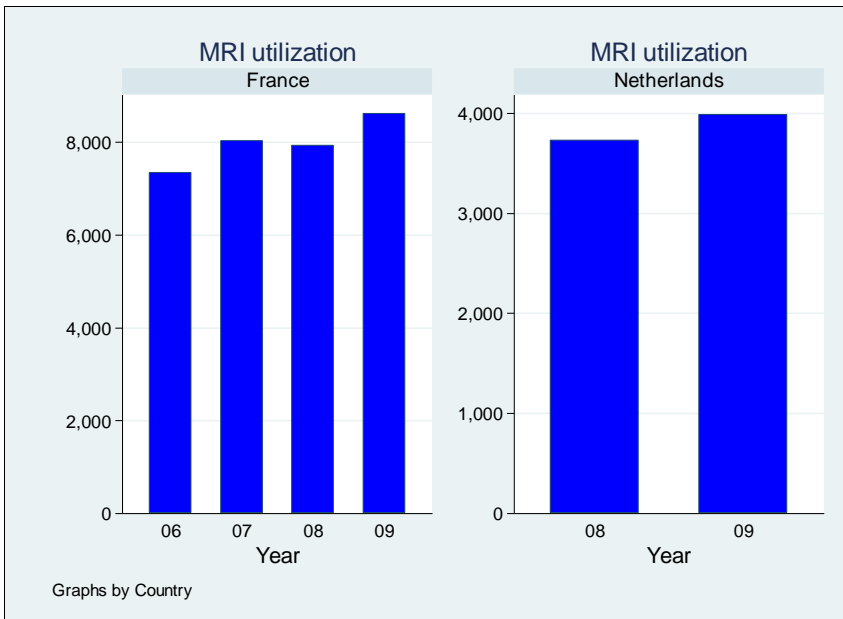


Figure 18: Number of MRI exams per unit (continued) (Source: Data from OECD and World Bank)

In terms of CT examinations per unit of equipment, again Canada ranks the second highest after France, and USA is the lowest (Figures 19-20). This has to be translated into whether such overuse of equipment is cost-effective. The other issue this raises is the fundamental value Canadians have for access. If fewer machines are available (either MRI or CT scanners), then wait times and access are more than likely to be compromised than if MRI or CT scanners are more prevalent.

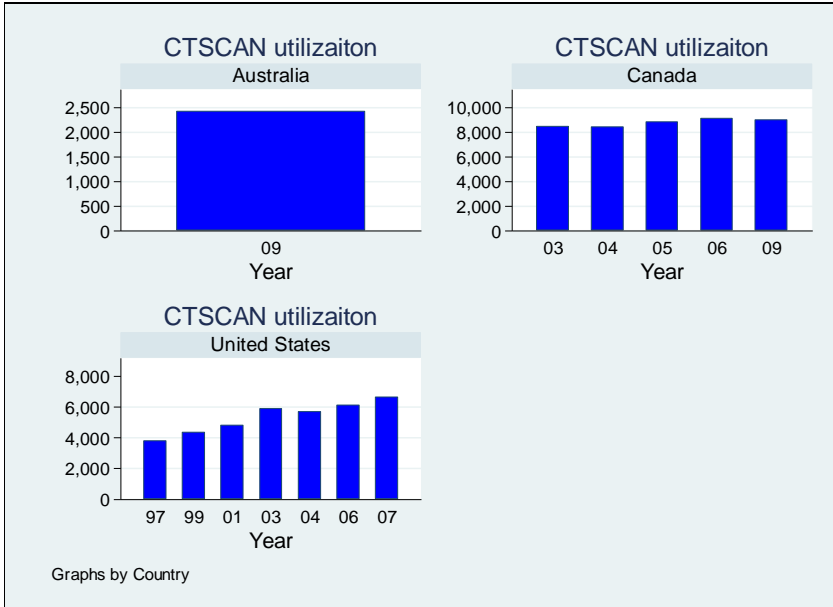


Figure 19: Number of CT scan exams per unit (Source: Data from OECD and World Bank)

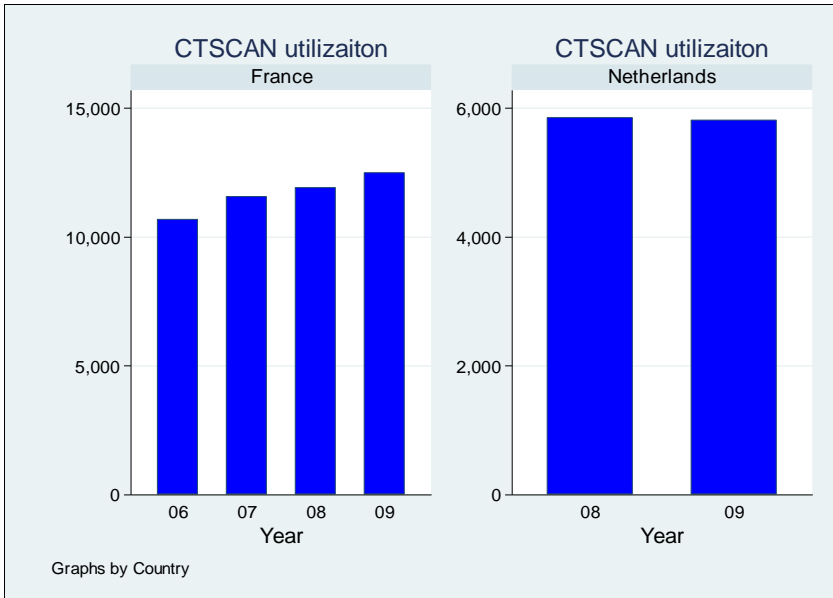


Figure 20: Number of CT scan exams per unit (Source: Data from OECD and World Bank)

4. Pharmaceutical Therapies

Pharmaceutical therapies have been long thought to be core drivers of health system costs. Canada has the second highest expenditures in the world on pharmaceutical products (a median of \$572 US, PPP), just behind the U.S. (Figure 21), and it is the fastest growing over 2000 to 2010. In the U.K., there have been very aggressive attempts to manage drug costs by incentivizing physicians to decrease the amount of prescriptions for medications they issue to patients. This strategy introduced protocols to decrease drug therapies and use a “funding holding” approach, whereby the cost savings from reduced reliance on medication is awarded to the physician. The U.K. continues to operate in a very cost-containment type of health care environment, which has clearly resulted in the lowest pharmaceutical expenditures among all OECD countries. Switzerland engaged in a pharmacist-physician collaboration, which resulted in over 40 per cent reduction in pharmaceutical costs.

