

Studies in Health Care Policy



October 2008

Paying More, Getting Less

Measuring the Sustainability of
Government Health Spending in Canada
2008 Report

by Brett J. Skinner and Mark Rovere





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Executive summary

This is the Fraser Institute's fifth annual report on the financial sustainability of health spending by provincial governments in Canada. The report uses a moving 10-year trend analysis to measure 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 unsustainable when it grows faster (on average) than revenue over the trend period. In this report, future growth in government health spending and revenue is projected on the basis of the 10-year trend to estimate the urgency of the sustainability problem.

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

Policy environment

The annual growth of government spending on health care is affected to a large degree 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). [1] Instead, each province has established its own government-run monopoly over the market for medical insurance. The provincial medical insurance monopolies also insulate consumers from the cost of medical care because they provide coverage without any user-based price signals such as premiums, copayments, or deductibles. In addition, private-sector health care providers are prohibited

1 Six of the 10 provinces (representing roughly 84% of the population in 2006) legally prohibit direct private payment for medical services insured by the provincial health program. Six of the 10 provinces (representing roughly 90% of the population in 2006) legally prohibit private insurance for medical services insured by the provincial health program. In all provinces, universal eligibility for publicly funded health insurance covering 100% of the costs of necessary medical services creates a de facto government-run monopoly over standard medical insurance (Flood and Archibald, 2001; Statistics Canada, 2007).

from competing for the delivery of publicly insured medical services. Each province also has separate, publicly funded drug programs that occupy roughly half of the market for prescription drug insurance. [2]

Findings

Averaged nationally across all provinces, government health spending has grown at an annual rate of 7.7% over the 10-year trend period (1998/1999 to 2007/2008). At the same time, the annual growth rate for total available provincial revenue (national average) has been only 6.3%. Government health spending has also grown faster than provincial GDP, which averaged only 6.1% annual growth across all provinces over the same period.

The severity of the unsustainable growth rate in health care spending varies significantly from province to province. Over the 10-year trend period, health spending has been growing at an unsustainable pace in nine provinces. Alberta is the only province where provincial revenue has grown at approximately the same pace as government health spending over the last 10 years.

Projecting the 10-year trend into the future suggests that government health spending in six provinces is on pace to consume more than half of total revenue from all sources by 2036. New Brunswick and Manitoba are the worst cases. Growth in government spending on health care in those two provinces is on pace to consume half of total available revenues as early as 2019 and 2020, respectively.

Paying more

If government health spending is to be kept at a stable percentage of revenue, then revenue must grow at least as fast as public health spending. Thus, high rates of growth in government health spending must be kept in check or taxpayers will be faced with the constant prospect of paying more. When the economy is rapidly growing, revenue often grows fast enough to keep up with government health spending. However, when the economy grows at historically normal or slower-than-normal rates, health spending usually outpaces revenue. This scenario increases the likelihood that future tax rates will rise, new taxes will be introduced, or spending on other government responsibilities will be scaled back.

2 In Canada, the government accounts for nearly half (48% in 2007) of all expenditures on prescription medicines in Canada (CIHI, 2008a, b).

Getting less

Rationing is used by all provincial governments in an effort to contain growth in government health spending. Instead of introducing policies that would take pressure off public finances, governments prefer to restrict access to publicly insured medical goods and services.

The continued rationing of medical goods and services results in long waits for specialist services and access to new medicines. As long as centrally planned rationing is used to control the growth in health spending, patients will be faced with the prospect of getting less.

Analysis

Based on an analysis of recent economic circumstances and the policies affecting the trends in government spending on health care, it is clear that despite high rates of growth in total available revenue over the trend period, in nine of the 10 provinces, government health spending is still growing faster than the ability to pay for it through public means alone.

In some provinces—British Columbia, Alberta, Saskatchewan, Newfoundland & Labrador, and Nova Scotia—recent revenue growth can be partially explained by increased GDP growth linked to escalating energy prices. If GDP in these provinces continues to grow at a high rate as a result of high energy prices, then provincial revenues could grow fast enough to maintain relatively high rates of growth in government health spending—even if the current system is less efficient than alternative ways of financing health care. However, it is uncertain whether the economic conditions driving high energy prices will persist in the future. Furthermore, energy-driven revenue increases in British Columbia, Saskatchewan, Newfoundland & Labrador, and Nova Scotia still have not kept pace with the growth in health spending when averaged over the trend period.

