Lessons from Abroad
A Series on Health Care Reform

Health Care Lessons from Switzerland
by Nadeem Esmail
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Executive Summary

This paper is part of a series that examines the way health services are funded and delivered in other nations. The nations profiled all aim to achieve the noble goal of Canada’s health care system: access to high quality care regardless of ability to pay. How they organize to achieve that goal differs markedly from the Canadian approach. So do their performances and results.

The focus of this paper in the series is Switzerland. The Swiss health care system has previously been identified as a system that provides some of the best outcomes when compared with other developed nations that maintain universal approaches to health care insurance. The Swiss health care system has also been identified as highly responsive and one in which waiting times are not considered to be a problem. A careful examination of the Swiss health care system will provide insights and information that will be useful in the Canadian debate over the future of Medicare.

Health system performance—Canada compared to Switzerland

Health care expenditures in Canada are higher than in Switzerland and considerably higher than in the average universal access nation. In 2009, Canada’s health expenditures (age-adjusted) were 16% higher than in Switzerland, and 26% higher than in the average universal access nation. In fact, in 2009 Canada’s health expenditures, as an age-adjusted share of GDP, were the highest among developed nations with universal access health insurance schemes.

Unfortunately, the performance of Canada’s health care system does not reflect this level of expenditure. With respect to access to health care services, the Canadian system does not outperform the Swiss health care system in any of the eight measures examined. The Swiss health care system outperforms the Canadian system in ratios of physicians to population, nurses to population, CT scanners to population, hospital beds to population; and wait times for emergency care, primary care, specialist care, and elective surgery.
Looking at factors such as the ability of the health care system to provide healthy longevity, low levels of mortality from disease, and effective treatment for both chronic and terminal illnesses, it seems the Swiss health care system broadly performs at a level similar, if not superior, to that in Canada. Specifically, the Canadian health care system outperforms Switzerland’s in five of 13 measures examined: one of three measures of in-hospital mortality, two of three measures of primary care performance, and two of six measures of patient safety. Conversely, the Swiss health care system outperforms Canada’s in eight measures: infant mortality, two of three measures of in-hospital mortality, one of three measures of primary care performance, and four of six measures of patient safety.

Switzerland’s health policy framework

The basis of the Swiss health insurance system is markedly different from Canada’s approach. Rather than relying on a tax-funded monopoly government insurer, the Swiss model provides universal coverage in an insurance premium-funded system characterized by competition between independent insurers, competition between providers, consumer choice of health plan characteristics, and a high level of consumer responsibility.

Swiss citizens are required to purchase individual universal health insurance coverage from, and pay insurance premiums to, one of Switzerland’s independent insurance companies. In this sense, the Swiss health insurance marketplace is probably best characterized as one with managed competition. Specifically, the provision of health care and health care insurance is largely in private/independent hands with the government maintaining a high level of regulation within which the industry operates.

Insurers providing universal access health insurance can offer the basic universal insurance package as well as several coverage options that focus on lowering insurance premiums. The basic Swiss universal insurance package includes a minimum annual deductible of CHF300 (CAN$336).1 Basic insurance includes the ability to change insurance companies at the end of every June and December, while policies with options can be changed only at the end of December.

In addition to basic insurance, insurers can offer the following options:

- Increased deductibles up to CHF2,500 (CAN$2,797)

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1 There is no minimum annual deductible for children.
### Health system performance—Canada compared to Switzerland

<table>
<thead>
<tr>
<th>Indicator*</th>
<th>Canada</th>
<th>Switzerland</th>
</tr>
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<tbody>
<tr>
<td>Total health expenditures (age-adjusted, % of GDP)</td>
<td>12.5</td>
<td>10.8</td>
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<tr>
<td>Physicians (age-adjusted, per 1,000 pop.)</td>
<td>2.6</td>
<td>3.6</td>
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<td>Nurses (age-adjusted, per 1,000 pop.)</td>
<td>10.3</td>
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<td>CT scanners (age-adjusted, per million pop.)</td>
<td>15.2</td>
<td>31.0</td>
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<tr>
<td>Hospital beds (age-adjusted, per 1,000 pop.)</td>
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<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3.6</td>
<td>4.8</td>
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<td><strong>Curative care beds</strong></td>
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<td>Waited less than 30 minutes in emergency room before being treated (% of patients, 2010)</td>
<td>20%</td>
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<td>Same- or next-day appointment with doctor or nurse when sick or needed care (% of patients, 2010)</td>
<td>45%</td>
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<td>Waited less than one month for specialist appointment (% of patients, 2010)</td>
<td>41%</td>
<td>82%</td>
</tr>
<tr>
<td>Waited less than one month for elective surgery (% of patients, 2010)</td>
<td>35%</td>
<td>55%</td>
</tr>
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<td>Waited four hours or more in emergency room before being treated (% of patients, 2010)</td>
<td>31%</td>
<td>6%</td>
</tr>
<tr>
<td>Waited six days or more for access to doctor or nurse when sick or needed care (% of patients, 2010)</td>
<td>33%</td>
<td>2%</td>
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<tr>
<td>Waited two months or more for specialist appointment (% of patients, 2010)</td>
<td>41%</td>
<td>5%</td>
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<tr>
<td>Waited four months or more for elective surgery (% of patients, 2010)</td>
<td>25%</td>
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<td>Infant mortality rate (per 1,000 live births)</td>
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<td>In-hospital case-fatality rates within 30 days, AMI**</td>
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<td>In-hospital case-fatality rates within 30 days, hemorrhagic stroke**</td>
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<td>In-hospital case-fatality rates within 30 days, ischemic stroke**</td>
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<td>Uncontrolled diabetes hospital admission rate (per 100,000 pop.)**</td>
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<td>COPD hospital admission rate (per 100,000 pop.)**</td>
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<td>Asthma hospital admission rate (per 100,000 pop.)**</td>
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<td>Obstetric trauma, vaginal delivery w/ instrument (per 100 patients)</td>
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<td>7.7</td>
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<td>Obstetric trauma, vaginal delivery w/out instrument (per 100 patients)</td>
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<td>Foreign body left in during procedure (per 100,000 hospital discharges)</td>
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<td>13.8</td>
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<td>Accidental puncture or laceration (per 100,000 hospital discharges)</td>
<td>525</td>
<td>392</td>
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<tr>
<td>Postoperative pulmonary embolism or deep vein thrombosis (per 100,000 hospital discharges)</td>
<td>566</td>
<td>548</td>
</tr>
<tr>
<td>Postoperative sepsis (per 100,000 hospital discharges)</td>
<td>769</td>
<td>354</td>
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Notes: * 2009 or nearest year, unless otherwise noted; ** The difference for this indicator is statistically significant (95% confidence interval). Note that confidence intervals apply to in-hospital case-fatality rates and hospital admission rates.

Sources: OECD, 2011; Commonwealth Fund, 2010; calculations by author.
• Managed care/restricted choice options that trade off lower premiums for reduced choice and more case management.

• Bonus insurance plans that offer premium reductions (after a higher premium in the first year) following years where no insurance claim was made.

Switzerland’s health care system relies on an internationally high level of cost sharing to encourage informed decision making from those seeking health care. Throughout the Swiss health insurance system, a minimum annual deductible of CHF300 (CAN$336) applies with some exceptions. Beyond the deductible, most insured services are subject to a 10% co-insurance payment, with an annual ceiling of CHF7002 (CAN$783), and adult inpatient hospital stays are subject to a co-payment of CHF15 (CAN$17) per day. Exemptions and reductions to cost sharing apply, including for children and maternity care.

While choice and financial responsibility for the individual are central to the Swiss approach, choice for insurers and those providing care is restricted through regulation in order to ensure universal access. There are regulations for who must be covered, how insurance premiums are assessed, how risks are shared between companies, and how companies providing universal insurance are organized.

Insurance premiums in Switzerland are based on place of residence (within established premium regions) and broad age categories (0-18, 19-25, and 25+) rather than individual characteristics of the person purchasing insurance. Specifically, Swiss insurers are required to use community-rated premiums for the universal insurance product and are not permitted to charge different premiums to patients with differing medical histories and pre-existing conditions.

In addition to community rated premiums, insurers in Switzerland must accept all those seeking universal coverage and provide guaranteed renewal. The aim is for insurers to compete for subscribers on the basis of price (insurance premiums) and quality/service rather than on the basis of risk selection.

In order to account for the potential adverse effects of community rating and mandatory offer of insurance, Swiss governments operate a risk-adjustment scheme that transfers funds between insurers. This is done in an effort to balance financial capacity between those with insured populations that are expected to incur relatively greater medical expenses and those expected to incur relatively fewer expenses.