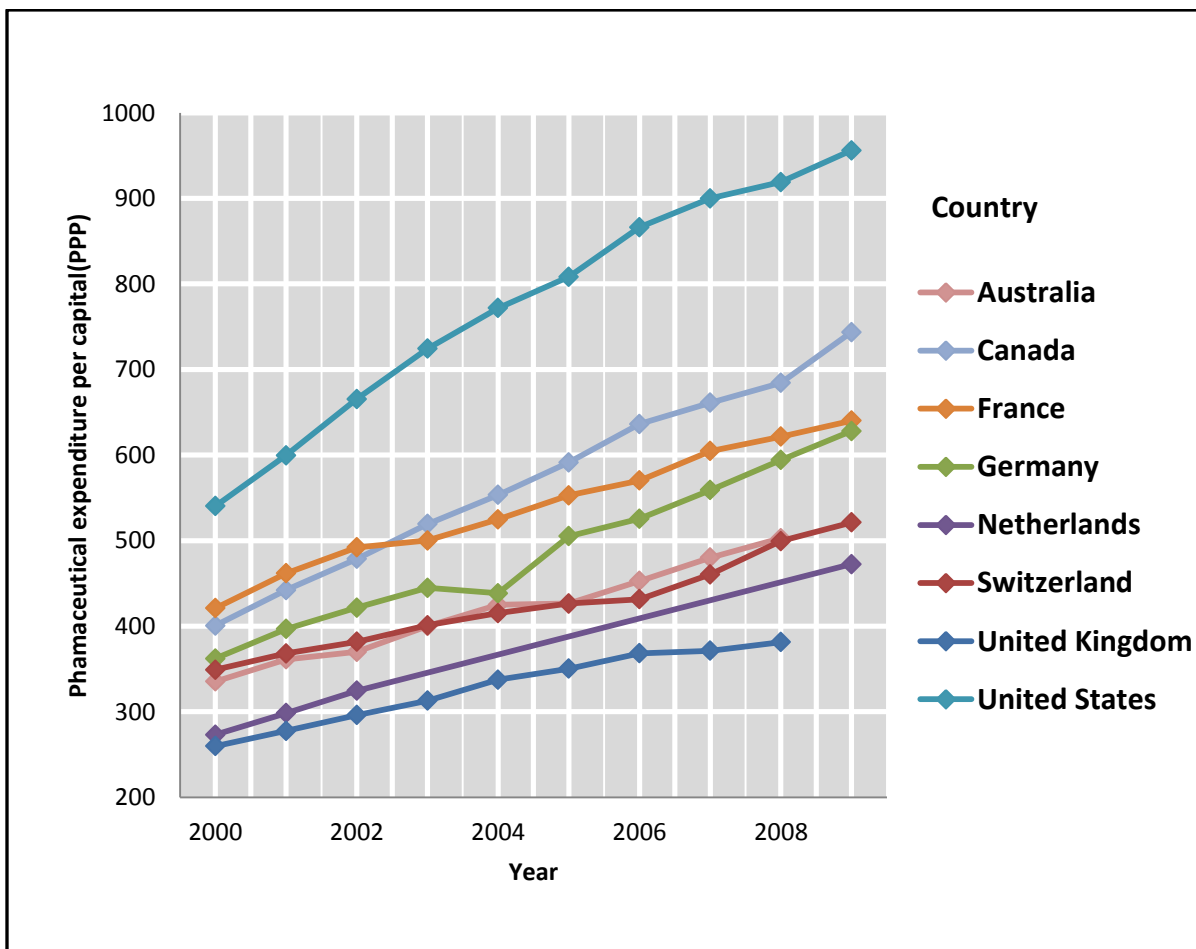


Figure 21: Growth of pharmaceutical expenditure per capita (PPP) (Source: Data from OECD and World Bank)

5. Institutional Characteristics

We felt it was important to compare a number of institutional health characteristics across our comparator OECD sample. We specifically looked at items related to hospitals, but hope to expand this analysis in the future to include indicators of home care and community care, as they are also important elements of health care systems in OECD countries. Our analysis considered hospital beds in terms of their number and occupancy, as well as the average length of the patient's stay. Occupancy rates and average length of stay are metrics often used for hospital planning purposes.

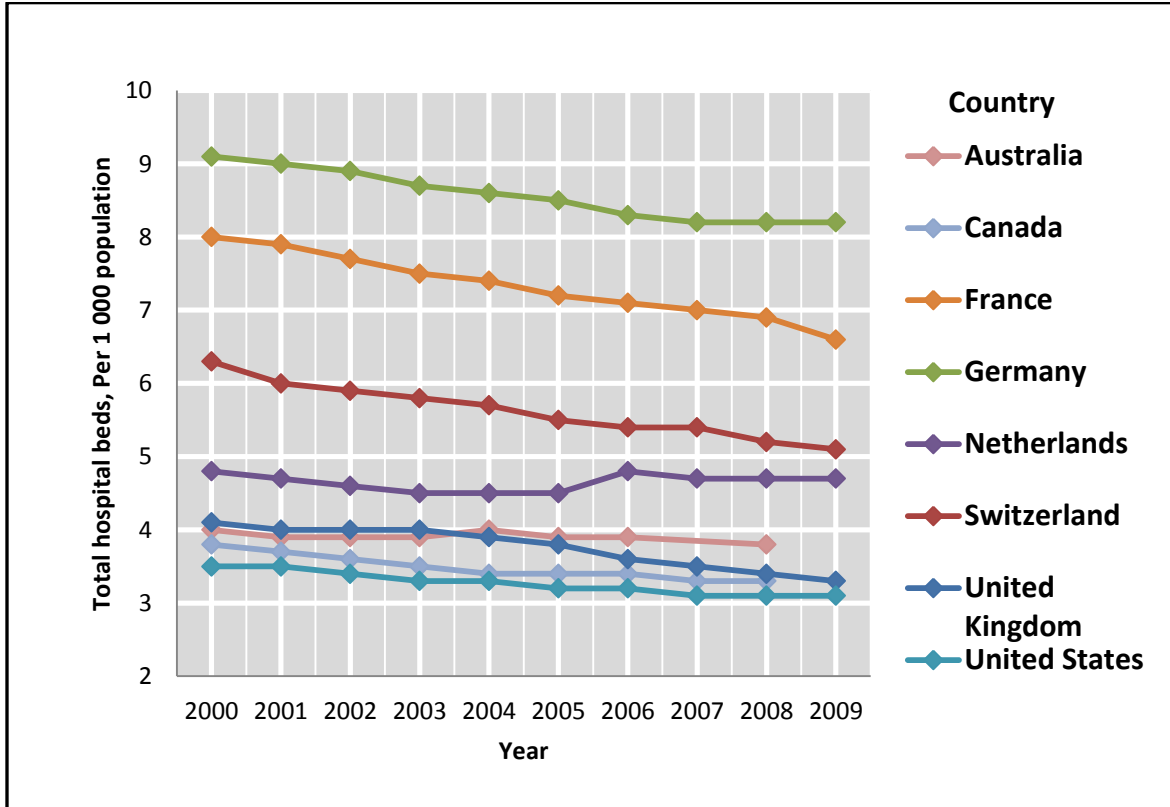


Figure 22: Hospital beds per 1,000 people (Source: Data from OECD and World Bank)

The number of hospital beds controlled for populations has stayed relatively stable over the past decade with a slight downward trend. France and Germany have the highest levels; with Canada only being second to the United States for the fewest beds (see Figure 22). Not surprisingly, Canada has the highest occupancy rate of acute care beds, hovering around 93 per cent (Figure 23).

