



Lessons from Abroad

A Series on Health Care Reform



Health Care Lessons from Japan

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 Japanese health care system has previously been identified as a system 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; OECD, 2009). The Japanese health care system has also been identified in Organisation for Economic Cooperation and Development (OECD) research as a nation where wait times are not an issue (Siciliani and Hurst, 2003). While there are important cultural, institutional, and social differences between Canada and Japan, the Japanese experience can nevertheless provide important health policy insights with respect to the effect of particular health policy approaches. A careful examination of this high-performing 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 Japan

Health care expenditures in Canada are considerably higher than in both Japan and the average universal access nation. In 2009, Canada's health expenditures (age-adjusted) were 87% higher than Japan's and 26% higher than the average universal access nation. In fact, in 2009 Canada's health expenditures, as an age-adjusted (as older people require more care) share of GDP, were the highest among universal access developed nations.

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 outperforms that of Japan in two of five measures examined: physician and nurse to population ratios. Conversely, the Japanese health care system outperforms

the Canadian system in the other three: MRI machines to population ratio, CT scanners to population ratio, and hospital beds to population ratio.

Though wait times in Japan are reported to be low, comparable information is, unfortunately, not available (Siciliani and Hurst, 2003).

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 that the Japanese health care system performs at a level similar, if not superior, to that in Canada. Specifically, the Canadian health care system outperforms the Japanese health care system in one of eight measures examined: in-hospital mortality from acute myocardial infarction (heart attack). Conversely, the Japanese health care system outperforms the Canadian health care system in five measures: infant mortality, mortality amenable to health care, one of three measures of cancer survival, and two of three measures of in-hospital mortality.

Japan's health policy framework

Japan's health care system is very different from the Canadian health care system. Japan relies on a statutory health insurance system with over 3,500 insurers (in 2005) to provide health care to the entire population. This system of multiple health insurers is regulated by the federal government to ensure that all Japanese have access to health care and that Japan's broader health policy goals are met by the many independent insurers and providers.

While the number of insurers in Japan is impressive, individuals typically do not have the ability to choose between them: one must register with a specified insurer based principally on occupation/employment status, place of residence, and age. Insurers broadly fall into four categories: society-managed health insurance funds (SMHI) set up by large employers; government-managed health insurance funds (GMHI) for employees working in small to medium sized firms and their dependants; mutual aid society funds/associations (MAA) for national and local government employees and their dependants; and national health insurance funds (NHI) for farmers, the self-employed, retired, and unemployed among others not covered elsewhere.

In 2008, the Japanese government funded more than one third of its health insurance system, while insurance premiums made up nearly half of funding. Cost sharing provided 14% of funding (Tajika and Kikuchi, 2012).

Japan's health care system relies on an internationally high level of cost sharing to encourage informed decision making by those seeking health care. All health services in Japan are subject to a uniform 30% co-insurance rate (70% reimbursement). The rate is reduced to 20% for children and to 10-20% for those aged 75 and older. Those in a state of low income and other specific population groups receive subsidies for cost sharing or are exempted. Some employer-based funds (SMHI) also provide cost sharing refunds for those

Health system performance—Canada compared to Japan

Indicator*	Canada	Japan
Total health expenditures (age-adjusted, % of GDP)	12.5	6.7
Physicians (age-adjusted, per 1,000 pop.)	2.6	1.7
Nurses (age-adjusted, per 1,000 pop.)	10.3	7.5
MRI machines (age-adjusted, per million pop.)	8.8	34.0
CT scanners (age-adjusted, per million pop.)	15.2	76.7
Hospital beds (age-adjusted, per 1,000 pop.)		
<i>Total</i>	3.6	10.8
<i>Curative care beds</i>	2.0	6.4
Infant mortality rate (per 1,000 live births)	5.1	2.4
Mortality amenable to health care (per 100,000 pop. 2007)	74	66
Five year relative survival rate for breast cancer	86.6	87.3
Five year relative survival rate for cervical cancer	64.9	70.2
Five year relative survival rate for colorectal cancer**	63.4	68.0
In-hospital case-fatality rates within 30 days, AMI**	3.8	9.7
In-hospital case-fatality rates within 30 days, hemorrhagic stroke**	20.6	9.7
In-hospital case-fatality rates within 30 days, ischemic stroke**	6.3	1.8

Notes: * 2009 or nearest year, 2004-2009 or nearest year for cancer survival rates, unless otherwise noted. ** The difference for this indicator is statistically significant (95% confidence interval). Note that confidence intervals apply to cancer survival rates and in-hospital case-fatality rates.

Sources: OECD, 2011; Gay et al., 2011; calculations by author.

enrolled. Finally, a monthly limit to co-insurance payments applies (varied based on age and income), beyond which a 1% co-payment is applied subject to a higher payment limit.

Primary care

Primary care, and ambulatory or outpatient physician care, in Japan is organized in a manner distinct from what is seen in most developed nations. Specifically, because of the open access, free choice of provider, and gate-keeping-free (referrals are not required for specialist care) organization of the Japanese health care system, there is little distinction between primary care

and ambulatory specialist care or even clinic and outpatient hospital care. Japanese patients can choose either a clinic or hospital as their first point of contact with the health system.

Clinics in Japan are mostly physician led, with nurses playing a smaller role in patient care. Multispecialty groups or clinics are uncommon. While clinics are more commonly used for primary care, most hospitals maintain outpatient departments to provide physician consultations.

Reimbursement of clinic and hospital services is done on a fee-for-service basis based on a national uniform fee schedule, which generally does not distinguish between clinic and hospital services (Paris et al., 2010).

Specialized, hospital, and surgical care

The Japanese hospital sector is dominated by private hospitals. While some 70% of hospitals are privately owned, they comprise only 55% of the total bed stock; 45% of hospital beds are found in the public sector as national and public hospitals tend to be larger in size (Tatara and Okamoto, 2009).¹ Looking only at acute care beds, however, 73.7% of beds are found in the private sector with just 26.3% in the public sector (Paris et al., 2010).

Secondary care in Japan is assigned to 106 regional health care hospitals. Eighty special tertiary care hospitals (primarily university hospitals) provide the next level of treatment and typically have more than 500 hospital beds. While these hospitals should, in theory, be focused on referred patients due to their specialized high-level nature, Japanese patients are not restricted (other than by financial disincentive) from seeking their care without referrals.

Activity-based funding (hospitals paid based on services provided) is used to remunerate hospital services in Japan. However, funding in Japan is somewhat different from the typical case-mix approach² common in Europe (Sweden, for example). Rather, Japan's health care system reimburses hospital care through a mix of approaches including payment per procedure/service and a diagnosis-adjusted per diem (per day of hospitalization) payment known as Diagnosis Procedure Combination (DPC).

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- 1 This is partly a result of restrictions on financing for private institutions that may reduce efficiency (OECD, 2009).
 - 2 Also known as prospective case payment or Diagnosis Related Group (DRG) type financing, where hospital cases are classified into groups (DRGs) and providers are paid a specified amount for treating a patient in a given group with adjustments for significant co-morbidities.

Privately funded options/alternatives

Japan's comprehensive insurance coverage provided by statutory insurance companies, combined with gatekeeping-free rapid access to all levels of care, has resulted in a small market for parallel private/voluntary health insurance coverage. While voluntary insurers are permitted to sell coverage for goods and services included in the universal scheme, a market does not appear to have formed.³ Japanese voluntary health insurance typically comes in the form of complementary coverage for hospitalization or for certain health conditions/diagnoses with cash payments paid daily for hospitalizations and in a lump sum for conditions/treatments. More than 70% of adults in Japan hold this type of complementary insurance (Matsuda, 2012).

