Studies in Health Care Policy



November 2009

Paying More, Getting Less

Measuring the Sustainability of Government Health Spending in Canada 2009 Report

by Brett J. Skinner and Mark Rovere



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Executive summary

Introduction and method

This report studies the financial sustainability of health spending by provincial governments in Canada, using a methodology originally developed by Skinner (2004, 2005) and replicated by Skinner and Rovere (2006, 2007, 2008). [1] This report uses an empirical trend analysis to estimate long-term future sustainability. The trend is derived from the average annual growth rates for total provincial government health expenditures (GHEX) and total available provincial government revenue from all sources (TAREV) over the most recent 10-year period. Government spending on health care is considered to be financially unsustainable when it grows faster (on average) than revenue over the trend period. The trend rates are used to create projections that illustrate the consequences of allowing unsustainable growth in government health spending to continue in the future.

This report also examines the long-term feasibility of the attempts of provincial governments to deal with the unsustainable growth in health spending through increased taxation and centrally planned rationing. Our analysis partially exposes the degree to which Canadians are paying more for government health insurance while getting less in return.

Policy environment

The annual growth of government spending on health care is largely affected by the structure of medical and drug insurance in Canada. Canada's current approach to health policy is unique among developed countries. Generally speaking, since the late 1960s the private sector has been effectively prohibited from providing health insurance for necessary medical services in Canada (e.g., hospital and physician services). [2] Instead, each province has

¹ A discussion about why sustainability is a special problem associated with public health insurance systems can be found in chapter 1, note 17, of a new book titled Canadian Health Policy Failures: What's Wrong? Who Gets Hurt? Why Nothing Changes by Brett J. Skinner (2009). Other papers authored by Skinner on the topic include Long-term, Shortterm: Public Health Insurance is not Sustainable and Misinformation and Wishful Thinking about Medicare's Sustainability. All of these are available at <www.fraserinstitute.org>.

² Six of the 10 provinces (representing roughly 90% of Canada's population in 2006) legally prohibit private insurance for medical services insured by the provincial health program.

established its own government-run monopoly over the market for medical insurance. The government publicly subsidizes 100% of medical costs (i.e., most hospital and physician services) through taxes; user-based price signals, such as premiums, co-payments, co-insurance, and deductibles, are legally prohibited. As a result, government health insurance completely insulates consumers from the cost of medical care. In addition, private sector health care providers are prohibited from competing for the delivery of publicly insured medical services. Each province has its own publicly funded drug program, which together account for roughly half of the market for prescription drug insurance in Canada. [3]

Findings and analysis

Provincial government health spending has grown at an average annual rate of 7.4% over the 10-year trend period examined in this report (1999/2000 to 2008/2009). [4] At the same time, the average annual growth rate for total available provincial revenue has been only 6.5%. [5] Provincial government health spending has also grown faster than provincial GDP, which grew at an average annual rate of only 6.4% over the same period. [6]

The most recent one-year trend data (2007/2008 to 2008/2009) show that there is a significant gap between health spending growth and revenue growth. The most recent one-year growth in government health spending was 8.3% (on average across all provinces), while the growth in total available revenue was only 5.2%.

The severity of the sustainability problem varies from province to province. Over the 10-year trend period, health spending grew at an unsustainable pace in six provinces. Alberta, British Columbia, Saskatchewan, and Newfoundland and Labrador are the only provinces where provincial revenue has grown at approximately the same rate as government health spending over the last 10 years. In these provinces, revenue growth over the trend period can be explained partially by increased economic growth due to escalating energy prices. If these provincial economies continue to experience

In all provinces, universal eligibility for publicly funded health insurance covering 100% of the cost of necessary medical services, and provincial policies that discourage providers from accepting private payment create a de facto government-run monopoly over standard medical insurance (Flood and Archibald, 2001; Statistics Canada, 2007).

³ In Canada, governments (federal, provincial, and territorial) account for nearly half (45% in 2008) of all expenditures on prescription medicines in Canada (CIHI, 2009b).

⁴ Averaged nationally across all provinces.

⁵ Averaged nationally across all provinces.

⁶ Averaged nationally across all provinces.

high growth rates because of high energy prices, then provincial revenues could grow fast enough to sustain relatively high rates of growth in government health spending, even if the current system is less efficient than other ways of financing health care. However, it is uncertain whether the economic conditions driving high energy prices will persist in the future.

Both Alberta and British Columbia have seen significantly slower growth in their economies recently. The most recent one-year trend data suggest that the two provinces are experiencing much slower revenue growth, while health expenditures continue to increase. During the most recent oneyear trend period (2007/2008 to 2008/2009), government health spending in Alberta grew by 8.6% while total available revenue grew by only 1.1%. Over the same period, health spending in British Columbia grew by 9.6% while revenues declined by 1.3%.

In some provinces, growth rates for revenue over the 10-year trend period have been affected by new or increasing taxes. For instance, in 2004 Ontario increased revenues by introducing a new income surtax called the "health premium." However, the effect on revenue growth rates was only temporary. Government health spending in Ontario still grew faster on average than total available revenue over the trend period. Over the 10-year trend period, government health spending growth outpaced revenue growth in most of the provinces where taxes were increased.

The percentage of "own-source" revenue [7] consumed by health spending also differs from province to province. For instance, in Manitoba, New Brunswick, Nova Scotia, Ontario, Prince Edward Island, and Quebec, high rates of growth in government health spending are subsidized by money transferred from other provinces.

Unfortunately, provincial governments typically attempt to slow the growth of health spending by restricting or delaying access to publicly insured health care. For example, the most recent data show that wait times for access to medical services have increased in every province over the 10-year trend period (Esmail et al., 2008). In addition, provincial publicly funded drug programs are, to an increasing degree, covering only a small percentage of new medicines. Such policies have the effect of slowing growth in government health spending in the short term. However, the rationing of health goods and services cannot continue indefinitely without increasing medical risks for patients.

^{7 &}quot;Own-source" revenue is the amount of revenue a province generates for itself, apart from the revenue it receives through federal transfer programs.

Paying more

Under a universal, publicly funded health system, the growth rate for government health spending must remain below the growth rate for available revenue or taxpayers will be faced with the prospect of paying more taxes. When the economy is growing rapidly, revenue often grows fast enough to keep pace with government health spending because the tax base is expanding. But when the economy grows at historically normal or slower rates, health spending usually outpaces revenue, increasing the possibility that the government will raise taxes or introduce new taxes. However, off-setting spending with higher taxes is not a sustainable policy because increasing the tax burden will hinder economic growth.