2 CHF350 (CAN$392) for children.
Finally, and perhaps less relevant to the successful operation of the marketplace given this restriction on profit does not exist in other nations with similarly market-oriented health care systems, Swiss insurers offering the universal product must operate on a not-for-profit basis and have a registered office in Switzerland.3

Swiss governments ensure that those in a state of lower-income have access to the competitive insurance marketplace by placing an income/wealth-based ceiling on the cost of insurance. A premium subsidy is provided if the cost of health insurance exceeds 8 to 10 percent of family income (depending on the canton). An estimated 40% of Swiss households (or a little less than one third of the population) receives premium assistance, with approximately 19% of all health insurance premiums paid with government funds (Leu et al., 2009; Tanner, 2008).

Primary Care

Primary or ambulatory health care in Switzerland differs for individuals based on form of insurance. One type of primary care system exists for those covered by managed care insurance, while another type exists for those covered by other forms of insurance.

For those covered by non-managed care insurance, services can be provided on a fee-for-service basis by any licensed provider in the canton. Both primary care practitioners and specialist care can be accessed directly, without a referral, in ambulatory (outpatient) care settings. Physicians are predominantly in private individual office-based practices, while nurses, group practices, and hospital-based polyclinics play a much smaller role in the provision of care.

Individuals covered by managed care organizations can find themselves under three models of primary care, depending on the type of organization: health maintenance organization (HMO), independent practice association (IPA), or fee-for-service plan with gate-keeping provisions.

Primary care provided for those covered by HMOs in Switzerland falls under two models: staff models in which physicians are employees of the HMO, and group models in which a physician group owns the HMO and physicians are paid on a per capita basis.

IPAs in Switzerland consist of a network of general practitioners who contract with an insurer to function as gate-keepers for patients. Typically,

3 Plans can operate on either a for-profit or not-for-profit basis in the Dutch universal insurance scheme for example (Paris et al., 2010).
these providers are on a fee-for-service basis, although a few receive capitation payments.

Fee-for-service plans with gate-keeping provisions require that enrollees obtain a referral from their GP for specialty care. Patients may also be registered in a Telmed program, where their care (with exemptions for emergencies and other select services) begins with a call to a telemedicine phone line from which referral to a care provider or other advice is given.

**Specialized, hospital, and surgical care**

Hospital care is provided to all insured individuals within a canton either by public hospitals or by private hospitals included in the canton’s hospital list. Approximately 70% of acute inpatient care is provided by public or publicly subsidized private hospitals. Access to private hospitals can vary in Switzerland, with individuals having only a public hospital option under the universal insurance plan in some cantons.

A diagnosis-related-group (DRG) or case-mix based funding model for hospital care applies equally to public and private hospitals, where hospitals are paid based on the type and mix of cases treated. This method of financing provides hospitals a payment per patient based on the expected costs of treating the patient’s condition (including significant co-morbidities). Prices are set at the canton level and payment to hospitals is split between cantons and insurers.

While Swiss citizens do have a choice of hospital, they do not have choice of doctor within the hospital under the universal insurance product. Generally, physicians practicing in hospitals are employed by the hospital and paid a salary.

**Privately funded options and alternatives**

Swiss citizens are not required to receive medically necessary care from the universal insurance scheme. Individuals in Switzerland are permitted to purchase medical goods and services privately and private voluntary insurance is available.

Supplementary insurance provides a number of benefits beyond the universal access health insurance product, including: choice of doctor in hospital (including guaranteed access to the most senior physicians), access to private providers who are not on the canton’s hospital list, access to services outside of the insured’s canton, dental care, and private rooms when being
cared for under the universal scheme. Voluntary insurance may also provide cover for services delivered by providers who are operating outside the negotiated fee schedules. Voluntary insurance is not, however, permitted to cover the deductibles and co-payments required under the universal scheme.

Switzerland’s privately-funded health care sector shares medical resources with the universal sector. In particular, physicians in Switzerland are permitted to practice in both the universal sector and the supplementary sector (a system known as dual practice).

**Lessons for Canada**

The combination of superior access to health care and potentially superior outcomes from the health care process with fewer resources suggests there is much Canadians can learn from the Swiss model. It must be recognized that emulating the Swiss approach to health care would require substantial reform of the Canadian system including, most significantly, a shift from a tax-funded government insurance scheme to a system of independent competitive insurers within a statutory enrolment framework. While that may be a large undertaking, the evidence suggests there may be significant benefits to doing so.

The Swiss health care system departs from the Canadian model in the following important ways:

- Cost sharing for all forms of medical services
- Private provision of acute care hospital and surgical clinic services
- Activity-based funding for hospital care
- Permissibility of privately funded parallel health care
- A system of statutory independent insurers providing universal services to their insured populations on a largely premium-funded basis (commonly known as a social insurance system), with individual choice of insurers and some personalization of insurance coverage

Of these core policy differences, three can be implemented without violating the letter of the Canada Health Act (CHA): private hospital services and surgical facilities, activity-based funding, and privately funded parallel health care. Of course, some Swiss policies would violate the letter of the CHA,
while others might be interpreted to do so by the federal government. This said, interference or compliance with the CHA neither validates nor invalidates policy reforms. It is critical to recognize that many of the health policies pursued throughout the developed world would violate the CHA and past federal interpretations of the CHA. Yet these reforms have been shown to provide superior access to, and outcomes from, the health care process. Thus, the recommendations below set aside discussion of the CHA and focus only on the policy changes that would have to take place if Canada were to more closely emulate the Swiss approach to health care.

**Recommendation 1:** Activity-based funding models for hospital/surgical care, potentially with competitive benchmarking employed to set fees; private provision of hospital and surgical services.

**Recommendation 2:** Private health care and health care insurance for medically necessary care; dual practice for physicians to maximize the volume of services provided to patients in both public and private settings.

**Recommendation 3:** Cost sharing regimes for universally accessible health care with reasonable annual limits and automated exemptions for low-income populations.

**Recommendation 4:** A social insurance construct with premium funding and taxpayer supports for those who cannot afford insurance, choice of insurer, and personalization of insurance policies.
Introduction

Every government of a developed nation 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 private insurance system. In between these two extremes fall various types of mixed insurance systems, including those where comprehensive private insurance is mandatory and those where government provides both a tax-funded universal insurance product and tax-funded supports for private insurance premiums. Some systems even allow consumers to choose between comprehensive private and universal health insurance.

Each of these approaches to health insurance is built around a set of policies that determines how health services will be financed, who will be permitted to provide those health services, how physicians and hospitals will be paid, what responsibilities patients will have for payment of services, and whether or not patients can opt to finance all of their care privately. Ultimately, the types of policies that governments choose will affect the quantity and quality of care that is provided to their populations. Health policy choices must therefore be assessed on the basis of value for money—in other words, how good is the health system at making sick and injured people better, at making health services available, and at what economic cost? One way of

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4 This is a contested statement in the Canadian health policy debate. Some in the Canadian debate see outcomes as secondary to the justice of the structures and processes by which they are achieved. Still others consider “Canadian values” to be the primary determinant of health policy choices. This analysis seeks, however, to determine what health policies may be the most beneficial for those in need of care and those who are funding that care within a universal framework.
assessing health policy choices is to examine the choices of other developed nations and the performance that has resulted from those choices.

This paper is part of a series that examines the way health services are funded and delivered in other nations. The nations studied all aim to achieve the noble goal of Canada’s health care system: access to high quality care regardless of ability to pay. How they go about achieving that goal, however, differs markedly from the Canadian approach; and, as suggested above, so do their performances in achieving that goal.

The focus of this paper is the health care system in Switzerland. The Swiss health care system has previously been identified as one that provides some of the best outcomes on an aggregate basis when compared with other developed nations that maintain universal approaches to health care insurance (Esmail and Walker, 2008). Switzerland’s system has also been identified as highly responsive and one in which wait times are not considered to be a problem (Siciliani and Hurst, 2003; Ghent, 2010; OECD/WHO, 2011). A careful examination of the Swiss health care system may provide useful insights and information to help inform the Canadian debate over the future of Medicare.

The next section examines the performances of the Canadian and Swiss health care systems across a broad range of measures. A detailed examination of Swiss health care policy is undertaken in the third section. A section considering what lessons can be taken from the Swiss experience for Canadians interested in improving the state of Medicare follows.
Health System Performance—Canada compared to Switzerland

The comparisons below look at the health care systems of both Canada and Switzerland as well as the average performance of health care systems in other developed nations that also maintain universal approaches to health care insurance. All data in this section are from OECD (2011) unless otherwise noted. The age-adjustment methodology used in measures of spending and access below is from Esmail and Walker (2008).

