

How Canadian Health Care Differs from Other Systems

Canada has one of the most expensive universal health-care systems in the developed world. However, there is an imbalance between the value Canadians receive and the relatively high amount of money they spend on their health-care system. Of particular concern is the fact that Canada has significantly fewer physicians and acute-care beds, and also ranks poorly for the availability of important medical technologies like MRIs and CT scanners. Of course, the most spectacular failure of Canada's health-care system is manifested in the form of wait times, which have become a defining feature of the Canadian health-care experience.

These failures have little to do with the notion of universal health care or spending. Not only does Canada rank among the top spenders on health care internationally, but provincial governments within the country have been increasing spending at unsustainable rates for years. There are several other countries around the world that share the goal of ensuring universal access to health care regardless of the patient's ability to pay; and generally, with similar or lower health expenditures, they perform on par or better on most indicators of performance. A comparison of health policies that compares Canada's with those in eight other high-income OECD countries with universal health care (Australia, France, Germany, the Netherlands, New Zealand, Sweden, Switzerland and the United Kingdom) reveals significant differences.

Canada is the only country of the nine where private financing for medically necessary services is disallowed and where the private sector is for the most part shut out of delivering medically necessary treatment. The ability of outpatient and inpatient specialist physicians to practise both in publicly funded universal settings and in private settings is also severely restricted in Canada in contrast to the other countries. Canada and the United Kingdom are the only two countries among the nine where patients are not expected to share directly in the cost of medically necessary treatment. Finally, Canada is the only country in the cohort that relies almost exclusively on prospective global budgets to fund its hospitals in contrast to other countries that are increasingly moving towards payment based on some measure of activity.

Clearly, the policies that characterize Canada's health-care system stand in stark contrast to those pursued by other—arguably more successful—universal health-care systems. These differences, coupled with evidence of how Canada's health-care system underperforms, suggest the need for policy reform.

Note. This is a prerelase of Part One of *Is the Canada Health Act a Barrier to Reform?*. The complete publication will be released next month.

Introduction

Despite spending more on health care than the majority of developed countries that seek to provide universal access regardless of a patient's ability to pay, Canada performs poorly on a number of key health-care indicators of the availability of medical resources and timely access (Barua et al., 2017a). While there is no simple or single reason why Canada's health-care system underperforms in comparison to other comparable countries providing universal health care, it is worth noting that there are a number of ways in which the policy informing Canada's health-care system differs. For example, in contrast to more successful universal health-care systems, private involvement in the financing and delivery of core medical services, patient cost-sharing, dual-practice of physicians, and activity-based funding for hospitals are either entirely absent or relatively uncommon in the Canadian context (Esmail and Walker, 2008; Barua and Esmail, 2015; Globerman, 2016).

Why is this the case?

Canadian health-care policy, including decisions about what services will be provided under a universal scheme, how those services will be funded and remunerated, who will be permitted to deliver services, and whether those services can be partly or fully funded privately is determined exclusively by provincial governments in Canada. However, the federal government significantly influences provincial decision making by exercising its federal spending power through the Canada Health Act (CHA), a financial act that defines the terms and conditions under which provincial governments will retain access to their full portion of the Canada Health Transfer, valued at \$37.2 billion in 2017/18 (Department of Finance Canada, 2017).

The objective of this paper is to determine the extent to which the CHA may create significant financial barriers to a number of health-policy choices that would more closely align Canada's approach to universal health-insurance policy with those of the developed world's best performing universal systems. Part One of this publication highlights some of the well-known failings of Canada's health-care system; presents the case for reform; and summarizes notable ways in which Canada's health-care policy differs from that of a group of comparable countries with universal health care. Part Two introduces and describes the Canada Health Act; answers the question at the heart of this paper, to what extent is the Canada Health Act a barrier to reform; and presents a set of options for reform.

1 The Failures of Canadian Health Policy and the Case for Reform

Before delving into whether the Canada Health Act (CHA) represents a significant obstacle to employing the sorts of policies commonly found in other successful countries with universal health care—and, if so, to what extent—it is important to ask why the question needs to be asked in the first place. If the present situation is both financially sustainable and able to deliver timely access to quality care regardless of a patient's ability to pay, then the need for reform is less clear. However, this is not the case. Empirical evidence suggests that there are a number of ways in which the Canadian health-care system is failing and that there is cause for concern for its overall sustainability.

A recent study examined the age-adjusted cost and performance of 29 universal health-care systems in high-income countries and concluded that: "Canada ranks among the most expensive universal health-care systems in the OECD. However, its performance for availability and access to resources is generally below that of the average OECD country, while its performance for use of resources and quality and clinical performance is mixed" (Barua, Hasan, and Timmermans, 2017: 41). Of particular concern is the fact that Canada had significantly fewer physicians (ranking 25th out of 29) and acute care beds (27th out of 27) compared to the average OECD country in the cohort in 2015. It is therefore unsurprising that, in 2014, roughly 4.5 million of Canadians (14.9%) aged 12 and older, reported that they did not have a regular medical doctor (Statistics Canada, 2014). Of these, an estimated 2.4 million indicated that this was the case because doctors were not taking new patients, doctors were retiring and leaving the area, or simply that no doctors were available where they lived² (Statistics Canada, 2014; calculations by authors). Canada also ranked poorly for the availability of important medical technologies like MRI's (20th out of 27) and CT scanners (22th out of 28). Unfortunately, research also suggests that the few diagnostic technologies that are available are ageing and outdated (Esmail, 2011).