Getting less

All provincial governments use rationing in an effort to contain growth in government health spending. Instead of introducing policies that would take some pressure off public finances and encourage efficiency (e.g., percentage-based co-payments, deductibles, and private insurance options), governments reduce the scope of public insurance benefits. The rationing of medical goods and services creates long waits for access to many medical services and new medicines. As long as centrally planned rationing is used to control the unsustainable growth in government health spending, patients will be faced with the prospect of getting less.

Additionally, if government health spending is allowed to consume an increasing share of available revenue, then other important government services may need to be cut back or eliminated altogether. While medical costs could easily be shifted to the private sector, it may not be possible to fund other government services (e.g., those that are, by definition, "public goods" [8]) through private payment mechanisms. Public funding should be reserved for public goods.

⁸ According to a dictionary of economic terms published by *The Economist* (2009), public goods are: "things that can be consumed by everybody in a society, or nobody at all. They have three characteristics. They are: non-rival—one person consuming them does not stop another person consuming them; non-excludable—if one person can consume them, it is impossible to stop another person consuming them; non-rejectable—people cannot choose not to consume them even if they want to. Examples include clean air, a national defence system and the judiciary. The combination of non-rivalry and non-excludability means that it can be hard to get people to pay to consume them, so they might not be provided at all if left to market forces ... in most countries they are provided at least in part by government and paid for through compulsory taxation."

Conclusion and recommendations

Based on the data and analysis in this report, we conclude that public health insurance, as it is currently structured in Canada, produces rates of growth in government health care spending that are not financially sustainable through public means alone. This is occurring while governments are restricting and reducing the range of benefits covered under publicly funded health insurance. As an alternative to the current "pay more, get less" approach to health policy, we recommend that governments do the following:

- # encourage the efficient use of health care by requiring patients to make copayments (preferably flat, percentage-based co-insurance payments) for all publicly funded medical goods and services they use;
- # relieve cost pressures facing the public health insurance system by legally recognizing the moral right of patients to pay privately (out of pocket or through private insurance) for all types of medical goods and services, including hospitals and physician services, as is currently allowed for access to prescription drugs;
- ** allow health providers to receive reimbursement for their services from any insurer, whether government or private;
- shift the burden of medical price inflation onto the private sector by allowing providers to charge patients fees in addition to the government health insurance reimbursement level; and
- create incentives for cost and quality improvements by permitting both for-profit and non-profit health providers to compete for the delivery of publicly insured health services.

Detailed findings

National trend

Government health spending currently consumes a large percentage of total available revenue in each of the provinces. The most recent national trend for the sustainability of provincial government health spending is shown in figure 1. National 10-year average annual growth rates are the average of the 10-year average annual growth rates for each of the provinces. [9] Figure 1 compares the average annual rates of growth in provincial government health expenditures (GHEX), total available provincial revenue (TAREV), [10] and provincial gross domestic product (GDP) as a consolidated national average across all 10 provinces. [11]

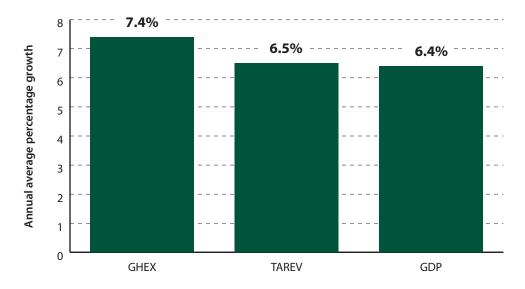
Figure 1 shows that, averaged across all provinces, government health spending has grown at a faster average annual rate than revenue over the last 10 years. Health spending has also grown faster than the economy (GDP) over this period. Therefore, on average, provincial government spending on health care has been growing faster than our ability to pay for it through public means alone, without counter-balancing reductions in spending on all other responsibilities of government.

Provincial growth rates

The severity of the unsustainable rate of growth in health care spending varies significantly from province to province. Figure 2 compares the average annual percentage growth in GHEX, TAREV, and GDP in each province over the

- 9 These 10-year average annual growth rates are vulnerable to the effects of revisions to earlier published data that Statistics Canada completes each year.
- 10 Total available revenue (TAREV) is total revenue from all sources, including federal transfers, minus debt charges. Debt charges are removed because they represent fixed financial obligations of the provinces and cannot be spent on programs or other responsibilities of the government. Debt charges are distinct from debt repayment. Debt repayment is a policy choice, whereas debt charges are not.
- 11 Data for GHEX and TAREV were obtained from Statistics Canada's Financial Management System, which uses fiscal years ending on March 31 for its accounting periods. Data for GDP were obtained from the general databases of Statistics Canada, which uses calendar years ending on December 31 for its accounting. Therefore, the most recent 10-year period for GHEX and TAREV covers the years 1999/2000 to 2008/2009. The most recent 10-year period for GDP covers the years 1999 to 2008.

Figure 1: National average of 10-year average annual growth rates for provincial government health expenditures (GHEX) and total available revenue (TAREV), 1999/2000 to 2008/2009; and gross domestic product (GDP), 1999 to 2008



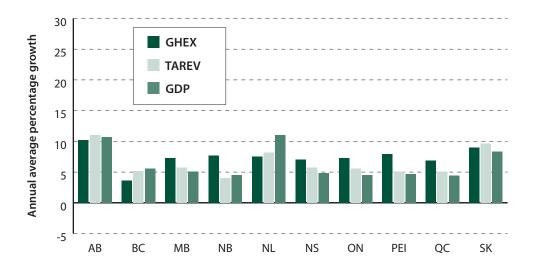
Note: TAREV growth rates for Newfoundland and Labrador and Nova Scotia have been adjusted to remove the one-time, one-year increase in revenue from the Atlantic Accord. Sources: Statistics Canada, 2009a, b; calculations by authors.

10-year trend period. (The provinces are listed in alphabetical order.) Over the past 10 years, the fastest average annual rate of growth for GHEX occurred in Alberta (10.2%). British Columbia had the slowest average annual rate of growth for GHEX (3.6%). The fastest average annual growth of TAREV over the trend period was in the province of Alberta (11.0%). TAREV grew slowest in New Brunswick over the trend period (4.0% annually on average).

