National Health Expenditure Trends, 1975 to 2015

Report

October 2015

Spending and Health Workforce

Canadian Institute for Health Information

Institut canadien d'information sur la santé

Our Vision

Better data. Better decisions.
Healthier Canadians.

Our Mandate

To lead the development and maintenance of comprehensive and integrated health information that enables sound policy and effective health system management that improve health and health care.

Our Values

Respect, Integrity, Collaboration, Excellence, Innovation

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Key findings

National Health Expenditure Trends, 1975 to 2015 — the Canadian Institute for Health Information's 19th annual health expenditure trends publication — provides detailed, updated information on health expenditure in Canada.

Total health expenditure expected to reach $219.1 billion or $6,105 per Canadian in 2015

- It is anticipated that, overall, health expenditure will represent 10.9% of Canada's gross domestic product (GDP) in 2015, a share that has fallen gradually in the past few years, following the recession in 2009. The current trend of a declining health-to-GDP ratio, viewed in the context of the last 40 years, appears similar to that experienced in the mid-1990s.

In 2015, rate of growth in health spending per capita expected to be less than rates of inflation and population growth combined

- A new period is emerging, with health spending growth not keeping pace with inflation and population growth (combined). Since 2011, health spending has decreased by an average of 0.6% per year — comparable with decreases during the mid-1990s. It reflects, in large part, Canada's modest economic growth and fiscal restraint as governments focus on balancing budgetary deficits.

Slower growth in hospital, drug and physician spending

- Hospitals (29.5%), drugs (15.7%) and physician services (15.5%) continue to account for the largest shares of health dollars (more than 60% of total health spending). Although spending continues to grow in all 3 categories, the pace has slowed in recent years.
- Since 2007, physician spending as a share of total health care spending has increased. The estimated share for 2015 (15.5%) has recovered to levels comparable to those in the late 1980s.

Provincial/territorial per capita health expenditures vary

- In 2015, total health expenditure per capita is expected to range from $7,036 in Newfoundland and Labrador and $6,966 in Alberta to $5,665 in Quebec and $5,875 in British Columbia.

Canada's health care per capita spending in the top quartile internationally

- Among 29 countries that had comparable accounting systems in the Organisation for Economic Co-operation and Development (OECD) in 2013, the latest year for which data is available, spending per person on health care remained highest in the United States (US$9,086). Canada was in the top quartile of countries in terms of per-person spending on health, at US$4,569 — less than Denmark (US$4,847) and more than France (US$4,361), Australia (US$4,115) and the United Kingdom (US$3,364).

About this report

National Health Expenditure Trends, 1975 to 2015 provides an overview of how much is spent on health care annually, in what areas money is spent and on whom, and where the money comes from. It features comparative expenditure data at the provincial/territorial and international levels, as well as Canadian health spending trends from 1975 to the present.

Companion products to the *National Health Expenditure Trends, 1975 to 2015* report are available on CIHI's website at www.cihi.ca/nhex:

- National Health Expenditure Trends, 1975 to 2015: Data Tables (.xlsx)
- National Health Expenditure Trends, 1975 to 2015: Methodology Notes (.pdf)
- National Health Expenditure Trends, 1975 to 2015: Infographics
- National Health Expenditure Trends, 1975 to 2015: Chartbook (.pptx)
- National Health Expenditure Trends, 1975 to 2015: Briefing Deck (.pptx)

Please note that, throughout the report (including text and figures), numbers may not add up to the total due to rounding.

Please send feedback and questions to the National Health Expenditure Database (NHEX) team at nhex@cihi.ca.

CIHI expresses its gratitude to the National Health Expenditure Expert Advisory Group for its advice and constructive comments related to national health expenditures:

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- Jeremiah Hurley, PhD, McMaster University
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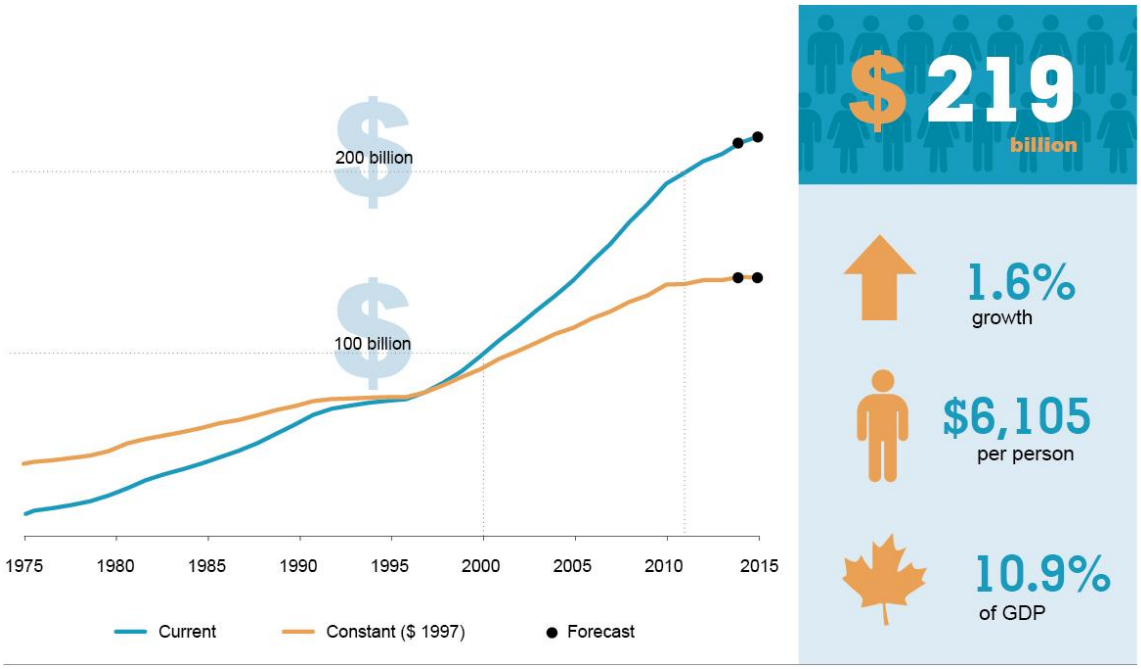
- Livio Di Matteo, PhD, Lakehead University
- Michael Wolfson, PhD, University of Ottawa
- Michael Hunt, Director, Health Spending and Strategic Initiatives, CIHI
- Brent Diverty, Vice President, Programs, CIHI