Perhaps the most spectacular failure of Canada's health-care system can be seen in the data for wait times, which have become a defining feature of the Canadian health-care experience. A recent study by the Commonwealth Fund (in association with the Canadian Institute for Health Information [CIHI]) of adults in Australia, Canada, France, Germany, the Netherlands, New Zealand,

^{1. 45.9%} of respondents reported that they had not looked for a regular doctor

^{2.} Respondents could choose more than one reason for not having found a regular medical doctor. 13.1% did not give a specific reason for not having a doctor.

Norway, Sweden, Switzerland, the United Kingdom and the United States found that Canada is not just lagging, but scraping the bottom when it comes to indicators of timely access to health care (CIHI, 2017; Osborn, Squires, Doty, Sarnak, and Schneider, 2016). A sample of Canada's poor performance is presented below:

- ability to get an appointment on the same or next day when sick—worst
- ability to get after-hours care (without visiting an emergency department)—second worst
- wait for treatment in the emergency department—worst
- wait to see a specialist—worst
- wait for elective surgery—worst

Although Canada clearly performs poorly in these various aspects, there are a number of ironies worth noting. For example, although an estimated 2.4 million Canadians reported that they could not find a regular medical doctor, and Canada clearly has one of the lowest physician-to-population ratios amongst high-income countries with universal health care, a report by The Royal College of Physicians estimated that "[s]ixteen percent of new specialist and subspecialist physicians said they could not find work" (Fréchette, Hollenberg, Shrichand, Jacob, and Datta, 2013). It also seems that the few resources we do have are not being used efficiently. A 2011 study found that "[a]pproximately 14 percent of Canadian hospital beds are filled with patients who are ready to be discharged but for whom there is no appropriate place to go" (Sutherland and Crump, 2011). This is particularly galling given that Canada ranked last in terms of the availability of acute-care beds per capita among the countries analysed in *Comparing Performance of Universal Health Care Countries*, 2016 (Barua, Timmermans, Nason, and Esmail, 2016).

On a related note, the Montreal Economic Institute [MEI] examined the use of 49% of the operating rooms in Quebec's public hospitals between April 2005 and March 2006 and found that, in addition to an average of nearly one (out of an average of 11.5) closed O/R per hospital, the rate of use of "open" operating rooms was only 46% for day shifts on weekdays. Further, while 62% of operating rooms were open weekday evenings, they were used at only 9% of their capacity. On weekends, the opening rate fell to 45%, while the rate of use fluctuated between 6% and 8% (Frappier and Laberge, 2007). This underuse of available resources is again particularly troubling given that Canada ranked last among the 10 countries with universal health care included in the Commonwealth Fund's measurement of wait times for elective surgery. Unfortunately, regulations ensure Canadians are effectively "stuck" in the public system with few options other than crossing the border into a different country.

It is important to highlight here that these failures have little to do with the notion of universal health care or spending. Several examples of universal health-care systems that outperform Canada on a number of metrics can be found in Barua, Hasan, and Timmermans (2017). Further, not only does Canada rank among the top spenders, but provincial governments have been increasing spending at unsustainable rates for years, with the result that health care now consumes 40.1% of provincial program spending, 7.3% of their GDP, a trend that is projected to continue growing in the future, albeit at a slower pace (Barua, Palacios, and Emes, 2017).

Of course, there is no simple or single reason that Canada's health-care system underperforms in comparison to other countries with universal health care that spend similar amounts. But, there are a number of ways in which Canada's health-care system differs with regards to policy. Some of the most notable differences are discussed in the next section.

2 How Canadian Health Policy Differs from Other Systems

Health-care systems differ dramatically in the way they are financed, regulated, and deliver services. It has, however, been pointed out in numerous studies that Canada's system differs from other successful universal health-care systems in some very specific ways. For example, private involvement in the insurance and delivery of core medical services, cost-sharing requirements, dual practice, and activitybased funding for hospitals are either entirely absent or relatively uncommon in Canada (Barua and Esmail, 2015; Globerman, 2016; Esmail and Walker, 2008). Whether or not this is due to the restrictions imposed by the Canada Health Act, provincial regulations, or simply inertia on the part of policy makers will be examined in later sections. However, it is useful to first examine how other relatively successful universal health-care systems approach these important policy considerations. In this section, we compare Canada with Australia, France, Germany, the Netherlands, New Zealand, Sweden, Switzerland, and the United Kingdom. The countries all share the goal of ensuring universal access to health care regardless of the patient's ability to pay; and generally perform on par or better on most indicators of performance (Barua, Hasan, and Timmermans, 2017); and perform notably better than Canada on available indicators of timely access to care.

Insurance of core medical services

The government of every country in the Organisation for Economic Co-operation and Development (OECD) provides some manner of health insurance for its populace. In some cases, comprehensive health-care coverage is provided by a government-run insurance scheme on a universal basis; in others, it is provided by government only for specifically identified population groups while the bulk of the population obtains coverage through a purely voluntary private-insurance systems. Between these two extremes, fall various types of mixed insurance systems, including those where comprehensive private insurance is mandatory and those where private insurance is designed to cover only the care not funded by the public system. Some systems even allow consumers to choose between comprehensive private and public health insurance.

The nine countries in our cohort (Canada plus eight comparative countries) can generally be categorized into one of two groups: those where the government is the primary insurer providing benefits through a tax-funded national health-care system, and those that rely on a social health-insurance system where multiple insurers compete in a regulated environment (table 1).