Most importantly, government health spending in six provinces has grown faster on average than revenue over the last 10 years. The only exceptions were Alberta, British Columbia, Newfoundland and Labrador, and Saskatchewan, where GHEX grew at approximately the same rate as TAREV over the trend period. The gap between the average annual growth rates for GHEX and TAREV was widest in New Brunswick, where GHEX outpaced TAREV by 3.7 percentage points annually on average between 1999/2000 and 2008/2009.

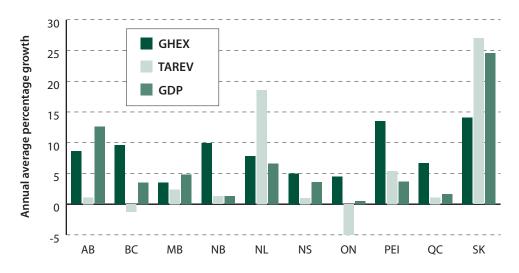
The most recent one-year trend data for GHEX, TAREV, and GDP reveal a much more troubling situation. Figure 3 compares the one-year growth in GHEX, TAREV, and GDP in each province between the fiscal years 2007/2008 and 2008/2009. Over the trend period, the fastest annual

Figure 2: Average annual percentage growth rates for government health expenditures (GHEX) and total available revenue (TAREV), 1999/2000 to 2008/09; and gross domestic product (GDP), 1999 to 2008; by province



Note: TAREV growth rates for Newfoundland and Labrador and Nova Scotia have been adjusted to remove the one-time, one-year increase in revenue from the Atlantic Accord. Sources: Statistics Canada, 2009a, b; calculations by authors.

Figure 3: One-year growth rates for government health expenditures (GHEX) and total available revenue (TAREV), 2007/2008 to 2008/2009; and gross domestic product (GDP), 2007 to 2008; by province



Note: TAREV growth rates for Newfoundland and Labrador and Nova Scotia have been adjusted to remove the one-time, one-year increase in revenue from the Atlantic Accord. Sources: Statistics Canada, 2009a, b; calculations by authors.

rate of growth for GHEX occurred in Saskatchewan (14.1%), while Manitoba had the slowest annual rate of growth for GHEX (3.5%). The fastest annual growth of TAREV over the one-year trend period occurred in the province of Saskatchewan (27.0%). The slowest annual growth of TAREV occurred in Ontario, where TAREV actually decreased (-5.0%).

Between 2007/2008 and 2008/2009, government health spending grew faster than revenue in eight provinces. The only exceptions were Newfoundland and Labrador and Saskatchewan. The gap between the average annual growth rates for GHEX and TAREV was widest in British Columbia, where GHEX (9.6%) outpaced TAREV (-1.3%) by 10.8 percentage points.

Health spending consuming more revenue

Government health spending currently consumes a large percentage of total available revenue in each of the provinces. The most recent data (figure 4) show that government health expenditures (GHEX) in 2008/2009 accounted for 46.4% of total available revenue (TAREV) in Ontario, the largest percentage among the provinces. GHEX consumed only 28.8% of TAREV in Saskatchewan, the smallest percentage among the provinces. From 1999/2000 to 2008/2009, GHEX grew as a percentage of TAREV in every province except Newfoundland and Labrador and Saskatchewan (figure 4).

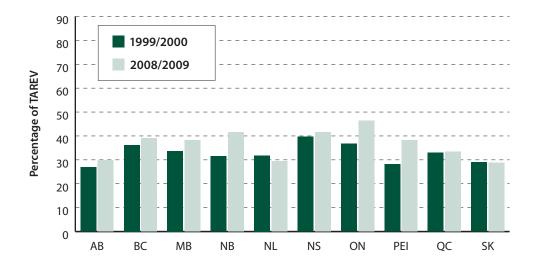
However, once federal transfers are excluded, the percentage of provincial own-source available revenue (OAREV) consumed by government health spending is much higher (figure 5). In the 2008/2009 fiscal year, GHEX represented 74.1% of OAREV in Nova Scotia, 70.0% in New Brunswick, 66.1% in Newfoundland and Labrador, 65.9% in Prince Edward Island, 59.9% in Manitoba, and 56.8% in Ontario.

Projections

Figure 6 shows the number of years it will take for government health spending to consume half of total available revenue in each of the six provinces where government health spending has grown faster than revenue on average over the 10-year trend period (1999/2000 to 2008/2009). These projections are based on the most recent 10-year trends for growth rates in GHEX and TAREV.

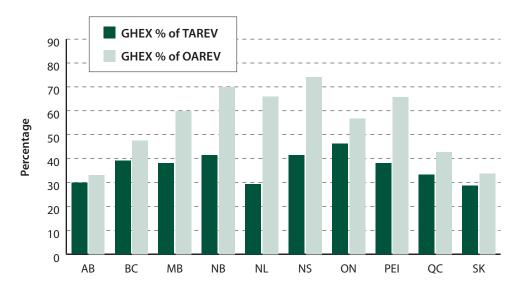
Among the provinces, Ontario and New Brunswick face the most severe sustainability problem. Based on growth trends for the past 10 years, growth in GHEX in both provinces is on pace to consume half of TAREV as early as 2014. Recent economic circumstances have made the situation of these two provinces much worse. Based on the most recent one-year growth

Figure 4: Percentage of total available revenue (TAREV) consumed by government health expenditures (GHEX), 1999/2000 and 2008/2009, by province



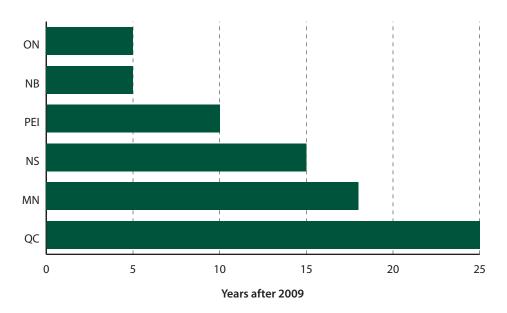
Note: TAREV growth rates for Newfoundland and Labrador and Nova Scotia have been adjusted to remove the one-time, one-year increase in revenue from the Atlantic Accord. Source: Statistics Canada, 2009a; calculations by authors.