Health care expenditures in Canada are higher than in Switzerland and considerably higher than in the average universal access nation (Chart 1). In 2009, Canada's health expenditures (age-adjusted, as older people require more care) were 16% higher than in Switzerland, and 26% higher than in the average universal access nation. In fact, in 2009 Canada's health expenditures, as an age-adjusted share of GDP, were the highest among developed nations with universal access health insurance schemes.

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5 Defined here as member nations of the Organisation for Economic Cooperation and Development (OECD) in 2009.
6 Note that Turkey was not included in age-adjusted averages due to a low proportion of population over the age of 65 that was not conducive to meaningful adjustment.
7 Age-adjustment is based on the percent of population over age 65 in a given country relative to the average of OECD nations that maintain universal access. A complete description of the methodology is available in Esmail and Walker, 2008: 17-22, with a mathematical example shown in Box 2, page 21.
Chart 1: Total health expenditures, age-adjusted share (%) of GDP, 2009 or nearest year

Note: The number of universal-access member nations of the OECD in 2009 for whom data was available to create the average is shown in parentheses. Source: OECD, 2011; calculations by author.

Chart 2: Physicians per 1,000 population, age-adjusted, 2009 or nearest year

Note: The number of universal-access member nations of the OECD in 2009 for whom data was available to create the average is shown in parentheses. Source: OECD, 2011; calculations by author.

Chart 3: Nurses per 1,000 population, age-adjusted, 2009 or nearest year

Note: The number of universal-access member nations of the OECD in 2009 for whom data was available to create the average is shown in parentheses. Source: OECD, 2011; calculations by author.
Access

Unfortunately, access to health care services in Canada does not reflect this level of expenditure.\(^8\) The Swiss health care system seems to offer a better balance between cost and access to health care than does Canada’s.

With respect to physicians, Canada performs relatively poorly compared to both the universal-access average and Switzerland (Chart 2). In 2009, it should be noted of course that we cannot directly measure access, but rather are measuring here the quantity of medical goods and services available to individuals in these countries and the wait times for receiving medical care to provide insight into the availability of medical services for individuals in these countries.
Canada had 2.6 physicians per 1,000 population (age-adjusted). That compares to an OECD average of 3.3 and Switzerland’s 3.6 per 1,000 population.

Canada’s nurse to population ratio standing is somewhat more positive (Chart 3). Canada (10.3) had more nurses per 1,000 population (age-adjusted) than the average universal access nation (9.6). However, Switzerland (14.5) had many more nurses per 1,000 population than Canada.

With respect to CT scanners per million population (age-adjusted), Canada (15.2) performed relatively poorly in comparison with both the OECD average (23.9) and Switzerland (31.0) (Chart 4). Unfortunately, comparable data for MRI scanners was not available for Switzerland.
The supply of hospital beds in both the Canadian and Swiss health care systems is below the universal-access average in total (Chart 5). In 2009, Canada had 3.6 hospital beds for every 1,000 population (age-adjusted), of which 2.0 were curative care beds. This is fewer than were available in Switzerland where 3.1 curative care beds of a total of 4.8 hospital beds were present per 1,000 population. The average universal access health care nation maintained 5.6 total beds per 1,000 population (age-adjusted), of which 3.8 were curative care beds.

Interestingly, Siciliani and Hurst (2003) find that acute care bed to population ratios are negatively related to waiting times. This suggests that the Swiss health care system may be better able to deliver health care in a timely fashion than Canada. Both wait times data from the Commonwealth Fund (2010) and examinations of wait times in Switzerland confirm this is the case (Siciliani and Hurst, 2003).

According to the Commonwealth Fund 2010 International Health Policy Survey, Canadians were less likely than Swiss respondents to experience a reasonably short waiting time for access to emergency care, primary care, and specialist care. In all cases these differences were sizeable: 20% of Canadians reported waiting less than 30 minutes in the emergency room.

9 Curative care beds are beds specifically for accommodating patients for the purposes of providing non-mental illness health care (excluding palliative care) including childbirth, treatment for health conditions, recovery from health conditions or surgery, and for diagnostic or therapeutic procedures.

10 The OECD’s definitions of “acute care” (OECD, 2013) and “curative care” (OECD, 2011) are similar with the notable exception that the term “non-mental illness” appears in the definition given in OECD, 2011. However, the term “curative care” is used above following OECD, 2011 while the term acute care is used here following Siciliani and Hurst, 2003.
Chart 9: In-hospital case-fatality rates (age-, sex-standardized) within 30 days after admission for select conditions, 2009 or nearest year

Chart 10: Hospital admission rates per 100,000 population aged 15 and over (age-, sex-adjusted) for select conditions, 2009 or nearest year

Note: The number of universal-access member nations of the OECD in 2009 for whom data was available to create the average is shown in parentheses. Source: OECD, 2011; calculations by author.
compared to 44% of Swiss respondents. Further, only 45% of Canadians reported a same- or next-day appointment for primary care when ill compared to 93% of Swiss respondents. Canadians (41% and 35% respectively) were also much less likely to report relatively short wait times to see specialists and receive elective surgery than were Swiss respondents (82% and 55%) (Chart 6).

Looking at long waits, again according to the Commonwealth Fund survey (2010), Canadian access to health care was poorer than experienced by those in Switzerland (Chart 7). Thirty-one percent of Canadians reported waiting four hours or more in emergency compared to just 6% of Swiss respondents. The proportion of respondents reporting a wait of six-days or more for primary care in Canada was 33%, compared to a low 2% in Switzerland. Forty-one percent of Canadians reported waiting two months or more for a specialist appointment compared to only 5% of Swiss respondents. Finally, one quarter of Canadian respondents reported waiting four months or more for elective surgery compared to just 7% of Swiss respondents.

Overall, it seems that the Swiss health care system is able to provide more timely access to health care services and a more abundant supply of medical professionals and medical technologies for less expenditure as an age-adjusted share of GDP.

Outcomes

Looking at factors such as the ability of the health care system to provide healthy longevity,\(^\text{11}\) low levels of mortality from disease, and effective treatment for both chronic and terminal illnesses,\(^\text{12}\) it seems the Swiss health care system broadly performs at a level similar, if not superior, to that in Canada.

One of the most basic measures of mortality commonly used to compare health status is infant mortality rates. It should be noted that infant mortality rates can be affected by immigration from poor countries, unhealthy outlier populations, and other population characteristics (Seeman, 2003). However, they can also serve as indicators of a well-functioning health care system.

\(^{11}\) Life expectancy, one of the more common measures of longevity, is not included in the measures below principally because factors outside of the health care system can be significant drivers of overall longevity. This exclusion does not affect the analysis however: Switzerland’s life expectancy is 82.3 years compared to Canada’s 80.7. (OECD, 2011).

\(^{12}\) It is important to recognize that data on the quality of health care may capture more than the effects of the health care system. Though a high performing health care system may provide an essential component, health outcomes are ultimately determined as a result of several processes of which the health care system is only one (Busse, 2002). With this in mind, the indicators used for comparison here were selected for their ability to measure as directly as possible the performance of the health care system and for their ability to be affected as little as possible by factors external to the application of health care.
Chart 11: Patient safety (obstetric trauma, foreign body), Canada, OECD, and Switzerland, 2009 or nearest year

- Obstetric trauma, vaginal delivery with instrument, crude rate per 100 patients
- Obstetric trauma, vaginal delivery without instrument, crude rate per 100 patients
- Foreign body left in during procedure, secondary-diagnosis adjusted rate per 100,000 hospital discharges

Note: The number of universal-access member nations of the OECD in 2009 for whom data was available to create the average is shown in parentheses. Source: OECD, 2011; calculations by author.

Chart 12: Patient safety (accidental puncture/laceration, embolism/thrombosis, sepsis), Canada, OECD, and Switzerland, 2009 or nearest year

- Accidental puncture or laceration, secondary-diagnosis adjusted rate per 100,000 hospital discharges
- Postoperative pulmonary embolism or deep vein thrombosis, secondary-diagnosis adjusted rate per 100,000 hospital discharges
- Postoperative sepsis, secondary-diagnosis adjusted rate per 100,000 hospital discharges

Note: The number of universal-access member nations of the OECD in 2009 for whom data was available to create the average is shown in parentheses. Source: OECD, 2011; calculations by author.
system, in particular the health care system’s capacity to prevent death at the youngest ages and the effectiveness of health care interventions during pregnancy and childbirth. For example, Or (2001) found that OECD countries with higher physician-to-population ratios (used as a proxy measure for health care resources) had lower infant mortality rates.