Table 1: Health care insurance in Canada and eight other OECD countries

| | Primary Insurance System | Primary Private Insurance | Secondary Private Insurance | | | | |
|----------------|---|---------------------------------|-----------------------------------|---------------------------------|-----------------------------|-----------------------------|-----------------------------|
| | | | Can cover core services | Expanded coverage (non-medical) | Expanded choice of provider | Quicker access | Choice of doctor |
| Australia | Tax-Funded National Health System | * | √ | ✓ | ✓ | ✓ | ✓ |
| Canada | Tax-Funded National Health System | * | * | - | _ | - | _ |
| France | Tax-Funded National Health System | * | ✓ | ✓ | × | × | ✓ |
| Germany | Multiple insurers, with choice of insurer | ✓ | _ | ✓ | ✓ | ✓ | ✓ |
| Netherlands | Multiple insurers, with choice of insurer | ✓ | _ | _ | _ | _ | _ |
| New Zealand | Tax-Funded National Health System | * | ✓ | ✓ | ✓ | ✓ | ✓ |
| Sweden | Tax-Funded National Health System | * | ✓ | _ | ✓ | ✓ | _ |
| Switzerland | Multiple insurers, with choice of insurer | ✓ | _ | ✓ | ✓ | ✓ | ✓ |
| United Kingdom | Tax-Funded National Health System | * | ✓ | ✓ | _ | ✓ | _ |
| Sources: | OECD, 2016a, Q2; Q2, Subitem1 | Barua and Esmail, 2015 | OECD, 2016a, Q22b, Item 3b | OECD, 2016a, Q23, Item 1 | OECD, 2016a, Q23, Item 2 | OECD, 2016a, Q23, Item 3 | OECD, 2016a, Q23, Item 4 |

Note: Data presented have been simplified for the purposes of presentation based on the authors' interpretation. Data for New Zealand are from the OECD's 2012 survey. For precise definitions and details, see OECD, 2012; 2016a.

Canada belongs to the first group of tax-funded health care systems along with Australia, France, New Zealand, Sweden, and the United Kingdom. However, this is where the similarities in the availability of insurance come to an end, particularly in the role of private insurance for core medical services. Unlike Canada, each of these countries allow private insurers to cover health-care goods and services included in the basic benefit package, including when these are delivered by providers whose services are eligible for funding by basic primary health coverage (to varying extents). For example, in Australia, private insurers can offer coverage for enhanced non-medical accommodation services (for example, private rooms in hospitals), expanded choice of providers, choice of doctor, and quicker access to health care.

At the other end of the spectrum, multiple insurers compete in a regulated environment to provide basic benefits in Germany, the Netherlands, and Switzerland. Germany's universal health-care system consists of two insurance systems: Statutory Health Insurance (GKV) and Private Health Insurance (PKV). Both are funded by premiums. The GKV system covers about 86% of the population (Busse and Blumel, 2014: 8) and is provided by about 145 competing independent, not-for-profit sickness funds. Germans earning over a certain amount (€57,600) can opt out of the GKV system and purchase private insurance for basic benefits from 24 for-profit and 19 not-for-profit insurance companies (Barua and Esmail, 2015).

In the Netherlands, residents must purchase a standard insurance package from one of a number of private insurers, who may choose to operate on a forprofit basis in a regulated but competitive market. In 2011, there were 27 health-insurance companies competing in the market. The market leader (Achmea), with a 32% market share, was a for-profit company while the three other largest conglomerates were private not-for-profit companies (OECD, 2012).

Switzerland has a similar system in which the federal government is primarily concerned with ensuring universality (through legislation and supplementary funding) to its citizens in an environment of managed competition among insurance companies and providers of health care. However, insurers are not allowed to make

^{4.} In the OECD 2012 survey on health system characteristics, basic health care coverage in France was described as being provided by "multiple insurers with automatic affiliation" for individuals. The 2016 update, describes it as having "a single health insurance fund (single-payer model)". The Commonwealth Fund notes that "[o]ver the past two decades ... the state has been increasingly involved in controlling health expenditures funded by statutory health insurance" (Mossialos, 2017). The system is primarily funded by taxes, insurers are non-competitive, and citizens can only opt out in rare cases. For the sake of simplicity, the authors therefore classify it as a tax-funded, national health system.

5. Auraaen, Fujisawa, de Lagasnerie, and Paris (2016) note that while "[t]he boundaries of health coverage are not uniformly defined across OECD countries ... [a] wide range of interventions considered as "core medical care" are probably covered in all OECD countries". This study uses the terms core/basic to refer broadly to medically necessary in-patient, out-patient, and specialist care. It is notable that, even within Canada, provincial governments may hold differing definitions of which hospital and physician services may be considered medically necessary.

profits on the basic, compulsory insurance package but may offer supplementary insurance packages on a for-profit basis. Of the 67 insurers approved to offer social health insurance, 6 33 were registered as a Société Anonyme/Aktiengesellschaft (SA/AG)—that is, as a corporation with shareholders (OFSP, 2014).

Delivery of core medical services

The question of who pays for the services—an individual, a public insurer, or a private insurer—is independent of the question of the profit motive of the institution where the service is delivered. Regardless of the source of payment, core medical services may be delivered in public, private, not-for-profit, or private, for-profit hospitals. A recent study by Barua and Esmail (2015) explained how private hospitals are not only compatible with the notion of universal health care but are, in fact, a common feature in well-performing systems and there is a great degree of variation in the ownership of hospitals across the nine countries (table 2). For example, while private for-profit hospitals only constitute 4% of all hospitals in Sweden, they represent 43% of hospitals in Germany.