In provinces without large energy resources, recent growth rates for revenue have been raised by increasing the tax burden. For instance, in 2004, Ontario introduced a new income surtax called the “health premium.” However, the effect on revenue growth rates is only temporary because the tax burden cannot continue to rise over the long-term unless people are willing to accept declining rates of economic growth and lower standards of living. High and rising taxes discourage consumer spending, savings, investment, and productivity, which are engines of economic growth. Trying to drive long-term revenue growth through tax increases is futile: the 10-year trend shows that the growth in government health spending still outpaces revenue growth in most of the provinces where tax increases have occurred.

The percentage of own-source revenue consumed by health spending also differs from province to province. For instance, in Manitoba, New Brunswick, Newfoundland & Labrador, Nova Scotia, and Prince Edward Island, high rates of growth in government health spending are heavily subsidized by money transferred from other provinces. [3] Federal transfer programs take money from populations in wealthy provinces to boost the revenue bases of less wealthy 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 in fact increased in every province over the 10-year trend period. In addition, provincial, publicly funded drug programs only cover a small percentage of new medicines. Such policies have the effect of slowing the growth in government health spending in the short-term. However, strict rationing of health goods and services cannot continue indefinitely without causing medical risks for patients.

Conclusion 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 for any publicly funded medical goods and services they use;
- ❧ relieve cost pressures facing the public health insurance system by legalizing the right of patients to pay privately (private insurance or out of pocket) 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;

3 Recent growth in oil revenues in Newfoundland & Labrador and Nova Scotia may make them relatively permanent net contributors to equalization subsidies in the future.

- ❧ 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

Current health spending as a percentage of available revenue

The first finding of this report is that government health spending currently consumes a large percentage of total available revenues in each of the provinces. The most recent data (figure 1) show that government health expenditures (GHEX) in 2007/2008 accounted for 42.5% of total available revenue (TAREV) [4] in Ontario, the largest percentage among all 10 provinces. At the other end of the scale, GHEX consumed 28.9% of TAREV in Alberta.

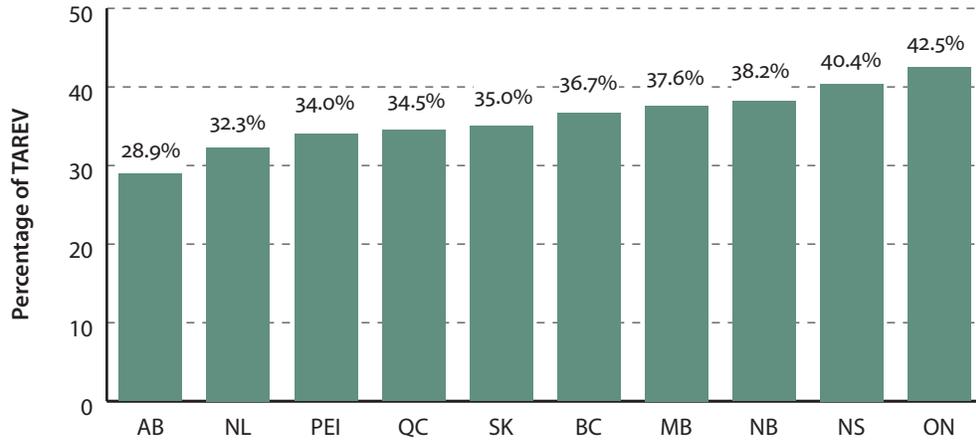
National trend

The most recent national trend for the sustainability of provincial government health spending is shown in figure 2. National 10-year average annual growth rates are the average of the 10-year average annual growth rates for each province. Figure 2 compares the average annual rates of growth in provincial government health expenditures (GHEX), total available provincial revenue (TAREV), and provincial gross domestic product (GDP) as a consolidated national average across all 10 provinces. [5]

Figure 2 shows that, averaged across all provinces, government health spending has grown at a faster average annual pace 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 of spending on all other responsibilities of government.