Lessons for Canada

The combination of potentially superior access to health care and potentially superior outcomes from the health care process with substantially fewer resources committed to health care suggests there is much Canadians can learn from the Japanese health care system. It must be recognized that emulating Japan's 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 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 Japanese health care system departs from the Canadian model in the following important ways:

- ◆ Cost sharing for all forms of medical services
- ◆ Largely private provision of acute care hospital and surgical clinic services
- ◆ Activity-based funding for hospital care
- ◆ Permissibility of privately funded parallel health care

3 The Japanese system does, however, uniquely restrict mixed billing approaches (other than for those items listed in the "specified medical costs" list). Individuals purchasing certain treatments (for example, special drugs or new treatments) are prohibited from using health insurance to fund other combined health services that would otherwise be covered for that event if the unlisted service was not used. The OECD (2009) has recommended that this ban be relaxed to improve the quality of health care services in Japan.

- ◆ 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).

Of course, some policy differences between Canada and Japan would violate the letter of the Canada Health Act (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 policy constructs 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 the CHA discussion and focus only on the policy changes that would need to take place if Canada were to more closely emulate the Japanese approach to health care.

Recommendation 1: *Activity-based funding models—possibly with competitive benchmarking employed to set fees—and private provision of hospital and surgical services.*

Recommendation 2: *Private health care and health care insurance for medically necessary care.*

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

Recommendation 4: *Social insurance construct for universal coverage with premium funding, along with taxpayer supports for those who cannot afford insurance.*

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 a 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?⁴ One way to

4 This is a contested statement in the Canadian health policy debate. Some see outcomes as secondary to the justice of the structures and processes by which they are achieved. 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.

assess health policy choices is to examine those of other developed nations and their performance results.

This paper is part of a series that examines the way health services are funded and delivered in other nations. The nations to be 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.

Japan is the focus of this paper in the series. The Japanese health care system has previously been identified as a system 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; OECD, 2009). The Japanese health care system has also been identified in OECD research as a nation where wait times are not an issue (Siciliani and Hurst, 2003). While there are important cultural, institutional, and social differences between Canada and Japan, the Japanese experience can nevertheless provide important health policy insights with respect to the effect of particular health policy approaches. A careful examination of this high-performing health care system will provide insights and information that will be useful in the Canadian debate over the future of Medicare.

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

Health system performance: Canada compared to Japan

The comparisons below look at the health care systems of both Canada and Japan as well as the average performance of health care systems in other developed nations⁵ that also maintain universal approaches to health care insurance.

Health care expenditures in Canada are considerably higher than in Japan or the average universal access nation (Chart 1). In 2009, Canada's health expenditures (age-adjusted) were 87% higher than Japan's,⁶ and 26% higher than in the average universal access nation. In fact, in 2009 Canada's health expenditures, as an age-adjusted⁷ (as older people require more care) share of GDP, were the highest among universal access developed nations.

Access

Unfortunately, access to health care services in Canada does not reflect its level of expenditure.⁸ The Japanese health care system seems to offer a better balance between cost and access to health care than does Canada's.

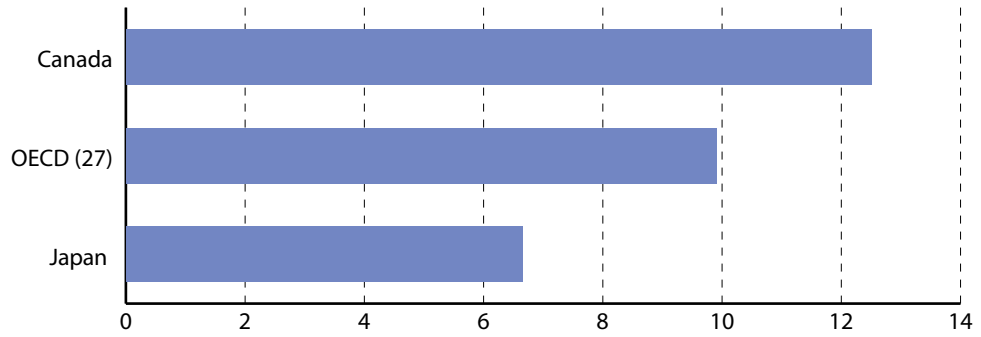
5 Defined here as member nations of the Organisation for Economic Cooperation and Development (OECD) in 2009.

6 The cautionary note regarding health expenditures data for Japan below does not apply to this comparison. Data compared here are from OECD (2011), which uses health expenditures data from the OECD's internationally comparable System of Health Accounts.

7 The age-adjustment methodology used here is from Esmail and Walker (2008). 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" on page 21.

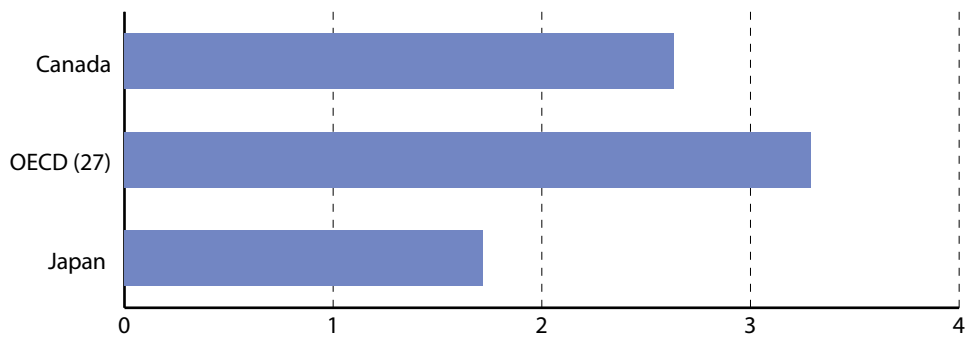
8 It should be noted that we cannot directly measure access, but rather are measuring the quantity of medical goods and services available to individuals in these countries, to provide insight into the availability of medical services for individuals in these countries.

Chart 1: Total health expenditures, age-adjusted share of GDP, 2009 or nearest year



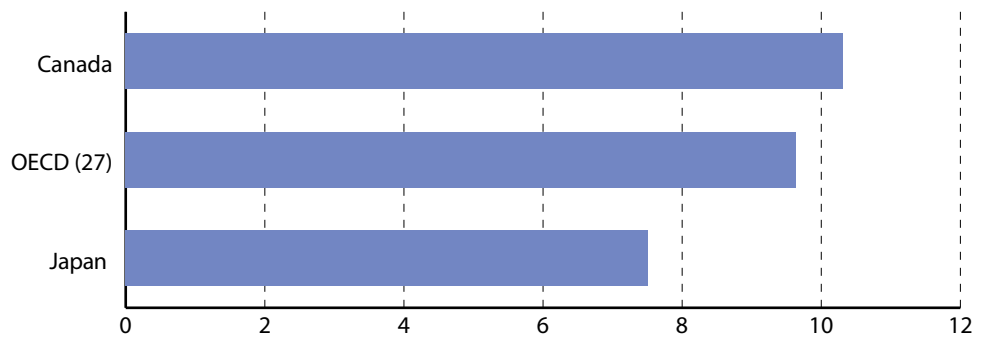
Note: The number of universal-access member nations of the OECD in 2009 for whom data was available to create the average is shown in parentheses.
Source: OECD, 2011; calculations by author.

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.