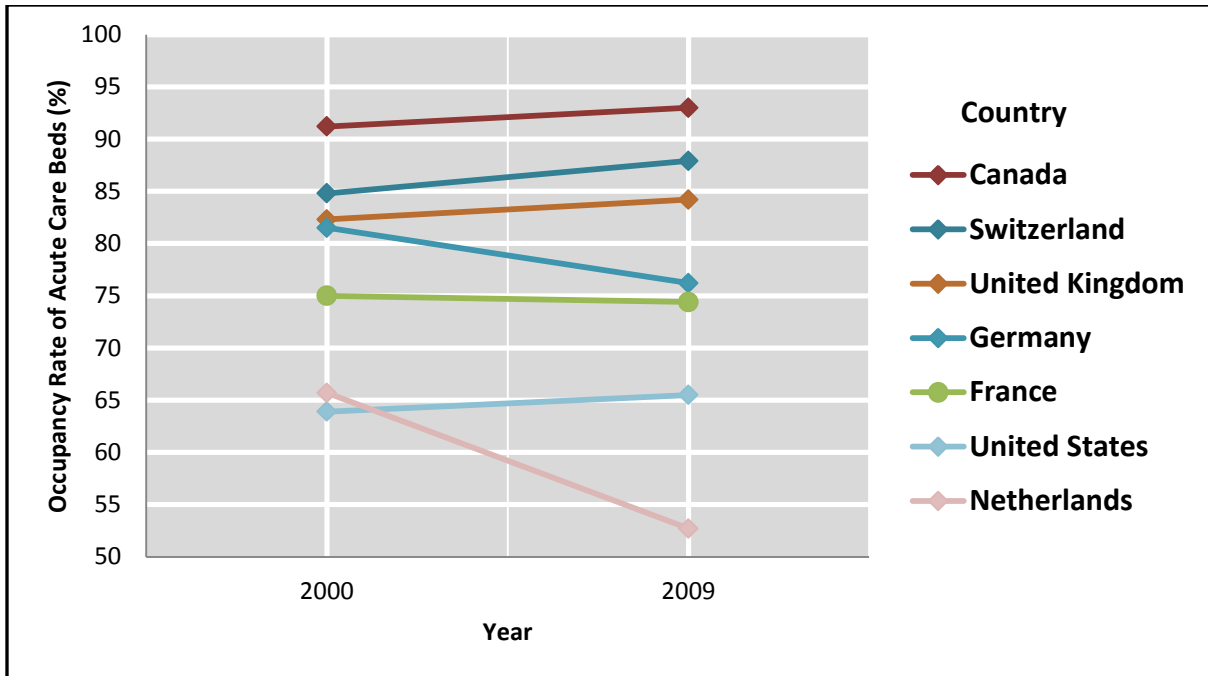


Figure 23: Occupancy rate of acute care beds (per cent) in 2000 and 2009 (Source: Data from OECD and World Bank)

Canada has the highest lengths of stay for acute care hospitalization among the OECD countries, with the US and France being among the lowest (Figure 24a). The trend for Canada's length of stay is increasing, whereas in other countries there is a clear trend towards shorter lengths of stay for patients in hospital. Lengths of stay (LOS) in Canada may reflect few community resources as alternatives to hospital care and may also reflect the dominant hospital model of care in Canada. Clearly, the trends in this analysis identify that Canada has the fewest number of beds and the highest lengths of stay, suggesting that the efficiency of hospital bed use is among the least impressive relative to other countries, even compared to the US.

In terms of relationship between LOS and total HCE, we found in the literature that in some countries, such as the U.S., the first three days of hospitalization are the most cost intensive days, thus suggesting that a reduction of hospital costs in the first few days would reduce hospital related HCE substantially.

Our graphical analysis (Figure 24b) shows that Canada's LOS-HCE relationship is different than other comparator OECD countries. In fact, it seems that increasing LOS is associated with increasing cost in Canada, while in the rest of countries the relationship goes in the opposite direction, even when compared to countries with HCE growth similar to Canada (e.g., Germany).