Switzerland’s performance in preventing death at the youngest ages appears to be superior to Canada’s (Chart 8). In 2009, the Swiss experienced an infant mortality rate of 4.3 per 1,000 live births. The average universal access nation experienced a rate of 4.0. Canada’s rate that year was 5.1. It is important to recognize that this was not an outlier year—Canada has long lagged in comparisons of infant mortality rates as well as perinatal mortality rates (28 weeks gestation to first week of life) (Esmail and Walker, 2008).

It is also possible to look at indicators that can provide insight into a health care system’s ability to provide effective medical interventions quickly. Chart 9 reports in-hospital case fatality rates within 30 days after admission for acute myocardial infarction (AMI, or heart attack), and ischemic (obstruction) and haemorrhagic (rupture) stroke. For AMI, Canada performs better than both Switzerland and the universal access average, with Switzerland having a rate that is similar to the average. Conversely, Canada lags Switzerland and the universal access nation average in both measures of in-hospital mortality from stroke, with Switzerland’s performance being better than the universal access nation average in haemorrhagic but not ischemic stroke.

Insight into the quality of primary care services in a health care system, and in particular the ability of the primary care sector to successfully manage (including co-ordination and care continuity) chronic illness, can be gleaned from measures such as hospital admission rates for chronic obstructive pulmonary disease (COPD), uncontrolled diabetes, and asthma. The rates shown in chart 10 suggest that both Canada and Switzerland maintain high performing primary care sectors, and that Canada’s primary care sector may be performing better than Switzerland’s. Canada and Switzerland outperform the universal access average for both uncontrolled diabetes and asthma, with Canada outperforming Switzerland. On the other hand, for COPD, both Canada and Switzerland outperform the universal access nation average, with Switzerland outperforming Canada.

The final set of measures examined here relates to patient safety when undergoing treatment in the health care system. As shown in Charts 11 and 12, Switzerland outperforms Canada but not the average in obstetric trauma with instrument and accidental puncture or laceration, and outperforms both Canada and the average in postoperative pulmonary embolism or deep vein thrombosis and postoperative sepsis. On the other hand, Canada outperforms
Switzerland but not the average in foreign body left during procedure and obstetric trauma without instrument.

In summary, the Canadian health care system outperforms the Swiss health care system in: one of three measures of in-hospital mortality, two of three measures of primary care performance, and two of six measures of patient safety. Conversely, the Swiss health care system outperforms the Canadian health care system in: physician to population ratio, nurse to population ratio, CT scanner to population ratio, hospital beds to population ratio, wait times, infant mortality, two of three measures of in-hospital mortality, one of three measures of primary care performance, and four of six measures of patient safety.

Importantly, Switzerland’s superior performance across measures of access and outcomes from the health care process comes at a reduced cost compared to Canada. The superior value for money provided by the Swiss health care model suggests it is well worth examining if lessons are to be learned for effective, positive reform of the Canadian health care system.
Switzerland’s health policy framework

General overview

The basis of the Swiss health insurance system is markedly different from Canada’s approach. Rather than relying on a tax-funded monopoly government insurer, the Swiss model provides universal coverage in an insurance premium-funded system characterized by competition between independent insurers and competition between providers, consumer choice of health plan characteristics, and a high level of consumer responsibility. Universality is ensured through government mandates for insurance purchase.

Interestingly, the Swiss health care system is far more market-oriented than the structures of the majority of universal access health care systems.

The Swiss health care system as it exists today was largely created by the 1994 Health Insurance Law (LAMal) which came into effect in 1996. Since that time, Swiss health care policy has seen little reform of its core characteristics. This may result from a high level satisfaction with the health care system’s costly but impressive performance for both access and quality. It is noteworthy that in 2007, 71 percent of voters in Switzerland rejected a proposal to move from Switzerland’s multiple-insurer with individual premiums

13 The description of the Swiss health care system in this section is based on information found in: Camenzind, 2012; Colombo, 2001; Daley et al., 2011; European Observatory on Health Care Systems, 2000; Ghent, 2010; Herzlinger and Parsa-Parsi, 2004; Lundy and Finder, 2009; Leu et al., 2009; OECD/WHO, 2011; Paris et al., 2010; Schnackenberg and Tabernig, 2011; and Tanner, 2008.
model to a single public insurer with means tested premiums based on wealth and income (Daley et al., 2011).

Responsibility for delivery and funding of universal access health care in Switzerland largely falls to Switzerland’s 26 cantons. The federal government’s role is restricted by the Swiss constitution primarily to public health and regulation and to social insurance provision. In addition to setting national guidelines for the universal access health care system and providing federal regulatory oversight of insurance companies, the federal government provides funding support for health care.

**Fiscal/financing arrangements**

Swiss citizens are required to purchase universal health insurance coverage from, and pay insurance premiums to, one of Switzerland’s independent insurance companies as a matter of law.\(^\text{14}\) In this sense, the Swiss health insurance marketplace is probably best characterized as one with managed competition.\(^\text{15}\) Specifically, the provision of health care and health care insurance is largely in private/independent hands with the government maintaining a high level of regulation within which the industry operates.

Swiss citizens have a choice of insurer for the provision of their universal access health insurance product.\(^\text{16}\) This choice in Switzerland is supported by information on health insurance companies, including customer satisfaction ratings and financial data, while information on the quality of providers is more limited.\(^\text{17}\) In 2009, some 90 insurance companies, which must be registered with the Federal Department of Home Affairs and are supervised by the Federal Office of Public Health, provided universal health insurance in

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14 New residents are required to insure themselves within three months of arriving in Switzerland, with coverage applied retroactively to their arrival date (Camenzind, 2012). Those who have insurance in a member country of the EU are exempt from this requirement (Lundy and Finder, 2009).

15 Herzlinger and Parsa-Parsi suggest the Swiss health care system “frees demand much more than supply” (2004: 1214).

16 An estimated 7% of insured change companies each year (Paris et al., 2010).

17 A recent initiative seeks to provide medical quality indicators for Swiss hospitals (Camenzind, 2012).

18 Insurers vary in size from as few as 2,000 members to more than 1 million members (Dougherty, 2008).
Switzerland (Lundy and Finder, 2009). Because these companies do not all operate nationally, no canton had more than 65 insurers (including subsidiaries of insurance conglomerates) in 2005. While there are many options for insurers, recent estimates suggest that the top 10 insurance conglomerates account for some 80 percent of enrolment (Leu et al., 2009).

Insurers providing universal access health insurance can offer the basic universal insurance package as well as several coverage options that focus on lowering insurance premiums. These options do so by increasing individual responsibility for costs or by restricting choice, or (in the case of policies that combine higher deductibles with restricted choice) both. The basic Swiss universal insurance package includes a minimum annual deductible of CHF300 (CAN$336) and the ability to change insurance companies at the end of every June and December.

In addition to basic insurance, insurers can offer the following options, all of which include restrictions on insurer switching:

- Increased deductibles up to CHF2,500 (CAN$2,797) in return for a reduction in insurance premiums (up to 50%). Individuals have the ability to change insurance companies at the end of every December.

- Managed care/restricted choice options (discussed in more detail below) that trade off lower premiums (up to 20%) for reduced choice and more

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19 Herzlinger and Parsa-Parsi (2004) suggest the Swiss experience may demonstrate the viability of small insurers, and do not find much difference in administrative costs between smaller (fewer than 1,000 members) and larger insurers (over 1 million members). They note that, at least in part, smaller insurers “may benefit from their superior knowledge of the health care status of the enrollees in their small territories” (p.1216).

20 Paris et al. (2010) report, from their 2008/2009 health system characteristics survey, that the top 10 insurers in Switzerland held a 66% market share. The level of concentration in Switzerland is low in comparison with the Czech Republic and the Netherlands but higher than in Germany (OECD/WHO, 2011).

21 There is no minimum annual deductible for children 18 and under.

22 Canadian dollar conversions are based on the average currency conversion for 2011 provided by the Bank of Canada at http://www.bankofcanada.ca/rates/exchange/10-year-converter/. Converted dollar values are rounded to the nearest dollar.

23 Enrolees may opt for a deductible between CHF500 (CAN$559) and CHF2,500 (CAN$2,797) in CHF500 increments. For children, increased deductibles can vary from CHF100 (CAN$112) to CHF600 (CAN$671) in CHF100 increments.