With respect to physicians, Canada performs relatively poorly compared to the universal-access average though Canada clearly outperforms Japan (Chart 2). In 2009, Canada had 2.6 physicians per 1,000 population (age-adjusted). That compares to an average of 3.3 and Japan's relatively low 1.7 per 1,000 population.⁹

Canada's nurse to population ratio standing is internationally more positive with a similarly superior performance to that of Japan (Chart 3). Canada (10.3) has more nurses per 1,000 population (age-adjusted) than the average universal access nation (9.6), while Japan ranks below the average (7.5).

Access to medical technologies, however, is markedly better in Japan than in Canada. With respect to MRI machines per million population (age-adjusted), Canada performs relatively poorly at 8.8 machines compared to an OECD average of 12.9 and the Japanese count of 34.0 (Chart 4). With respect to CT scanners per million population (age-adjusted), Canada again performs relatively poorly at 15.2 machines compared to an OECD average of 23.9 and the Japanese count of 76.7 (Chart 5).¹⁰

The supply of hospital beds in the Canadian health care system is below the universal-access average in total and well below that in Japan (Chart 6). In 2009, Canada had 3.6 hospital beds for every 1,000 population (age-adjusted), of which 2.0 were curative care beds.¹¹ This is fewer than were available in Japan where 6.4 curative care beds of a total of 10.8 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 bed¹² to population ratios are negatively related to wait times. This suggests that Japan may be better able to deliver health care in a timely fashion than Canada.

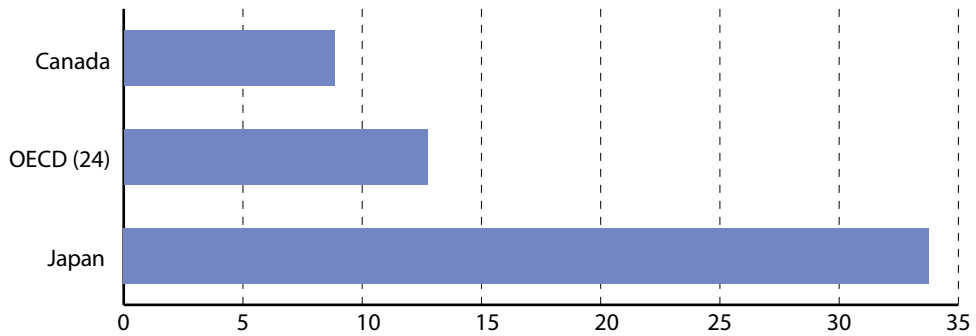
9 Interestingly, like Canada, Japan regulates physician training. Admissions capacities of medical schools in Japan were reduced in the 1980s and were unchanged until 2007 after which they increased (Matsuda, 2012).

10 It should be noted that medical device availability in Japan may not be fully reflective of the MRI/CT comparison (OECD, 2009). This may in part be a consequence of the fee schedule and governmental determinations of fees, both of which are discussed below.

11 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.

12 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).

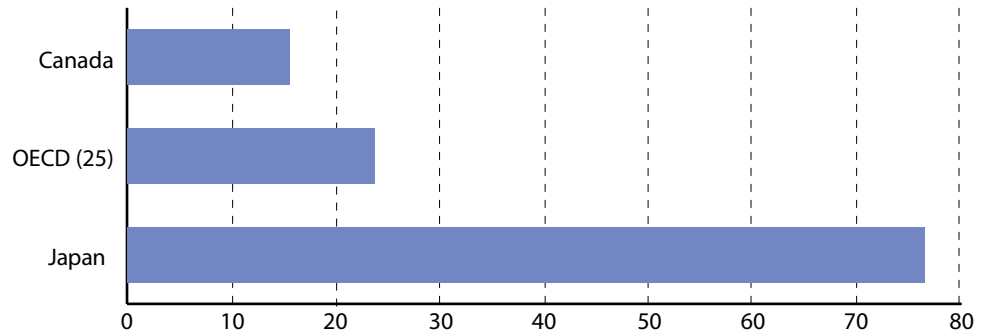
Chart 4: MRI machines per million population, age-adjusted, 2009 or nearest year



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.

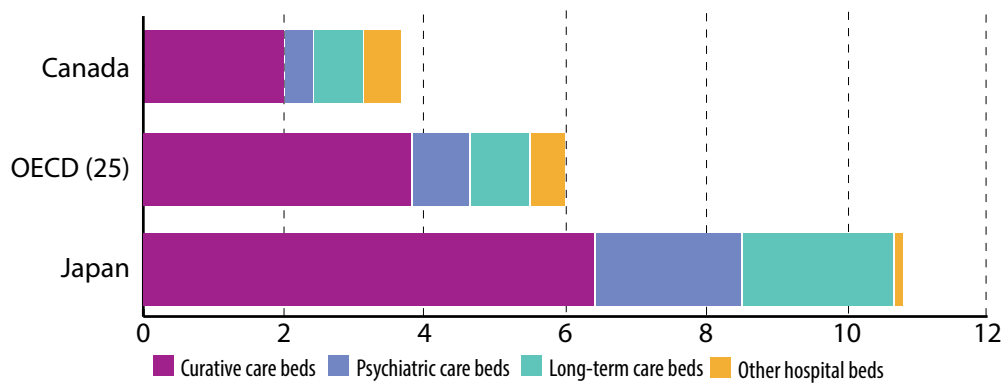
Chart 5: CT scanners per million population, age-adjusted, 2009 or nearest year



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 6: Hospital beds 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.

Unfortunately, comparable wait times information for Japan is not available, though wait times are reported to be low in Japan (Siciliani and Hurst, 2003).

Overall, it seems that the Japanese health care system is able to provide more timely access to health care services and a more abundant supply of medical technologies for markedly less expenditure as an age-adjusted share of GDP. Canada's health care system on the other hand provides a more abundant supply of medical professionals such as physicians and nurses, though at considerably higher cost.

Outcomes

Looking at factors such as the ability of the health care system to provide healthy longevity,¹³ low levels of mortality from disease, and effective treatment for both chronic and terminal illnesses,¹⁴ it seems the Japanese health care system broadly performs at a level similar to, or superior to, that in Canada.

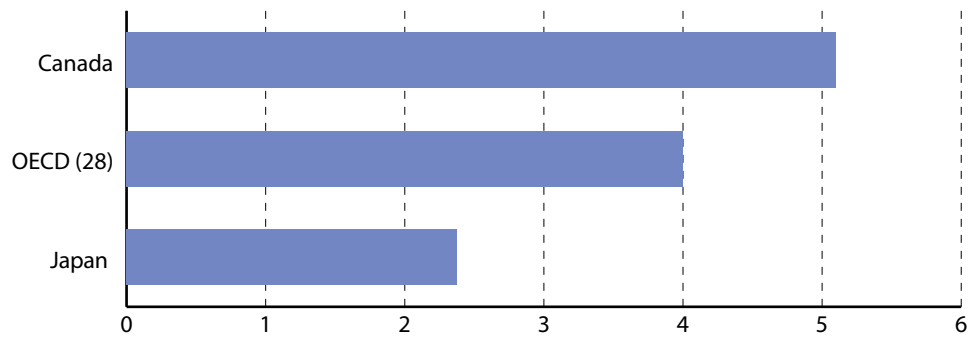
One of the most basic measures of mortality commonly used to compare health status is infant mortality rates. It should be noted that infant mortality rates can be affected by immigration from poor countries, unhealthy outlier populations, and other population demographics (Seeman, 2003). However, they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

Japan's performance in preventing death at the youngest ages appears to be superior to Canada's (Chart 7). In 2009, residents of Japan experienced an infant mortality rate of just 2.4 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

13 Life expectancy, one of the more common measures of longevity, is not included in the measures below because factors outside of the health care system can be significant drivers of overall longevity. This exclusion does not affect the analysis however: Japan has a life expectancy of 83.0 years, compared to Canada's 80.7 (OECD, 2011).