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- 4 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.
 - 5 Data for GHEX and TAREV were obtained from Statistics Canada's Financial Management System, which uses fiscal years ending March 31 for its accounting periods. Data for GDP were obtained from the general databases of Statistics Canada, which uses calendar years ending December 31 for its accounting. Therefore, the most recent 10-year period for GHEX and TAREV covers the years 1998/1999 to 2007/2008. The most recent 10-year period for GDP covers the years 1998 to 2007.

Figure 1: Percentage of total available revenue (TAREV) consumed by government health expenditures (GHEX), 2007/2008, by province



Note: To make Quebec comparable to other provinces, the extra tax room ceded to the province by the federal government for policy areas that are under federal jurisdiction in other provinces has been removed from the calculation of TAREV.

Source: Statistics Canada (2008a); calculations by authors.

Figure 2: National average of 10-year average annual provincial growth rates for government health expenditure (GHEX) and total available revenue (TAREV), 1998/1999 to 2007/2008; and gross domestic product (GDP), 1998 to 2007



Note: To make Quebec comparable to other provinces, the extra tax room ceded to the province by the federal government for policy areas that are under federal jurisdiction in other provinces has been removed from the calculation of TAREV. TAREV growth rates for Newfoundland & Labrador and Nova Scotia have been adjusted to remove the one-year increase in revenue from the Atlantic Accord.

Sources: Statistics Canada (2008a, b); calculations by authors.

Provincial trends

The severity of the unsustainable rate of growth in spending on health care varies significantly from province to province. Figure 3 compares the average annual percentage growth in GHEX, TAREV, and GDP in each province over the 10-year trend period. [6] The provinces are ranked according to the slowest to the fastest average annual rate of growth in GHEX over the trend period. Over the most recent 10 years, the fastest average annual rate of growth for GHEX occurred in Alberta (10.3%). British Columbia had the slowest average annual rate of growth for GHEX (5.8%). On the revenue side, the fastest average annual growth of TAREV over the trend period was in the province of Alberta (10.2%). Over the last 10 years, TAREV grew slowest in New Brunswick (4.6% annually on average).

Most importantly, government health spending in nine provinces has grown faster than revenue on average over the last 10 years. The only exception was the province of Alberta, which kept the pace of growth in health spending approximately the same as the growth of revenue over the trend period. The gap between the average annual growth rates for GHEX and TAREV was widest in Newfoundland & Labrador, where GHEX outpaced TAREV by 2.7 percentage points annually on average between 1998/1999 and 2007/2008.

Projections

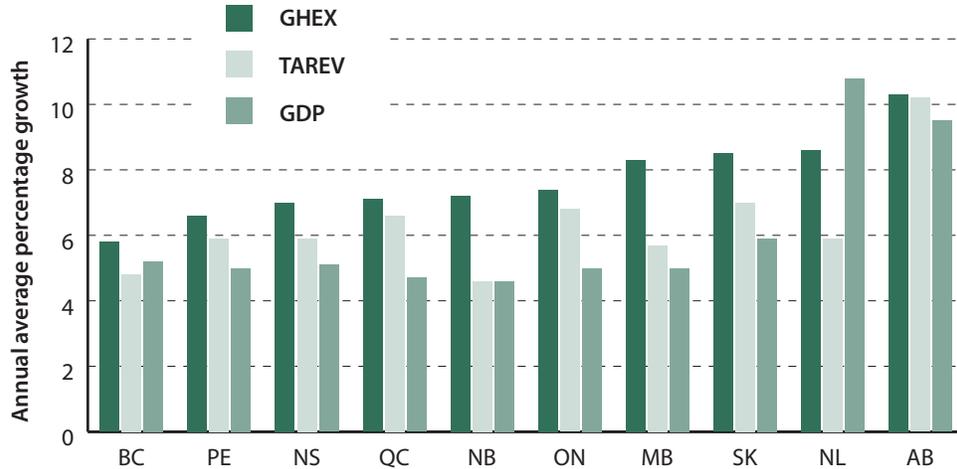
Figure 4 shows the number of years it will take for government health spending to consume half of total available revenue in each of the nine provinces where government health spending has grown faster than revenue on average over the last 10 years. This projection is based on the most recent 10-year trend for growth rates in GHEX and TAREV.

Among the provinces, New Brunswick and Manitoba face the most urgent sustainability problem. Growth in government spending on health care in both provinces is on pace to consume half of all provincial revenues as early as 2019 and 2020, respectively. Newfoundland & Labrador and Nova Scotia are the next worst cases; spending on health care in those two provinces will consume half of total available revenues by 2025 and 2027, respectively.