24 The reduction cannot, however, exceed 70% of the difference between the chosen and ordinary deductible. For example, the savings on a CHF1,000 deductible plan cannot exceed 0.7*(1000-300) = CHF490 (OECD/WHO, 2011).
Individuals have the ability to change insurance companies at the end of every December.

- Bonus insurance plans that offer premium reductions (after a higher premium in the first year) following years where no insurance claim was made. Individuals must commit to the bonus scheme with an insurer for at least 5 years to achieve the maximum discount (up to 45%). Individuals have the opportunity to change insurers at the end of December.

According to the Swiss Federal Office of Public Health (FOPH), approximately 31% of insurance contracts in 2010 were for basic insurance with standard deductible, 22% included increased deductibles, 0.1% were bonus schemes, and 47% were restricted choice arrangements. Looking in more detail at adult (19 and older) insurance contracts, approximately 28% were for basic insurance, 27% for basic insurance with increased deductibles, 17% for alternate insurance (including restricted choice) with the standard CHF300 deductible, and 29% were for alternate insurance with increased deductibles. Looking in more detail at children's insurance contracts, approximately 46% were for basic insurance, 5% for basic insurance with increased deductibles, 44% for alternate insurance (including restricted choice) with the standard zero deductible, and 5% were for alternate insurance with increased deductibles (FOPH, 2012, calculations and translation by author).

While choice of insurer and insurance plan exists in Switzerland, the contents of the required universal insurance package do not vary. The universal insurance package is determined by the federal government and includes inpatient and outpatient physician and hospital care (including physician home visits), long term care (partial coverage), prescription drugs, and complementary and alternative therapies. Limited coverage for dental treatment, specifically for very severe and unavoidable diseases, is included under the universal scheme while most dental services are not. Services are typically

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25 Managed care plans offer a 10–20% reduction in premium. Gatekeeping plans (discussed below) offer savings in the range of 5–15% (Dougherty, 2008). In 2010, nearly 47% of insurance contracts were for one of the three forms of managed care plan discussed below (Camenzind, 2012). In 2005, some 2/3 of the 12.1% of Swiss insured choosing managed care plans opted for fee-for-service plans with gatekeeping provisions (Leu et al, 2009).

26 These reductions can reach 45% after five years (Daley et al., 2011). Enrollees pay a 10% higher premium in the first year (Lundy and Finder, 2009).

27 A list of services not covered is established by the federal government (Paris et al., 2010).

restricted to the canton of residency. While a broad range of services is covered, deductibles and co-payments apply throughout.\textsuperscript{29}

In the Swiss health insurance system, a minimum annual deductible of CHF300 (CAN$336) applies with some exceptions.\textsuperscript{30} Beyond the deductible, Swiss citizens are also required to share in the cost of health care services (with some exceptions) up to an annual ceiling. Most insured services are subject to a 10\% co-insurance payment, with an annual ceiling of CHF700\textsuperscript{31} (CAN$783), after which care is fully subsidized. The co-insurance rate rises to 20\% for brand name drugs when a generic option is available, unless a physician requests no substitution. Inpatient hospital stays for adults are subject to a co-payment of CHF15 (CAN$17) per day. These rates of cost sharing are high by international standards.

While a high level of individual financial responsibility is central to the Swiss approach to universal health insurance, exemptions and reductions to cost sharing do apply. People with large families,\textsuperscript{32} those needing social-assistance, and recipients of supplementary old-age and disability benefits are eligible for cost sharing exemptions. Minors are exempt from deductibles and the daily co-payment for inpatient hospital care. Maternity care/care for pregnant women and select preventive services are also exempt from cost sharing requirements. Some managed care plans also offer cost sharing free insurance coverage for select services. In addition, the hospital co-payment is graduated according to family income, and waived entirely for certain groups such as children and expectant mothers.\textsuperscript{33}

While choice and financial responsibility for the individual are central to the Swiss approach to universal health insurance, choice for insurers and those providing care is restricted through regulation in order to ensure universal access to insurance and care. Regulations apply to who must be covered, how insurance premiums are assessed, how risks are shared between companies, and how companies providing universal insurance are organized.

Insurance premiums in Switzerland are based on place of residence and broad age categories rather than individual characteristics of the person purchasing insurance. Specifically, Swiss insurers are required to use community-rated premiums for the universal insurance product and are not permitted

\textsuperscript{29} Generally, patients pay for ambulatory/outpatient services (physician consultations, for example) then apply for reimbursement of the insurable portion while hospital services are paid for directly (to providers by insurers/cantons) with co-payments/co-insurance payments paid to health insurers.

\textsuperscript{30} There is no minimum annual deductible for children under 18.

\textsuperscript{31} CHF350 (CAN$392) for children (under 19).

\textsuperscript{32} An aggregate maximum for cost sharing for children of CHF1,000 (S1,119) applies to families with multiple children (OECD/WHO, 2011).

\textsuperscript{33} Insurers, who fund health care services for plan members, administer cost sharing arrangements subject to federal requirements.
to charge different premiums to patients with differing medical histories and pre-existing conditions. Insurers must maintain the same premium for all individuals within federally defined age-ranges and regions, but are permitted to vary the premium between ranges and regions. The Federal Office of Public Health establishes premium regions for health insurers, with up to three regions per canton. Within regions, insurers can vary their premiums across three age categories: 0-18, 19-25, and 25+. Beyond the regional and age-category variations, premiums can vary only by insurance type.\(^{34}\)

In addition to community rated premiums, insurers in Switzerland must accept all those seeking universal coverage and provide guaranteed renewal. The aim is for insurers to compete for subscribers on the basis of price (insurance premiums) and quality/service rather than on the basis of risk selection. Further, individuals in Switzerland are supposed to have access to the entire insurance marketplace in their area regardless of individual health risks/medical history.

In order to account for the potential adverse effects of community rating and mandatory offer of insurance, Swiss cantons operate a risk-adjustment scheme that transfers funds between insurers.\(^{35}\) This is done in an effort to balance financial capacity between those with better-than-average risk pools and those with worse-than-average risk pools.\(^{36}\) Prior to 2012, the risk formula for financial transfers included 15 age and two gender categories (30 categories in all). As of January 2012, in response to much criticism of the inadequacy of using age and sex to proxy health status/morbidity between insurers, a history of hospital or nursing home stays of more than three days in the previous year have been added as a risk adjuster (Leu et al., 2009).

Finally, and perhaps less relevant to the successful operation of the marketplace given this restriction on profit does not exist in other nations with similarly market-oriented health care systems,\(^{37}\) Swiss insurers offering the universal product must operate on a not-for-profit basis and have a registered office in Switzerland.

Within this managed competitive marketplace, insurance premiums can vary considerably from region to region and from insurer to insurer within regions. In 2005, for example, the difference between the lowest and

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34 Premiums are authorized by the Federal Office of Public Health.
35 Risk equalization is also done between cantons.
36 Initially, risk equalization was planned to last only 10 years. The assumption being that consumer mobility would level risk profiles among insurers over time. In practice, mobility has been lower than expected and good risks proven to be more mobile than bad risks. As a result, risk adjustment remains a core feature of the Swiss health insurance marketplace.
37 Plans can operate on either a for-profit or not-for-profit basis in the Dutch universal insurance scheme for example (Paris et al., 2010).
highest premium\textsuperscript{38} for coverage in Zurich was 89 percent (Leu et al., 2009). Regional variations are equally large. In the mid-2000s premiums in Geneva (the most costly canton) were approximately double what they were in the least costly canton (Leu et al., 2009). In 2012, the difference between the insurance premium in Appenzell Innerhoden to that in Basel-Stadt was 71% (Camenzind, 2012).\textsuperscript{39} Further, rates of premium growth also vary from canton to canton (Leu et al., 2009).

While differences in premiums should be expected in a competitive marketplace, there is concern that much of the difference in premiums is the result of risk selection among insurers. As noted above, many have pointed to the weakness of using age and sex exclusively to equalize risk. Simulations indicate that the revision to the risk-adjustment system for 2012 should significantly reduce incentives for risk discrimination (Leu et al., 2009).\textsuperscript{40}

Insurance contracts in Switzerland are made on an individual basis. Dependents are not covered by a parent’s contract and there is no group or family coverage. Individuals are also responsible for paying the full premium for their health care insurance, which encourages cost consciousness. While employers are permitted to contribute part of the insurance premium, there is no tax benefit to doing so.\textsuperscript{41}

Swiss governments ensure that low-income people have access to the competitive insurance marketplace by placing an income/wealth-based ceiling on the cost of insurance. If the cost of the average premium in the individual’s canton exceeds 8 to 10 percent of family income (depending on the canton), governments provide a premium subsidy through the income tax system. This subsidy reduces the cost of health insurance but still requires that individuals pay for insurance and be active participants\textsuperscript{42} in the universal insurance marketplace. Cantons individually establish these subsidies under federal guidelines,\textsuperscript{43} and the federal government provides subsidies (on a per population basis) to assist with the costs of subsidizing insurance

\textsuperscript{38} Minimum deductible plan.