Overview of health spending in Canada

Total health expenditure is expected to amount to $6,105 per Canadian in 2015

Health spending in Canada is projected to reach $219.1 billion, representing 10.9% of Canada's GDP in 2015. This amounts to $6,105 per Canadian.



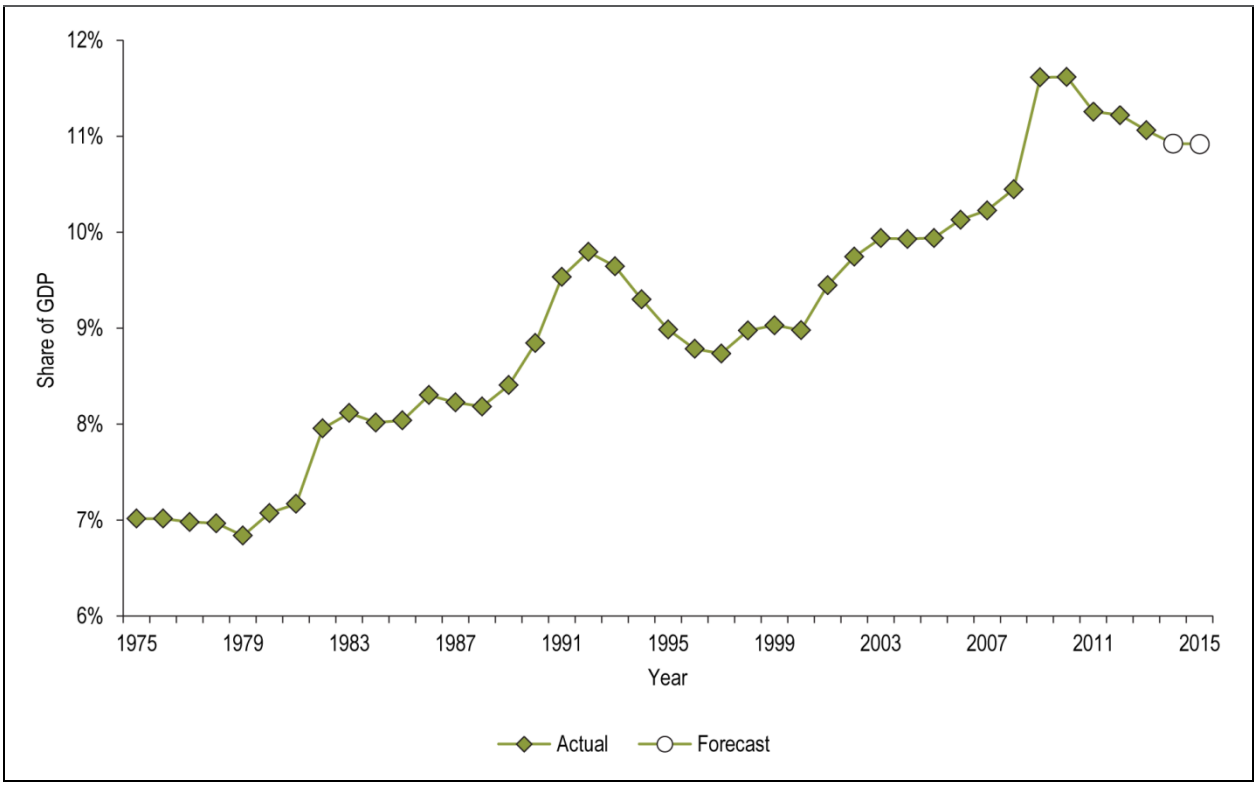
Source
National Health Expenditure Database, Canadian Institute for Health Information.

Total health expenditure growth in 2015 is forecast to be 1.6%.

Health as a share of GDP has fallen since the 2009 recession

It is anticipated that, overall, health expenditure will represent 10.9% of Canada's GDP in 2015, a share that has fallen gradually in the past few years, following the recession in 2009. The current trend, viewed in the context of the last 40 years, appears similar to that experienced in the mid-1990s (Figure 1).