It should be noted that the presence of private hospitals does not imply that access to them is restricted to those who have private insurance or who can pay out of pocket. For example, in Australia, governments often contract with private hospitals for the provision of universally accessible services. In Germany, although about a third of the total number of hospital beds are in private, for-profit hospitals, 99% of all beds in the country are accessibly to individuals with GKV (statutory) coverage (Busse, 2014). In Switzerland, public and private hospitals compete with one another for patients under the universal scheme, which is likely why the OECD suggests that "[d]ifferentiation according to ownership and profit is not relevant in the Swiss health system" (OECD, 2017b).

The Netherlands presents an interesting case where universal health care is ensured, but no hospital is classified as a "public" organization. While a forprofit motive is prohibited by the 1971 Hospital Facilities Act, hospitals are in fact generally allowed to earn profits, but they cannot be distributed to shareholders (a regulation that was still being debated in parliament as of June 13, 2017). The OECD reports there were 324 locations where for-profit medical organizations provided care in 2014. This includes for-profit hospitals that "do not have a license for health insurance coverage" as well as "the number of independent treatment

^{6.} Six of the insurers (not SA/AG) are included in the list of approved insurers though they only practise the daily allowance insurance.

^{7.} A recent survey of the literature on hospitals and surgical clinics finds that competition, and a blend of public and private (both for- and not-for-profit) delivery, will likely have a positive impact on some measures of health care and little impact on others (Ruseski, 2009).

^{8.} Any profit will add to the equity (equity assets) of the hospital (L. Ligtenberg, Nederlandse Zorgautoriteit, personal communication via e-mail, June 7, 2017).

Table 2: Hospitals, by ownership, 2015 (or most recent year)

| | Total | Public | Private not for profit | Private for profit | Proportion of private, for-profit hospitals |
|----------------------|-------|--------|---------------------------|-----------------------|---|
| Australia (2014) | 1,322 | 698 | 107 | 517 | 39% |
| Canada (2015) | 719 | 712 | 0 | 7 | 1% |
| France (2015) | 3,089 | 1,389 | 691 | 1009 | 33% |
| Germany (2015) | 3,108 | 806 | 979 | 1323 | 43% |
| Netherlands (2014) | 505 | 0 | 181 | 324 | 64% |
| New Zealand (2015) | 165 | 85 | 28 | 52 | 32% |
| Sweden* | 83 | 77 | 3 | 3 | 4% |
| Switzerland** (2013) | 293 | 61 | 82 | 150 | 51% |
| United Kingdom | _ | _ | _ | _ | - |

Sources: OECD, 2017a; **Barua and Esmail, 2015; *Anell, Glenngård, and Merkur, 2012

centres, which offer treatment (medical specialist care) that is covered by the compulsory health insurance" (OECD, 2017b). The extent to which they provided core medical services under a definition comparable to other countries is unclear.

Another interesting case is Canada, where most hospitals are technically private, not-for-profit institutions. However, as Esmail and Walker have pointed out, they "are governed largely by a political process, given wage schedules for staff, are told when investment can be undertaken, denied the ability to borrow privately for investment, told which investments will be funded for operation, and forcibly merged or closed by provincial governments" (Esmail and Walker, 2008). Similarly, the OECD's health-care research categorizes no private, not-for-profit hospitals in Canada, and classifies them as being publically owned "as they are controlled by government units" (OECD, 2017b). In addition to the seven private, for-profit hospitals delivering core medical services in Canada, other medically necessary surgical care and diagnostic imaging is also provided by private, for-profit clinics that specialize in specific procedures. Research indicates that in 2007/2008 there were approximately "72 private for-profit surgical hospital [and/ or] clinics operating in 7 provinces, excluding those that sell purely unnecessary [sic] services such as cosmetic surgery and the abortion clinics" (Mehra, 2008: 42). Again, the question of whether or not such activity is expressly prohibited (or discouraged) by the Canada Health Act, will be explored in Part Two.

Clearly, private hospitals are found in several other countries with universal health care (and even in Canada, albeit to a very limited extent). It is also of note that physicians are generally allowed to practise both in publicly funded, universal settings and in private settings (a policy known as "dual practice") rather than having their activities restricted to one setting only. As can be seen in table 3, however, the ability of outpatient and inpatient specialists to engage in such dual practice in Canada is severely restricted in contrast to the other countries in our cohort. Again, the question of whether the CHA is responsible for this policy will be examined in Part Two.

Table 3: Dual-practice of physicians

| | Outpatient Specialist | Inpatient |
|--------------------|---------------------------------|---------------------------------|
| Australia | ✓ – always | ✓ — always |
| Canada | × | * |
| France | ✓ – always | ✓ _ sometimes |
| Germany | ✓ – always | - |
| The Netherlands | ✓ – always | ✓ _ always |
| New Zealand* | ✓ | ✓ |
| Sweden | ✓ _ sometimes | √ – sometimes |
| Switzerland | ✓ – always | ✓ _ always |
| The United Kingdom | ✓ – always | ✓ – always |
| Sources: | OECD, 2016a, Q30d; *Gauld, 2013 | OECD, 2016a, Q31d; *Gauld, 2013 |

Methods of remuneration for core medical services

Doctors are generally paid by one of three methods: salary, capitation payment,⁹ or fee for service. Each of these methods has advantages and disadvantages that result from the degree to which the payment method is related to the actual output of the physician and the incentives inherent in each. Doctors can also be paid through a mixed system that incorporates two or all three of these methods of

^{9.} Physicians are paid a "[p]rospective lump-sum payment per enrolled patient covering a range of services" (OECD, 2016c).

payment to capture the positive effects of each, while mitigating the negative. Table 4 provides the predominant employment status and method of remuneration for primary physicians and outpatient and inpatient specialists.