\textsuperscript{39} In 2012, the average annual premium for adults in the basic (CHF300 deductible) plan was CHF3,510 (CANS3,927) in Appenzell Innerhoden and was CHF6,005 (CANS6,718) in Basel-Stadt (Camenzind, 2012).

\textsuperscript{40} Future plans for the risk equalization scheme include changing from the current retrospective model to a prospective model (Camenzind, 2012).

\textsuperscript{41} The positive effects on competition, cost efficiency, and quality created by direct consumer purchase of health services (including high levels of cost sharing) and direct consumer purchase of insurance are critical to understanding the high performance and high level of consumer focus of the Swiss health care system.

\textsuperscript{42} Though not necessarily focused on premium costs depending on how the subsidy is applied (OECD/WHO, 2011).

\textsuperscript{43} Guidelines include premium reductions of at least 50% for children.
premiums. An estimated 40% of Swiss households (or a little less than one third of the population) receives premium assistance, with approximately 19% of all health insurance premiums paid with government funds (Leu et al., 2009; Tanner, 2008).

Individuals who do not purchase insurance for themselves forego choice of insurer, may be automatically insured by their canton or community for basic insurance, and are liable for paying the premium of the insurance package provided. Insurance companies must also continue enrollment for individuals until provided clear evidence that the insured individual has changed companies or is no longer required to be insured.

The universal access health care system makes up the majority of total health expenditures in Switzerland. In 2009, 19.4% of total health expenditure was direct government spending on health care. Social health insurance premiums made up 29.3% of expenditure, with another 5.8% of expenditure being tax-funded subsidies for insurance purchase. Other social insurance schemes made up 5.8% of expenditures in Switzerland. Private sources, including out-of-pocket payments for both cost sharing under the universal and voluntary schemes (5.6%) and direct purchases of health care services (mostly dentistry and long-term care) as well as voluntary health insurance expenditures (8.8%) made up 39.8 percent of total Swiss expenditures (Camenzind, 2012).

**Delivery of primary care**

Primary or ambulatory health care in Switzerland differs for individuals based on form of insurance. One type of primary care system exists for those covered by managed care insurance, while another type exists for those covered by all other forms of insurance.

For those covered by non-managed care insurance, services can be provided by any licensed provider in the canton. Both primary care practitioners and specialist care can be accessed directly without a referral in ambulatory (outpatient) care settings. For the most part, physicians are predominantly in
private individual office-based practices, while nurses, group practices, and hospital-based polyclinics play a much smaller role in the provision of care.

Care is funded on a fee-for-service basis, with all insurers adhering to fees negotiated annually between associations of insurers and providers at the canton level. If insurers and providers are unable to agree to a fee schedule, governments are empowered to impose a fee schedule on both parties. These fees are to be accepted by providers as full payment, and providers are not permitted to balance-bill/extra-bill under Swiss policy. While physicians must accept the fee schedule as payment in full when treating patients under the universal scheme, there are no restrictions on setting up practices in Switzerland.48

Individuals covered by managed care organizations can find themselves under three models of primary care, depending on the type of organization: health maintenance organization (HMO), independent practice association (IPA), or fee-for-service plan with gate-keeping provisions.49 Patients may also be registered in a Telmed program, where their care episode (with exemptions for emergencies and other select services) begins with a call to a telemedicine phone line from which referral to a care provider or other advice is given.

A gate-keeping managed care plan uses few cost containment measures other than requiring enrollees obtain a referral from their GP for specialty care. HMO and IPA models are more likely than fee-for-service gate-keeping plans to employ prior authorizations, utilization reviews, and other methods to manage patient care.

Primary care provided for those covered by HMOs in Switzerland falls under two models: staff models in which physicians are employees of the HMO, and group models in which a physician group owns the HMO and physicians are paid on a capitation basis. Generally, HMOs have group practices that include general practitioners, specialists, and other health care personnel.

IPAs in Switzerland consist of a network of general practitioners who contract with an insurer to function as gatekeepers for patients. Typically, these providers are on a fee-for-service basis, although a few receive capitation payments. Patients maintain the freedom to choose their care provider,

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48 This has resulted in physicians locating in higher paying areas with physician shortages being created in others. This is not, however, a rural/urban divide: anecdotal evidence suggests that shortages of care do not occur in rural areas while some Swiss insurers specialize in insuring rural populations (Herzlinger and Parsa-Parsi, 2004).

49 According to the Swiss Federal Office of Public Health, 4.3% of adult insurance contracts in 2010 were HMO policies, while 29.5% were GP gatekeeping policies. For children, the breakdown was 4.1% and 32.4%, respectively (FOPH, 2012; calculations and translation by author).
but often are totally or partly exempt from cost sharing requirements when using an in-network general practitioner.

**Delivery of specialized, hospital, and surgical care**

Hospital care is provided to all insured individuals within a canton either by public hospitals or by private hospitals included in the canton’s hospital list.\(^{50}\) Approximately 70% of acute inpatient care is provided by public or publicly subsidized private hospitals (Camenzind, 2012). Access to private hospitals can vary in Switzerland, with individuals having only a public hospital option under the universal insurance plan in some cantons.

While Swiss citizens do have a choice of hospital in their canton\(^ {51}\) under the universal insurance product, they do not have choice of doctor within the hospital. Generally, physicians practicing in hospitals are employed by the hospital and paid a salary.

Prior to 2012, Swiss cantons operated a varying subsidy and per-diem model that treated public and private hospitals differently. As of 2012, a national DRG (diagnostic related group) based or activity-based/case-mix based funding model that applies equally to public and private hospitals has been introduced.\(^ {52}\) This method of financing provides hospitals a payment per patient based on the expected costs of treating the patient’s condition (including significant co-morbidities). The scheme is intended to discourage inefficiencies in Swiss hospitals and make it easier to compare providers. The new DRG system is overseen by SwissDRG and uses federation-wide case groupings (DRGs) for medical services, with the actual values negotiated at the canton level. Payment of the negotiated amounts to hospitals is split between cantons and insurers.

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\(^{50}\) The use of canton hospital lists reduces choice, but is perceived to be a cost-cutting measure. Most private for-profit hospitals are excluded from lists (Daley et al., 2011).

\(^{51}\) Patients may seek services outside their canton but generally must pay the difference between the reimbursement in their canton and the price charged outside their canton. In emergency cases or in cases where the service is not available in the canton of origin, the canton of origin covers the difference.

\(^{52}\) Cantons also partially finance public acute care hospitals, and provide subsidies to private hospitals if necessary to ensure adequate supply of services (Camenzind, 2012).
Privately funded options/alternatives

Swiss citizens are not required to receive medically necessary care from the universal insurance scheme. Individuals in Switzerland are permitted to purchase medical goods and services privately. Private voluntary insurance is also available.

Supplementary and complementary private insurance products in Switzerland, unlike the universal product, can be sold on a risk-rated for-profit basis (even when the insurer operates in the universal marketplace on community-rated non-profit basis) and insurers are permitted to refuse enrollment. The voluntary health insurance marketplace in Switzerland is regulated by the Swiss Financial Market Supervisory Authority. As many as 40% of Swiss citizens have purchased some form of voluntary insurance (Tanner, 2008).

Supplementary insurance provides a number of benefits beyond the universal access health insurance product, including: choice of doctor in hospital (including guaranteed access to the most senior physicians), access to private providers who are not on the canton’s hospital list, access to services outside of the insured’s canton, dental care, and private rooms when being cared for under the universal scheme. Voluntary insurance may also provide cover for services delivered by providers who are operating outside the negotiated fee schedules (Tanner, 2008). Voluntary insurance is not, however, permitted to cover the deductibles and co-payments required under the universal scheme.

Switzerland’s privately-funded health care sector shares medical resources with the universal sector. In particular, physicians in Switzerland are permitted to practice in both the universal sector and the supplementary sector (a system known as dual practice). Doctors with dual-practices may pay part of this income to the hospital.