Figure 1: Total health expenditure as a percentage of GDP, Canada, 1975 to 2015



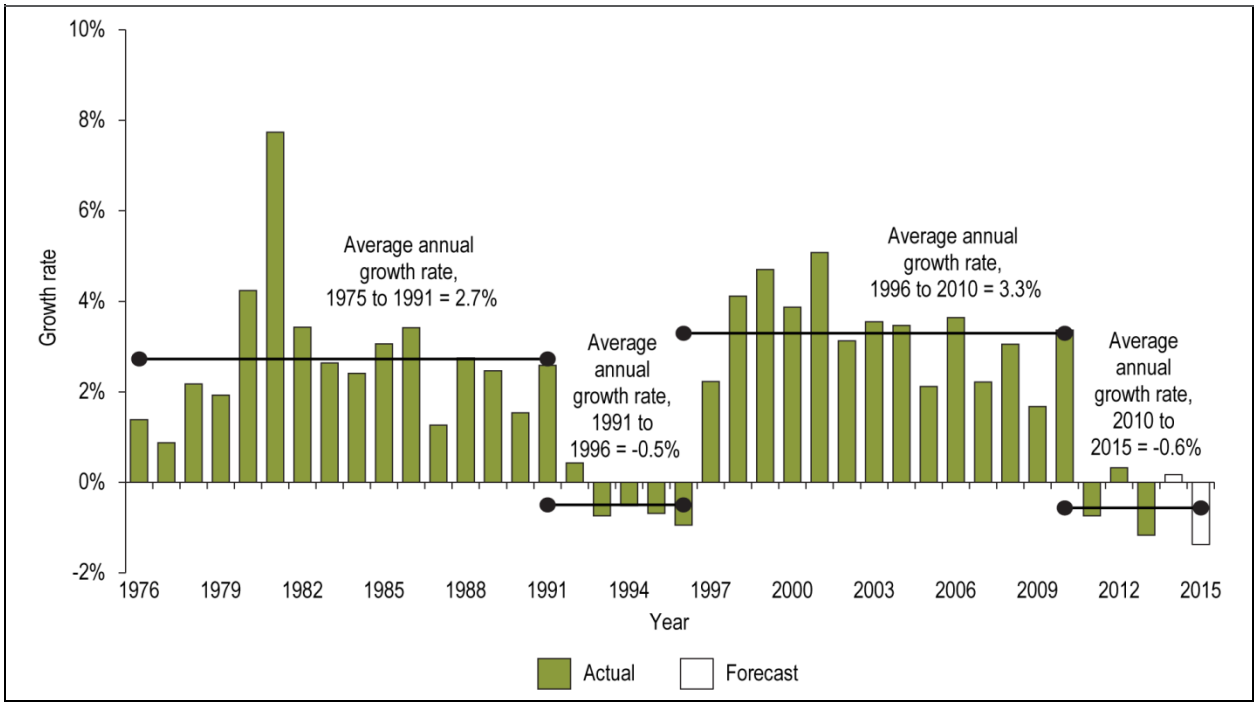
Note
See data table A.1.
Source
National Health Expenditure Database, Canadian Institute for Health Information.

- **1975 to early 1990s:** Health expenditure grew during this period. Total health expenditure as a proportion of GDP was 7.0% in 1975. With GDP falling during the 1982 recession, the ratio of total health expenditure to GDP increased sharply, from 6.8% in 1979 to 8.1% in 1983. The ratio continued to increase significantly, reaching 9.8% for the first time in 1992 (Figure 1).
- **Mid-1990s:** As governments focused on fiscal restraint, total health expenditures grew more slowly than GDP between 1993 and 1997. Consequently, the health-to-GDP ratio fell each year in that period, reaching 8.7% in 1997.
- **Late 1990s to 2010:** Major investments were made in health care. Health expenditure grew faster than or close to GDP from 1998 to 2010, with the result that the health-to-GDP ratio trended upward. It peaked at 11.6% in 2010.
- **2011 to 2015:** Following the 2009 recession, governments have focused on restraining program spending to manage budgetary deficits. Health spending growth has been slower than the growth in the overall economy. Consequently, the health-to-GDP ratio has declined from 11.6% to an estimated 10.9%.

In 2015, the rate of growth in health spending per capita is forecast to be less than the rates of inflation and population growth combined

After accounting for inflation and population growth, total health expenditure in 2015 is expected to decline by 1.4%. A new period has emerged, with health spending growth not keeping pace with inflation and population growth (combined). Since 2010, health spending has decreased by an average of 0.6% per year (Figure 2), comparable with the rate during the mid-1990s. It reflects, in large part, Canada's modest economic growth and fiscal restraint as governments focus on balancing budgetary deficits.

Figure 2: Total health expenditure per capita, annual growth rates,* Canada, 1976 to 2015



Notes

* Calculated using constant 1997 dollars.

See data table A.1.