Table 4: Physician Employment and Payment

| | Primary physicians | Outpatient specialists | Inpatient specialists |
|--------------------|--|-----------------------------------|----------------------------|
| Australia | Privately employed, fee for service | - | Self-employed, mixed |
| Canada | Self-employed, | Self-employed, | Self-employed, |
| | mixed | fee for service | fee for service |
| France | Self-employed, | Self-employed, | Publicly employed, |
| | mixed | fee for service | salary |
| Germany | Self-employed, fee for service | Self-employed, fee for service | _ |
| The Netherlands | Self-employed, | Self-employed, | Self-employed, |
| | mixed | fee for service | mixed |
| New Zealand | Self-employed, mixed | _ | - |
| Sweden | Publicly employed, | Publicly employed, | Publicly employed, |
| | salary | salary | salary |
| Switzerland | Self-employed, | Self-employed, | Private, |
| | fee for service | fee for service | mixed |
| The United Kingdom | Self-employed, | Publicly employed, | Publicly employed, |
| | mixed | salary | salary |
| Sources: | OECD, 20161, Q29a Q29b | OECD, 2016a, Q30a and Q30c | OECD, 2016a, Q31a and Q31c |

Note: FFS = Fee-for-service. Mix implies a mixture of fee-for-service, salary, and capitation for primary physicians, but only fee-for service and salary for in-patient physicians. Data for New Zealand is from the OECD's 2012 survey.

The payment of physicians supplying primary and outpatient specialist services in Canada is similar to the methods employed in the other countries in our cohort. Primary-care physicians are generally self-employed and remunerated using a mix of salary, fee for service, and capitation payments, except in Australia, Germany, and Switzerland where fee for service is the predominant method of payment. Physicians supplying outpatient specialist services are predominantly self-employed and paid on a fee-for-service basis, except in Sweden and the United Kingdom where such specialists are predominantly publically employed and salaried.

In general, no clear trend can be concluded from the data regarding physicians supplying inpatient specialist services in our cohort. In France, Sweden, and the United Kingdom inpatient specialists are predominantly publically employed and paid a salary. Canada is the only country in the cohort where inpatient physicians are paid predominantly on a fee-for-service basis. Such physicians are remunerated using a mix of fee-for-service and salary in Australia, the Netherlands, and Switzerland.

The method of remuneration for hospitals generally falls into two categories (table 5). The first involves the use of prospective global budgets under which the "funding total and its allocation across hospitals is set at the beginning of the fiscal year. The funding levels and allocations may be adjusted over time—using sociodemographic, political and economic factors to determine future payments—but mainly follow historic patterns" (CIHI, 2010: 3). In other words, global budgeting provides a specific grant to a hospital irrespective of activity in that particular year and the hospital's resources are, therefore, not directly and specifically linked to the services provided. Canada is the only country in the cohort that relies almost 10 exclusively on prospective global budgets to fund its hospitals, although Sweden also uses this method for public and private not-for-profit hospitals (representing the majority of institutions in the country). The rationale for using such a system of block grants provides governments with a direct means of controlling hospital expenditure or costs that is simple to administer (Leonard, Rauner, Schaffhauser-Linzatti, and Yap, 2003; Park, Braun, Carrin, and Evans, 2007). Such a payment structure, however, disconnects funding from the provision of services to patients. For this reason, there are few incentives to provide a higher or superior quality of care, or to function efficiently. Conversely, the incentive structure encourages the delivery of few services, quicker discharges, the avoidance of costly patients, and shifting patients to outside institutions as a means of controlling expenditures.

An increasingly common way to fund hospitals is to base payment on some measure of activity. Activity-based-funding (ABF), according to the strictest definition, provided by the Canadian Institute for Health Information (CIHI),

can be defined by two features: first, a case mix system¹¹ is used to describe hospital activity and to define its products or outputs; second, a payment price is set for each case mix group in advance of the funding period and payments to the hospital are made on a per case basis ... Other funding models that share principles of activity-based funding include case mix funding, diagnosis-related group (DRG)-based funding, patient-focused funding, pay for performance (P4P), payment by results (PbR), prospective payment system (PPS) and service-based funding. (CIHI, 2010: 3)

^{10.} Some provinces have begun moving towards more activity-based funding. For example, Ontario made some movement in this direction with the introduction of the Health System Funding Reform (HSFR), which introduced Health Based Allocation Model [HBAM] funding to pay hospitals based on demographics and complexity, and Quality-Based Procedures [QBP] funding to pay hospitals based on a price-times-volume approach with incentives to reimburse providers for delivering high-quality care (Ontario Ministry of Health and Long-Term Care, 2017). British Columbia also implemented a limited pilot program involving patient-focused funding in 2010 whereby "hospitals receive financial incentives for delivering acute-care services for a competitive, set price" (British Columbia Ministry of Health Services, 2010).

^{11.} For a detailed description of case-mix system and activity-based funding, see CIHI, 2010.

