Studies in Health Care Policy



April 2011

Canada's Medicare Bubble

Is Government Health Spending Sustainable without User-based Funding?

by Brett J. Skinner and Mark Rovere



Studies in Health Care Policy

April 2011

Canada's Medicare Bubble

Is Government Health Spending
Sustainable without User-based
Funding?

by Brett J. Skinner and Mark Rovere

Contents

```
Summary/ iv

Highlights / 1

Measuring sustainability / 4

Data and methodology / 23

References / 25

About the authors / 29

Acknowledgments & Disclaimer / 30

Publishing information / 31

Supporting the Fraser Institute / 32

About the Fraser Institute / 33

Editorial Advisory Board / 34
```

Summary

This study examines whether the public costs associated with Canada's health system are economically sustainable. Total provincial health spending has grown at an average annual rate of 7.5% over the last ten years, compared to only 5.7% for total available provincial revenue (including federal transfers), and only 5.2% for GDP. Long-term trends are similar: government spending on health has grown faster on average than GDP since 1975. As of 2011, provincial health spending in Ontario and Quebec currently consumes more than 50% of total revenues. Projections show that in Saskatchewan, Alberta, British Columbia and New Brunswick government health spending is on pace to consume 50% of revenues by 2017. In Manitoba and Prince Edward Island health spending will reach 50% of total available revenues by 2028. When federal transfers are excluded, government health spending currently consumes between 48.0% (Alberta) and 87.7% (Nova Scotia) of total available provincial own-source revenues. Economic reality recommends liberal reforms. Federal funding is not a solution: the federal government has already transferred billions more in health funding to the provinces than the amounts needed to keep up with general price inflation or population growth. Transfers encourage the provinces to avoid making necessary reforms. Paying more is not a solution: taxes cannot rise indefinitely to chase expenditures. High and rising taxes discourage economic growth and reduce the long-term potential revenue base for governments. Getting less is not a solution: provincial governments have used the blunt policy approach of rationing to constrain public expenditures without allowing private funding to fill the insurance gaps. This has reduced the availability of necessary medical goods and services. We conclude that Canada's health system produces rates of growth in health spending that are not sustainable solely through redistributive public financing. Supplementary user-based, private financing would off-load public cost pressures, encourage economic efficiency, and offer a sustainable source of additional resources.

Highlights

- Total provincial health spending has grown at an average annual rate of 7.5% over the last ten years, compared to only 5.7% for total available provincial revenue (including federal transfers) and only 5.2% for GDP.
- Across Canada, government spending on health has grown faster (8.1% annually) on average than GDP (6.7% annually) since 1975. Government health expenditures accounted for 8.4% of GDP in 2009 compared to only 5.4% of GDP in 1975.
- As of 2011, provincial health spending in Ontario and Quebec currently consumes more than 50% of total revenues.
- Projections of the most recent ten-year trend show that in Saskatchewan, Alberta, British Columbia, and New Brunswick government health spending is on pace to consume 50% of revenues by 2017. In Manitoba and Prince Edward Island, health spending will reach 50% of total available revenues by 2028.
- Excluding federal transfers, health spending currently consumes 87.7% of total available provincial own-source revenue in Nova Scotia, 74.2% in New Brunswick, 71.9% in Quebec, 65.5% in Prince Edward Island, 63.1% in Ontario, 62.8% in Manitoba, 60.3% in Newfoundland & Labrador, 55.2% in Saskatchewan, 54.6% in British Columbia, and 48.0% in Alberta.
- Provincial governments have increased taxes to fund health care. In 2004, Ontario introduced an income surtax, which the province mislabeled a "health premium." In 2010, the province of Quebec introduced a new health tax called the "health contribution." Like Ontario's "health premium," Quebec's "health contribution" is not linked to individual consumption of medical goods and services; it is in fact an income surtax and will therefore have no impact on costs because there is no incentive effect on the consumption choices of health care users.
- Federal transfers have been generous over the period. Between 1997/98 and 2006/07, the federal government provided the provinces with an estimated \$115.7 billion in cash transfers for health care—\$36.0 billion more than needed to keep up with population growth and inflation over the same period.

- Governments are trying to control costs by rationing access to necessary medical care. Across all provinces, the average median total wait between an appointment with a family doctor and the final receipt of specialist treatment has grown from 9.3 weeks in 1993 to 18.2 weeks in 2010.
- Provincial drug plans increasingly refuse to pay for most of the drugs that are certified by Health Canada as safe and effective. Averaged across all provincial public drug programs, only 20.3% of all drugs certified by Health Canada in 2008 had actually been approved for reimbursement (fully or partially) by the provinces as of December 31, 2009. On average, full or partial provincial reimbursement was approved for only 23.0% of new drugs approved by Health Canada in 2004, 16.2% of new drugs approved in 2005, 28.0% of new drugs approved in 2006, and 19.1% of new drugs approved in 2008, as of December 31, 2009.

Conclusion and recommendations

Government health spending currently consumes a large and growing percentage of total available revenue in each of the Canadian provinces. 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 policy on health funding is unique among developed countries. Generally speaking, since the late 1960s the private sector has been effectively prohibited from providing health insurance for medical services in Canada. Instead, each province and territory has established its own government-run monopoly over the market for medical insurance. The government publicly subsidizes 100% of eligible medical costs through taxes. User-based price signals such as premiums, co-payments, co-insurance, and deductibles, are legally prohibited for medical services in Canada. As a result, redistributive funding completely insulates consumers from the cost of medical services. In addition, each province, as well as the federal government and the territories, has its

¹ The Canada Health Act (CHA) specifically prohibits user fees and extra-billing for publicly insured medical goods and services. The CHA does not explicitly prohibit private health insurance, but it is generally perceived to be contrary to the spirit of the CHA. As a result, six of the ten provinces (representing roughly 90% of Canada's population in 2010) have legislation explicitly prohibiting private insurance for medical services that are eligible for insurance coverage under the provincial health program. In addition, all ten provinces have policies that discourage medical providers from accepting private payment, thus creating a de-facto government-run monopoly over medical insurance (Flood and Archibald, 2001; Statistics Canada, 2010a).

own publicly funded drug program, which together account for roughly half of the market for prescription drug insurance in Canada.² User-based costsharing is also absent from the funding models of these programs.