Source

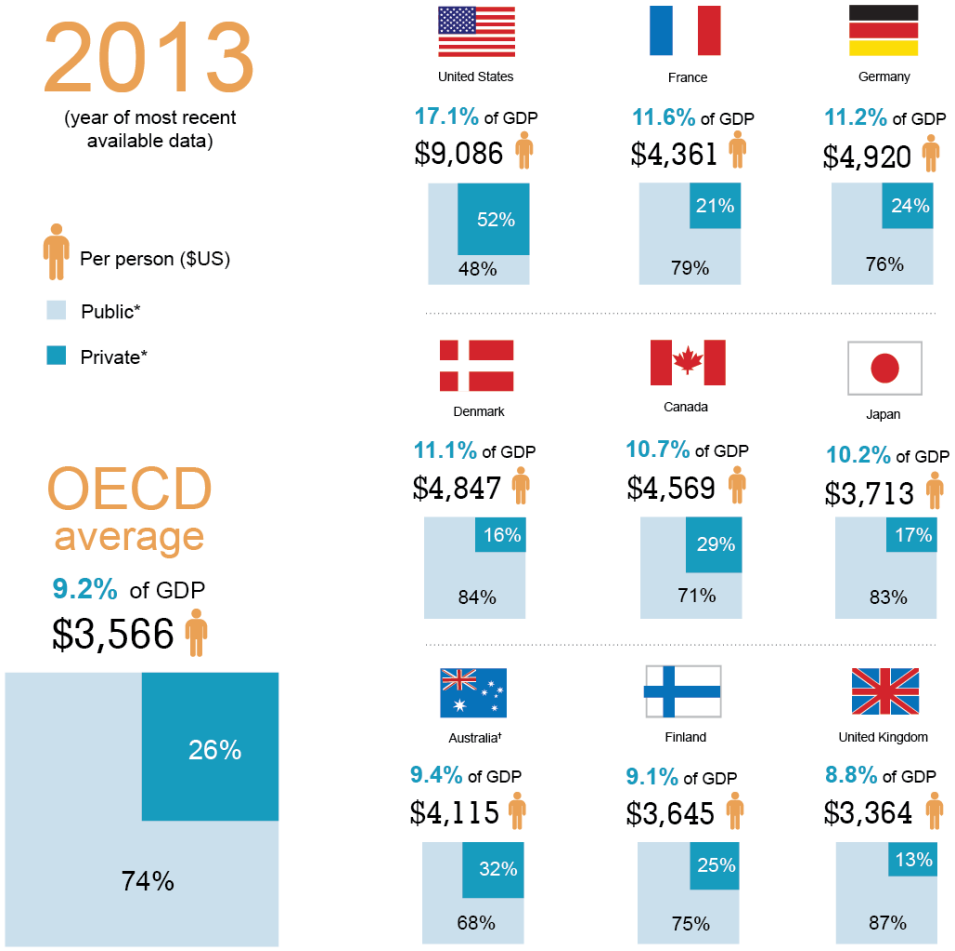
National Health Expenditure Database, Canadian Institute for Health Information.

- **1975 to 1991:** This was a period of sustained growth in health spending. The average annual growth rate was 2.7%, with a spike of spending growth in the early 1980s.
- **Mid-1990s:** Total health expenditure declined by an annual average rate of 0.5% during this period of fiscal restraint.
- **Late 1990s to 2010:** This period of reinvestment in health care saw health spending increase by an average rate of 3.3% per year.
- **2011 to 2015:** In this period of fiscal restraint, total health expenditure has declined by an annual average rate of 0.6%.

International comparisons

Canada is among the top quartile spenders in the OECD

Among 29 countries that had comparable accounting systems in the Organisation for Economic Co-operation and Development (OECD) in 2013, the latest year for which data is available, spending per person on health care remained highest in the United States (US$9,086). Canada was in the top quartile of countries in terms of per-person spending on health, at US$4,569 — less than Denmark (US$4,847) and more than France (US$4,361), Australia (US$4,115) and the United Kingdom (US$3,364).



Notes

* Total current expenditure (capital excluded).

† 2012 is the latest year available.

Source

OECD Health Statistics 2015 (June edition).

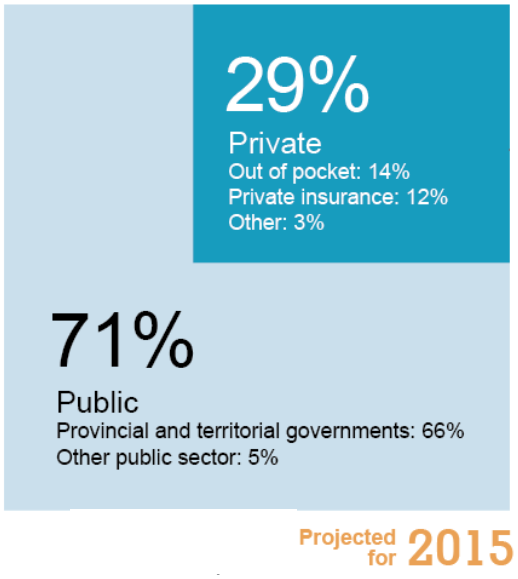
Since the start of the global economic recession in 2008, the ratio of health spending to GDP has stabilized or fallen in most OECD countries.