The OECD categorizes most of these payment forms as DRG-like, "which refers to a payment linked to the type and severity of hospital cases. Each patient is classified in a specific 'diagnostic' group according to his/her principal diagnosis and a fixed reimbursement is given to the hospital for treating the patient" (OECD, 2016b: 3).

As can be seen in table 5, DRG-like (or per procedure/service) payments are the predominant method used to remunerate hospitals in most countries examined in our cohort. In some countries, this method of payment is combined with a form of global budgeting. Notably, Australia, France, the Netherlands, and the United Kingdom use DRG-like payments for public hospitals but "locate this within an overall global budget". Such budgeting is more pronounced at a hospital level in Australia and the United Kingdom, which "could be argued"

Table 5: Detailed Acute-Care Hospital Payment

| | Public | Private not for profit | Private for profit |
|----------------|---|---|------------------------------|
| Australia | Per case, DRG-like | By procedure, service | By procedure, service |
| Canada | Prospective global budget | Prospective global budget | Prospective global budget |
| France | Per case, DRG-like | Per case, DRG-like | Per case, DRG-like |
| Germany | Per case, DRG-like | Per case, DRG-like | Per case, DRG-like |
| Netherlands | Per case, DRG-like | Per case, DRG-like | - |
| New Zealand | Prospective global budget | _ | - |
| Sweden | Prospective global budget, per case, DRG-like* | Prospective global budget, per case, DRG-like* | Per case, DRG-like |
| Switzerland | Per case, DRG-like | Per case, DRG-like | Per case, DRG-like |
| United Kingdom | Per case, DRG-like | By procedure, service | Retrospective |
| Sources: | OECD, 2016a, Q28a, Item 1; *Anell, Glenngård, and Merkur, 2012 | OECD, 2016a, Q28b, Item 1; *Anell, Glenngård, and Merkur, 2012 | OECD, 2016a, Q28c, Item1 |

Note: Data for hospitals in New Zealand and private, not-for-profit, hospitals in Sweden are based on the OECD's 2012 survey.

^{12. &}quot;Diagnosis Related Groups [DRGs] refers to groups of hospital cases based on diagnoses, procedures performed and patient characteristics (age, gender and co-morbidities)" (OECD, 2016b: 3). "Developed in the United States, DRGs were introduced in the hospital management of many European countries over the last twenty years" (HOPE, 2009: 92).

to have DRG-based budgeting rather than DRG-based reimbursement". In the Netherlands, the budget is "set across the entire hospitals sector" while "France deploys a mix of both setting budgets at the hospital level and at the national level, and links this to a broader macroeconomic spending target across the health sector" (OECD, 2013: 13). Such budgeting constraints are not found in countries like Germany and Switzerland. In fact,

the German approach to the implementation of DRGs is that they are a pricing tool and not an expenditure management tool, [reflecting] its commitment to rigourous costing [and] the idea that financial controls should not stand in the way of patients accessing services. This has meant that, while hospitals receive price signals from DRGs, they have a high degree of control over their total budget through their decisions on whom to treat, how many people they wish to treat in any one year, and which DRG group to record them in. (OECD, 2013: 14)

Regulation of direct payments by individuals for core medical services

As mentioned previously, the health-care insurance systems in the nine countries in our cohort can generally be categorized into one of two groups: those where the government is the primary insurer providing benefits through a taxfunded national health-care system, and those that rely on a social health-insurance system where multiple insurers compete in a regulated environment (table 1). Regardless of the system examined, individuals are ultimately responsible for paying for health-care services.¹³ Indirect payments, which are generally unrelated to the quantity of services rendered to the individual, are made through the tax system in countries like Australia, France, New Zealand, Sweden, and the United Kingdom. Meanwhile, in countries like Germany, the Netherlands, and Switzerland, such payments are made through insurance premiums (again, supplemented by the tax system).

There are, however, also various forms of direct payments related to the level of services provided that individuals may be required to make. These forms of what is commonly referred to as cost-sharing may be in the form of deductibles (fixed lump-sum payments required before insurance kicks in), co-insurance payments (representing a share of the cost of each service), and copayments (fixed payments per service) (table 6). Although the levels and types of direct payments

^{13.} Individuals ultimately pay for health-care services, whether they are funded directly, through voluntary or mandatory insurance premiums, or through various forms of taxation. Of course, the amount each individual will pay will vary depending on the method of funding. For example, in a general tax-funded system like Canada's, those with very low income will pay little to nothing while those with higher incomes will pay much more in comparison.

Table 6: Cost Sharing

| | Deductible | Outpatient Primary | Outpatient Specialist | Inpatient Acute |
|----------------|------------------|------------------------------|-----------------------------|-----------------------------|
| Australia | * | Sometimes | Sometimes | Sometimes |
| Canada | * | * | * | * |
| France | × | ✓ | ✓ | ✓ |
| Germany | × | × | * | ✓ |
| Netherlands | ✓ | × | * | × |
| New Zealand* | * | ✓ | * | * |
| Sweden | ✓ | √ * | √ * | √ * |
| Switzerland | ✓ | ✓ | ✓ | ✓ |
| United Kingdom | * | × | * | × |
| Sources: | OECD, 2016a, Q11 | 0ECD, 2016a, Q12,. Item 2 | OECD, 2016a, Q12, Item 2 | 0ECD, 2016a, Q12, Item 1 |

Note: * Data based on the OECD's 2012 survey.

expected of patients vary greatly from country to country, almost every country in our cohort requires residents to pay either a deductible (the Netherlands), coinsurance (France), co-payments (Germany), or some combination of all three (Switzerland). In fact, the only countries where such direct payments for coremedical services are entirely absent are the United Kingdom and Canada.