Figure 5: Government health expenditures (GHEX) as a percentage of total available revenue (TAREV) and provincial own-source available revenue (OAREV), 2008/2009, by province



Note: TAREV growth rates for Newfoundland and Labrador and Nova Scotia have been adjusted to remove the one-time, one-year increase in revenue from the Atlantic Accord. Sources: Statistics Canada, 2009a, b; calculations by authors.

Figure 6: Number of years until government health expenditures (GHEX) consume 50% of total available revenue (TAREV), 2009 forward, by province, based on the most recent 10-year trend in GHEX and TAREV

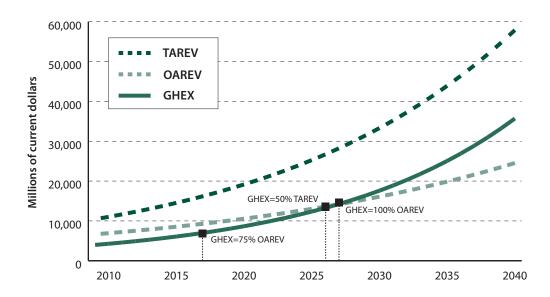


Note: TAREV growth rates for Newfoundland and Labrador and Nova Scotia have been adjusted to remove the one-time, one-year increase in revenue from the Atlantic Accord. Sources: Statistics Canada, 2009a, b; calculations by authors.

trends for GHEX and TAREV (not shown), GHEX is on pace to consume 50% of all provincial revenues in Ontario by next year (2010); in New Brunswick, GHEX is on pace to consume 50% of TAREV by 2012.

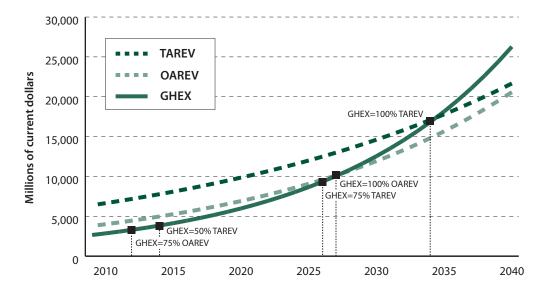
Projections based on the most recent 10-year growth trends for GHEX, TAREV, and OAREV are shown in figures 7 through 12. Provinces where OAREV grew at the same pace or faster than GHEX are not shown. As noted above, government health expenditures already consume over 50% of OAREV in six of the 10 provinces (figure 5). The projection graphs show when government health expenditures will consume 75% and 100% of OAREV if the most recent 10-year trends continue unabated. The data show that government health spending is on pace to consume 75% of OAREV in five provinces by the year 2019.

Figure 7: Manitoba – projected government health expenditures (GHEX), total available revenue (TAREV), and total available ownsource revenue (OAREV), based on 10-year trends in GHEX, TAREV, and OAREV (1999/2000 to 2008/2009), 2009 to 2040



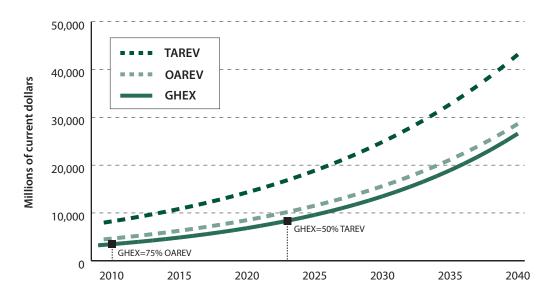
Source: Statistics Canada, 2009a; calculations by authors.

Figure 8: New Brunswick – projected government health expenditures (GHEX), total available revenue (TAREV), and total available own-source revenue (OAREV), based on 10-year trends in GHEX, TAREV, and OAREV (1999/2000 to 2008/2009), 2009 to 2040



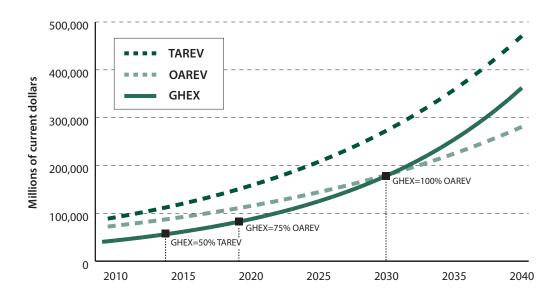
Source: Statistics Canada, 2009a; calculations by authors.

Figure 9: Nova Scotia – projected government health expenditures (GHEX), total available revenue (TAREV), and total available ownsource revenue (OAREV), based on 10-year trends in GHEX, TAREV, and OAREV (1999/2000 to 2008/2009), 2009 to 2040



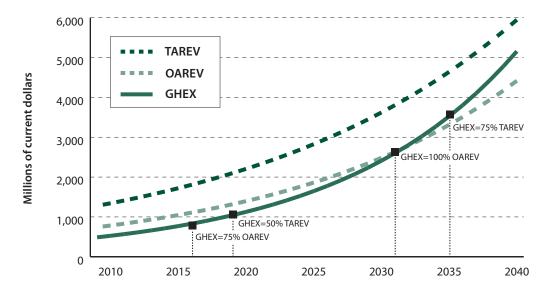
Source: Statistics Canada, 2009a; calculations by authors.

Figure 10: Ontario – projected government health expenditures (GHEX), total available revenue (TAREV), and total available ownsource revenue (OAREV), based on 10-year trends in GHEX, TAREV, and OAREV (1999/2000 to 2008/2009), 2009 to 2040



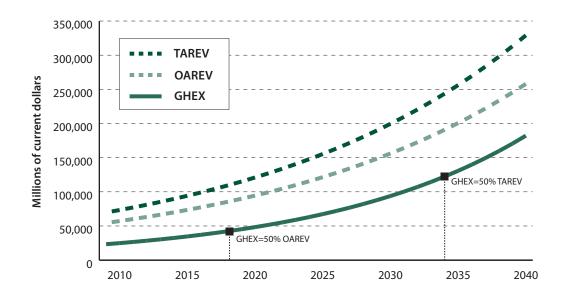
Source: Statistics Canada, 2009a; calculations by authors.

Figure 11: Prince Edward Island – projected government health expenditures (GHEX), total available revenue (TAREV), and total available own-source revenue (OAREV), based on 10-year trends in GHEX, TAREV, and OAREV (1999/2000 to 2008/2009), 2009 to 2040



Source: Statistics Canada, 2009a; calculations by authors.