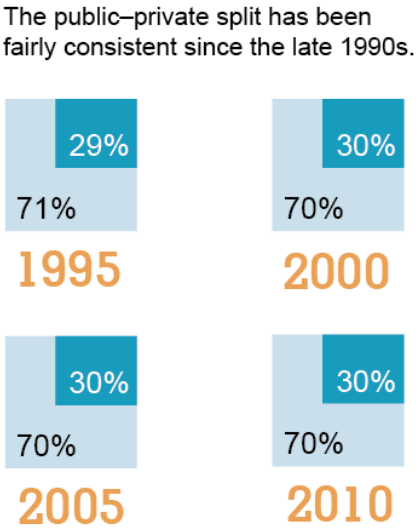
Total health expenditure by source of finance

About 70% of total health expenditure in 2015 will come from public-sector funding

Both the public and private sectors finance Canada's health system. Public-sector funding includes payments by governments at the federal, provincial/territorial and municipal levels and by workers' compensation boards and other social security schemes. Private-sector funding consists primarily of health expenditures by households and private insurance firms.

Provincial and territorial government spending on health is expected to account for 66% of total health expenditure in 2015.[i] Another 5% will come from other parts of the public sector: federal direct government, municipal government and social security funds. Since 1997, the public-sector share of total health expenditure has remained relatively stable at around 70%.





Source
National Health Expenditure Database, Canadian Institute for Health Information.

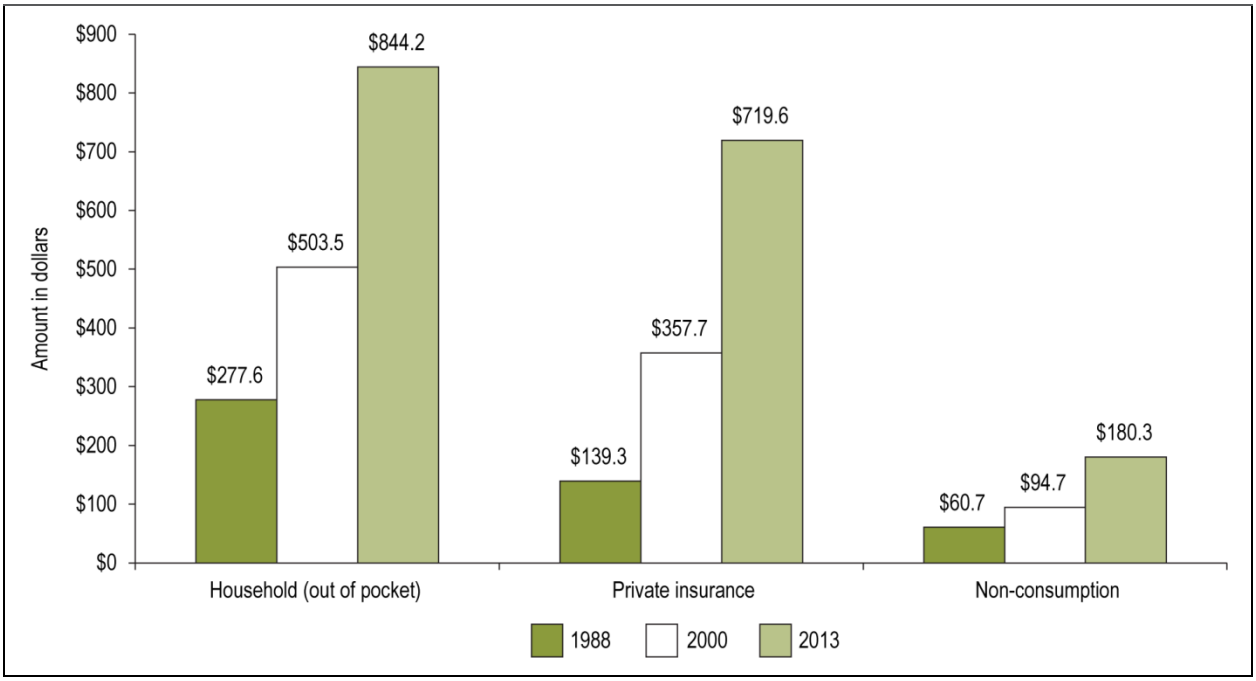
i. National health expenditures are reported based on the principle of *responsibility for payment* rather than on the original source of the funds. It is for this reason, for example, that federal health transfers to the provinces/territories are contained within the provincial government sector, since it is the responsibility of provincial/territorial governments to expend federal transfers on health services.

It is estimated that private-sector spending will account for 29.3% of total health expenditure in 2015. The private sector was made up of 3 spending categories, the largest of which was out-of-pocket spending (14.2%), followed by private health insurance (11.9%) and non-consumption[ii] (3.2%).

Out-of-pocket health expenditure exceeds $800 per person

Out-of-pocket health expenditure per person has increased from $278 in 1988 (the first year for which data at this level of detail was available) to $844 in 2013, representing a 4.5% annual growth rate. Private health insurance expenditure per person has increased from $139 to $720 over the same period, a 6.8% annual growth rate (Figure 3).