The data presented in this study suggest that the redistributive, taxbased funding structure of Canada's health system produces rates of growth in health spending that are not sustainable without at least a partial reliance on user-based, private financing. We recommend the following.

The federal government should:

 temporarily suspend enforcement of the Canada Health Act for a five-year trial period to allow the provinces to experiment with new ways of financing medical goods and services.

The provincial governments should:

- encourage the efficient use and allocation of health resources by requiring patients to make percentage-based, co-insurance payments for all publicly funded medical goods and services they use;
- off-load cost pressures from the public health system by legalizing private payment and private insurance options for all types of medical goods and services, including hospitals and physician services, as is currently allowed for prescription drugs;
- allow health providers to receive reimbursement for their services from any insurer or payer, 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 economic 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.

Similar types of policies are common across the health systems of OECD countries that share Canada's social goals for health care.

² In Canada, governments (federal, provincial, and territorial) account for nearly half (45% in 2009) of all expenditures on prescription medicines in Canada (CIHI, 2010b).

Measuring sustainability¹

This report uses an empirical trend analysis to estimate the long-term future economic sustainability of the public costs associated with Canada's health system.² 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 ten-year period.³ Government spending on health 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 politically managed rationing.

National trend

Averaged across all provinces, government health spending has grown faster than total available revenues (including federal transfers) over the last ten years. The most recent national trend is shown in figure 1. National ten-year average annual growth rates are the average of the ten-year average annual growth rates for each of the provinces. Figure 1 compares the average annual rates of growth in provincial government health expenditures (GHEX), total

- 1 Health costs under user-based, private-funding models are economically sustainable by definition because private spending is a direct expression of individual consumer preferences for health care relative to alternative uses of money, and costs are ultimately limited by each individual's own spending constraints. Sustainability is a special problem associated with redistributive funding models. Redistributive systems socialize the costs of health care while consumption remains private, so that consumers have little or no economic incentive to make efficient use and substitution choices. Under redistributive systems, consumers are insulated from the costs of their own consumption of health resources because they are in effect spending other people's resources.
- 2 The methodology used was originally developed by Skinner (2004, 2005) and replicated by Skinner and Rovere (2006, 2007, 2008, 2009).
- 3 This year's study uses Public Accounts data instead of FMS data due to reporting changes by Statistics Canada. See Data Sources below for detailed explanation.

7.5% Annual average percentage growth 5.7% 6 5.2% 3 2 0 **GHEX TAREV GDP**

Figure 1: National 10-year average annual percentage growth rates for provincial government health expenditures (GHEX) and total available revenue (TAREV), 2000/01-2009/10; and gross domestic product (GDP), 2000-2009

Sources: Statistics Canada, 2010b; Canada, Department of Finance, 2010a; Public Accounts, various provinces, 2000–2010; calculations by authors.

available provincial revenue (TAREV), ⁴ and provincial gross domestic product (GDP) as a consolidated national average across all ten provinces.⁵ Figure 1 shows that, averaged across all provinces, government health spending has grown at a faster average annual rate than revenue over the last ten years. The data suggest that 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.

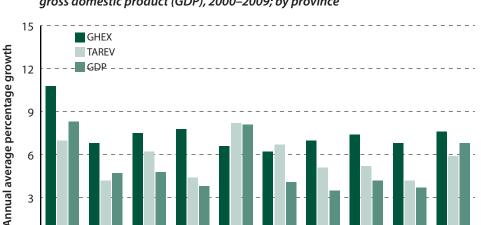
- Total available revenue (TAREV) is total revenue from all sources, including federal transfers, minus debt charges. Debt charges are removed because they represent fixed financial obligations of the provinces and cannot be spent on programs or other responsibilities of the government. Debt charges are distinct from debt repayment. Debt repayment is a policy choice, whereas debt charges are not. TAREV growth rates for Newfoundland & Labrador and Nova Scotia have been adjusted to remove the temporary increase in revenue from the Atlantic Accord, which due to accounting accrues across several years in our trend period. Including these temporary additional revenues in our assumptions about future growth rates would overstate realistic revenue projections for these provinces.
- 5 Data for GHEX and TAREV were obtained from the provincial Public Accounts, which use fiscal years ending March 31 for their 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 ten-year period for GHEX and TAREV covers the years 2000/01 to 2009/10. The most recent ten-year period for GDP covers the years 2000 to 2009.

Provincial growth rates

Trends vary significantly from province to province. Figure 2 compares the average annual percentage growth in GHEX, TAREV, and GDP in each province over the most recent ten-year trend period (the provinces are listed in alphabetical order). Over the past ten years, the fastest average annual rate of growth for GHEX occurred in Alberta (10.8%). Nova Scotia had the slowest average annual rate of growth for GHEX (6.2%). The fastest average annual growth of TAREV over the trend period was in the province of Newfoundland & Labrador (8.2%). The slowest annual average growth in TAREV over the trend period was in British Columbia and Quebec (4.2%).

Government health spending in eight provinces has grown faster on average than total available revenue over the last ten years. The were two exceptions: Nova Scotia, where GHEX grew at approximately the same rate as TAREV over the trend period; and Newfoundland & Labrador, where TAREV grew faster than GHEX over the ten-year period. The gap between the average annual growth rates for GHEX and TAREV was widest in Alberta, where GHEX outpaced TAREV by 3.8 percentage points annually on average between 2000/01 and 2009/10.

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 2008/09 and 2009/10. Over the one-year trend period, the fastest annual rate of growth for GHEX occurred in Saskatchewan (12.2%), while British Columbia had the slowest annual rate of growth for GHEX (2.8%). The fastest annual growth of TAREV over the one-year trend period occurred in the province of Prince Edward



NL

Figure 2: Ten-year average annual percentage growth rates for government health expenditures (GHEX) and total available revenue (TAREV), 2000/01–2009/10; and gross domestic product (GDP), 2000–2009; by province

Sources: Statistics Canada, 2010b; Canada, Department of Finance, 2010a; *Public Accounts*, various provinces, 2000–2010; calculations by authors.