14 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 7: Infant mortality rate, per 1,000 live births, 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.

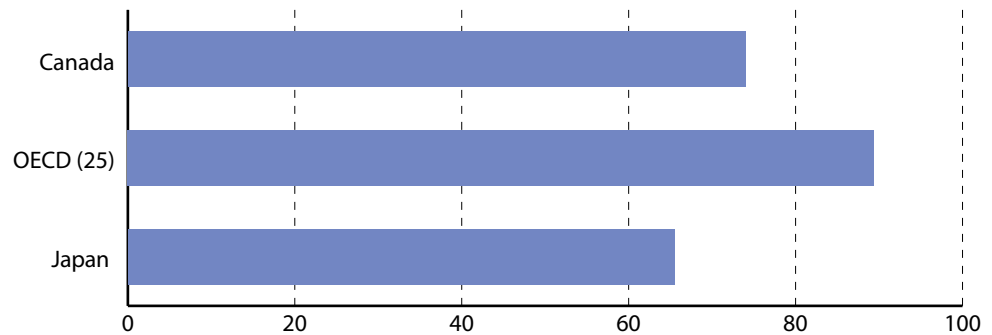
lagged in comparisons of infant mortality rates as well as perinatal mortality rates (28 weeks gestation to first week of life) (Esmail and Walker, 2008).

Another way of looking at mortality is to examine deaths that were likely preventable with the application of appropriate health care, or deaths that should not occur if effective health care is applied in a timely fashion. Gay et al. (2011) provide estimates of mortality amenable to health care that can be used to examine how the Canadian and Japanese health care systems perform in saving lives that should, in the presence of timely and effective health care, not be lost.¹⁵ This calculation relies on counting the number of deaths for specific conditions/diseases in specific age ranges for which there is evidence that timely, effective health care can prevent mortality. In this comparison (Chart 8), both Canada (74 per 100,000 population) and Japan (66 per 100,000 population) outperform the universal access health care system average (89 per 100,000 population). However, the Japanese rate of mortality amenable to health care is nearly 11 percent lower than Canada's.

Survival rates for cancers of the breast, cervix, and colon can provide some insight into the health care system's ability to detect disease early and treat disease effectively. With respect to survival rates for breast cancer, both Japan and Canada, though similar to one another, perform better than the universal access average. For survival rates for cervical cancer, the Canadian rate is similar to the universal access average while the Japanese rate is better than the average but similar to Canada's rate. For colorectal cancer, both

¹⁵ Gay et al. (2011) provide calculations of mortality amenable to health care using two widely used lists of causes amenable to health care: the list published by Tobias and Yeh, and the list published by Nolte and McKee. For consistency with comparisons published by Esmail and Walker (2008), this series uses calculations based on the Nolte and McKee list of causes.

Chart 8: Mortality amenable to health care, per 100,000 population, 2007 or latest year available



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: Gay et al., 2011; calculations by author.

Canada and Japan outperform the universal access average with Japan's rate also being better than Canada's (Chart 9).

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 10 reports in-hospital case fatality rates within 30 days of admission for acute myocardial infarction (AMI or heart attack), ischemic (obstruction), and haemorrhagic (rupture) stroke. For AMI, Canada performs better than the universal access average, while Japan performs worse than the universal access average in this measure. For in-hospital mortality from both forms of stroke, Japan's performance is superior to both the universal access average and to Canada's performance, while Canada lags the average for both measures.

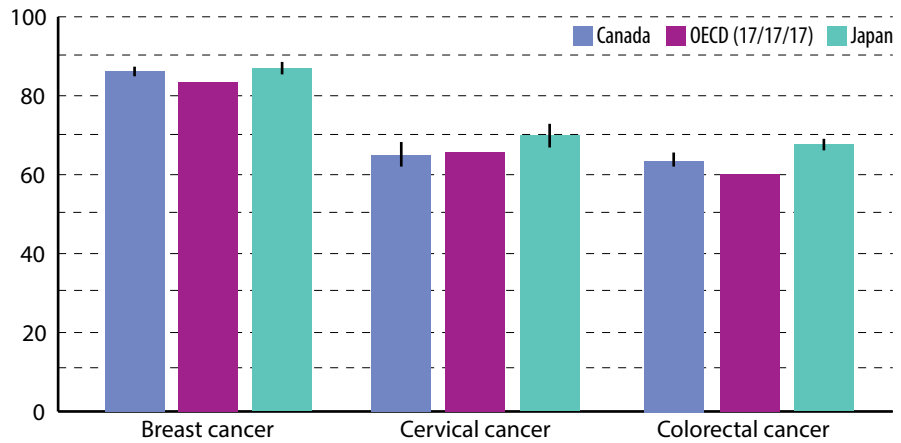
Unfortunately, comparable data for measures of primary care performance and patient safety examined in other studies in this series were not available for Japan.

In summary, the Canadian health care system outperforms the Japanese health care system in: physician to population ratio, nurse to population ratio, and one of three measures of in-hospital mortality.

Conversely, the Japanese health care system outperforms the Canadian health care system in: MRI machines to population ratio, CT scanners to population ratio, hospital beds to population ratio, infant mortality, mortality amenable to health care, one of three measures of cancer survival, and two of three measures of in-hospital mortality.

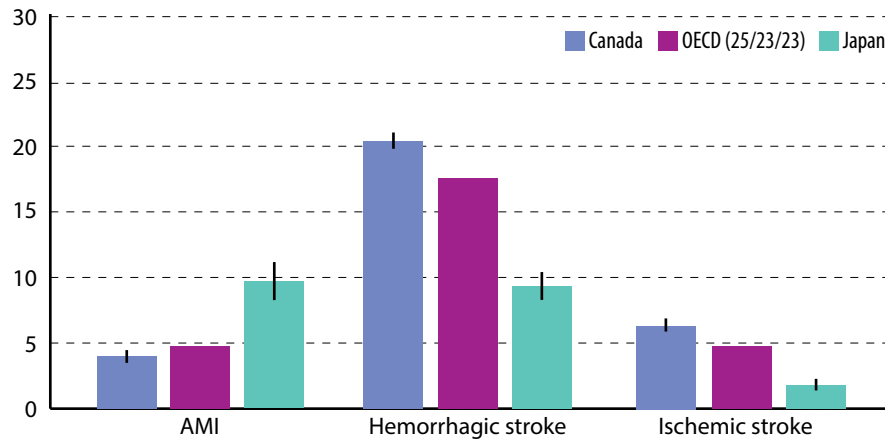
Importantly, Japan's similar to superior performance comes at markedly reduced cost compared to Canada. The superior value for money provided by the Japanese health care model suggests it is well worth examining if lessons are to be learned for effective, positive reform of the Canadian health care system.

Chart 9: Five-year relative survival rates for select cancers, 2004-09 or nearest period



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 10: In-hospital case-fatality rates within 30 days after admission for select conditions



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.

Japan's health policy framework

General overview

Japan's health insurance system¹⁶ achieves universality through statutory enrolment with one of more than 3,500 insurers. Japan's health care system is largely overseen by the federal government with prefecture and large city governments playing a secondary role. The federal government in Japan is responsible for health insurance policy, setting fees for provider reimbursement, setting what is to be included in the uniform insurance benefits schedule, and setting standards for health care facilities. Prefectures (and certain large city governments) are responsible for developing regional health plans (including for the purposes of cost containment), licensing hospitals, and monitoring providers in line with federal guidelines.