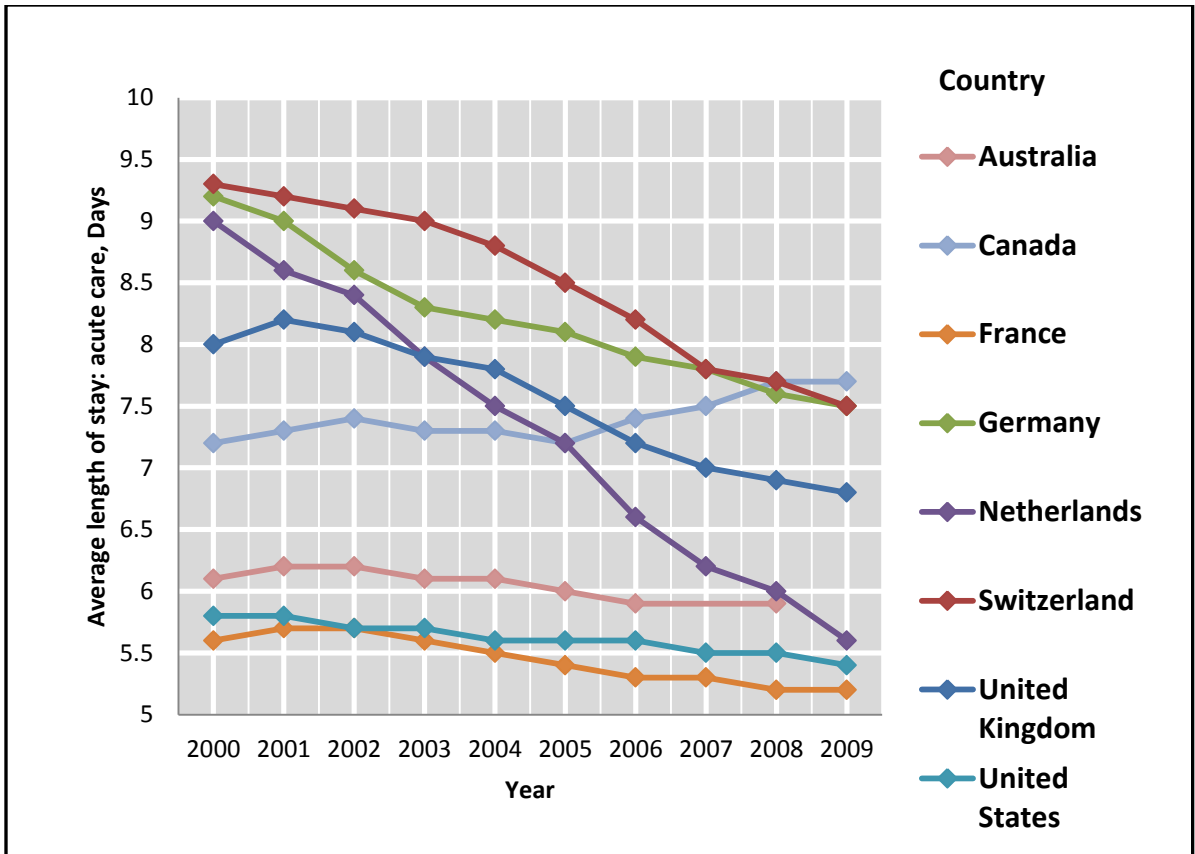


Figure 24a: Average length of stay, acute care days (2000 - 2009) (Source: Data from OECD and World Bank)

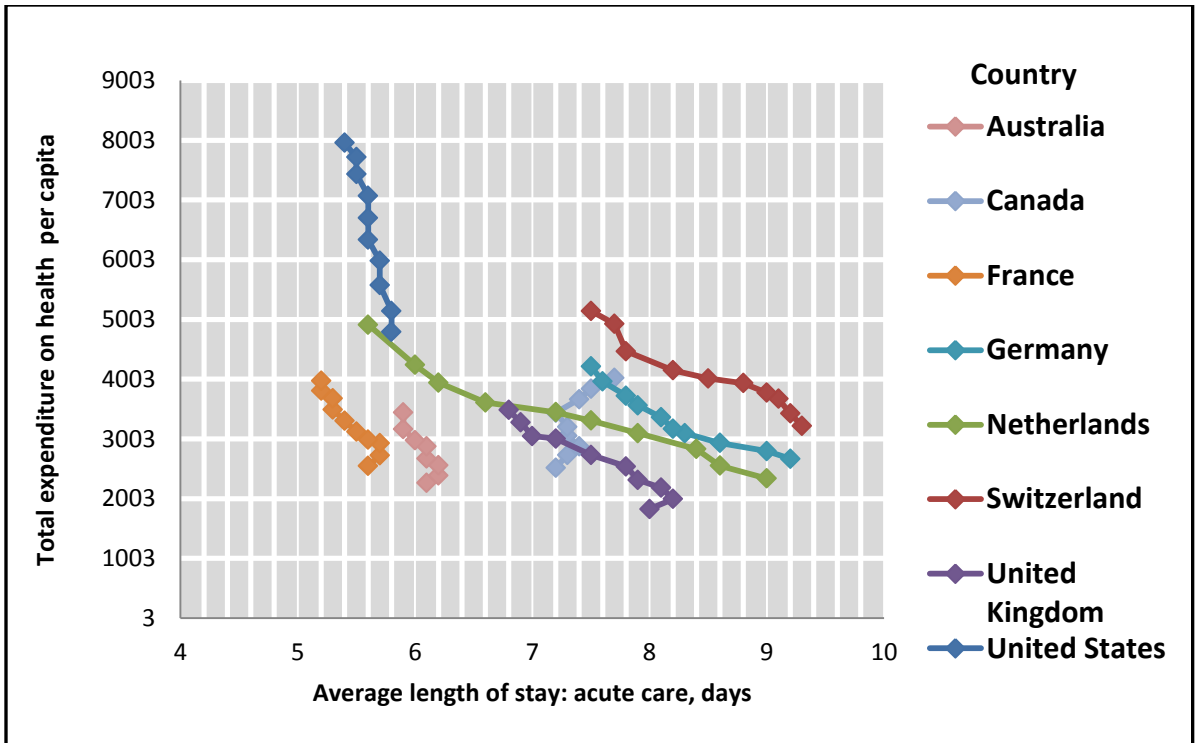


Figure 24b: Average length of stay, acute care days (2000 - 2009) (Source: Data from OECD and World Bank)

6. Public Health

This analysis examines the current health status outcomes of the Canadian population relative to other OECD countries. In particular, child health outcomes (e.g., vaccination) and lifestyle health outcomes, such as smoking and alcohol prevalence, are examined in Canada relative to other OECD countries.

Canada's rates for childhood immunizations including measles (Figure 25) and tetanus, diphtheria and pertussis (TDP) are not impressive. Canada ranks fourth out of comparator OECD countries for measles and is last for TDP. This can lead to increased health costs at later stages of a child's life. It may also be a contributing factor in Canada's child mortality rate.

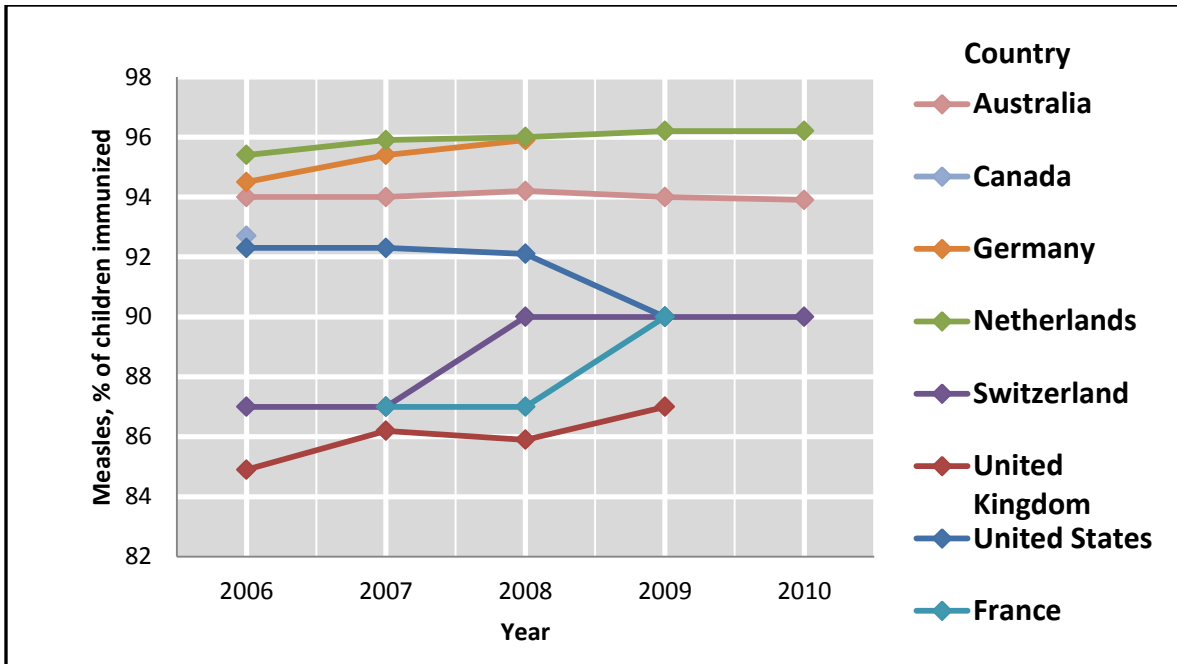


Figure 25: Percentage of children immunized for measles (2006 – 2009) (Source: Data from OECD and World Bank)