NS

PEI

QC

SK

ON

BC

MB

NB

ΑB

AB

BC

MB

NB

Figure 3: One-year average annual percentage growth rates for government health expenditures (GHEX) and total available revenue (TAREV), 2008/09–2009/10; and gross domestic product (GDP), 2008–2009; by province

Sources: Statistics Canada, 2010b; Canada, Department of Finance, 2010a; *Public Accounts*, various provinces, 2000–2010; calculations by authors.

ON

PEI

QC

Island (3.9%). The slowest annual growth of TAREV occurred in Newfoundland & Labrador, where TAREV actually decreased (-22.6%). In fact, due to the economic downturn, the average annual change in TAREV decreased in seven out of ten provinces. Between 2008/09 and 2009/10, government health spending grew faster than revenue in all ten provinces. The gap between the average annual growth rates for GHEX and TAREV was widest in Newfoundland & Labrador, where GHEX grew by 11.6% and TAREV decreased by 22.6% (a difference of 34.2 percentage points).

Health spending consumes large share of revenues

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 2009/10 accounted for 52.5% of total available revenue (TAREV) in Quebec, the largest percentage among the provinces. GHEX consumed 34.3% of TAREV in Prince Edward Island, the smallest percentage among the provinces.

However, once federal transfers are excluded, the percentage of total available *own-source* revenue available (TAOREV) consumed by government health spending is much higher (figure 4). In the 2009/10 fiscal year, GHEX consumed 87.7% of TAOREV in Nova Scotia, 74.2% in New Brunswick, 71.9% in Quebec, 65.5% in Prince Edward Island, 63.1% in Ontario, 62.8% in Manitoba, 60.3% in Newfoundland & Labrador, 55.2% in Saskatchewan, 54.6% in British Columbia, and 48.0% in Alberta.

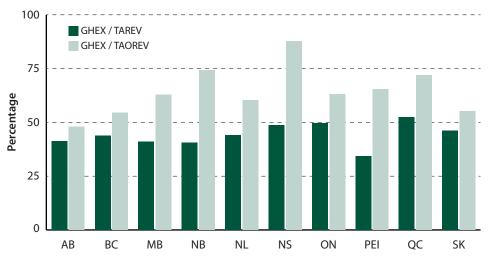


Figure 4: Government health expenditures (GHEX) as a percentage of total available revenue (TAREV) and total available own-source revenue (TAOREV), 2009/10, by province

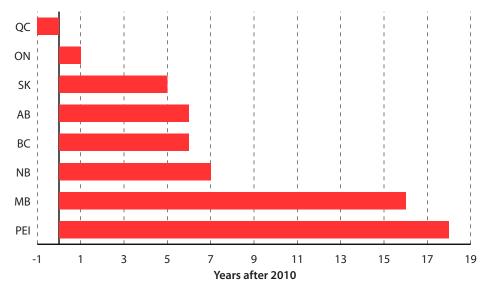
Source: Canada, Department of Finance, 2010a; *Public Accounts*, various provinces, 2000–2010; calculations by authors.

Projections

Figure 5 shows the number of years it will take for government health spending to consume half of total available revenue (including federal transfers) in each of the eight provinces where government health spending has grown faster than revenue on average over the ten-year trend period from 2000/01 to 2009/10. These projections are based on the most recent ten-year trends for growth rates in GHEX and TAREV. Among the provinces, Quebec faces the most severe sustainability problem as GHEX already consumes more than 50% of TAREV (52.5% in 2010). Ontario is also facing a serious sustainability problem. Based on trends for the past ten years, growth in GHEX in Ontario is on pace to consume half of TAREV by this year (2011). As the projection in figure 5 shows, health spending in Saskatchewan is on pace to consume 50% of TAREV by 2015; in Alberta and British Columbia, by 2016; in New Brunswick, by 2017; in Manitoba, by 2026; and in Prince Edward Island, by 2028.

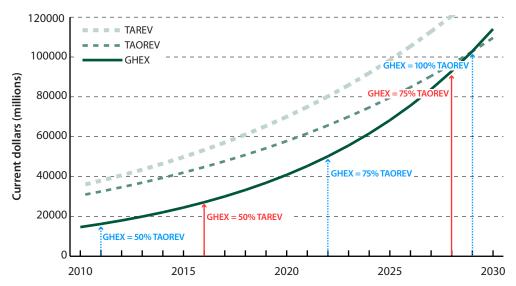
Projections to 2030, based on the most recent ten-year growth trends for GHEX, TAREV, and TAOREV, are shown in figures 6 to 13. (Newfoundland & Labrador and Nova Scotia, provinces where TAREV grew at the same pace or faster than GHEX are not shown.) As noted above, government health expenditures already consume over 50% of TAOREV in nine of the ten provinces (figure 4). The projections show when, over the next 20 years, government health expenditures will consume 75% and 100% of TAOREV if the most recent ten-year trends continue unabated. The data show that government health spending is on pace to consume 75% of TAOREV in seven provinces by the year 2023, and 100% of TAOREV in six provinces by the year 2029.

Figure 5: Number of years until government health expenditures (GHEX) consume 50% of total available revenue (TAREV), 2010 forward, by province, based on the most recent 10-year trends in GHEX and TAREV



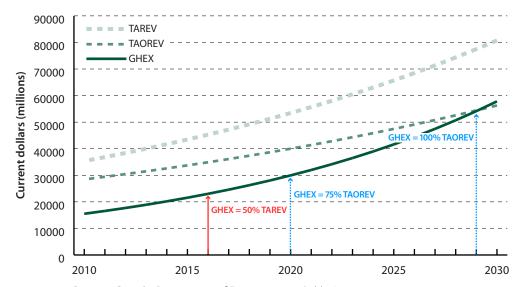
Sources: Canada, Department of Finance, 2010a; Public Accounts, various provinces, 2000–2010; calculations by authors.