Originally modelled after Germany's health care system, the Japanese system achieved universality through the passage of legislation in 1961. This followed enactment of a health insurance system for the employed population in 1922 and for the self-employed population in 1938. Two key federal pieces of legislation guide administration and regulation of the Japanese health care system: the ever-evolving Medical Care Act¹⁷ regulates health services including human and capital resources while the Health Insurance Act is used to regulate the financing of health care.

As is the case throughout the developed world, Japan's health care system is in a constant state of reform. Recent directions of reform in Japan

16 The description of the Japanese health care system in this section is based on information found in: Jeong and Hurst, 2001; Kawaguchi, 2012; Matsuda, 2012; OECD, 2009; Paris et al., 2010; Tajika and Kikuchi, 2012; and Tatara and Okamoto, 2009.

17 Tatara and Okamoto (2009) report the first Medical Care Act was passed in 1948 (with an origin traceable to 1874). It was substantially revised in 1985, with subsequent revisions in 1993, 1997, 2000, and 2006.

include a focus on improving the state of primary care and, in particular, preventive health services, improving integration of preventive and acute care, integration of financially struggling health insurance funds at the prefecture level, encouraging competition between prefectures through premium reform of the government health insurance fund, consolidating the municipal insurance system, and, most critically, focusing on better management of the challenges associated with a large elderly population including care coordination, financing, and long term care. This latter point is critical in the Japanese discussion: in 2009 some 22.7% of the Japanese population was aged 65 or older, compared with 15.1% in the average developed nation¹⁸ and just 13.9% in Canada (OECD, 2013). That high proportion of elderly in the population and the associated health care costs suggest that Japan is facing a health care delivery and funding challenge quite unlike that faced by most other developed nations. Japan's success (discussed above) in providing rapid access to high quality care at reasonable cost under these circumstances suggests the Japanese have been largely successful with both core health policy constructs and reform approaches.

Fiscal/financing arrangements

As noted above, Japan's health care system is very different from the Canadian health care system in approach. Japan relies on a statutory health insurance system with over 3,500 insurers (in 2005) to provide health care to the entire population. This system of multiple health insurers is heavily regulated by the federal government to ensure that all Japanese have access to health care and that Japan's broader health policy goals are met by the many independent insurers and providers.

While the number of insurers in Japan is impressive, individuals typically do not have the ability to choose between them: one must register with a specified insurer based principally on occupation/employment status, place of residence, and age. Insurers broadly fall into four categories: society-managed health insurance funds (SMHI) set up by large employers¹⁹; government-managed health insurance fund (GMHI, also known as Japan Health Insurance Association-Managed Health Insurance or JHIAHI) which is managed by the federal government, operated by the Japan Health Insurance Association, and covers employees working for small to medium sized firms and their dependants; mutual aid society funds/associations (MAS or MAA), which are organized for national and local government employees and their dependants; and

18 Defined here as the 30 member nations of the OECD in 2009.

19 The employer-based system for regular workers has created incentives for firms to increase their share of non-regular workers who would be covered by NHI rather than SMHI.

national health insurance funds (NHI) for farmers, the self-employed, retired, and unemployed among others not covered elsewhere²⁰ that are either managed by sub-federal governments or operate as a society fund (for professionals such as lawyers and doctors). In 2005, the total of 3,662 insurance funds was comprised of 1,584 SMHI funds, 1,835 municipal NHI funds, 166 NHI society funds, 76 MAS funds, and the GMHI fund. Broken down by population, SMHI covered 23.6% of the population, NHI covered 39.3%, MAS covered 8.6%, and GMHI covered 27.9% (Tatara and Okamoto, 2009).

Japanese expenditure statistics, which cannot be compared internationally because they exclude many private payments or charges not covered by health insurance, show that government funds more than one third of the Japanese health insurance system while insurance premiums make up the largest share of expenditures. Specifically, according to Japanese statistics, 48.8% of health insurance funding was from insurance premiums, tax-sources provided another 37.1% of funding, and patient cost sharing provided 14.1% of funding in 2008 (Tajika and Kikuchi, 2012). The OECD, providing internationally comparable statistics through their System of Health Accounts, reports that 81.3% of total Japanese health expenditures were from public sources, with 64.0% from social security and 15.4% from general government sources. Private funding, comprising 18.7% of total health expenditures, broke down into a small share for private health insurance (2.6%) and were dominated by out-of-pocket payments (15.1%) (Paris et al., 2010).²¹ Figure 1 provides a high level overview of financial flows in the Japanese health care system, using Japanese expenditure statistics.

These broad funding numbers mask a great deal of variability in both insurance premiums and government support for health insurance funds. Approximately 13% of GMHI costs and roughly 43% of NHI costs are provided through general tax revenues, partly reflecting the higher cost and lower revenue potentials of these insurance funds (Tatara and Okamoto, 2009). SMHI and MAS funds receive no subsidies from government with the exception of payments to assist with those who are facing financial difficulties.

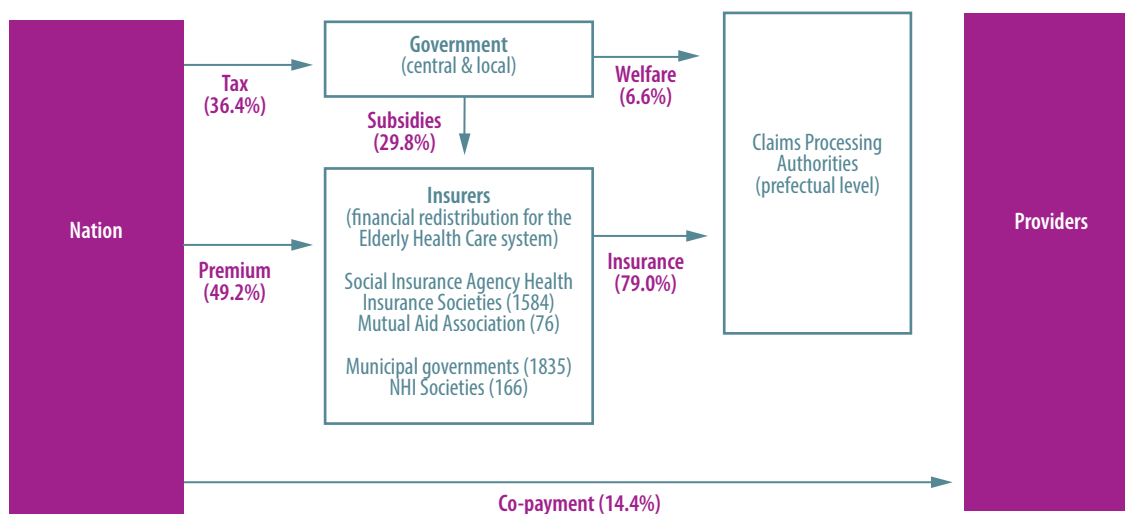
Insurance premiums, which are determined within federal guidelines by each insurance fund, can also vary considerably in Japan.²² In 2004, the

20 The Health Insurance Act defines the role of NHI to provide cover for those not covered by other funds.

21 Canada's total health expenditures break down as approximately 70% public and 30% private. Public expenditures cover 91% of all spending on hospitals and 99% of all spending on physicians, while covering less than half (46%) of prescribed drug expenditures. On the other hand, nearly half (46%) of private expenditures on health care in Canada are for drugs (both prescribed and non-prescribed) and dental care (CIHI, 2012).

22 For example, a family paying local income tax of 50,000 yen (an annual income of roughly 2,000,000 yen) would pay an annual premium (municipal NHI) of 200,000 yen in Tokyo but 405,000 yen in Osaka (Tatara and Okamoto, 2009).

Figure 1: Flow chart for 2005



Source: Tataru and Okamoto (2009).