Figure 12: Quebec – projected government health expenditures (GHEX), total available revenue (TAREV), and total available ownsource revenue (OAREV), based on 10-year trends in GHEX, TAREV, and OAREV (1999/2000 to 2008/2009), 2009 to 2040



Source: Statistics Canada, 2009a; calculations by authors.

Paying more

Increasing tax burdens

In some provinces, revenue growth has been temporarily accelerated by unsustainable and counter-productive tax increases. High and rising tax burdens reduce economic growth in the long run, and thus reduce potential revenue growth in the future by decreasing the size of the tax base (Clemens et al., 2007; Karabegović et al., 2004). Slower economic growth can also result in job losses and increase demands for more government spending on programs such as employment insurance and social assistance, further straining government revenues.

At best, tax increases have a one-time, temporary effect on the annual rate of revenue growth. For instance, in 2004 Ontario introduced an income surtax called a "health premium." The measure added approximately \$2.5 billion to the revenue base of the province and temporarily increased the growth rate of TAREV. In 2005, the first full year of collecting the new health premium, the annual growth rate in total available revenue doubled from 6.8% in 2004 to 13.6% (Statistics Canada, 2009a). However, the significant increase in the growth rate of TAREV was only a one-year occurrence; in 2006, the annual growth rate in TAREV returned to normal levels (4.7%).

Over the long run, the only sustainable fiscal strategy for increasing government revenue is to reduce the tax burden (especially on capital investment and returns) in order to accelerate economic growth (Clemens et al., 2007; Karabegović et al., 2004). Economic growth increases the amount of wealth available to be taxed. Thus, when the economy is growing, government revenue also grows, without the damaging, long-term effects of increasing the tax burden. In light of the recent recession, it is unlikely that many provinces will be able to count on rates of revenue growth comparable to those observed over the 10-year trend period examined in this report. Increasing the tax burden at this time would only further delay economic recovery.

Interprovincial subsidies

Revenues available to some provinces for health spending are obtained at the expense of other provinces. Table 1 shows which provinces received equalization transfers from the federal government in the fiscal years 2007/2008, 2008/2009, and 2009/2010. In figure 5, we showed that, once all federal transfers are excluded from the analysis, the percentage of available own-source

Table 1: Equalization transfers by province, 2007/2008, 2008/2009, and 2009/2010, billions of \$

	2007/2008	2008/2009	2009/2010
Alberta	477	0	0
British Columbia	0	0	0
Manitoba	1,826	2,063	2,063
New Brunswick	1,477	1,584	1,689
Newfoundland and Labrador	477	0	0
Nova Scotia	1,465	1,465	1,391
Ontario	0	0	347
Prince Edward Island	294	322	340
Quebec	7,160	8,028	8,355
Saskatchewan	226	0	0

Source: Canada, Department of Finance, 2009.

revenue consumed by health spending is much higher in some provinces than in others. The gap between the percentage of TAREV consumed by GHEX and the percentage of OAREV consumed by GHEX suggests that the growth in government health spending in Manitoba, New Brunswick, Nova Scotia, Ontario, Prince Edward Island, and Quebec is subsidized by federal transfers to a much higher degree than in other provinces.

Energy prices and the recent recession

Over the trend period, revenue growth in some provinces has been boosted by escalating energy prices, which have increased the rate of economic growth and increased royalty revenues. However, only British Columbia, Alberta, Saskatchewan, Newfoundland and Labrador, and, to some extent, Nova Scotia have significant energy resources to rely on, and it is uncertain whether the economic conditions driving the increases in energy prices will persist in the future. For instance, the province of Newfoundland and Labrador is projecting a \$750-million deficit for 2009/2010, which is directly associated with lower oil prices (Canadian Press, 2009, Oct. 22). The recent recession has also had an effect on revenue growth, causing a significant deterioration in the financial situations of the provincial and federal governments (table 2).

	Budget projections and policy responses
Alberta	"Anticipating a \$4.7-billion deficit—the largest in the province's history. Flagging energy prices have gutted the bottom line. If revenues don't rebound, the province will have to raise \$2.2-billion by cutting spending, increasing taxes, or both."
British Columbia	"Budget includes a \$2.8-billion shortfall for the fiscal year 2009, a BC record that tops the \$2.6-billion deficit in 2002."
Manitoba	"Tabled a \$12.7-billion budget with a \$48-million surplus, but the government had to dip into its rainy-day fund. Trying to stave off shrinking economic growth by increasing tobacco taxes and user fees to pay for \$226-million in new spending."
New Brunswick	"Projects a \$741-million deficit and 700 jobs cut from the civil service in a budget presented in the spring, but it is now planning an early budget for 2010-11 to be presented on Dec. 1 because of the state of the economy."
Newfoundland and Labrador	"Forecasts a \$750-million deficit for 2009-10, a heavy drop from the \$2.4-billion surplus recorded last year. The plunge is largely due to lower oil prices."
Nova Scotia	"projects a \$592-million deficit for this fiscal year, the first time Nova Scotia will fall into the red in eight years." $$
Ontario	"The province projects a record deficit of \$24.7-billion for 2009-10. The higher-than- expected figure, revealed in the finance minister's fall economic update, was blamed on a 48.1 per cent drop in corporate tax revenues and increased program spending."
Prince Edward Island	"Predicts an \$85.3-million deficit and an increase in the net debt to \$1.6-billion by next year. No job cuts to the civil service."
Quebec	"Foresees four consecutive deficits, starting with \$3.9-billion in 2009-10. There will be a provincial sales tax increase of one per cent on Jan. 1, 2011."
Saskatchewan	"Projects a \$424.5-million surplus, while delivering cuts to property taxes and \$1-billion in spending for roads, hospitals and schools."
Federal	"deficit expected to balloon to more than \$50-billion—much more than the \$34-billion he [Finance Minister Jim Flaherty] predicted in the January budget."

Source: Canadian Press, 2009, Oct. 22.

Getting less

Evidence of rationing

All of the provinces continue to use rationing in an effort to contain the growth in government health spending. Governments ration health care with policies that reduce the effective supply of health professionals (Esmail, 2006), reduce the availability of advanced medical equipment (Esmail and Walker, 2008), and restrict the scope of coverage for new medicines under public drug insurance plans (Skinner and Rovere, 2009). Such rationing contributes to lengthy waits for access to necessary medical treatment.