Figure 6: Alberta—projected government health expenditures (GHEX), total available revenue (TAREV), and total available own-source revenue (TAOREV), based on 10-year trends in GHEX, TAREV, and TAOREV (2000/01-2009/10), 2010-2030



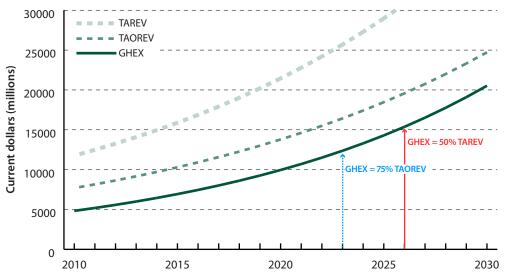
Sources: Canada, Department of Finance, 2010a; Public Accounts, various provinces, 2000–2010; calculations by authors.

Figure 7: British Columbia—projected government health expenditures (GHEX), total available revenue (TAREV), and total available own-source revenue (TAOREV), based on 10-year trends in GHEX, TAREV, and TAOREV (2000/01–2009/10), 2010–2030



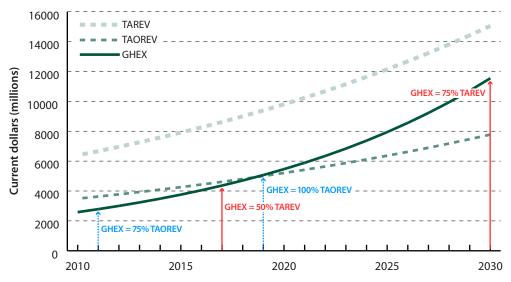
Sources: Canada, Department of Finance, 2010a; *Public Accounts*, various provinces, 2000–2010; calculations by authors.

Figure 8: Manitoba—projected government health expenditures (GHEX), total available revenue (TAREV), and total available own-source revenue (TAOREV), based on 10-year trends in GHEX, TAREV, and TAOREV (2000/01–2009/10), 2010–2030



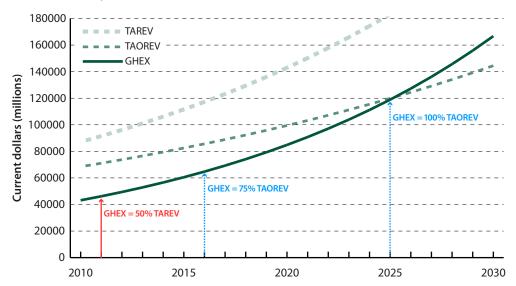
Sources: Canada, Department of Finance, 2010a; *Public Accounts*, various provinces, 2000–2010; calculations by authors.

Figure 9: New Brunswick—projected government health expenditures (GHEX), total available revenue (TAREV), and total available own-source revenue (TAOREV), based on 10-year trends in GHEX, TAREV, and TAOREV (2000/01-2009/10), 2010-2030



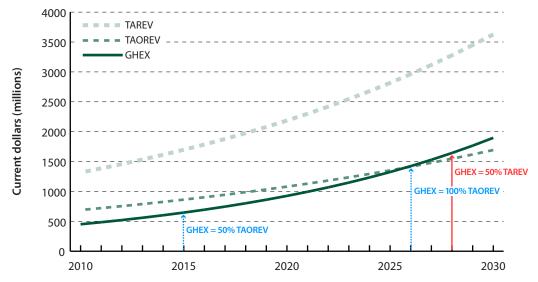
Sources: Canada, Department of Finance, 2010a; Public Accounts, various provinces, 2000–2010; calculations by authors.

Figure 10: Ontario—projected government health expenditures (GHEX), total available revenue (TAREV), and total available own-source revenue (TAOREV), based on 10-year trends in GHEX, TAREV, and TAOREV (2000/01-2009/10), 2010-2030



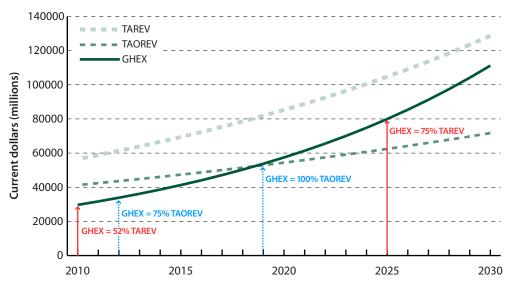
Sources: Canada, Department of Finance, 2010a; Public Accounts, various provinces, 2000–2010; calculations by authors.

Figure 11: Prince Edward Island—projected government health expenditures (GHEX), total available revenue (TAREV), and total available own-source revenue (TAOREV), based on 10-year trends in GHEX, TAREV, and TAOREV (2000/01–2009/10), 2010–2030



Sources: Canada, Department of Finance, 2010a; *Public Accounts*, various provinces, 2000–2010; calculations by authors.

Figure 12: Quebec—projected government health expenditures (GHEX), total available revenue (TAREV), and total available own-source revenue (TAOREV), based on 10-year trends in GHEX, TAREV, and TAOREV (2000/01–2009/10), 2010–2030



Sources: Canada, Department of Finance, 2010a; *Public Accounts*, various provinces, 2000–2010; calculations by authors.

45000 TAOREV 40000 **GHEX** 35000 Current dollars (millions) 30000 25000 20000 15000 10000 5000 50% TAREV 0 2015 2030 2010 2020 2025

Figure 13: Saskatchewan—projected government health expenditures (GHEX), total available revenue (TAREV), and total available own-source revenue (TAOREV), based on 10-year trends in GHEX, TAREV, and TAOREV (2000/01-2009/10), 2010-2030

Sources: Canada, Department of Finance, 2010a; Public Accounts, various provinces, 2000–2010; calculations by authors.

Health spending as a percentage of GDP

Long-term data available for federal, provincial and territorial government health spending confirm that across the whole country GHEX has grown faster than GDP on average since 1975. Figure 14 shows that over the period from 1975 to 2009, total federal, provincial, and territorial government health spending has grown by 8.1% annually on average versus 6.7% for national GDP over the same period (CIHI, 2010a; Statistics Canada, 2010b). The differential growth rates have resulted in government health spending growing as a percentage of GDP over time. Figure 15 shows that all government health expenditures (GHEX) accounted for 8.4% of GDP in 2009 compared to only 5.4% of GDP in 1975.