Figure 3: Private-sector health expenditure per capita, source of finance, Canada, 1988, 2000 and 2013

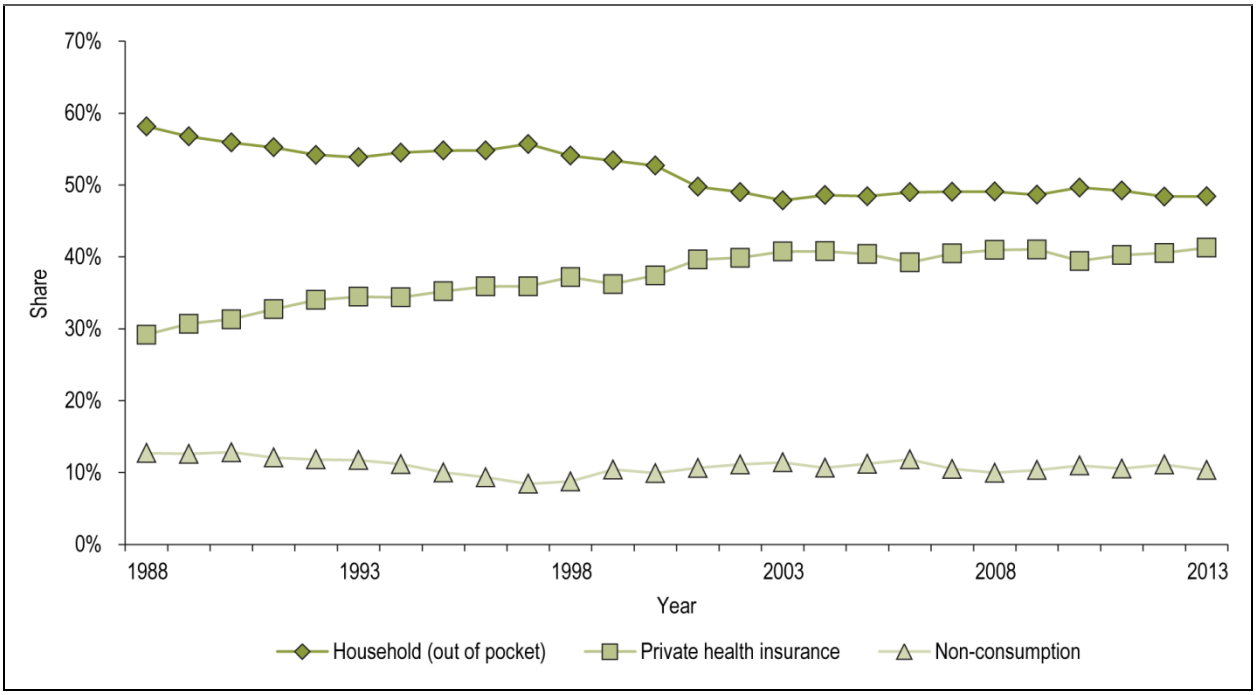


Source
National Health Expenditure Database, Canadian Institute for Health Information.

In 2013, out-of-pocket expenditure accounted for 48.4% of private-sector expenditure, down from 58.1% in 1988. Private health insurance expenditure has grown more rapidly than out-of-pocket spending. As a result, the share of private health insurance has steadily increased, reaching 41.3% in 2013, up from 29.2% in 1988 (Figure 4).

ii. Non-consumption expenditure includes a number of diverse components, such as hospital non-patient revenue, capital expenditures for privately owned facilities and health research.

Figure 4: Share of private-sector health expenditure by source of finance, Canada, 1988 to 2013



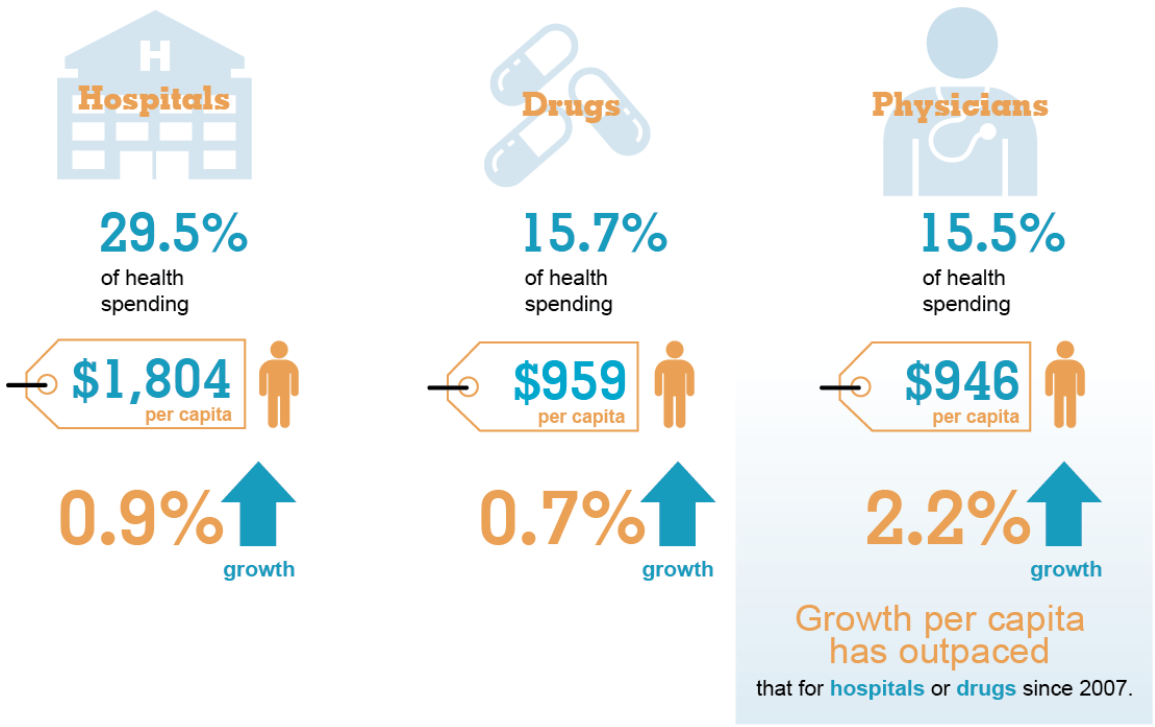
Source
National Health Expenditure Database, Canadian Institute for Health Information.