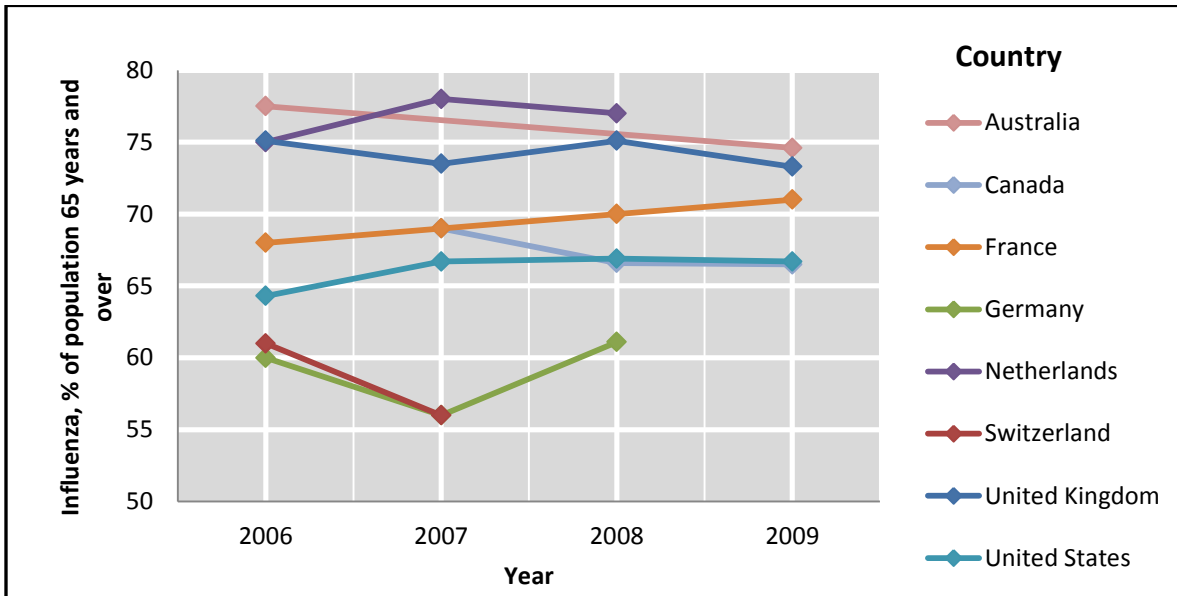


Figure 26: Percentage of population 65 years and over immunized for influenza (2006-2009) (Source: Data from OECD and World Bank)

Canada has among the lowest rates of influenza vaccinations for people over the age of 65 years (Figure 26). This could help explain the high levels of hospital occupancy reported earlier, which may also be linked to length of stay if patients over 65 years are the majority of patients in hospital.

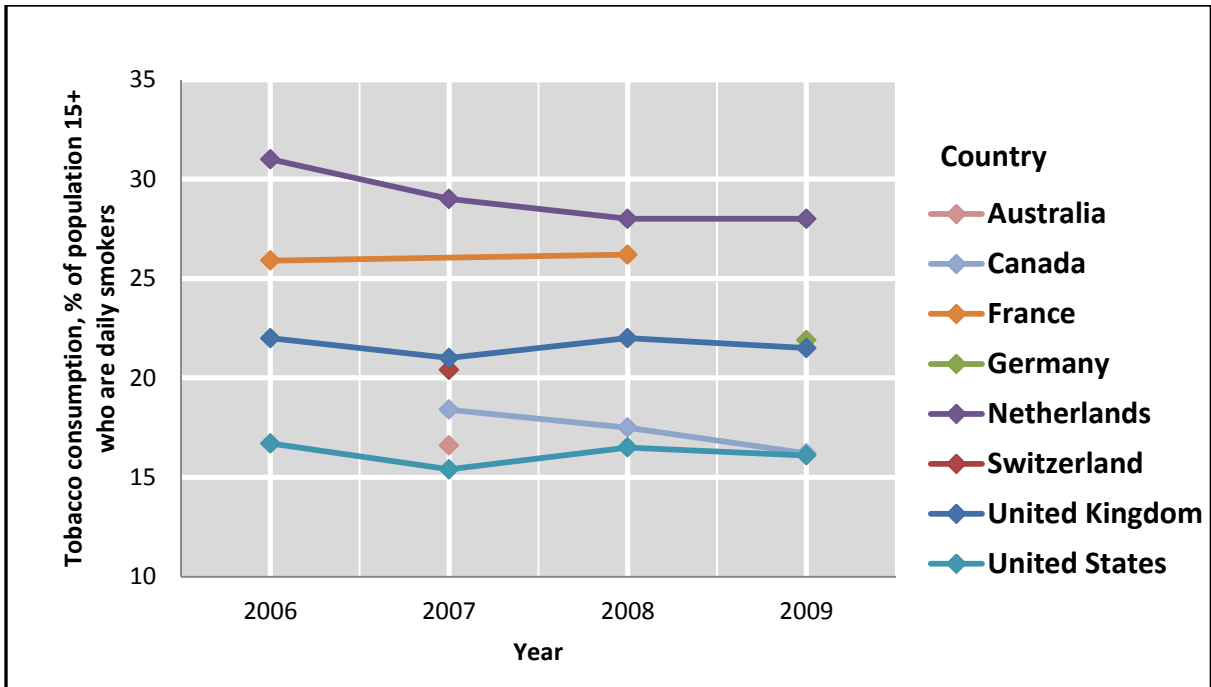


Figure 27: Percentage of the population 15 or older who consume tobacco daily (2006-2009) (Source: Data from OECD and World Bank)

Canada has among the lowest rates of tobacco consumption in the OECD countries and has achieved a sharp decline in smoking prevalence since 2007 (Figure 27). Canada also reports the lowest rates of alcohol consumption among the OECD countries (Figure 28).