8.1%
6.7%

GHEX

GDP

Figure 14: Average annual growth in total federal, provincial, territorial government health expenditures (GHEX), and gross domestic product (GDP), 1975–2009

Sources: Canadian Institute for Health Information [CIHI], 2010a.



Figure 15: Federal, provincial, and territorial government health expenditures (GHEX), private health expenditures (PrHEX), and total health expenditures (THEX) as a percentage of national gross domestic product (GDP), 1975–2009

Sources: Canadian Institute for Health Information [CIHI], 2010a; Statistics Canada, 2010b.

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, which the province 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%). In 2010, the province of Quebec introduced a new health tax called the "health contribution" (Bachand, 2010). Like Ontario's health premium, Quebec's "health contribution" is not linked to individual consumption of medical goods and services; it is in fact an income surtax.

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, increasing the tax burden at this time would have the further damaging effect of delaying economic recovery.

Federal transfers and interprovincial subsidies

Previous research has shown that the federal government provided the provinces with an estimated \$115.7 billion in cash transfers for health care between 1997/98 and 2006/07. The average annual rate of growth in federal cash transfers to the provinces for health over this period was 12.9%. At the same time, it was estimated that the rate required to keep health spending growing at the same pace as population and inflation was only 3.1%. The analysis confirmed that between 1997/98 and 2006/07 Ottawa increased its cash transfers for health to the provinces by \$36.0 billion more than needed to compensate for population growth and inflation over the same period. (Esmail et al., 2007) Yet, the growth in provincial government health spending has continually outpaced the growth in total available revenues, including these federal transfers.

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 fiscal years 2007/08, 2008/09, 2009/10, and 2010/11 (projection). In figure 4, we showed that, once all federal transfers are excluded from the analysis, the percentage of total available own-source revenue (TAOREV) 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 TAOREV consumed by GHEX suggests that the growth in government health spending in Manitoba, New Brunswick, Nova Scotia, Prince Edward Island, and Quebec is subsidized by federal transfers to a much higher degree than in other provinces. In fact, in 2010/11 federal transfers will account for 26% of TAREV in Manitoba; 34% of TAREV in New Brunswick; 32% of TAREV in Nova Scotia; 34% of TAREV in Prince Edward Island; and 27% of TAREV in Quebec. In contrast, in 2010/11 federal transfers are estimated to account for only 9% of TAREV in the province of Alberta (Canada, Department of Finance, 2010b).

Table 1: Equalization transfers (\$ millions) by province, 2007/08, 2008/09, 2009/10, and 2010/11

	2007/08	2008/09	2009/10	2010/11	
Alberta	477				
British Columbia					
Manitoba	1826	2063	2063	1826	
New Brunswick	1477	1584	1689	1581	
Newfoundland & Labrador	477				
Nova Scotia	1465	1465	1391	1110	
Ontario			347	972	
Prince Edward Island	294	322	340	330	
Quebec	7160	8028	8355	8552	
Saskatchewan	226				

Source: Canada, Department of Finance (2010b).

Evidence of rationing

All of the provinces continue to restrict aggregate spending in an effort to contain the growth in government health spending. The result of this blunt policy approach to cost control has been to reduce the effective supply of health professionals (Esmail, 2006, 2011), reduce the availability of advanced medical equipment (Skinner and Rovere, 2010b), and restrict the scope of coverage for new medicines under public drug-insurance plans (Skinner and Rovere, 2010a), which has contributed to lengthy waits for access to necessary medical treatment.

Figure 16 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 (2000–2010). These waits can be considered severe as they exceed the wait physicians consider clinically reasonable for patients. Data also show that nationally, wait times have nearly doubled in Canada since the early 1990s. In 1993, the national average median total wait between an appointment with a family doctor and the final receipt of specialist treatment was 9.3 weeks. By 2010, the national total average median weight was 18.2 weeks (Barua et al., 2010).

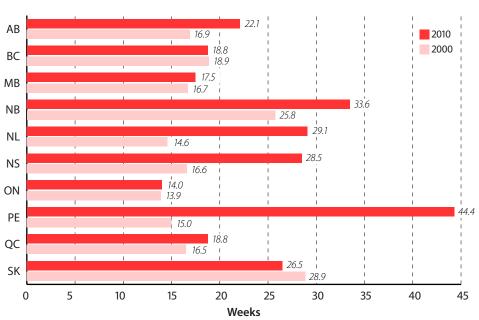


Figure 16: Weighted average median wait times (weeks) from referral by family doctor to specialist treatment, 2000 and 2010, by province

Sources: Walker and Wilson, 2001; Barua et al., 2010.

Similarly, delays and denials for the reimbursement of new medicines under public drug programs in Canada are also evident (Skinner and Rovere, 2010a). Figure 17 shows the total average wait for access to new medicines for patients dependent on public drug benefits (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 the 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 in hospital and cannot afford to pay cash.

The average time spent by the provinces to grant eligibility for public reimbursement was 316 days, or almost 10.5 months (as of December 31, 2009), for drugs that were approved by Health Canada in 2008. The second segment of the bar in figure 16 is broken down by province in figure 18. As the figure shows, some provinces take longer than others to decide whether to approve a new drug for public reimbursement.

There is also a significant number of drugs that are approved by Health Canada as safe and effective but never declared eligible for public reimbursement by the provinces. Table 2 shows the number of drugs approved for public reimbursement (as of December 31, 2009) 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, 2007, and 2008. As table 2 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 20.3% of all drugs approved by Health Canada as safe and effective in 2008 had actually been approved for reimbursement (fully or partially) by the provinces as of December 31, 2009. On average, full or partial provincial reimbursement was approved for 23.0% of new drugs approved by Health Canada in 2004, 16.2% of new drugs approved in 2005, 28.0% of new drugs approved in 2006, and 19.1% of new drugs approved in 2008, as of December 31, 2009.

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 eight provinces over the last ten years.