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53 These doctors will be opted out of the LAMal system and operating fully privately (Paris et al., 2010).
Lessons for Canada

The combination of superior access to health care and potentially superior outcomes from the health care process with fewer resources suggests there is much Canadians can learn from the Swiss approach. It must be recognized that emulating the Swiss approach to health care would require substantial reform of the Canadian system including, most significantly, a shift from a tax-funded government insurance scheme to a system of independent competitive insurers within a statutory enrolment framework. While that may be a large undertaking, the evidence presented above suggests there may be significant benefits to doing so.

The Swiss health care system departs from the Canadian model in the following important ways:

- Cost sharing for all forms of medical services
- Private provision of acute care hospital and surgical clinic services

While Canada’s provinces do allow private provision/ownership to a very limited extent, most notably for surgical clinics, for the most part Canada’s approach to provision is through public facilities particularly with respect to hospital care. Further, although Canadian hospitals are legally considered private, not-for-profit entities (Standing Senate Committee, 2002), 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. They are considered, therefore, public hospitals for the sake of comparability. Indeed, Detsky and Naylor, in a discussion about the
• Activity-based funding for hospital care

• Permissibility of privately funded parallel health care

• A system of statutory independent insurers providing universal services to their insured populations on a largely premium-funded basis (commonly known as a social insurance system), with individual choice of insurers and some personalization of insurance cover

Of these core policy differences, three can be implemented by Canada’s provinces without violating the letter of the Canada Health Act (CHA): private acute care services and surgical facilities, activity-based funding, and private parallel health care. As noted by Clemens and Esmail (2012), however, a federal interpretation of the term *reasonable access* in section 12 of the CHA could be used to disallow a broad range of policies at the sole discretion of the federal government including in particular private acute care providers and private parallel health care. Given these reforms are emulating a more successful approach to universal access health care, however, and thus cannot be reasonably opposed in a factual manner, this restrictive feature of the Act is not considered here.

The first policy difference, cost sharing, does clearly violate the CHA and would result in required reductions in federal transfers for health and social services under sections 19 and 20 of the CHA. This policy change either requires a federal change to the CHA, which may be undertaken unilaterally by the federal government (Clemens and Esmail, 2012; Boychuk, 2008), or requires a province to accept dollar-for-dollar reductions in federal cash transfers for health and social services.

Ownership status and structure of Canadian hospitals, state: “For all intents and purposes, they are public institutions” (2003: 805).

55 Payment based on services provided, as opposed to budgetary models which pre-fund patient care in bulk.

56 Of course, the argument against these policies by a federal government could be purely ideological in nature, as so many discussions of allowable health policy have been in the past. As it is difficult to predict the outcome of such ideological opposition, and in the interests of objectivity, such an argument is not entertained here.

57 Clemens and Esmail (2012) also note that the CHA, partly through limitation on cost sharing, effectively discourages the inclusion of pharmaceuticals under the taxpayer-funded universal health insurance scheme. Clemens and Esmail argue that “free” physician and hospital care required by the CHA encourages patients to forego pharmaceutical care unless the province sets deductibles/co-payments to zero and bears the full cost. This either harms the health of patients and decreases cost-effectiveness, or forces provincial policy decisions regarding pharmaceutical coverage. Clemens and Esmail further note that this distortion under the CHA relates to many areas of health care in addition to pharmaceuticals, including home care and long-term care.
transfers to implement this policy. Setting aside concerns about the politics of doing so, this latter option may not necessarily be against the province’s financial interest depending on the savings that may accrue from such a policy decision (Esmail, 2006).

Switzerland’s social insurance construct with multiple insurers and choice of policy options also violates the CHA. Importantly, section 8 of the Act disallows multiple insurer social-insurance constructs, though monopoly social insurance constructs are permitted. Further, section 10 of the CHA requires that provinces offer insurance on uniform terms and conditions making the Swiss policy of personalized health insurance agreements not permissible under the CHA. By violating “principles” of the Canada Health Act, a province undertaking these policy approaches would put its entire cash transfers for health and social services at risk. Implementing these policy choices would require a federal change to the CHA.

This said, interference or compliance with the CHA neither validates nor invalidates these policies. It is critical to recognize that many of the health policy constructs pursued throughout the developed world would violate the CHA and past federal interpretations of the CHA. Yet these constructs have been shown to provide superior access to and outcomes from the health care process (see for example Esmail and Walker, 2008). The Canada Health Act has clearly not produced superior access and outcomes for Canadians. Thus, the discussion of reforms below sets aside the CHA discussion and focuses only on the policy changes that would need to take place if Canada were to more closely emulate the Swiss approach to health care.

Principal policy differences two and three are very much intertwined and relate strongly to the efficiency of hospital and surgical care. Importantly, the economic literature generally finds that private businesses (both for- and not-for-profit) operate more efficiently and at higher quality with a greater consumer focus than their public counterparts. Reviews of the literature focused on hospital care are generally supportive of the conclusion for businesses in general (Esmail and Walker, 2008). Indeed, 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, little impact on others, and is unlikely to have a negative impact (Ruseski, 2009). That survey concludes that “…a carefully crafted policy that encourages competition among non-profit, for-profit, and public providers can result in a health care system that is fiscally sustainable, ensures access to quality health care, and results in better health outcomes” (Ruseski, 2009: 42). Further, reviews of hospital funding mechanisms have generally found that activity-based funding is markedly superior to budget-based funding in terms of efficiency and output (Esmail, 2007).
Neither result is surprising when one considers the incentives associated with the various approaches to ownership and financing.

Kornai (1992) identified budget constraints as one of the major and unchangeable differences between private-sector businesses and government. Government budget constraints are “soft”, since it is effectively impossible for government to be de-capitalized. Private-sector businesses, on the other hand, face “hard” budget constraints: if they incur sustained losses, or even a few large losses, the decline of capital can push them into bankruptcy. Kornai argued that this central difference between the two types of entities can result in extraordinary differences in operations. Private-sector businesses must provide consumers with the goods and services they demand in a timely manner and at affordable prices that are consistent with their quality. Government business enterprises (GBEs) do not face the same constraints. They can consistently lose money by offering goods and services whose prices do not reflect their quality or timeliness. Put more simply, private businesses face the risk of going under if they fail to provide good value, and thus will usually behave differently from their public sector counterparts who do not. Further, Megginson and Netter (2001) found that GBEs tend to develop with less capital and thus are more labour intensive than their private-sector counterparts. That GBEs do not incorporate an optimal amount of capital has negative implications for both labour and total factor productivity.

With respect to funding, global budgets or block grants (the dominant form of hospital funding in Canada) disconnect funding from the provision of services. As a result, incentives to provide a higher or superior quality of care to patients are weak, as are incentives to function efficiently, especially in the presence of “soft” budget constraints (Gerdtham et al., 1999). Conversely, administrators working under global budgets have an incentive to discharge patients quickly, avoid admitting costly patients, and shift patients to other outside institutions as a means of controlling expenditures (Leonard et al., 2003). Activity-based funding on the other hand creates incentives for hospitals to treat more patients and to provide the types of services that patients desire while still maintaining an incentive for cost-efficiency by paying only for the average cost of treatment and not for all services actually delivered.

Studies have shown that activity-based funding can lead to a greater volume of services being delivered using existing health care infrastructure, reductions in wait times, reductions in excessive hospital stays, improved quality of care, more rapid diffusion of medical technologies and best practice methods, and the elimination of waste (see for example, OECD-DFEACC, 2006; Bibbee and Padrini, 2006; Bjørn et al., 2003; and Siciliani and Hurst, 2003). In addition, studies have also shown a positive benefit to including private providers within an activity-based funding model, particularly if a competitive bidding process is employed to determine compensation rates. For example, OECD-DFEACC (2006) notes the “presence of for-profit hospitals
can be associated with 2.4 percent lower hospital payments in a geographic area,” that “[p]rice competition between selectively contracted hospitals can lead to price reductions of 7 percent or more,” and that “[b]enchmarking of payment levels against most efficient hospitals can lead to a 6 percent reduction in costs at less efficient hospitals” (25). An OECD economic survey of the UK has also noted that “[i]nvolving a broader mix of providers can stimulate productivity as public and private providers learn from each other’s innovations…” (OECD, 2004: 5).

It is valuable to reiterate the benefits created by combining activity-based funding and competition with private provision of services. Vitally, when it comes to efficiency, ownership (though an important factor) may be less important than the extent of competition. Both public and private providers are likely to be less efficient in the absence of competition, while both are likely to operate more efficiently in the presence of competition. The key advantage of introducing more private provision in health care is that it would provide greater competition, putting pressure on all providers (whether public or private) to operate more efficiently.58

Clearly there are significant benefits that can accrue from shifting from global budgets to activity-based funding and including private providers under the universal access health insurance scheme.