Of course, the most straightforward form of direct payment is the purchase of health-care services by individuals using their own funds to pay the cost of the service. While there is no direct data source to corroborate the notion that individuals are allowed to do so in the countries included in our cohort, to the authors' knowledge, the only instances¹⁴ where individuals have been prevented from doing so have been recorded in Canada. Whether the absence of direct payments by individuals for core medical services in the form of cost-sharing or private purchase is the result of the CHA will be examined in Part Two.

^{14.} More generally, it has been suggested that there are only three countries in the world where individuals are legally prevented from paying for health care services: Canada, Cuba, and North Korea (Goodman, 2012: 48).

References

Arvay, J.J., and T.M. Rankin (2000). *Canada Health Act and Alberta Bill 11*. Legal opinion provided to the Canadian Union of Public Employees [CUPE]. https://cupe.ca/subject/health-care?page=119.

Anell, A., A.H. Glenngård, and S. Merkur (2012). Sweden: Health System Review. *Health Systems in Transition* 14, 5: 1–159.

Auraaen, Ane, Rie Fujisawa, Grégoire de Lagasnerie, and Valérie Paris (2016). *How OECD Health Systems Define the Range of Good* [sic] *and Services to Be Financed Collectively.* OECD Health Working Papers, No. 90. http://dx.doi.org/10.1787/5jlnb59ll80x-en.

Barua, Bacchus, and Nadeem Esmail (2015). For-Profit Hospitals and Insurers in Universal Health Care Countries. Fraser Institute.

Barua, Bacchus, Ingrid Timmermans, Ian Nason, and Nadeem Esmail (2016). *Comparing Performance of Universal Health Care Countries*, 2016. Fraser Institute.

Barua, Bacchus, Sazid Hasan, and Ingrid Timmermans (2017). *Comparing Performance of Universal Health Care Countries*, 2017. Fraser Institute.

Barua, Bacchus, Milagros Palacios, and Joel Emes (2017). *The Sustainability of Health Care Spending in Canada 2017*. Fraser Institute.

Blomqvist, Åke (2010). Reforming Canadian Medicare: Can an Icon Be Redesigned? In Robert Leeson, ed., Canadian Policy Debates and Case Studies in Honour of David Laider (Palgrave Macmillian) 122–155.

Boychuk, Gerard W. (2008a). *The Regulation of Private Health Funding and Insurance in Alberta under the Canada Health Act: A Comparative Cross-Provincial Perspective*. SPS Research Papers, Health Series, 1, 1. University of Calgary School of Policy Studies.

Boychuk, Gerard W. (2008b). *National Health Insurance in the United States and Canada: Race, Territory, and the Roots of Difference*. Georgetown University Press.

Bridge, Kieran A.G. (2007). The Canada Health Act: Facts and Fallacies. *Fraser Forum* (February): 9–10.

British Columbia Ministry of Health Services (2010). *B.C. Launches Patient-Focused Funding Provincewide*. Press release. https://archive.news.gov.bc.ca/releases/news_releases 2009-2013/2010HSERV0020-000403.htm>.

Busse, R., and M. Blümel (2014) Germany: Health System Review. *Health Systems in Transition* 16, 2:1–296.

CBC News (2016). Feds give Sask. 1 year to make case for private MRIs. *CBC News*. http://www.cbc.ca/news/canada/saskatoon/feds-give-sask-1-year-to-make-case-for-private-mris-1.3940066>.

Canadian Institute for Health Information [CIHI] (2010). A Primer on Activity-Based Funding.

Canadian Institute for Health Information [CIHI] (2016). *National Health Expenditure Trends: 1975 to 2016*. CIHI.

Canadian Institute for Health Information [CIHI] (2017). *How Canada Compares:* Results from the Commonwealth Fund's 2016 International Health Policy Survey of Adults in 11 Countries, CIHI.

Clemens, Jason, and Nadeem Esmail (2012). First, Do No Harm: How the Canada Health Act Obstructs Reform and Innovation. Macdonald-Laureier Institute.

Choudhry, Sujit (2000). Bill 11, the Canada Health Act and the Social Union: The Need for Institutions. *Osgoode Hall Law Journal* 38, 1: Article 2.

Courchene, Thomas J (2008). Reflections on the Federal Spending Power: Practices, Principles, Perspectives. IRPP Working Paper Series, No. 2008-01.

Department of Finance Canada (2017). *Federal Support to Provinces and Territories*. Government of Canada. https://www.fin.gc.ca/fedprov/mtp-eng.asp.

Eisen, Ben, Bacchus Barua, Jason Clemens, and Steve Lafleur (2016). *Less Ottawa, More Province: How Decentralization Is Key to Health Care Reform.* https://www.fraserinstitute.org/studies/less-ottawa-more-province-how-decentralization-is-key-to-health-care-reform.

Emery, J.C. Herbert, and Ronald Kneebone (2013). *The Challenge of Defining Medicare Coverage in Canada*. SPP Research Papers, 6(13). University of Calgary School of Public Policy.

Esmail, Nadeem (2011). Old and Outdated Medical Equipment. Fraser Forum 31–34 (May/June). Fraser Institute.

Esmail, Nadeem, and Michael Walker (2008). *How Good Is Canadian Healthcare?* 2008 Report: An International Comparison of Healthcare Systems. Fraser Institute.