CR to NOC NOC to PR 388 days 316 days 100 200 300 400 500 600 700 800 0 Days

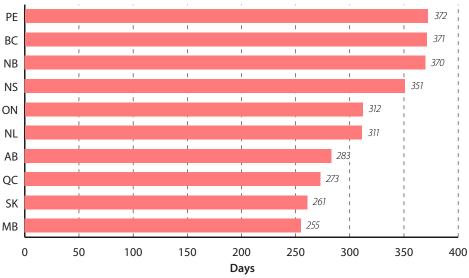
Figure 17: Total time (days) spent waiting after a new drug has been developed before patients have access to new medicines in Canada, by wait segment, 2008*

*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, 2010a.

Figure 18: Average wait times (days) for approval of public drug program reimbursement (PR) after market authorization has been granted by Health Canada (NOC) in 2008, by province, as of December 31, 2009



Source: Skinner and Rovere, 2010a.

Table 2: Public reimbursement approvals, as a percentage of NDS-class drugs approved by Health Canada, by province, 2004–2008, as of December 31, 2009

	2004		2005		2006		2007		2008	
	Number of drugs approved	Drugs approved as % of NOCs	Number of drugs approved	Drugs approved as % of NOCs	Number of drugs approved	Drugs approved as % of NOCs	Number of drugs approved		Number of drugs approved	Drugs approved as % of NOCs
Alberta	8	17.0%	2	4.4%	11	21.6%	4	9.1%	6	18.8%
British Columbia	10	21.3%	2	4.4%	8	15.7%	5	11.4%	5	15.6%
Manitoba	9	19.1%	5	11.1%	8	15.7%	7	15.9%	3	9.4%
New Brunswick	11	23.4%	10	22.2%	20	39.2%	10	22.7%	8	25.0%
Newfoundland & Labrador	11	23.4%	9	20.0%	18	35.3%	8	18.2%	8	25.0%
Nova Scotia	9	19.1%	7	15.6%	16	31.4%	8	18.2%	6	18.8%
Ontario	8	17.0%	7	15.6%	11	21.6%	8	18.2%	4	12.5%
Prince Edward Island	9	19.1%	8	17.8%	12	23.5%	6	13.6%	2	6.3%
Quebec	20	42.6%	13	28.9%	22	43.1%	22	50.0%	14	43.8%
Saskatchewan	13	27.7%	10	22.2%	17	33.3%	6	13.6%	9	28.1%
Provincial average		23.0%		16.2%		28.0%		19.1%		20.3%
Total NDS NOCs	47		45		51		44		32	

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 the observed years 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

Note: NDS = new drug submission; NOC = the date Health Canada issues an official Notice of Compliance, certifying that the new drug is safe and effective and is legally approved for sale in Canada. Total NDS NOCs include all available data from Brogan Inc.

Sources: Health Canada, 2009; Brogan Inc., 2009; calculations by authors; replicates Skinner and Rovere, 2010a: table 2..

Growing consensus warning of sustainability crisis

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).

- International Monetary Fund [IMF] (2010). IMF Country Report No. 10/377 (Canada). December 2010.
- Canadian Medical Association [CMA] (2010). Health Care Transformation in Canada. CMA. August 2010.
- Organisation for Economic Co-operation and Development [OECD] (2010b). OECD Economic Surveys: Canada 2010. http://titania.sourceoecd. org/upload/1010141etemp.pdf>, as of September 13, 2010.
- TD Economics (2010). Charting a Path to Sustainable Health Care in Ontario: 10 proposals to restrain cost growth without compromising quality of care. TD Economics, Special Report. May 27, 2010.
- Bachand, Raymond (2010). 2010-2011 Budget Speech. Government of Quebec, Ministry of Finance.
- 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 and methodology

Data sources

This year's report uses a different data set than previous editions. In previous reports, all data for government health expenditures and for total revenues were taken from Statistics Canada's Financial Management System (FMS). In the past, Statistics Canada used a modified cash-based system of accounting for the FMS data set; however, due to a recent move by Canadian governments away from modified cash-based accounting to an accrual-based accounting system, Statistics Canada's methodology will be revised (Statistics Canada, 2010c). In place of the FMS, Statistics Canada will be adopting the internationally accepted Government Finance System (GFS). Until data from this system are published in 2012 (Statistics Canada, 2010c), this study will use Public Accounts data, which are published annually by each province and the federal department of finance. Due to the change in data sources, results in this year's report should not be compared to previous editions. This study will use GFS data when Statistics Canada resumes publication in 2012.

The data on provincial government health spending 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 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 addition, the growth rates for TAREV for Newfoundland & Labrador and Nova Scotia have been adjusted to remove the temporary 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 a temporary effect of a one-time federal policy change.

Method

In this study, we use a trend analysis to measure sustainability over the most recent ten-year period. The ratio of government spending on health care (GHEX) to total available revenue (TAREV) is preferred to other measures of sustainability, such as the ratio of health spending to total program spending. The GHEX to TAREV method ensures that deficit financing does not create a

spurious effect on our sustainability measurement. For example, if a government borrows money to finance health care spending, 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. Our method serves to warn taxpayers of health spending trends that will create pressures to raise 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 about 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 (2010a) show that average per-capita provincial and territorial health spending was about \$3,353 for Canadians of all ages in 2008. In contrast, average per-capita spending was about \$6,953 for those aged 65 to 74, roughly \$12,611 for those aged 75 to 84, and \$22,907 for those aged 85 years and older (CIHI, 2010a: table E.1.1).

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 20.8% of Canadians will be 65 years of age or older by 2026 (Statistics Canada, 2010d). 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 in the future to grow much faster than the rates of growth observed over the trend period examined in this report.

References

Bachand, Raymond (2010). 2010-2011 Budget Speech. Government of Quebec, Ministry of Finance.

Barua, Bacchus, Mark Rovere, and Brett J. Skinner (2010). Waiting Your Turn: Wait Times for Health Care in Canada, 2010 Report (20th edition). Fraser Institute.

Brogan Inc. (2009). Special data request.

Canadian Institute for Health Information [CIHI] (2010a). National Health Expenditure Trends, 1975-2010. CIHI.

Canadian Institute for Health Information [CIHI] (2010b). Drug Expenditure in Canada, 1985 to 2009. 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.