Other than Alberta, the only province where average annual growth rates in total available revenue have grown at roughly the same pace as

6 Unfortunately, the 10-year average annual rates of growth calculated are vulnerable to the effects of revisions to earlier published data that Statistics Canada routinely completes each year.

Figure 3: Average annual percentage growth rates for government health expenditure (GHEX) and total available revenue (TAREV), 1998/1999 to 2007/2008; and gross domestic product (GDP), 1998 to 2007, by province



Note: To make Quebec comparable to other provinces, the extra tax room ceded to the province by the federal government for policy areas that are under federal jurisdiction in other provinces have been removed from the calculation of TAREV. TAREV growth rates for Newfoundland & Labrador and Nova Scotia have been adjusted to remove the one-year increase in revenue from the Atlantic Accord.

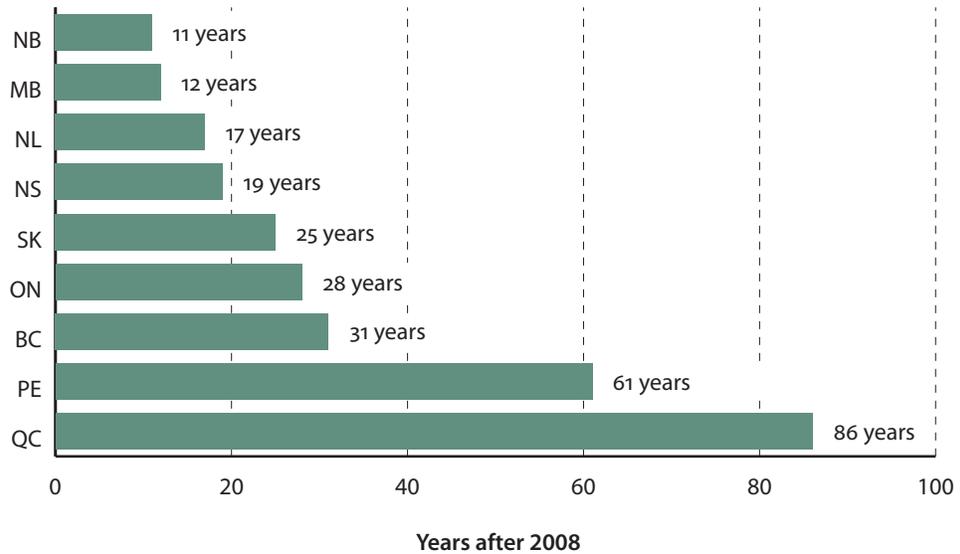
Sources: Statistics Canada (2008a, b); calculations by authors.

government health expenditures is Quebec. Based on the most recent 10-year trend, growth in government spending on health care in Quebec is on pace to consume half of all provincial revenues by 2094.

Estimating 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. Expectations regarding future rates of growth in government spending on health care must account for the acceleration of demand that will accompany the aging of the population. Data on provincial health spending by age from the Canadian Institute for Health Information shows that, across all ages, average per-capita provincial/territorial health spending in Canada was about \$2,810 in 2005, while spending for those aged 65 to 74 was about \$6,105, for those aged 75 to 84 was roughly \$11,131, and for those 85 years of age and older was \$21,185 (CIHI, 2007). It is well known that the proportion of the population that is older than 65 years will increase in the coming years as the

Figure 4: Number of years until government health expenditures (GHEX) consume 50% of total available revenue (TAREV), 2008 forward, by province



Note: To make Quebec comparable to other provinces, the extra tax room ceded to the province by the federal government for policy areas that are under federal jurisdiction in other provinces have been removed from the calculation of TAREV. TAREV growth rates for Newfoundland & Labrador and Nova Scotia have been adjusted to remove the one-year increase in revenue from the Atlantic Accord.

Sources: Statistics Canada (2008a); calculations by authors.

age cohort born just after World War II approaches retirement. Given this demographic trend, if there are no significant changes made to the structure of health care financing in Canada, government health expenditures will almost certainly grow much faster in the future than observed over the trend periods presented here.