European Hospital and Healthcare Federation [HOPE] (2009). *Hospitals in the 27 Member States of the European Union*. Paris: Dexia; Bruxelles: HOPE, 2009.

Federal Office of Public Health [OFSP] (2014a). *The Compulsory Health Insurance in Switzerland: Your Questions, Our Answers.* Government of Switzerland.

Frappier, Julie, and Mathieu Laberge (2007). *An Overview of Operating Room Use in Quebec Hospitals*. Montreal Economic Institute.

Fréchette, D., D. Hollenberg, A. Shrichand, C. Jacob, and I. Datta (2013). *What's Really behind Canada's Unemployed Specialists? Too Many, Too Few Doctors?* Findings from the Royal College's employment study. The Royal College of Physicians and Surgeons of Canada.

Globerman, Steven (2016). Select Cost Sharing in *Universal Health Care Countries*. https://www.fraserinstitute.org/studies/select-cost-sharing-in-universal-health-care-countries>.

Goodman, John C. (2012). *Priceless: Curing the Healthcare Crisis*. Independent Institute.

Government of Canada (2018). *Canada Health Act. R.S.C.*, 1985, c. C-6. Justice Laws Website. http://laws-lois.justice.gc.ca/eng/acts/c-6/ (act current to 2018-02-15 and last amended on 2017-12-12).

Health Canada (2010). *Canada Health Act – Annual Report 2009-2010*. Health Canada.

Leonard, Kevin J., Marion S. Rauner, Michaela-Maria Schaffhauser-Linzatti, and Richard Yap (2003). The Effect of Funding Policy on Day of Week Admissions and Discharges in Hospitals: the Cases of Austria and Canada. *Health Policy* 63: 239–257.

Madore, Odette (2005). *The Canada Health Act: Overview and Options*. Parliamentary Information and Research Service. Library of Parliament.

Madore, Odette (2006). *Duplicate Private Health Care Insurance: Potential Implications for Quebec and Canada*. Parliamentary Information and Research Service. Library of Parliament.

Mehra, Natalie (2008). *Eroding Public Medicare: Lessons and Consequences of for-Profit Health Care across Canada*. Ontario Health Coalition. http://www.ontariohealthcoalition.ca/wp-content/uploads/Eroding-Public-Medicare.pdf.

Mossialos, E., A. Djordjevic, R. Osborn, and D. Sarnak (eds.) (2017). *International Profiles of Health Care Systems*. The Commonwealth Fund (May).

Ontario Ministry of Health and Long Term Care (2017). *Health System Funding Reform (HSFR)*. http://www.health.gov.on.ca/en/pro/programs/ecfa/funding/hs_funding.aspx.

Organisation for Economic Co-operation and Development [OECD] (2012). *OECD Economic Surveys: Netherlands 2012.* "> OECD.

Organisation for Economic Co-operation and Development [OECD] (2013). Managing Hospital Volumes. Germany and Experiences from OECD Countries (April). OECD.

Organisation for Economic Co-operation and Development [OECD] (2012). *Health Systems Characteristics Survey 2012*.

Organisation for Economic Co-operation and Development [OECD] (2016a). *Health Systems Characteristics Survey 2016*.

Organisation for Economic Co-operation and Development [OECD] (2016b). *Health Systems Characteristics Survey 2016. Glossary.*

Organisation for Economic Co-operation and Development [OECD] (2016c). *Better Ways to Pay for Health Care*. https://www.oecd.org/els/health-systems/Better-ways-to-pay-for-health-care-FOCUS.pdf.

Organisation for Economic Co-operation and Development [OECD] (2017a). *OECD Health Statistics 2016*.

Organisation for Economic Co-operation and Development [OECD] (2017b). *Health Statistics 2017. Definitions, Sources and Methods. Hospitals.* OECD

Osborn, R., D. Squires, M.M. Doty, D.O. Sarnak, and E.C. Schneider (2016). In New Survey of 11 Countries, U.S. Adults Still Struggle with Access to and Affordability of Health Care. *Health Affairs Web First*, published online Nov. 16, 2016, https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2016.1088?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub%3Dpubmed.

Park, M., T. Braun, G. Carrin, and D. Evans (2007). *Provider Payments and Cost-Containment. Lessons from OECD Countries*. Technical Briefs for Policy-Makers, No. 2. World Health Organization.

Richer, Karine (2007). The Federal Spending Power. PRB 07-36E. Library of Parliament.

Ruseski, Jane E. (2009). *Competition in Canadian Health Care Service Provision: Good, Bad, or Indifferent?* SPP Research Papers: The Health Series 2, 4. University of Calgary School of Public Policy.

Statistics Canada (2015). Access to a Regular Medical Doctor, 2014. Cat. no. 82-625-X. http://www.statcan.gc.ca/pub/82-625-x/2015001/article/14177-eng.htm.

Sutherland, Jason M., and R. Trafford Crump (2011). *Exploring Alternative Level Care (ALC) and the Role of Funding Policies: An Evolving Evidence Base for Canada, 2011.* Canadian Health Services Research Foundation.

Turner, J. Gilbert (1958). The Hospital Insurance and Diagnostic Services Act: Its Impact on Hospital Administration. *Canadian Medical Association Journal* 78, 10: 768–770.

Watts, Michael (2013). *Debunking the Myths. A Broader Perspective of the Canada Health Act*. Macdonald-Laurier Institute.

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