Total health expenditure by use of funds

There's slower growth in hospital, drug and physician spending

Hospitals (29.5%), drugs (15.7%) and physician services (15.5%) continue to account for the largest shares of health dollars (more than 60% of total health spending). Although spending continues to grow in all 3 categories, the pace has slowed in recent years.

- **Hospital** spending will grow by an estimated 0.9% in 2015, reaching $1,804 per person. This is the lowest rate of growth since the late 1990s. The majority (more than 60%) of hospital expenditure is spent on compensation for the hospital workforce.
- **Drug** expenditure is projected to be $959 per person, an increase of 0.7% in 2015. The restrained growth in drug expenditure in recent years has been due to jurisdictions introducing generic pricing control policies, patent expirations and fewer new drugs emerging on the market.
- **Physician** spending is forecast to be $946 per person in 2015 — a growth rate of 2.2% from last year. The growth of physician expenditure has outpaced that of hospitals or drugs since 2007, due in part to more rapid growth in the supply of physicians and increases in fees.



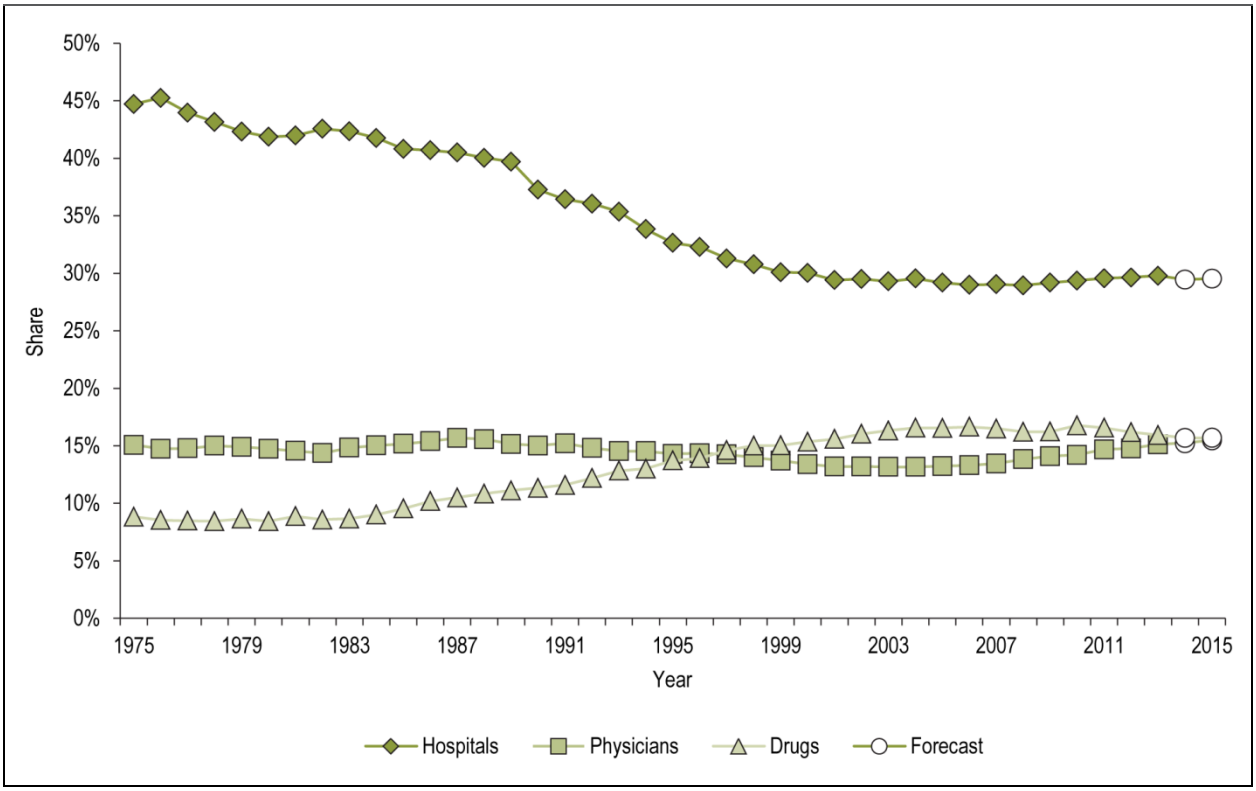
Source
National Health Expenditure Database, Canadian Institute for Health Information.