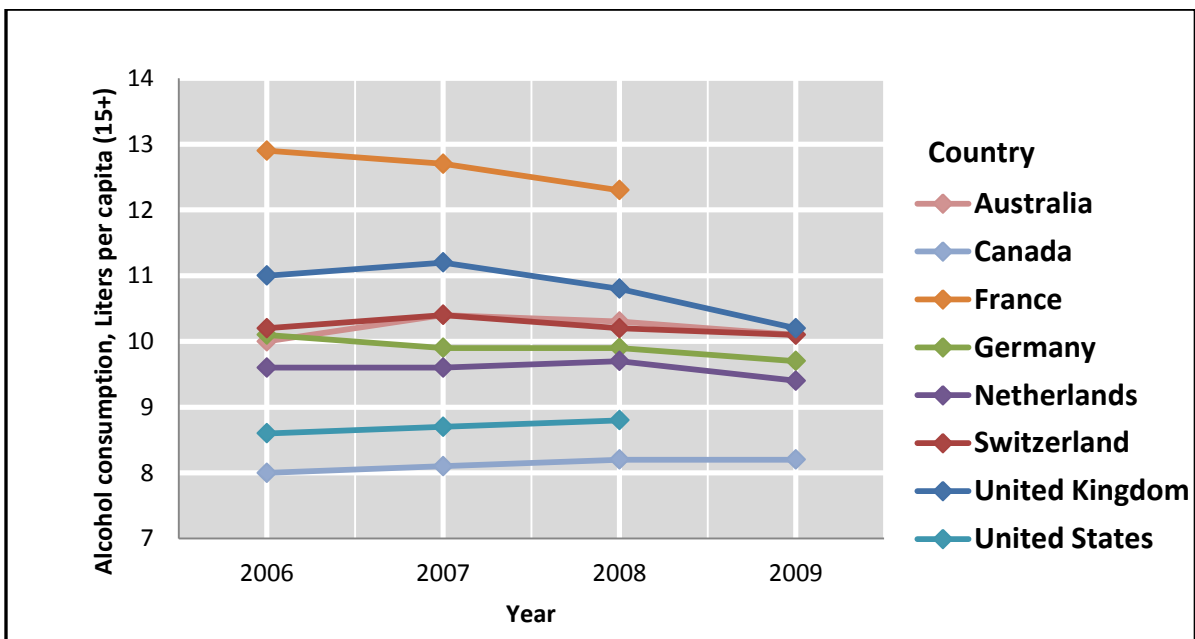


Figure 28: Alcohol consumption of those 15 and older (litres per capita) (2006-2009)

Despite impressive public health achievements such as rates of smoking and drinking, Canada continues to have a high rate of obesity among the population (Figure 29). Canadian children are the first generation in its history that may not outlive its parents due to high rates of obesity among children.³⁴ While this analysis has substantial missing data, it is clear that Canada remains very high relative to other OECD countries, exceeded only by the U.S.

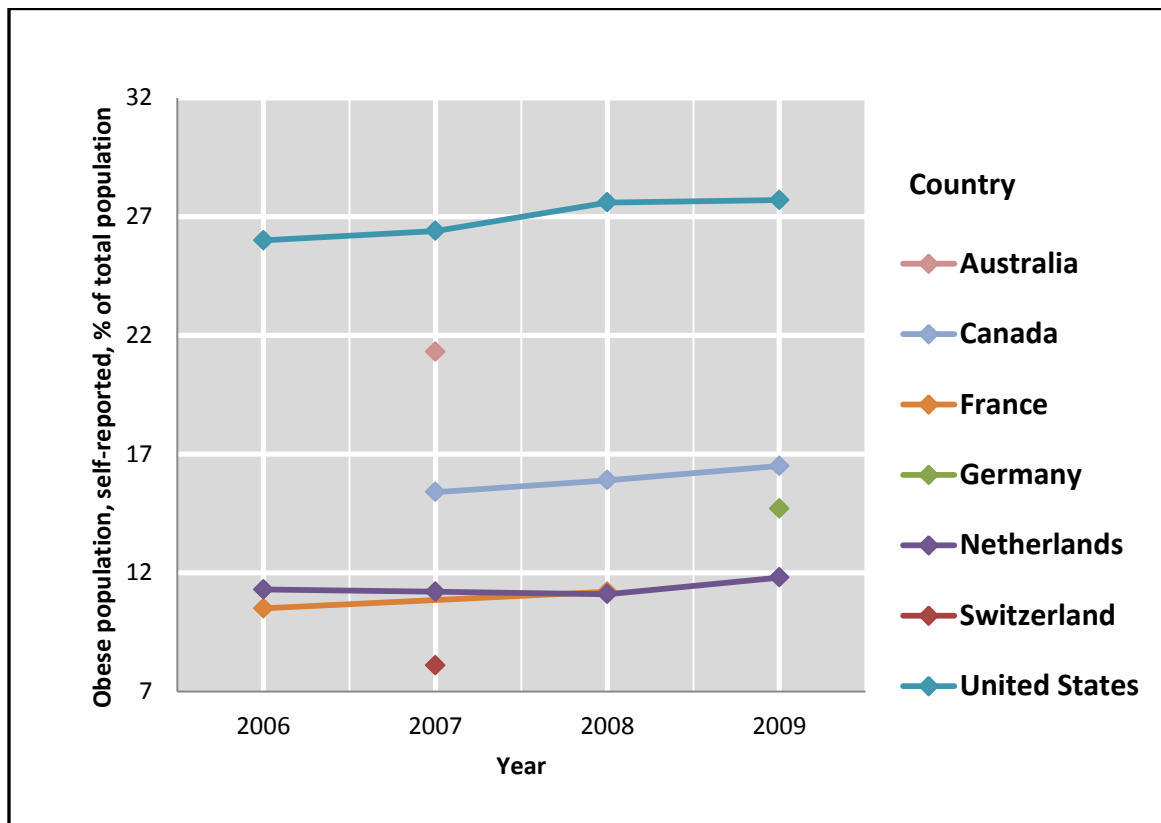


Figure 29: Obese population as percentage of total population (2006-2009) (Source: Data from OECD and World Bank)

For reference, Table 14 provides a summary of the relative rankings for public health indicators discussed above and relative to 2000 to 2010 data.