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). *Economics A–Z*, s.v. Public Goods. 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 (2011). Canada's Physician Supply. Fraser Forum March/April: 12–18. http://www.fraserinstitute.org/research-news/news/display.aspx?id=17350>.

Esmail, Nadeem, Jason Clemens, Niels Veldhuis, and Milagros Palacios (2007). Federal Health Transfers to the Provinces: Expensive and Ineffective. Fraser Alert (March). 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.

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

Health Canada (2009). Special Data Request. Detailed drug product data matching the Brogan Inc. (2008) dataset, which was used to measure provincial reimbursement delays and rates.

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 Digital Publication. Fraser Institute.

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

Skinner, Brett J. (2007a). *Long-term, Short-term: Public Health Insurance is not Sustainable.* Fraser Institute.

Skinner, Brett J. (2007b). *Misinformation and Wishful Thinking about Medicare's Sustainability*. Fraser Institute.

Skinner, Brett J. (2009). *Canadian Health Policy Failures: What's Wrong?* Who Gets Hurt? Why Nothing Changes. 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 Digital Publication. 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 Digital Publication. Fraser Institute.

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

Skinner, Brett J., and Mark Rovere (2009). Paying More, Getting Less: Measuring the Sustainability of Government Health Spending in Canada (2009 Report). Studies in Health Care Policy. Fraser Institute.

Skinner, Brett J., and Mark Rovere (2010a). Access Delayed, Access Denied: Waiting for New Medicines in Canada (2010 Report). Fraser Institute.

Skinner, Brett J., and Mark Rovere (2010b). Value for Money from Health Insurance Systems in Canada and the OECD. Fraser Alert (October). Fraser Institute.

Walker, Mike, and Greg Wilson (2001). Waiting Your Turn: Hospital Waiting Lists in Canada (11th Edition). Fraser Institute.

Government sources

Alberta, Ministry of Finance (2000–2010). *Public Accounts*. Government of Alberta.

British Columbia, Ministry of Finance (2000–2010). *Public Accounts*. Government of British Columbia.

Canada, Department of Finance (2010a). Provincial and Territorial Governments Public Accounts. http://www.fin.gc.ca/frt-trf/2010/frt-trf-1004- eng.asp>, as of October 12, 2010.

Canada, Department of Finance (2010b). Federal Support to Provinces and Territories. http://www.fin.gc.ca/fedprov/mtp-eng.asp, as of February 4, 2010.

Manitoba, Ministry of Finance (2000–2010). *Public Accounts*. Government of Manitoba.

New Brunswick, Ministry of Finance (2000–2010). *Public Accounts*. Government of New Brunswick.

Newfoundland & Labrador, Ministry of Finance (2000–2010). Public Accounts. Government of Newfoundland & Labrador.

Nova Scotia, Ministry of Finance (2000–2010). Public Accounts. Government of Nova Scotia.

Ontario, Ministry of Finance (2000–2010). *Public Accounts*. Government of Ontario.

Prince Edward Island, Ministry of Finance (2000–2010). *Public Accounts*. Government of Prince Edward Island.

Quebec, Ministry of Finance (2000–2010). *Public Accounts*. Government of Quebec.

Saskatchewan, Ministry of Finance (2000–2010). *Public Accounts*. Government of Saskatchewan.

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

Statistics Canada (2010a). *Quarterly demographic estimates*. http://www.statcan.gc.ca/daily-quotidien/100325/t100325a2-eng.htm, as of March 25, 2010.

Statistics Canada (2010b). *Table 384-0002—Gross Domestic Product (GDP), Expenditure-Based, Provincial Economic Accounts, Annual.*Statistics Canada.

Statistics Canada (2010c). *Moving from the Financial Management System to Government Finance Statistics*. http://www.statcan.gc.ca/pub/13-605-x/2010001/article/11155-eng.htm.

Statistics Canada (2010d). *Population Projections for Canada, Provinces and Territories, 2010-2036.* Catalogue No. 91-520-X. Statistics Canada.

About the authors

Mark Rovere

Mark Rovere is Associate Director of the Health Policy Research Centre at the Fraser Institute. He holds a B.A. (honours) and an M.A. in Political Science from the University of Windsor. Since joining the Institute, Mr Rovere has coauthored numerous studies on a range of health and pharmaceutical policy issues including Canadian pharmaceutical pricing, access to new medicines, government drug expenditures, Canadian and American prescription drug spending, and the sustainability of public health care in Canada. His recent commentaries have appeared in such newspapers as the Financial Post, Calgary Herald, Halifax Chronicle Herald, and Toronto Sun. Mr Rovere has also written regularly for *Fraser Forum* on a variety of topics related to health and pharmaceutical policy. He is currently a Ph.D. student in the Department of Health Policy, Management, and Evaluation at the University of Toronto.

Brett J. Skinner

Brett J. Skinner is the Fraser Institute's President as well as Director of Health Policy and Insurance Policy research. He holds a B.A. from the University of Windsor, an M.A. through joint studies between the University of Windsor and Wayne State University in Detroit (Michigan), and a Ph.D. from the University of Western Ontario, where he has lectured in both the Faculty of Health Sciences and the Department of Political Science. He has also worked as a research consultant to the Insurance Bureau of Canada (Toronto). Since 2002, Dr. Skinner has authored or co-authored nearly 40 major original pieces of applied economics and public policy research. In 2003, he was a co-winner of the Atlas Economic Research Foundation's Sir Antony Fisher Memorial Award for innovative projects in public policy. His research has been published through several think-tanks including the Fraser Institute, the Atlantic Institute for Market Studies (Halifax) and the Pacific Research Institute (San Francisco). His work has also been published in several academic journals including Economic Affairs, Pharmacoeconomics, and Alimentary Pharmacology & Therapeutics. Dr. Skinner is frequently cited by Canadian, American, and global media. He has presented his research at conferences and events around the world, including twice testifying before the House of Commons Standing Committee on Health in Ottawa, and twice briefing bi-partisan Congressional policy staff at the US Capitol in Washington, DC.