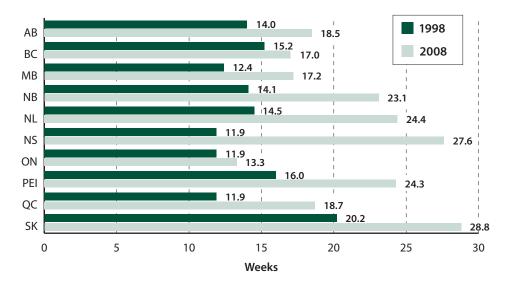
Figure 13 shows the only available, nationally comparable data on wait times for specialist medical services in Canada. The results are averaged across 12 medically necessary specialties. The data indicate that the average median total wait between an appointment with a family doctor and the final receipt of specialist treatment has grown significantly in all provinces over the trend period (1998 to 2008). These waits can be considered severe as they are nearly twice as long, on average, as the wait physicians consider clinically reasonable for patients (Esmail et al., 2008).

Similarly, delays and denials for the reimbursement of new medicines under public drug programs in Canada are also evident (Skinner and Rovere, 2009). Figure 14 shows that the total average wait for access to new medicines for patients dependent on public drug benefits was approximately 767 days (2.1 years) in 2007 (averaged across all provinces). Reading left to right: the first segment of the bar represents the time taken by Health Canada to certify that new drugs are safe and effective before allowing patients to use them. The second segment of the bar represents the amount of time taken by the provinces to decide whether to approve a new drug for public reimbursement. This segment represents an additional waiting period for those who are dependent on public drug programs, or for anyone who needs drugs that are only administered on an in-patient basis and cannot afford to pay cash.

The second segment of the bar (from figure 14) is broken down by province in figure 15. As the figure shows, some provinces take longer than others to decide whether to approve a new drug for public reimbursement. The average time spent by the provinces to grant eligibility for public reimbursement was 314 days, or almost 10.5 months (as of December 31, 2008), for drugs that were approved by Health Canada in 2007.

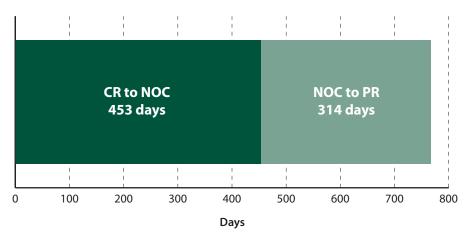
There are also a significant number of drugs that are approved by Health Canada as safe and effective, but which are never declared eligible for public reimbursement by the provinces. Table 3 shows the number of drugs

Figure 13: Median wait times (weeks) from referral by family doctor to specialist treatment, 1998 and 2008, by province



Sources: Esmail et al., 2008; Walker and Zelder, 1999.

Figure 14: Total time (days) spent waiting after a new drug has been developed before patients have access to new medicines in Canada, by wait segment, 2007*



*Averaged across all provinces and all new drug submission classes, weighted by the number of drugs in each submission class.

Abbreviations:

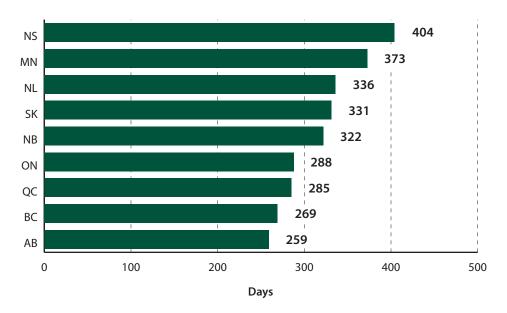
CR: the date the drug manufacturer's application for approval is recorded or filed in Health Canada's Central Registry.

NOC: the date Health Canada issues an official Notice of Compliance, certifying that the new drug is safe and effective.

PR: the date at which the first public reimbursement of the new drug is recorded in the formularies of each federal, provincial, and territorial drug program.

Source: Skinner and Rovere, 2009.

Figure 15: Average wait times (days) for approval of public drug program reimbursement after market authorization has been granted by Health Canada in 2007, by province, as of December 31, 2008



Note: The missing bar for Prince Edward Island indicates that none of the new drugs that were approved by Health Canada in 2007 had been declared eligible for reimbursement in that province as of December 31, 2008.

Source: Skinner and Rovere, 2009.

approved for public reimbursement (as of December 31, 2008) by each of the provinces as a share of all new drugs granted market authorization (a Notice of Compliance) by Health Canada in 2004, 2005, 2006, and 2007. As table 3 shows, most of the drugs that are approved by Health Canada as safe and effective are not declared eligible for reimbursement under provincial drug plans. Averaged across all provincial public drug programs, only 10.1% of all drugs approved by Health Canada as safe and effective in 2007 had actually been approved for reimbursement (fully or partially) by the provinces as of December 31, 2008. On average, full or partial provincial reimbursement was approved for 20.4% of new drugs approved by Health Canada in 2004, 15.2% of new drugs approved in 2005, and 25.6% of new drugs approved in 2006, as of December 31, 2008.

Importantly, none of the government's rationing efforts have made the growth of government spending on health care sustainable over the long run. Despite being slowed by the continued rationing of publicly insured medical goods and services, government spending on health care has still grown faster on average than revenue in six provinces over the last 10 years.

Table 3: Total number of new drugs approved for public reimbursement (as of December 31, 2008) as a percentage of new drugs granted a Notice of Compliance (NOC) by Health Canada in 2004, 2005, 2006, and 2007, by province

	2004		2005		2006		2007	
	Number of drugs approved	Drugs approved as a % of NOCs	Number of drugs approved	Drugs approved as a % of NOCs	Number of drugs approved	Drugs approved as a % of NOCs	Number of drugs approved	Drugs approved as a % of NOCs
AB	8	17.4%	2	4.8%	9	20.9%	1	2.3%
ВС	7	15.2%	2	4.8%	5	11.6%	2	4.7%
MB	8	17.4%	4	9.5%	7	16.3%	3	7.0%
NB	10	21.7%	9	21.4%	16	37.2%	1	2.3%
NL	9	19.6%	9	21.4%	13	30.2%	3	7.0%
NS	8	17.4%	7	16.7%	14	32.6%	5	11.6%
ON	7	15.2%	4	9.5%	7	16.3%	3	7.0%
PEI	8	17.4%	7	16.7%	9	20.9%	0	N/A
QC	17	37.0%	13	31.0%	18	41.9%	19	44.2%
SK	12	26.1%	7	16.7%	12	27.9%	2	4.7%
Provincial average		20.4 %		15.2%		25.6%		10.1%
Total NOCs	46		42		43		43	

Note: Provinces often take more than a year to decide whether or not to make a new drug eligible for public reimbursement. Therefore, more new drugs that were approved by Health Canada in 2006 and 2007 could eventually be granted eligibility for public reimbursement in the future. The delay will be captured in future reports and will be reflected in the percentages shown above.