Table 14: Country rankings of lifestyle and health behaviours (immunization, tobacco and alcohol consumption, and obesity)

	Australia	Canada	Swit.	France	Germany	Neth.	U.K.	U.S.
Percentage of children immunized for measles	3	4	6	NA	2	1	7	5
Percentage of children immunized for tetanus, diphtheria & pertussis	6	8	3	1	2	5	4	7
Percentage of population 65 and over immunized for influenza	2	6	8	4	7	1	3	5
Tobacco consumption, percentage of population	7	6	5	2	3	1	4	8
Alcohol consumption	4	8	3	1	5	6	2	7
Obese population, self-reported as a percentage of total population	2	3	7	6	4	5	NA	1

Key Findings

- Canada has a health care governance structure similar to both Australia and U.K., whereby the state as “owner and operator” directs the funding, the available health services, and oversees implementation of health services. Germany, France, Netherlands, and Switzerland have “State as Guardian” of health systems. Despite Canada being of a similar structure to the U.K. and Australia, our health system costs are much higher than either of these two countries.
- The values of each of the comparator systems revealed that values in OECD comparator countries focused on better health and active living, patient choice and equity, and health literacy, none of which were evident in Canadian health system values. Health literacy supports strong values towards the transparency of access to health information, which is viewed as important in supporting health decision making. Values in these OECD countries varied widely from Canadian values, the focus on healthy active living, patient choice and health literacy was in stark contrast to Canadian values towards excellent care, quality work environments, community governance and engagement, and innovation and new knowledge. These differences may reflect the strong focus in Canada on hospital based “disease” care, rather than healthy active living in communities.
- Comparative analyses of costs identifies Canada with the third highest in total expenditures for health care, and the fourth highest growth in private expenditures. All countries are experiencing a similar rate of growth in health expenditures.
- Performance of health systems relative to life expectancy and infant mortality reveal that Canada has not achieved gains evident in other countries such as France, which has exceeded Canada in life expectancy in recent years. Many of the other comparator countries have achieved substantive decline in infant mortality, which has not been achieved in Canada, suggesting health system performance in Canada has lagged behind other OECD countries.
- Health professional indicators revealed that Canada and France are the only two countries that have experienced a decline in physician consultations compared to other countries, where the number of physician consultations has increased since 2004. Given the increase in health system costs and the decline in MD consultations, the cost of physicians may not be a significant driver of health system costs in Canada. Regression analysis reveals that despite the higher density of physicians, utilization of physician consultations did not increase.
- Canada has among the fewest CT scans and MRI machines per capita among the OECD group; yet, the utilization of these machines (exams per device) is among the highest, second only to France. This high utilization rate raises the question of whether the availability of few machines and high utilization indicates a diminished access to these technologies, which is highly valued by Canadians.
- Canada experiences the second highest cost expenditures for pharmaceutical products and is the fastest growing among all countries in the analysis over the ten year period.

Canada has not implemented cost containment strategies as other countries have, such as the U.K. and Switzerland.

- The use of hospital beds remains much less efficient than our comparator countries, whereby our lengths of stay are the highest, yet the number of beds available is among the lowest relative to other countries.
- Health system efficiency was examined relative to the number, occupancy rate, and length of stay for hospital beds in the health system. Canada has among the lowest number of hospital beds available, yet has the highest occupancy rate (the only country to exceed 90 per cent occupancy) in the OECD group, and has the highest length of stay in hospital beds. Thus, Canada has few hospital beds available, keeps patients in these beds longer than other countries, and as a result, experiences very high occupancy rates, which limits access to hospital care for Canadians. Efficient use of hospital beds in Canada lags far behind every other country in the analysis.
- Immunization rates in Canada are ranked fourth for children for measles and are among the lowest for immunization for flu for people over 65 years of age.
- One of Canada's strengths has been the impressive decline in the use of tobacco and alcohol. This strength, however, is diminished by the very high rates of obesity across the nation.

Health system expenditures are growing in every country in the OECD comparator group, and Canada is no exception. However, this analysis reveals that there are unique characteristics of the Canadian health system that may be specifically contributing to the growing expenditures in Canada. The cost of pharmaceuticals in Canada is among the highest in the world, second only to the U.S., and access to hospital beds and diagnostic evaluations lags behind other countries. While the length of stay in hospitals is declining in most countries, it is increasing in Canada, which is leading to occupancy rates over 90 per cent. At the same time, Canada has the fewest hospital beds per capita. This places pressure on all parts of the health care system. Although Canada has achieved impressive gains in lifestyle behaviours, such as the reduced use of alcohol and tobacco, it has lagged behind in infant immunization for measles, infant mortality, life expectancy, and immunization for flu among our elderly. The amount of health professionals (limited to MDs in this study) is declining in Canada, as physician consultations have decreased over the last 10 years. These findings would suggest that further study is required to identify cost drivers for health systems in Canada. While this analysis reveals that despite the number of physician consultations declining, health system costs continue to grow. The relatively poor efficiency of the use of technology (low numbers of CT and MRI machines, but high utilization) and hospital resources (low number of beds, high lengths of stay, high occupancy rates) suggests that health system costs in Canada may be related to inefficient and ineffective use of hospital resources. The population health outcomes in Canada, compared to other countries suggest that Canada lags behind in achieving population health and wellness outcomes, defined by longer life expectancy and decreased infant mortality, neither

of which have been achieved as they have in other OECD countries included in this analysis.

These compelling findings may reflect a health system that is over-reliant on hospital care that is inefficient and costly, and one in which there is an absence of the value towards healthy active living that was so clearly evident in the mission, vision, and value statements in the OECD countries examined in this comparative analysis. Canadians value quality of life, health and wellness; however, as a country we rely too heavily on hospital based care and have not engaged greater focus on healthy active living, which can contribute directly to quality of life, health, and wellness, evident in a number of the countries included in this analysis. There are many opportunities to learn from these other countries and consider further how Canada may move forward to strengthen health systems in this country so that they may more effectively deliver value for Canadians.

Next Steps and Recommendations

There is a clear misalignment among Canadians' health care values and how health system performance is measured. Costs of health services are growing in health systems across Canada and among comparator OECD countries. However, Canada spends among the top four countries in the world for health care, and achieves among the bottom two countries for quality outcomes³². The cost of the health systems in Canada is not achieving value in terms of quality outcomes, when compared to other countries that spend less on health care and yet are able to deliver greater value in terms of health system efficiency, life expectancy, and health and wellness.

Canadians' health values are clearly best suited to a personalized health care system: one that engages every individual patient in a collaborative partnership with health providers, and supports patients to make decisions that strengthen and support health, wellness and quality of life. Personalization of health care empowers communities and engages them in health services that strive to achieve population health. Yet, health system performance is measured in terms of costs; operational inputs, such as services delivered; or quality measures, such as medication errors, readmission to hospitalization, and mortality. Thus, health system effectiveness is limited in its ability to deliver value to Canadians.

The values emerging from this analysis of health systems across Canada are very patient-centric, in that Canadians strive to achieve health system value that supports and strengthens the health and wellness of the whole person within the uniqueness of the individual and in which community they live.

To achieve greater value for health system costs in Canada, we offer three recommendations to support Canada's health systems in making a shift towards delivering value to Canadians in a cost effective, sustainable, and patient-centric model of health care.