GMHI contribution rate was 8.2% of monthly gross salary (4.1% each for employer and employee).²³ Contribution rates for society managed funds varied from as little as 3% to as high as 10%, averaging 7.4% (Tataru and Okamoto, 2009). Corporate based health insurance fund premiums are limited to between 3% and 10% of monthly salary under the Health Insurance Act. Municipal NHI funds levy an income-adjusted or means-tested premium.²⁴

Insurance fund premiums are split between employers and employees.²⁵ While premium splitting is to be done on an equal basis, some employers assume slightly more than half of the contribution leaving workers contributing about 45% of payments overall (Tanner, 2008). Further, contributions from employees are subject to a cap on qualifying income.

Insurance funds in Japan are regulated by the Ministry of Health, Labour, and Welfare. Funds (SMHI, NHI, and MAS) are tax-exempt non-profit corporations, and SMHI funds are to be independent from their parent

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- 23 It should be noted that the national GMHI rate has been eliminated following recent reforms focused on privatizing the GMHI into the JHIA in 2008. Part of this reform included the adoption of prefecture-level financing and premium setting to encourage competition between prefectures.
- 24 Rules for means testing vary between local governments and are set according to a set of complex rules provided by the national government. Both income and assets are considered along with size of household.
- 25 Enrollees of employer-based insurance are exempt from payment of premiums while on parental leave.

corporations. By regulation, both employers and employees sit on the governing assembly of health insurance funds.

Enrolment with an insurance fund is mandatory for all legal residents in Japan (including for foreigners not on a short-term visit), and includes dependent family members (including elderly dependants) by default.²⁶ Employees of major corporations are automatically enrolled in the company SMHI fund. Non-employed Japanese, including part time workers and pensioners, are automatically enrolled in the NHI system run by their local municipal government. While enrolment and premium contribution (means tested for municipal NHI) are mandatory, some 10% of the population evade the premium contribution and do not have access to insurance-subsidized health care as a result (Tatara and Okamoto, 2009). Those who neglect to enrol must pay up to two years of premiums when re-entering the system (with public subsidies available for those unable to pay).

Portability of insurance benefits is ensured by allowing the unemployed to remain on their former employer's plan, though they are not required to continue contributing. Further, municipal NHI is available to the unemployed. Both serve to mitigate health-insurance based job-lock that can occur in employment-based insurance systems.

Retirees in Japan leave their company insurance fund for municipal NHI funds—employers in Japan are not liable for the health costs of their retired employees. Previously, care for the elderly in Japan was funded through a financial pool into which individual insurers paid depending on their elderly (70+) enrolment (lower 70+ enrolments relative to the national average required a higher payment into the pool).²⁷ This pooling system was replaced by a new financial redistribution mechanism for those aged 65-74 and a new independent, prefecture-based, health care system for those aged 75 and older in 2008 known as Health Insurance for the Old Old. In part, the new policy requires that those aged 75 and over pay premiums according to their income (including pension) and imposes direct premium payment from pension payments. Funding for the new insurance scheme for those aged 75 and older is partly comprised of these premiums, with 50% of funding coming from government and 40% of funding coming from health insurance contributions (cross-subsidization from the premiums of those under 75). One of the intended outcomes of this new approach to elderly care funding is a

26 A recent court ruling also entitled immigrants, refugees, and asylum seekers to coverage by the municipal NHI system.

27 The Japanese health insurance system does not prospectively fund insurers on a risk-adjusted basis. Rather, the government subsidizes insurer costs on an ex-post basis, paying a fixed portion of actual costs incurred (Tajika and Kikuchi, 2012).

closer relationship between premium payments from those enrolled (along with a more explicit subsidy) and local health care costs.²⁸

Japan's health insurance system employs a uniform benefits package defined by the federal government. Benefits include the costs of prescription drugs (based on a list of covered pharmaceuticals), dental care, hospital and physician care, maternity care, and even some transport costs. Services and goods not covered under health insurance include surcharges for private beds at hospitals, glasses and contact lenses, and new technologies not yet adopted in the national fee schedule (including some advanced medical care services). Further, while treatment of disease is covered by health insurance in Japan, preventative care (including check ups) and normal childbirth are not reimbursed (though a lump-sum payment is provided for childbirth) under health insurance and are largely left to other processes (including insurer programs).

While coverage is broad in Japan, an internationally high level of cost sharing applies. All health services in Japan are subject to a uniform 30% co-insurance rate (70% reimbursement). The rate is reduced to 20% for small children,²⁹ and to 10% for those aged 75 and older (20% for elderly with high income). Those in a state of low income, who cannot afford the municipal NHI premium, may qualify for the welfare system under which there is no co-insurance. Further, specific population groups are also exempt from co-insurance payments while subsidies reduce the burden of cost sharing for other specific populations. Finally, a monthly limit to co-insurance payments applies, beyond which a 1% co-payment is applied to a higher limit. The monthly limit varies based on age and income.

In addition to the 30% rate of co-insurance, patients may also be required to pay one-time surcharges for accessing certain specialty and large hospitals without a physician referral. Elderly individuals (70 and over) also pay a fixed surcharge per month for outpatient and per day for hospital care.

While both the scope of benefits and reimbursement rates are determined by the national government, SMHI funds with sufficient finances are permitted to provide additional benefits to those enrolled. These come in the form of cost sharing refunds, reducing the effective level of cost sharing for some citizens. In 2004, 1,363 out of 1,584 funds provided such additional benefits (Tatara and Okamoto, 2009).

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- 28 Tajika and Kikuchi (2012) find that the large contributions from taxation (government subsidies) throughout the system has had a negative impact on the Japanese health care system as a result of the disconnect this creates between the cost of health care and the premium paid to the insurer as well as incentives for insurer management and efficiency. The lack of competition between insurers also weakens incentives to increase efficiency and innovate.
- 29 Tatara and Okamoto (2009) give the age limit for the lower rate to be 3 years old while OECD (2009) states the reduction applies until age 6.

Delivery of primary care

Primary care, and ambulatory or outpatient physician care, in Japan is organized in a manner distinct from what is seen in most developed nations. Specifically, because of the open access and gatekeeping-free organization of the Japanese health care system, there is little distinction between primary care and ambulatory specialist care or even clinic and outpatient hospital care. Generally speaking, primary health care services in Japan encompass the specialities of internal medicine, paediatrics, ophthalmology, otolaryngology, and gynaecology. It is noteworthy that primary care is not recognized as an academic discipline in Japan, and there are no established departments of primary care in medical schools. However, many schools have set up departments of general comprehensive care in an effort to train physicians to treat patients from a general diagnostic point of view.

The Japanese health insurance system has traditionally focused on curative care and the treatment of disease as opposed to preventive care,³⁰ health check-ups, and health screenings.³¹ These services were largely left to prefecture and municipal governments who provided them through public and community health centres. Public health centres are focused more on specialized services such as psychiatric problems, communicable diseases, and certain intractable diseases. Municipal community health centres are focused more on general health services such as screening and preventive care. As part of a health reform enacted in 2006 (effective from 2008), insurers are now responsible for provision of preventive health services and disease management. However, public health centres will remain responsible for infectious diseases, mental health, and other specific health needs, while community health centres will continue to provide maternal and child health services and cancer prevention services.

30 Alternatively, demand for preventive care from physicians may be low due to the high co-pay/lack of reimbursement in Japan. Individuals may simply be seeking preventive care from alternative providers, while seeking curative care (subject to high co-pays) from physicians and nurses. From a Canadian perspective, this would have the positive benefit of patients seeking care from providers that is more in line with their training and skills. Further, from the Canadian perspective, preventive care is sought from (costly) physicians in part because demand for lower cost alternatives is reduced because physician services are available without co-pay.