Paying more

Increasing tax burdens

In some provinces, recent revenue growth has been temporarily accelerated by unsustainable and counter-productive tax increases that will only reduce GDP growth in the long-run, and thus decrease revenue growth in the future. Simply put, increasing the tax burden is not a sustainable way to grow revenues over the long-run. Tax increases have only 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 the process. 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% in 2005 (Statistics Canada, 2008a). However, the significant increase in the growth rate of total available revenue was only a one-year occurrence, and in 2006 the annual growth rate in total available revenue returned to normal levels (4.7%).

Increasing tax burdens also reduces the growth of GDP and the potential tax base in future years (Clemens et al., 2007; Karabegović et al., 2004). Slower economic growth caused by increasing tax burdens can also raise the risk of job losses and increase demands for more government spending on things like employment insurance and social assistance, further straining provincial revenues. By contrast, over the long-run, the only sustainable fiscal strategy for increasing government revenue faster 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). This causes the tax base to grow along with the economy as the growth of GDP expands the tax base by increasing the amount of wealth available to be taxed. The growth of government revenue is then driven by general economic growth without the damaging, long-term effects of an increasing tax burden.

Recent trends suggest that a slowing of economic growth may already be occurring across the country. This makes it unlikely that many provinces will be able to count on rates of revenue growth that are as high as those observed over our 10-year trend period.

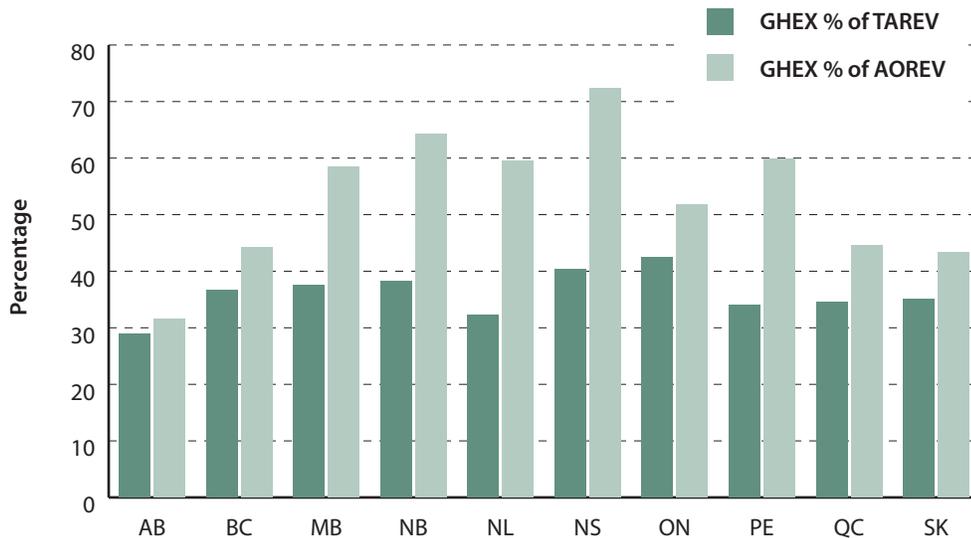
Interprovincial subsidies

Revenues available to some provinces for health spending are obtained at the expense of other provinces. Figure 5 shows that, once federal transfers are excluded, the percentage of available own-source revenue consumed by health spending is much higher in some provinces than in others. The growth rates for government health spending in Manitoba, New Brunswick, Newfoundland & Labrador, Nova Scotia, and Prince Edward Island are subsidized by federal transfers to a much higher degree than rates in other provinces. In the 2007/2008 fiscal year, government health expenditures (GHEX) represented 72.3% of available own-source revenue (AOREV) in of Nova Scotia, while GHEX represented only 31.5% of own-source revenue in Alberta.

Inflation in energy prices

Recent revenue growth in some provinces has been caused, to some degree, by escalating energy prices that have increased the rate of growth in GDP and expanded the tax base. Alberta, British Columbia, Saskatchewan, and

Figure 5: Government health expenditure (GHEX) as a percentage of total available revenue (TAREV) and available own-source revenue (AOREV), 2007/2008, by province



Note: To make Quebec comparable to other provinces, the extra tax room ceded to the province by the federal government for policy areas that are under federal jurisdiction in other provinces has been removed from the calculation of TAREV.

Source: Statistics Canada (2008a); calculations by authors.