Recommendation One:

Align health system values with Canadians' values to move from a system focused on managing provider performance, to a system focused on strengthening health and quality of life for Canadians.

a) Design cooperative models of health system leadership whereby the hospital sector works collaboratively with the community sector, primary care provider groups and long-term care to design integrated services across the continuum of care that are accessible in communities, are responsive to the health needs of the population and achieve population health outcomes that are consistent with Canadian values. In this model, leadership decisions are focused on designing health services that strengthen population health and wellness, support healthy active living, and empower communities. Leaders are incentivized and held accountable for achieving quality health outcomes for the populations they serve.

b) Move health care "upstream", closer to patients and families so that populations are empowered and have the tools to manage their own health and wellness, which is based on complete transparency and access to health information, and an understanding of risk so

populations can make informed decisions about their personal health, wellbeing and quality of life. Self-management requires collaborative partnerships with health providers who support patients and families to achieve quality of life. In order to do so, patients and families need the tools to achieve self-management.

c) Re-design health care to focus on healthy active living, which mitigates risk of chronic illness and has the added benefit of achieving quality of life. Despite our high expenditures on health care in Canada, the global comparative analysis brings clarity to the notion that our dominant disease management system has not served Canadians well. We continue to have high rates of obesity, higher infant mortality, and low rates of immunization and other prevention strategies relative to our comparator OECD countries. Canada needs to re-focus health systems on population health and wellness as is evident in other OECD countries.

Recommendation Two:

Align health system performance metrics and funding models with Canadian values, focusing on health and wellness as a central mandate.

Performance metrics, including cost measures of health systems in Canada, are not aligned with Canadian values. Health system performance continues to evolve as it transitions from health-provider-centric measures towards more patient-centric measurement indicators. The future of Canadian health systems will be shaped by the ability to create performance measurement systems that are deeply embedded in the values of Canadians; reflect the values of quality of life; and establish collaborative partnerships with health providers to achieve health and wellness, quality workplaces, community engagement and empowerment, innovation and discovery, and health system sustainability. Performance measurement that aligns with Canadian values will enable health systems to drive transformational change towards health systems by using these measures to incent and structure funding models to achieve person-centric health systems that focus on strengthening population health. We recommend transformational change in performance metrics and cost structures as follows:

a) Redesign the performance evaluation and metrics to align with values of Canadians. Create metrics that evaluate health outcomes of Canadians such as quality of life, patient engagement, and integrated care delivered by inter-professional health teams that use a collaborative approach to accomplish the following: support patient self-management and empowered decision making, and achieve effectiveness as coach and mentor for patients and families to achieve quality of life, health and wellness.

b) Transform data structures in the health system from provider-centric data structures that capture health transactions in organizations to patient-centric data structures that capture each individual's care transactions across the continuum of health care services. Performance measures for health systems need to capture the coordination and integration of care so that decisions or service delivery approaches achieve excellence in care across the entire continuum of health services. Currently, decisions in one sector of the health system often negatively impact outcomes in another part of the health system. For example, shortened lengths of hospital stay based on best evidence often lead to challenges among

vulnerable populations such as the elderly in the community seeking supportive care. Metrics need to focus on achieving quality outcomes for patients. This should include developing metrics that capture quality issues across the continuum of care, rather than measures that focus on individual organizational systems (e.g. focussing on hospitals, to the exclusion of how hospital care integrates with community care and primary care to achieve health and wellness. Ensure that performance measurement for health systems capture health and wellness outcomes that reflect the entire continuum of care, rather than just hospital care.

c) Create a robust measurement of patient and family engagement that measures and incentivizes health professionals to engage in collaborative partnerships with patients and families to focus on achieving health, wellness, and quality of life. Measure patient engagement not “patient satisfaction”, which is focused on single item questions in random patient satisfaction surveys. Attach accountabilities to all stakeholders to achieve meaningful patient engagement for regional populations across the continuum of care. This includes incenting patient-provider-institution cross collaboration.

d) Develop performance metrics that create incentives to achieve quality outcomes focused on health and wellness, so that they are actually measuring and rewarding excellence in achieving quality patient outcomes. Re-design performance metrics to focus on the positive, patient centric outcomes rather than be limited to measuring negative outcomes such as mortality, errors, readmission rates, and adverse events.

Our very prescriptive system focuses on disease care, which concentrates on the system’s ability to deliver care, rather than the quality of life outcomes achieved for and with patients and families. A shift in performance management systems, including metrics that evaluate performance and cost, could be an important tool to drive change in how health systems are organized, what they are mandated to achieve (shift from disease management to health and wellness management), and how they are incentivized or reimbursed in order to support the shift from disease care to health care. Such a performance management approach would more directly align with Canadians’ values.

Health care systems need to shift the culture away from disease focused management in hospitals with an abundance of technology and shift towards achieving/restoring quality of life, whereby patients are part of the health care team, working in partnership with health care professionals to achieve quality of life.

Recommendation Three:

Re-examine health workforce values relative to the needs and values of Canadians, who strive for personalized and collaborative relationships with health providers to achieve health and wellness.

a) Re-configure health professional practice models and approaches from single discipline scope of practice, to inter-professional models of practice that fully engage the unique role and expertise each professional brings to the health care team, including the unique and expert contribution of the patient and family, to achieve a coordinated, integrated

approach to health and wellness care that is directly aligned with Canadians' values.

- b) Focus the inter-professional model of care to address health and wellness needs across the continuum of care, by considering the whole person in the context in which the patient and family operate, and engaging the community with all of its opportunities for support and empowerment that come to bear on health and wellness. There is a need to move away from the siloed focus of health professionals who view their work strictly within the limitations of the sub-sector of their work (e.g., acute care, or community care, long term care) and within the narrow confines of their profession. Health teams need to engage a patient-centric approach whereby decisions account for the full range of health services that are integrated and comprehensive, and are consistent with the values of Canadians.
- c) Reimbursement models for health professionals need to align with Canadians' values, meaning that professionals are reimbursed based on achieving best practice quality outcomes, including quality of life, health and wellness, and leveraging patient empowerment to make decisions based on their unique goals and aspirations. Hospitals and community organizations have an important role to play in creating the necessary conditions for health professionals to engage in collaborative partnerships with patients and families by using an inter-professional model of professional practice.

Values regarding personalized health care systems are not evident or acknowledged in neither the values of health professionals who deliver care, nor in the health system performance measures or funding structures. Canadians are among the most highly educated populations in the world, and they value their health care system beyond any other symbol of national identity. The costs of our health system are also among the highest in the OECD group, suggesting there is adequate funding in the system. The challenge is to use the funding more wisely, by focusing more specifically on what Canadians value most: health, wellness and quality of life. This study offers insights into the possibilities and opportunities for how Canadian health care systems can achieve value inherent in health, wellness, and quality of life for the Canadian population.

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