Source: Skinner and Rovere, 2009.

Conclusions and recommendations

The data and analysis in this report indicate that public health insurance, as it is currently structured in Canada, produces rates of growth in government health care spending that are not financially sustainable through public means alone. This financial crisis is occurring while governments are restricting and reducing the range of benefits covered under publicly funded health insurance. As an alternative to the current "pay more, get less" approach to health policy, we recommend that governments do the following:

- # encourage the efficient use of health care by requiring patients to make copayments (preferably flat, percentage-based co-insurance payments) for all publicly funded medical goods and services they use;
- relieve cost pressures facing the public health insurance system by legally recognizing the moral right of patients to pay privately (out of pocket or through private insurance) for all types of medical goods and services, including hospitals and physician services, as is currently allowed for access to prescription drugs;
- ** allow health providers to receive reimbursement for their services from any insurer, whether government or private;
- % shift the burden of medical price inflation onto the private sector by allowing providers to charge patients fees in addition to the government health insurance reimbursement level; and
- create incentives for cost and quality improvements by permitting both for-profit and non-profit health providers to compete for the delivery of publicly insured health services.

Appendix

Other sustainability warnings

In April 2008, British Columbia tabled legislation to formally enshrine the five principles of the Canada Health Act in provincial health legislation, adding "sustainability" as the sixth principle of the act (*Health Edition Online*, 2008).

A number of researchers and government analysts have also come to the conclusion that the current growth in government spending on health care in Canada is not financially sustainable. The list includes the following (in chronological order from the most recent).

Taylor, C. (2006). *Economic and Fiscal Update: First Quarterly Report*. PowerPoint presentation, September 15. Ministry of Finance.

Organisation for Economic Co-operation and Development [OECD] (2006). *Rising Health Costs Put Pressure on Public Finances, Finds OECD*. OECD. http://www.oecd.org/document/37/0,3343, en_2649_201185_36986213_1_1_1_1,00.html>.

Menard, J.L. (2005). *Pour sortir de l'impasse: la solidarité entre nos générations*. Le Comité de travail sur la pérennité du système de santé et de services sociaux du Québec.

PriceWaterhouse Coopers Health Research Institute (2005). *Health Cast* 2020: Creating a Sustainable Future.

Mackinnon, J. (2004). The Arithmetic of Health Care. *Policy Matters* 5, 3 (July). (Janice MacKinnon was finance minister in Roy Romanow's NDP government in Saskatchewan.)

Esmail, Nadeem (2004). Hitting the Health Care Wall. *Fraser Forum* (July): 28–29.

Mullins, Mark (2004). 2028 or Bust: Ontario's Unsustainable Hospital Funding. Fraser Alert. Fraser Institute.

Crowley, B.L., B. Ferguson, D. Zitner, and Brett J. Skinner (2002). *Definitely Not the Romanow Report: Achieving Equity, Sustainability, Accountability*

and Consumer Empowerment in Canadian Health Care. Atlantic Institute for Market Studies.

Kirby, Michael J.L. (2002). *The Health of Canadians—The Federal Role Volume Five: Principles and Recommendations for Reform—Part I.* The Standing Senate Committee on Social Affairs, Science and Technology.

Fyke, K.J. (2001). *Caring for Medicare: Sustaining a Quality System*. Saskatchewan Commission on Medicare.

Mazankowski, D., et al. (2001). *A Framework for Reform*. Premier's Advisory Council on Health.

Brimacombe, Glenn G., et al. (2001). *The Future Cost of Health Care in Canada*, 2000–2020: Balancing Affordability and Sustainability. Conference Board of Canada.

Robson, William B.P. (2001). *Will the Baby Boomers Bust the Health Budget? Demographic Change and Health Care Financing Reform.*Commentary No. 148. CD Howe Institute.

Clair, M. (2000). *Emerging Solutions*. Commission d'étude sur les services de santé et les services sociaux.

Data sources

For this study, all data for government health expenditures and for total revenues are taken from Statistics Canada's Financial Management System (FMS). FMS data is comparable across provinces because of the application of standardized accounting. FMS data are also updated annually, retroactively adjusted for complete reporting, and provide detailed breakdowns that allow the separation of government spending on health care from private and other sources. All figures in this study are reported in current (or nominal) dollar terms. [12]

The data on government spending on health care used in this study include only the expenditures of the provinces. All federal and territorial government spending on health care, except federal transfers to the provinces, is excluded. All private spending on health care is also excluded. The revenue data include all revenue regardless of source (e.g., federal transfers). Total available revenue (TAREV) is calculated by counting total revenue from

¹² Data definitions are available from Statistics Canada (2006).

all sources minus debt charges. Debt charges are removed because they represent fixed financial obligations of the provinces and cannot be spent on programs or other responsibilities of the government. Debt charges are distinct from debt repayment. Debt repayment is a policy choice, whereas debt charges are not.

In previous *Paying More, Getting Less* reports, the extra tax room ceded to the province of Quebec by the federal government for policy areas that fall under federal jurisdiction in other provinces was removed from the calculation in order to improve comparability. The additional revenue was not removed in this year's report. Since the province of Quebec is able to use these funds to pay for public health care services, the authors believe that there is no good reason to exclude this tax room from total provincial revenue.

Growth rates for TAREV for Newfoundland and Labrador and Nova Scotia have been adjusted to remove the one-year increase in revenue from the Atlantic Accord. This was done because the revenue boost from the Atlantic Accord was a one-time event that will not be repeated in the future, and expectations about future revenue growth cannot be based on a trend that includes such a one-year effect.

Method

In this study, we use a trend analysis to measure sustainability over the most recent 10-year period. The ratio of government spending on health care (GHEX) to total available revenue (TAREV) is preferred because it is better than other measures of sustainability, such as the ratio of health spending to total program spending. The ratio of government health spending to total available revenue measures the ability of government to pay from currently available revenues, thus directly satisfying the definition of long-term sustainability. This approach also ensures that deficit financing does not affect the outcome of our measurement. For example, if a government borrows money to finance health care spending, then its health care expenditures could decline in proportion to total spending while rising as a proportion of revenue from sustainable sources.