31 This may, in part, be a cultural phenomenon, where visits to doctors in the absence of symptoms in Japan are not usual and where practice rules for physicians dictate that examinations and tests are to be ordered only to the extent a patient's symptoms warrant them. Interestingly, this may mean that patients often present with symptoms caused by lifestyle-related diseases when it is too late in the disease path for treatment to be effective (Tatara and Okamoto, 2009).

Clinics in Japan are mostly physician led, with nurses playing a smaller role in patient care. Multispecialty groups or clinics are uncommon.

Japanese patients can choose either a clinic or hospital as their first point of contact with the health system.³² Japan has no formal gatekeeping system, and individuals are free to access the health care system at the point of their choosing.³³ There is however a surcharge for patients who self-refer to certain specialized hospitals. Patients can also be referred to hospitals if they require surgical interventions or highly specialized diagnostic services.

While clinics are more commonly used for primary care, most hospitals maintain large outpatient departments to provide physician consultations, in part attempting to attract patients from clinics. For their part, some clinics also have inpatient beds (constituting 9.9% of total beds in 2004 (Tatara and Okamoto, 2009)) and effectively function like small hospitals. Notably, the utilization of hospital outpatient departments has been decreasing since the 1990s, while clinic use has increased. Similarly, the number of clinics with beds has been on the decline, while the number of clinics without beds has steadily increased. Both are likely related to a uniform fee schedule that compensates care equally whether in clinics without beds or in hospitals (where costs are higher). This is not to say that Japan's high-tech approach to health care is changing: some clinics maintain their own MRI, CT, or PET scanners.

Patients in Japan have free choice of their health care provider, as long as the provider has a contract with the national government.

Health care providers in Japan are predominantly private. In 2007, 52% of clinics were established by physicians, 31.8% by medical corporations, just 5.7% by public corporations, and 10.7% by others (Tatara and Okamoto, 2009).

Doctors in Japan also commonly dispense drugs directly to patients, which is unusual among developed nations. For patients, this can save the time and inconvenience of taking a prescription to the pharmacist.³⁴ While some may be concerned about the high rate of prescribing that has potentially been the result of this construct (Japan has among the highest per capita consumption of drugs in the OECD (Tatara and Okamoto, 2009), high use of

32 Under the Medical Care Act, clinics are defined as facilities with less than 20 beds while hospitals have 20 or more beds. Prior to 2006, when the distinction was removed from legislation, clinic beds were also not expected to be used by patients for more than 48 hours.

33 Allowing patients to access care providers directly without a referral would be expected to increase efficiency in the allocation of medical resources to the extent informational barriers (knowing which care provider to see or which level of care to access) are not a problem.

34 However, it takes (on average) two to three times longer for newly-developed drugs to be introduced in Japan as compared to other OECD countries. This has contributed to increasing dissatisfaction with the quality of health care, and likely is having a negative impact on health care in Japan (OECD, 2009; Esmail and Wrona, 2008).

drugs may go some distance to explain Japan's relatively low expenditures with a relatively positive health outcomes performance (see, for example, Esmail and Wrona, 2008).³⁵ The federal government has actively tried to discourage direct dispensing largely through changes to reimbursements, while generic substitution has also been promoted. In 2003, 48.4% of outpatient prescriptions were dispensed directly by physicians while in 2008 about 2/3 of prescriptions were filled at pharmacies (Tatara and Okamoto, 2009; Matsuda, 2012).

Reimbursement of clinic and hospital services is done on a fee-for-service basis based on a national uniform fee schedule, which generally does not distinguish between clinic and hospital services.³⁶ Fees must be accepted by providers as full payment (with a 70% reimbursement rate and 30% co-insurance rate with limits and exemptions for patients) except for "experimental treatments," amenity beds, outpatient services of large multi-specialty hospitals, after-hours services, and other services specified by the government. The fee schedule is revised biennially following stakeholder (including provider organizations and insurers) negotiations. In addition, the fee schedule is used as a health policy tool by the national government to both encourage and discourage particular provider activities and to effectively limit national health expenditure growth.³⁷ The former is accomplished through government adjustments/revisions of fees, for example to favour services believed to be more cost-effective (Jeong and Hurst, 2001).^{38 39 40} The latter is accomplished through efforts aimed at constraining the overall growth in fees. OECD (2009:106) notes that the Japanese government "has significantly reduced medical prices" since 2000, which may be having a negative impact on the availability and quality of care.⁴¹

35 Also likely negatively impacting quality is Japan's ban on off-label uses of pharmaceuticals.

36 With the notable exception of initial consultation fees since 1992.

37 Jeong and Hurst (2001) note the Japanese government has employed its monopsony purchasing position in this regard.

38 Jeong and Hurst (2001) note that as a result of these activities, the share of total provider payments devoted to traditional ambulatory services (mainly primary care) has remained high relative to the share for inpatient services and high tech medicine.

39 Possibly as a result of a strong cultural bias, surgery tends to be reimbursed at a much lower rate than non-surgical procedures (Tanner, 2008).

40 Tanner (2008) finds that bribes have also been used to influence fee-setting board decisions, as individual fee adjustments in a 3,000+ item schedule may go unnoticed.

41 Specifically, the OECD notes in their 2009 Economic Survey of Japan that: "Japan's strategy of repeatedly cutting the fees for physicians and hospitals and the price of drugs and equipment cannot continue forever. Prices can fall only so far before products become unavailable and the quality of care suffers; some would argue that this point has already been reached" (p. 112).

Under this fee-for-service structure, many hospitals and clinics are organized as medical corporations where the doctor will be an employee of the corporation and receive a monthly salary. Other health professionals (including nurses) employed by hospitals and clinics will also receive a salary plus some bonus payment.

Japan's low physician-to-population ratio has had consequences for primary care. Importantly, outpatient clinics may have long wait times in the waiting room,⁴² though there is no formal queuing and wait times are not perceived to be a problem. Further, providers perceived to be the best (often on the basis of having the best technology) can have some queues for treatment⁴³ though other providers are available on short notice. In addition, consultation times in Japan can be short: two-thirds of patients spend less than 10 minutes with their doctor and 18% spend less than 3 minutes (Tanner, 2008).⁴⁴ Finally, shortages of emergency care, obstetrics, and paediatricians are a problem in Japan (OECD, 2009).

Delivery of specialized, hospital, and surgical care

The Japanese hospital sector is dominated by private hospitals. Specifically, of 9,077 hospitals, 5,644 were established by private non-profit medical corporations, 760 by private sole proprietors, 1,377 by public institutions (including prefecture or municipal governments), 304 by government agencies, 129 by social insurance groups, and 863 by others (including public corporations, school corporations, and private medical schools). While some 70% of hospitals are privately owned, they comprise only 55% of the total bed stock, with 45% of hospital beds found in the public sector as national and public hospitals tend to be larger in size (Tatara and Okamoto, 2009).⁴⁵ Looking only at acute care beds, however, 73.7% of beds are found in the private sector with just 26.3% in the public sector (Paris et al., 2010).

Secondary care in Japan is assigned to 106 regional health care hospitals. Eighty special tertiary care hospitals (primarily university hospitals) provide the next level of treatment and typically have more than 500 hospital beds. While these hospitals should, in theory, be focused on referred patients

42 Long wait times occur primarily in university hospitals (OECD, 2009).

43 Tanner (2008) finds that a black market with “under the table” or envelope payments for faster access to these preferred providers has developed in Japan.