Newfoundland & Labrador are the provinces that have been most affected by the inflation in energy prices over the last five years. However, it is uncertain whether the economic conditions driving increases in energy prices will persist in the future, making it unclear whether recent growth rates for GDP and revenue will continue. Unless energy prices remain high in the future, the extraordinarily high rates of growth in GDP seen over the last five years will likely return to lower historical norms. Additionally, only British Columbia, Alberta, Saskatchewan, Newfoundland & Labrador, and, to some extent, Nova Scotia have significant energy resources to rely on. Moreover, despite the growth in GDP and revenue associated with high energy prices, government health spending is still growing faster than revenue in all of these provinces except Alberta, where revenue has been keeping pace with health spending over the period studied.

Getting less

Rationing access to publicly insured health care

All 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, 2006), and restrict the scope of coverage for new medicines under public drug insurance plans (Skinner and Rovere, 2008). Such rationing contributes to lengthy waits for access to necessary medical treatment.

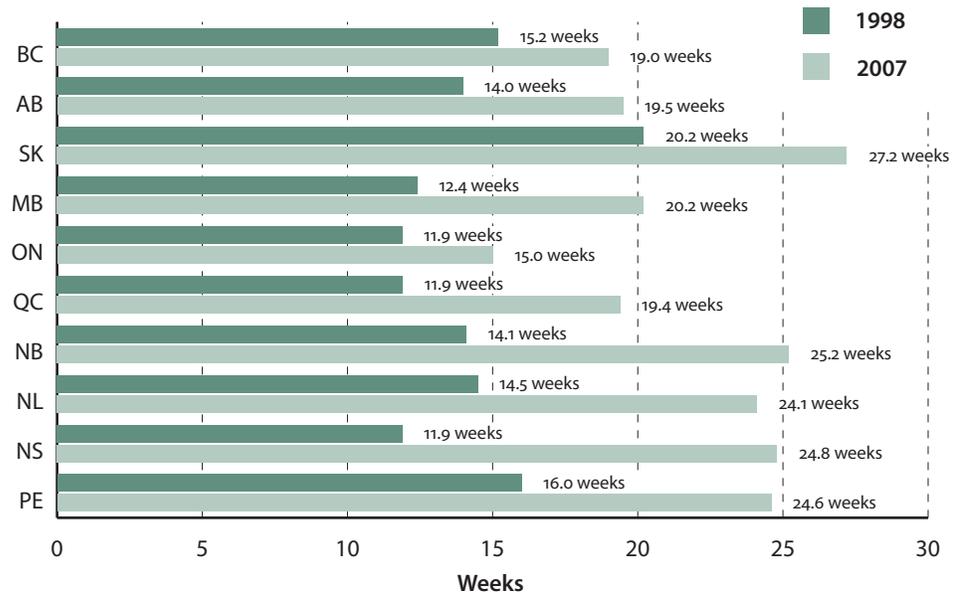
Figure 6 shows the only available, nationally comparable, data on wait times for specialist medical services in Canada. The results are averaged across 12 medically necessary specialties. The data indicate that the average median total wait between an appointment with a family doctor and the final receipt of specialist treatment has grown significantly in all provinces over the trend period. 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 and Walker with Bank, 2007).

Similarly, delays and denials for the reimbursement of new medicines under public drug programs in Canada are also evident (Skinner and Rovere, 2008). As shown in figure 7, the total average wait for patients dependent on public drug benefits in Canada (averaged across all provinces) for access to new medicines was approximately 703 days (1.9 years) in 2006. 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 a single period of waiting 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. Figure 8 shows the second segment of the bar (from figure 7) broken down by province.

As displayed in figure 8, some provinces take longer than others to decide whether or not to approve a new drug for public reimbursement. However, in general, averaged across all provinces, patients who were dependent on public drug benefits or who needed drugs that were delivered only through hospital settings waited 323 days on average (almost 11 months) in 2006.