The ratio of government health spending to revenue also explicitly illustrates the tax implications of unchecked high rates of growth for government health spending. If government health spending is to be kept at a stable percentage of revenue, then it must not grow faster than revenue. When the economy is expanding rapidly, revenue often grows fast enough to keep up with the growth in government health spending. But when the economy grows at historically normal or slower rates, health spending usually outpaces revenue, increasing the possibility that the government will raise taxes or introduce new taxes.

The ratio of health spending to revenue also makes trade-offs with competing government spending clear: if government health spending increases as a percentage of revenue, then spending in other areas must decrease as a percentage of revenue.

Cautious estimates of future growth rates for health spending

The most recent trends observed in this report should be seen as conservative estimates of expected future growth rates for government health spending because no adjustments were made for the expected aging of Canada's population. Expectations regarding future growth rates for government health spending should account for the acceleration of demand that will accompany the aging of the population. Data for provincial health spending by age from the Canadian Institute for Health Information (2008) show that average per capita provincial/territorial health spending was about \$2,973 for Canadians of all ages in 2006. In contrast, average per capita spending was about \$6,376 for those aged 65 to 74, roughly \$11,659 for those aged 75 to 84, and \$22,005 for those aged 85 years and older (CIHI, 2008: Table E.1.2).

It is well known that the proportion of the population aged 65 and older will increase in the coming years as the generation born just after World War II approaches retirement. According to Statistics Canada's population projections (medium growth), approximately 20.2% of Canadians will be 65 years of age or older by 2025 (Statistics Canada, 2008). Given this demographic trend, if no significant changes are made to the structure of health care financing in Canada, then government health expenditures will almost certainly be under pressure to grow much faster in the future than over the trend period examined in this report.

References

Canada, Department of Finance (2009). Federal Support to Provinces and Territories. Government of Canada.

Canadian Institute for Health Information [CIHI] (2008). *National Health Expenditure Trends*, 1975–2008. CIHI.

Canadian Institute for Health Information [CIHI] (2009a). *Health Expenditure by Use of Funds, by Year, by Source of Finance, by Province/Territory and Canada, 1975-2008 - Current Dollars.* CIHI.

Canadian Institute for Health Information [CIHI] (2009b). *Drug Expenditure in Canada, 1985 to 2008.* CIHI.

Canadian Press (2009, October 22). QuickList of Provincial and Federal Finances. Yahoo! News Canada. http://ca.news.yahoo.com/s/capress/091022/national/provincial_finances_quicklist.

Clemens, Jason, Niels Veldhuis, and Milagros Palacios (2007). *Tax Efficiency: Not All Taxes Are Created Equal*. Studies in Economic Prosperity No. 4. Fraser Institute.

Clever, Linda Hawes, et al. (1997). Additional Statements from the International Committee of Medical Journal Editors. *Canadian Medical Association Journal* 156, 4: 571–74.

Davidoff, Frank, et al. (2001). Sponsorship, Authorship and Accountability. *Canadian Medical Association Journal* 165, 6: 786–87.

The Economist (2009). Public Goods. *Economics A-Z*. http://www.economist.com/RESEARCH/ECONOMICS/alphabetic.cfm?term=publicgoods#publicgoods>.

Esmail, Nadeem (2006). *Canada's Physician Shortage: Effects, Projections, and Solutions.* Fraser Alert. Fraser Institute.

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

Esmail, Nadeem, and Maureen Hazel, with Michael A. Walker (2008). Waiting Your Turn: Hospital Waiting Lists in Canada (18th ed.). Fraser Institute.

Flood, Colleen M., and Tom Archibald (2001). The Illegality of Private Health Care in Canada. *Canadian Medical Association Journal* 164, 6: 825–30.

Health Edition Online (2008). 'Sustainability' Principle Enshrined in BC Law. *Health Edition Online* 12, 14 (April).

Karabegović, Amela, Niels Veldhuis, Jason Clemens, and Keith Godin (2004). Do Tax Rates Matter? *Fraser Forum* (July): 13–16.

Skinner, Brett J. (2004). *Paying More, Getting Less: Ontario's Health Premium and Sustainable Health Care*. Fraser Institute.

Skinner, Brett J. (2005). *Paying More, Getting Less 2005: Measuring the Sustainability of Provincial Public Health Expenditure in Canada*. Fraser Institute.

Skinner, Brett J., and Mark Rovere (2006). *Paying More, Getting Less 2006: Measuring the Sustainability of Public Health Insurance in Canada*. Fraser Institute.

Skinner, Brett J., and Mark Rovere (2007). *Paying More, Getting Less 2007: Measuring the Sustainability of Government Health Spending in Canada.* Fraser Institute.

Skinner, Brett J., and Mark Rovere (2008). *Paying More, Getting Less: Measuring the Sustainability of Government Health Spending in Canada*(2008 Report). Fraser Institute.

Skinner, Brett J., and Mark Rovere (2009). *Access Delayed, Access Denied:* Waiting for New Medicines in Canada (2009 Report). Fraser Institute.

Statistics Canada (2006). *Financial Management System (FMS) 2006: Chapter VI: Classification of Government Revenue and Expenditures.* Statistics Canada. http://www.statcan.ca/english/freepub/68F0023XIE/2005001/chapters/chapterVI.htm#4. Last updated March 17, 2006.

Statistics Canada (2007). *Population and Dwelling Counts, for Canada, Provinces and Territories, 2006 and 2001 Censuses - 100% data.* Catalogue No. 97-550-XWE2006002. Statistics Canada. www12.statcan.ca/english/

census06/data/popdwell/Table.cfm?T=101&SR=1&S=0&O=A&RPP=25&PR=0&C MA=0>, as of August 12, 2008.

Statistics Canada (2008). *Population Projections for Canada, Provinces and Territories, 2005-2031.* Catalogue No. 91-520-XIE. Statistics Canada.

Statistics Canada (2009a). *Financial Management System (FMS)* 2009. Statistics Canada.

Statistics Canada (2009b). *Table 384-0002—Gross Domestic Product (GDP), Expenditure-Based, Provincial Economic Accounts, Annual.* Statistics Canada.

Walker, Michael, and Martin Zelder (1999). Waiting Your Turn: Hospital Waiting Lists in Canada (9th ed.). Fraser Institute.

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