44 This is supported by data showing physician consultations in Japan are two to three times the OECD average per capita or per doctor, suggesting consultations tend to be short (OECD, 2009).

45 This is partly a result of restrictions on financing for private institutions, and may reduce efficiency (OECD, 2009).

due to their specialized high-level nature, Japanese patients are not restricted (other than by financial disincentive) from seeking their care without referrals.

Private ownership in Japan is either by sole proprietorship or by non-profit corporation. While medical corporations are similar to for-profit corporations (established by direct investment, corporate assets are shareholder property and can be claimed at market value), they are prohibited from dispersing profit in the form of dividends. Generally, for-profit corporations are prohibited from owning and operating hospitals in Japan based on the so-called “not-for-profit” principle presumably dictated by the Medical Care Act. However, the Act does not explicitly prohibit for-profit corporation ownership.⁴⁶

Contracts between the health insurance system and health care providers in Japan are made between the national government and individual providers. Since 2003, some limited insurer discretion has been permitted with the opportunity to undertake selective direct contracting between insurers and providers for discounted rates. However, no such contracting has taken place, possibly as a result of the continued need for government approval of agreements and many accompanying regulations (Tatara and Okamoto, 2009).

Activity-based funding (hospitals are paid based on services provided) is used to remunerate hospital services in Japan. However, funding in Japan is somewhat different from the typical case -mix approach⁴⁷ common in Europe (for example, Sweden). Rather, Japan’s health care system reimburses hospital care through a mix of activity-based payments including payment per procedure/service and a diagnosis-adjusted per diem (per day of hospitalization) payment known as Diagnosis Procedure Combination (DPC). The payment per procedure component compensates surgical procedures and anaesthesia, pharmaceuticals and equipment used in operating rooms, and high cost procedures. The DPC payment includes the hospital fee, pharmaceuticals and supplies used on wards, lab tests, and other exams, as well as lower cost procedures. This component provides a daily hospital payment (per-diem) based on the diagnosis/procedure combination group that decreases with length of stay. Hospitals can voluntarily elect to receive DPC payments or remain solely under payment per procedure/service. Hospitals encompassing roughly half of all acute-care hospital beds are funded under the blended fee-for-service/DPC system with the other half funded solely on a fee-for-service

46 There are interesting parallels here with the Canada Health Act (see Clemens and Esmail, 2012).

47 Also known as diagnosis related group (DRG) type financing, where hospital cases are classified into groups (DRGs) and hospitals are paid a specified amount for treating a patient in a given group with adjustments for significant co-morbidities.

basis.⁴⁸ Payments to hospitals include physician costs, where physicians are usually employed by hospitals on a salary basis.

Privately funded options/alternatives

Japan's comprehensive insurance coverage provided by statutory insurance companies, combined with rapid access to all levels of care, has resulted in a small market for parallel private/voluntary health insurance coverage.⁴⁹ While voluntary insurers are permitted to sell coverage for goods and services included in the universal scheme, a market does not appear to have formed.⁵⁰ Japanese voluntary health insurance typically comes in the form of complementary coverage for hospitalization or for certain health conditions/diagnoses. More than 70% of Japanese adults hold this type of complementary insurance (Matsuda, 2012). Payment from private health insurers is on a cash basis with a daily benefit paid during hospitalization and lump sums paid for major surgeries.

Voluntary health insurance schemes are typically operated by life insurance companies and promoted as part of life insurance policies. Enrolment is subject to a health examination and applicants may be denied cover. Group enrolment schemes are also uncommon.

48 Further, the government shows outcomes at DPC funded hospitals including treatment rates, lengths of stay, and readmission rates in order to encourage competition on quality and inform patient choice (OECD, 2009).

49 Voluntary is perhaps the better term here as Japan's health insurance system relies to a large extent on privately organized and managed statutory insurance companies.

50 The Japanese system does, however, uniquely restrict mixed billing approaches (other than for those items listed in the "specified medical costs" list). Individuals purchasing certain treatments (for example special drugs or new treatments) are prohibited from using health insurance to fund other combined health services that would otherwise be covered for that event if the unlisted service was not used. The OECD (2009) has recommended that this ban be relaxed to improve the quality of health care services in Japan.

Lessons for Canada

The combination of potentially superior access to health care and potentially superior outcomes from the health care process with substantially fewer resources committed to health care suggests there is much Canada can learn from the Japanese health care system. It must be recognized that emulating the Japanese 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 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 Japanese health care system departs from the Canadian model in the following important ways:

- ◆ Cost sharing for all forms of medical services
- ◆ Largely private provision of acute care hospital and surgical clinic services
- ◆ Activity-based funding for hospital care⁵¹
- ◆ 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)

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

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 allowing a private parallel health care sector. 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 a private parallel health care sector. Given that these reforms are emulating a more successful approach to universal access health care and, thus, cannot be reasonably opposed in a factual manner, this restrictive feature of the Act is not considered here.⁵²

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.⁵³ This policy choice 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 implementation. Setting aside concerns about the politics of doing so, this latter option may not necessarily be against a province's financial interest depending on the savings that may accrue from such a policy decision (Esmail, 2006).

Japan's social insurance construct with multiple insurers also violates the CHA. Importantly, section 8 of the Act disallows multiple insurer social-insurance constructs, though monopoly social insurance constructs are permitted. By violating one of the "principles" of the Canada Health Act, a province undertaking this policy approach would put its entire cash transfers for health and social services at risk. Implementing this policy choice 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

52 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.

53 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 a 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.

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 Esmail and Walker, 2008, for example). 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 Japanese 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: "... 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 patient 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.⁵⁴

Studies have shown that activity-based funding can lead to a greater volume of services being delivered using existing health care infrastructure, reductions in waiting time, 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; Biørn 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 under the activity-based funding model. 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. Vitality, 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

54 This is likely true to a lesser extent under the Japanese activity-based funding model than it is under a prospective case based or DRG-based funding model as found in Australia or Sweden among others.

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.⁵⁵

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—possibly with competitive benchmarking employed to set fees—and 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 Japanese health care system allows such private activity and manages to provide similar if not superior universal access care at less cost. While the Japanese private parallel health care system has not developed, likely because the public scheme offers broad coverage without gatekeeping (Tajika and Kikuchi, 2012) and because health care is available with little delay (Siciliani and Hurst, 2003),⁵⁶ dissatisfied Japanese consumers are nevertheless permitted an alternative to the universal scheme.

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 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.

55 Further, as noted above, there may be differences between public and private providers in their responsiveness to competition and to financial incentives.

56 Tajika and Kikuchi (2012) also suggest that cultural factors may explain a lack of demand for private parallel health care insurance designed to expedite access to physicians and improve the quality of patient-physician interactions.

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).

Recommendation 2: *Private health care and health care insurance for medically necessary care.*

A lack of cost sharing for medical services in Canada has resulted in excessive demand and wasted resources.⁵⁷ 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).

57 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 nations' 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).

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).

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 Japan and Canada is the use of a social insurance construct (with taxpayer support for the poor, elderly, and unemployed) rather than a taxpayer-funded government insurance scheme.

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.⁵⁸

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 who employ 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

58 An ancillary benefit is that premium-funded universal access health care insurance can more easily be adjusted to include 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 distortive) 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.

where waiting times are not an issue employ a social insurance funding model. In this study, the Japanese social insurance system (which also relies to a large extent on private ownership and private competition) provides access that is sufficiently rapid and of a sufficient quality to make private parallel health care insurance largely superfluous to the population. 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). 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).

Recommendation 4: *Social insurance construct for universal coverage with premium funding, along with taxpayer supports for those who cannot afford insurance.*

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