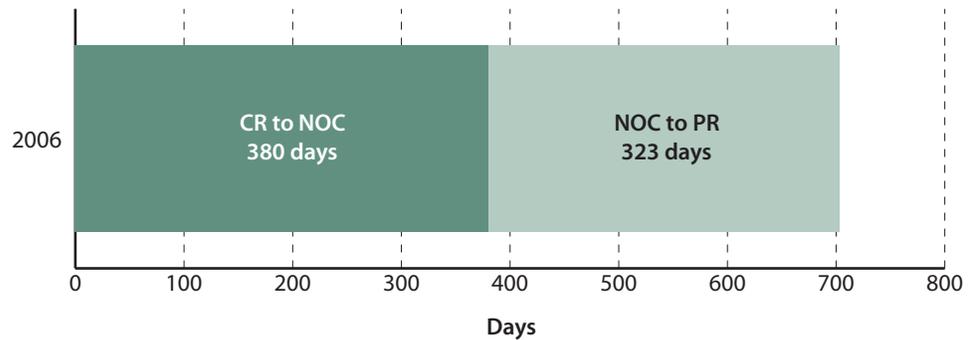
There are also a significant number of drugs that are approved by Health Canada as safe and effective, but which are never declared eligible for public reimbursement by the provinces. Table 1 shows the number of drugs

Figure 6: Median wait times (weeks) from referral by family doctor to specialist treatment, 1998 and 2007, by province



Sources: Esmail and Walker with Bank (2007); Walker and Zelder (1999).

Figure 7: Total time (days) spent waiting after a new drug has been developed before patients have access to new medicines in Canada, by wait segment, 2006*



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

Abbreviations:

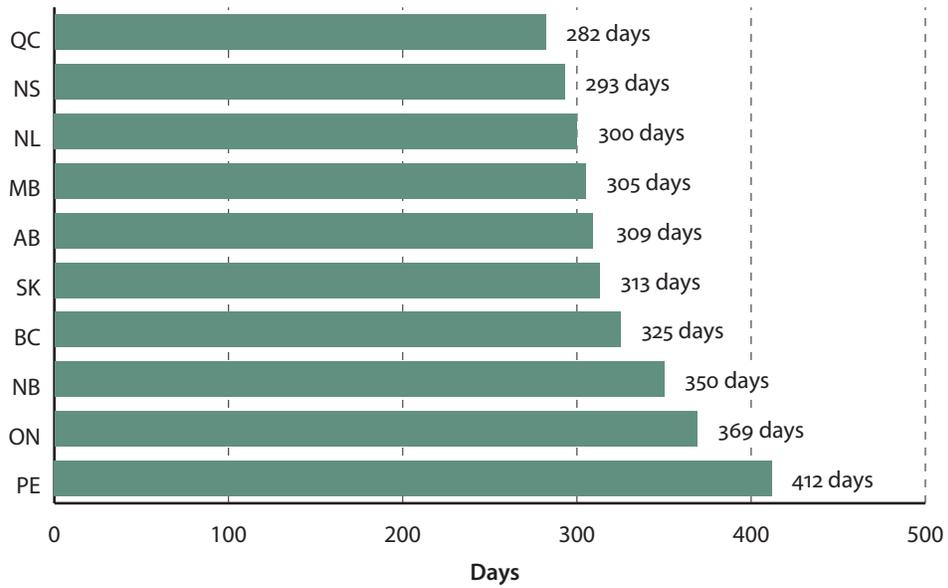
CR: the date the drug manufacturer's application for approval is recorded or filed in the Central Registry.

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 (2008).

Figure 8: Average wait times (days) for approval of public drug program reimbursement after market authorization has been granted by Health Canada, 2006, by province



Source: Skinner and Rovere (2008).

Table 1: Total number of new drugs approved for public reimbursement* as a percentage of new drugs that were granted a Notice of Compliance (NOC) by Health Canada in 2004, by province

	Drugs approved for public reimbursement	Approved drugs as a percentage of total NOCs
AB	35	42.2%
BC	32	38.6%
MB	32	38.6%
NB	39	47.0%
NL	28	33.7%
NS	40	48.2%
ON	25	30.1%
PE	14	16.9%
QC	81	97.6%
SK	41	49.4%
Provincial average		44%
Total NOCs	83	

* As of October 20, 2007.

Source: Skinner and Rovere (2008).

approved for public reimbursement (as of October 20, 2007) by each of the provinces, as a share of all new drugs that were granted market authorization (a Notice of Compliance) by Health Canada in 2004. Averaged across all provinces and public drug programs, only 44% of new drugs that obtained a Notice of Compliance (NOC) from Health Canada in 2004 were declared eligible for public reimbursement under provincial drug insurance programs as of October 20, 2007.