Acknowledgments

The authors would like to thank Milagros Palacios for advice about accounting and reporting changes to Statistics Canada data.

Any errors, omissions, or mistakes remain the sole responsibility of the authors. As the authors have worked independently, the views and analysis expressed in this document remain those of the authors and do not necessarily represent the views of the supporters, trustees, or other staff at the Fraser Institute.

Disclosure

Because the authors' employer receives charitable donations from research-based pharmaceutical manufacturers, the authors have chosen to disclose financial relationships in accordance with the policies of the International Committee of Medical Journal Editors (Clever et al., 1997; Davidoff et al., 2001). The authors acknowledge with sincere gratitude those who financially support the Fraser Institute and this research including research-based pharmaceutical companies (whose contributions make up less than 5% of the Fraser Institute's budget), as well as the general membership and other supporters of the Institute. With respect to this manuscript, no drug-maker or other donor had any input into the collection, analysis, or interpretation of the research, nor in the manuscript's writing. Nor did any drug-maker or other donor preview this manuscript before publication. The Fraser Institute accepts no government funding and no private contracts for research. The donations we receive are unrestricted and come only from private foundations, organizations, or individuals.

Publishing information

Periodically, the Fraser Institute publishes timely and comprehensive studies of current issues in economics and public policy. This study is one such example belonging to a series of related publications.

Distribution

These publications are available from http://www.fraserinstitute.org and http://www.fraseramerica.org in Portable Document Format (PDF) and can be read with Adobe Acrobat® 7 or later or with Adobe Reader® 7 or later. Adobe Reader® X, the most recent version, is available free of charge from Adobe Systems Inc. and may be down-loaded from: http://get.adobe.com/reader/. We encourage you to install the most recent version. Readers who have trouble viewing or printing our PDF files using applications from other manufacturers (e.g., Apple's Preview) should install and use Reader® or Acrobat®.

Ordering publications

For information about ordering the printed publications of the Fraser Institute, please contact the publications coordinator

- e-mail: sales@fraserinstitute.org
- telephone: 604.688.0221 ext. 580 or, toll free, 1.800.665.3558 ext. 580
- fax: 604.688.8539.

Media

For media inquiries, please contact our Communications Department

- 604.714.4582
- e-mail: communications@fraserinstitute.org.

Disclaimer

The authors of this publication have worked independently and opinions expressed by them are, therefore, their own, and do not necessarily reflect the opinions of the supporters, trustees, or other staff of the Fraser Institute. This publication in no way implies that the Fraser Institute, its trustees, or staff are in favour of, or oppose the passage of, any bill; or that they support or oppose any particular political party or candidate.

Copyright

Copyright© 2011 by the Fraser Institute. All rights reserved. No part of this publication may be reproduced in any manner whatsoever without written permission except in the case of brief passages quoted in critical articles and reviews.

ISSN

1918-2090 Studies in Health Care Policy (online version) 1918-2082 Studies in Health Care Policy (print version)

Date of issue

April 2011

Citation

Skinner, Brett J., and Mark Rovere (2011). *Canada's Medicare Bubble: Is Government Health Spending Sustainable without User-based Funding?* Studies in Health Care Policy. Fraser Institute.

This publication continues a series entitled *Paying More, Getting Less.* For complete publishing information, see Skinner, 2004, 2005, and Skinner and Rovere, 2006, 2007, 2008, 2009 in the list of references.

Editing and design

Lindsey Thomas Martin

Cover design

Bill Ray

Images for cover

Blood Cells © KHZ, Fotolia Heart Mon i tor © Kirsty Pargeter, Fotolia Blood Sam ple © Rob ert By ron, iStockphoto Test Tube © Emrah Turudu, iStockphoto X-Ray © Andrzej Tokarski, Fotolia Brain © Vasiliy Yakobchuk, iStockphoto

Supporting the Fraser Institute

To learn how to support the Fraser Institute, please contact

- Development Department, Fraser Institute Fourth Floor, 1770 Burrard Street Vancouver, British Columbia, V6J 3G7 Canada
- telephone, toll-free: 1.800.665.3558 ext. 586
- e-mail: development@fraserinstitute.org.

About the Fraser Institute

Our vision is a free and prosperous world where individuals benefit from greater choice, competitive markets, and personal responsibility. Our mission is to measure, study, and communicate the impact of competitive markets and government interventions on the welfare of individuals. Founded in 1974, we are an independent Canadian research and educational organization with locations throughout North America and international partners in over 70 countries. Our work is financed by tax-deductible contributions from thousands of individuals, organizations, and foundations. In order to protect its independence, the Institute does not accept grants from government or contracts for research.

Nous envisageons un monde libre et prospère, où chaque personne bénéficie d'un plus grand choix, de marchés concurrentiels et de responsabilités individuelles. Notre mission consiste à mesurer, à étudier et à communiquer l'effet des marchés concurrentiels et des interventions gouvernementales sur le bien-être des individus.

Nuestra visión es un mundo libre y próspero donde los individuos se beneficien de una mayor oferta, la competencia en los mercados y la responsabilidad individual. Nuestra misión es medir, estudiar y comunicar el impacto de la competencia en los mercados y la intervención gubernamental en el bienestar de los individuos.

Editorial Advisory Board

Prof. Armen Alchian Prof. James Gwartney

Prof. Terry Anderson Prof. H.G. Johnson*

Prof. Robert Barro Prof. Ronald W. Jones

Prof. Michael Bliss Dr. Jerry Jordan

Prof. James M. Buchanan† Prof. Ross McKitrick

Prof. Jean-Pierre Centi Prof. Michael Parkin

Prof. John Chant Prof. F.G. Pennance*

Prof. Bev Dahlby Prof. Friedrich Schneider

Prof. Erwin Diewert Prof. L.B. Smith

Prof. Stephen Easton Prof. George Stigler*†

Prof. J.C. Herbert Emery Mr. Vito Tanzi

Prof. Jack L. Granatstein Sir Alan Walters

Prof. Herbert G. Grubel Prof. Edwin G. West*

Prof. Friedrich A. Hayek* †

^{*} deceased

[†] Nobel Laureate