**Recommendation 1:** Activity-based funding models for hospital/surgical care, potentially with competitive benchmarking employed to set fees; private provision of hospital and surgical services.

Many in the Canadian health care debate have argued that allowing a private parallel health care sector is tantamount to abandoning the ideal of universality or that it will put Canada on a slippery slope to abandoning universality. Yet the Swiss health care system allows such private activity and manages to provide superior universal access care at less cost.

From the Canadian perspective, a private parallel health care sector plays several important roles. First, it provides individuals an option to return to normal life more rapidly than might be possible through the universal system. This has private benefits for those who opt to not wait including reduced financial losses if unable to work while waiting and fewer limitations on personal activities. This also has potential benefits for worker productivity in terms of increased work effort and productivity for those who opt to not wait for care. Second, when patients exit the universal system and use the private parallel health care sector they free up resources in the universal system for patients who have opted to not seek private care. Third, a private

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58 Further, as noted above, there may be differences between public and private providers in their responsiveness to competition and to financial incentives.
parallel health care sector provides a safety valve for the public system in the event of a capacity limitation or sudden increase in demand. Fourth, a private parallel health care sector creates incentives for better service in the public system through competition.

These benefits are not only theoretical but have been borne out in practice in studies of health care systems in other developed nations. In Australia for example, where government policy has been organized to encourage private insurance uptake, patient use of the private sector has helped to keep the cost of the public hospital system down over time (Harper, 2005). In another broader example, Siciliani and Hurst found, in a review of policies to tackle waiting times in 12 developed nations, preliminary evidence supporting the conclusion that wait times may be reduced by an increase in private health insurance coverage (Siciliani and Hurst, 2005).

Allowing physicians to work in both the public and private health care sectors rather than requiring them to opt out of the universal system has the benefit of making more efficient use of highly skilled medical resources. Importantly, under dual practice, any spare physician time that may be available due to limitations in practice under the universal scheme and/or restricted access to operating time can be employed to treat patients in private settings thus increasing the total volume of services provided. Even in the absence of such “free time”, physicians may be encouraged to take less time as leisure and work additional hours in return for supplementary private compensation.

Importantly, dual practice for physicians is not an unusual practice in the developed world. Dual practice for physicians can be found in Denmark, England, Ireland, New Zealand, Norway, Spain, Sweden, Australia, Finland, and Italy. In Australia, Denmark, England, and Ireland specialists working in public hospitals can also visit or treat private patients within the same institution. This said, restrictions may be imposed either in terms of earnings (England, for example), authorizations (Finland, for example), restrictions on the use of public hospitals (Spain, Sweden, Netherlands, for example), or by other regulations (Hurst and Siciliani, 2003). Put differently, allowing dual practice in an effort to more efficiently employ valuable medical resources is not uncommon, and various regulations that work to avoid potential negative consequences are available to be studied and adopted as well.

**Recommendation 2:** Private health care and health care insurance for medically necessary care; dual practice for physicians to maximize the volume of services provided to patients in both public and private settings.
A lack of cost sharing for medical services in Canada has resulted in excessive demand and wasted resources. By encouraging patients to make a more informed decision about when and where it is best to access the health care system, cost sharing both increases cost efficiency of health care (ultimately reducing total spending) and improves access to practitioners for those in need of care as demand for services is reduced through a nominal out-of-pocket charge. This is borne out in the economic literature showing the value of cost sharing in an insurance scheme (see, for example, Ramsay, 1998; Newhouse et al., 1993). Further, cost sharing policies have also been shown to not have an adverse impact on health outcomes as long as specific populations are exempt (Newhouse et al., 1993; Esmail and Walker, 2008).

On this latter point, work on the effects of cost sharing in Nordic countries (Denmark, Finland, Iceland, Norway, and Sweden) emphasizes the need for appropriate and effective exemptions for low-income individuals in order to ensure that these individuals are able to access the health care system in times of need (Øvretveit, 2001). Also, the process by which these exemptions are granted should be proactively administered and automated as much as possible in order to ensure that all who qualify for an exemption are receiving that exemption, since a lack of knowledge of exemptions, social stigmas, and the need to complete special forms (increasing the cost of getting subsidies) can result in many individuals not receiving appropriate assistance or protection (Warburton, 2005; Øvretveit, 2001).

There are some who disagree with this view in the Canadian debate, often citing studies by Forget et al. (2002) and Roos et al. (2004). However, neither Forget et al. (2002) nor Roos et al. (2004) demonstrate that low income users and high demanders of health care aren’t wasteful. Nor do they demonstrate that use of health care among those of higher income or among those who are low demanders isn’t wasteful. They show clearly that the majority of health spending is driven by a small portion of the population and that use of health care increases with income (while sensitivity to cost sharing falls as income rises). But this is true in all developed nation’s health care systems—it is not unique to the Canadian experience.

Thus, to the extent we can rely on international experience, we can rely on studies of the implementation of cost sharing in other nations (including the RAND Health Insurance Experiment) to inform thinking on cost sharing in Canada. Such studies typically show not insignificant reductions in total expenditures from low levels of cost sharing.

Further, even if we accept that there is no excess demand for health care services on the part of patients, cost sharing can act as a brake on excess supply of services by practitioners, a point made by both Newhouse (1993) and Tussing (1983).
Recommendation 3: Cost sharing regimes for universally accessible health care with reasonable annual limits and automated exemptions for low-income populations.

The fifth major policy difference between Switzerland and Canada is the use of a social insurance construct (with taxpayer support) including choice of insurer and tailoring of insurance policy rather than a one size fits all taxpayer-funded government insurance scheme. A social insurance construct is primarily premium funded and relies on an independent insurer or operator of the insurance scheme, as opposed to a tax-funded scheme like Canada's where government plays the role of insurer and services are funded primarily through taxation (either general or much less commonly hypothecated). Social insurance schemes in practice are often multiple-payer (insurer) and virtually always multiple provider models, and insurance companies (as in Switzerland) are often not only independent but non-governmental.

One of the central differences between a social insurance construct and a government insurance system is the de-politicization of decision making. This occurs through a clearer connection between the payment of premiums (to an insurer) and the receipt of services (funded by the insurer). The independence of providers from government makes politically-motivated intervention much less likely, and creates a greater focus on the needs of funders and consumers as opposed to administrators and providers.60

A wealth of evidence supports the de-politicization of health care insurance and more direct connection between payers and funders that comes from employing an independent insurer or social insurance model for universal access health care. For example, Altenstetter and Björkman (1997) note that countries employing social-insurance funding models appear to have fewer problems with wait times than those who employ tax-financed models. Further, all of the nations recognized by Siciliani and Hurst (2003) as those where waiting times are not an issue employ a social insurance funding model. Various international reviews of health care also show that health care systems based on social-insurance seem to outperform tax-financed government run models on measures of timeliness and quality (Matthews et al., 2012).

An ancillary benefit is that premium-funded universal access health care insurance can more easily accommodate risk-adjustment for controllable personal behaviours and choices such as smoking and obesity that increase health expenditures (imposed on other funders through the universal scheme) as compared with tax-funded schemes. Such an approach is more direct (and less distortionary) than the current approach to tobacco (consumption taxes paid to general revenues) and proposed approaches to obesity (taxes on certain foods, subsidies for certain activities, bans and restrictions in certain places, etc.) which are far less direct and do not provide individuals with a clear link between their choices and the cost of those choices.
Finally, research suggests that access to advanced medical technologies may be superior in social insurance financed health care systems as compared to tax-funded government insurance systems (Esmail and Wrona, 2008).

The high level of respect for individual preferences and consumer choice in Switzerland combined with individual financial responsibilities further enhances these characteristics while adding a dimension of personalization to a mandatory scheme. Importantly, the competition between insurance companies that results from choice may serve to further enhance efficiency and quality as well as consumer focus and responsiveness. Allowing individuals to tailor their insurance plan (within certain bounds) to their preferences may help to increase satisfaction with a mandatory scheme. It may also lead to a universal health insurance system that is more closely reflective of the preferences of the public, and may serve to improve efficiency in both the health insurance marketplace and in the broader economy. Finally, this construct may also result in a closer relationship between total health expenditures and the demands/desires of the public (both upwards and downwards) than is the case in centrally-managed/planned systems as individuals trade off higher deductibles and care management for lower health insurance expenditures/premiums and react to changes in premiums over time individually.

**Recommendation 4:** A social insurance construct with premium funding and taxpayer supports for those who cannot afford insurance, choice of insurer, and personalization of insurance policies.
References


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