Needless to say, none of these government efforts at rationing have made the growth of government spending on health care sustainable. Despite being slowed by the continued rationing of publicly insured medical goods and services over the trend period, government spending on health care has still grown faster on average than revenue in nine of the provinces over the last 10 years.

Conclusion 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 for any publicly funded medical goods and services they use;
- ❧ relieve cost pressures facing the public health insurance system by legalizing the right of patients to pay privately (private insurance or out of pocket) 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.

Other 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 of 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 (2006). *Rising Health Costs Put Pressure on Public Finances, Finds 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

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. [7]

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 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 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 order to make Quebec comparable to other provinces, the extra tax room ceded to the province by the federal government for policy areas that are under federal jurisdiction in other provinces has been removed from the calculation of TAREV.

Growth rates for TAREV for Newfoundland & 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.

7 Data definitions available from Statistics Canada (2006).

Method

For the analysis in this study, the ratio of government spending on health care (GHEX) to total available revenue (TAREV) is used because it is better than other measures of sustainability such as the ratio of health spending to total programs spending. The ratio of government spending on health care to total available revenue measures the ability of government to pay from current available revenues, thus directly satisfying the definition of long-run sustainability and immediately exposing any attempt to use deficits to finance government health spending. We use a moving-trend analysis to measure sustainability over the most recent 10-year period.

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 revenue must grow at least as fast as public health spending. 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 future tax rates will rise, new taxes will be introduced, or spending on other government responsibilities will be reduced.

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. By comparison, if the ratio of government health spending to program expenditure is used as a basis for analysis, the sustainability question is not immediately clear because deficit financing could be used to keep government health spending at a stable percentage of programs spending, thus creating the illusion of sustainability.

This report is based on a 10-year trend, which is a change from the methodology used in previous reports (2004, 2005, 2006) where five-year trends were used. Our methodology was changed in response to concerns among economists that five years is too short a period to capture the full effect of recent changes in the tax structure. Changes in tax policy have a delayed impact on the growth of GDP, which in turn affects the growth of the revenue base over a time horizon that might not be fully captured in a five-year trend. As the 10-year trend period moves forward in future reports, the effect of any changes in tax policy and economic circumstances will be reflected in the average annual growth rates.

References

Canadian Institute for Health Information [CIHI] (2007). Table E.1.2. Estimate of Total Provincial and Territorial Government Health Expenditures, by Age and Sex, by Province/Territory and Canada, 2005—Current Dollars. *National Health Expenditure Trends, 1975–2007*. CIHI.

Canadian Institute for Health Information [CIHI] (2008a). *Health Expenditure by Use of Funds, by Year, by Source of Finance, by Province/Territory and Canada, 1975-2007 - Current Dollars*. CIHI.

Canadian Institute for Health Information [CIHI] (2008b). *Drug Expenditure in Canada, 1985 to 2007*. CIHI.

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

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

Esmail, Nadeem, and Michael Walker (2006). *How Good Is Canadian Health Care? 2006 Report: An International Comparison of Health Care Systems*. Fraser Institute.

Esmail, Nadeem, and Michael Walker with Margaret Bank (2007). *Waiting Your Turn: Hospital Waiting Lists in Canada* (17th 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 (2004). *Paying More, Getting Less: Ontario's Health Premium and Sustainable Health Care*. Fraser Institute.

Skinner, Brett, and Mark Rovere (2008). *Access Delayed, Access Denied 2008: Waiting for New Medicines in Canada*. Fraser Institute.

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

Statistics Canada (2007). *Population and Dwelling Counts, for Canada, Provinces and Territories, 2006 and 2001 Censuses - 100% data*. Statistics Canada Catalogue No. 97-550-XWE2006002. <www12.statcan.ca/english/censuso6/data/popdwell/Table.cfm?T=101&SR=1&S=0&O=A&RPP=25&PR=0&CMA=0>, as of August 12, 2008.

Statistics Canada (2008a). Financial Management System. Statistics Canada.

Statistics Canada (2008b). Table 384-0002—Gross Domestic Product (GDP), Expenditure-Based, Provincial Economic Accounts, Annual. *Provincial Economic Accounts—1902*. Statistics Canada.

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

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