Physician expenditure has accounted for a larger share of the total since 2007

The shares of health expenditure have changed over time for the 3 largest spending categories: hospitals, physicians and drugs (Figure 5).

- The **hospital** spending share has decreased from 45% of total health expenditure in the mid-1970s to an estimated 29.5% in 2015. However, this share has been stable since 2001.
- The **drug** expenditure share has been increasing since the mid-1980s, and it has accounted for the second-largest share (15.7% in 2015), after hospital spending, since 1997.
- **Physician** spending as a percentage of total health expenditure started edging down in 1988. However, this trend reversed in the mid-2000s. Since 2007, physician spending as a share of total health care spending has increased. In 2015, the estimated share, at 15.5%, has recovered to levels comparable with those in the late 1980s.

Figure 5: Total health expenditure, share of selected use of funds, Canada, 1975 to 2015

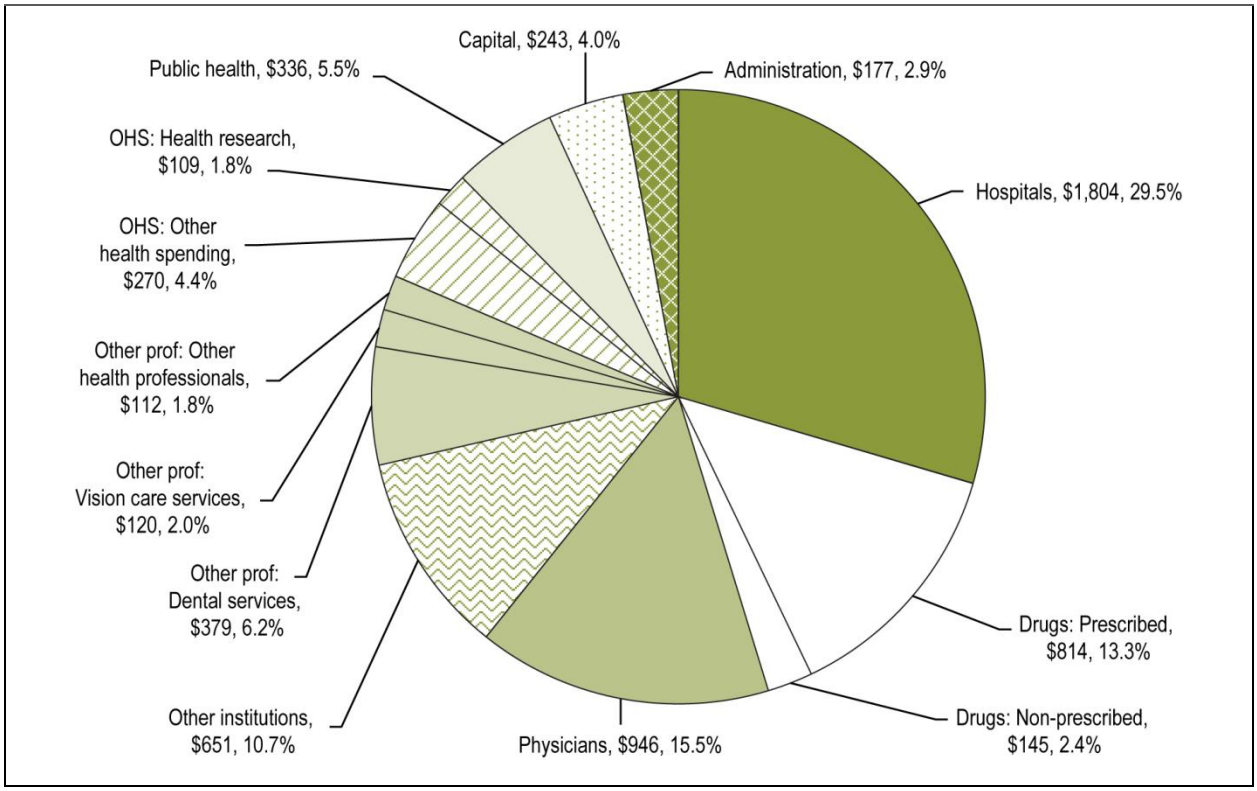


Note
See data table A.3.1.2.
Source
National Health Expenditure Database, Canadian Institute for Health Information.

After hospitals, drugs and physicians, about 40% is spent on other health care goods and services

Health dollars are used to purchase health care goods and services, to provide capital investment, to administer public and private insurance plans as well as public-sector health programs, and to fund research. These uses are grouped into major categories (uses of funds) throughout most of the national health expenditure data series. Of the remaining 40% of health expenditure, long-term care (Other) institutions will account for an estimated 10.7% of the total in 2015, while allied health professionals (Dental, Vision, Other) will account for about 10.0% (Figure 6).

Figure 6: Total health expenditure per capita by use of funds, Canada, 2015[f] (dollars and percentage share)

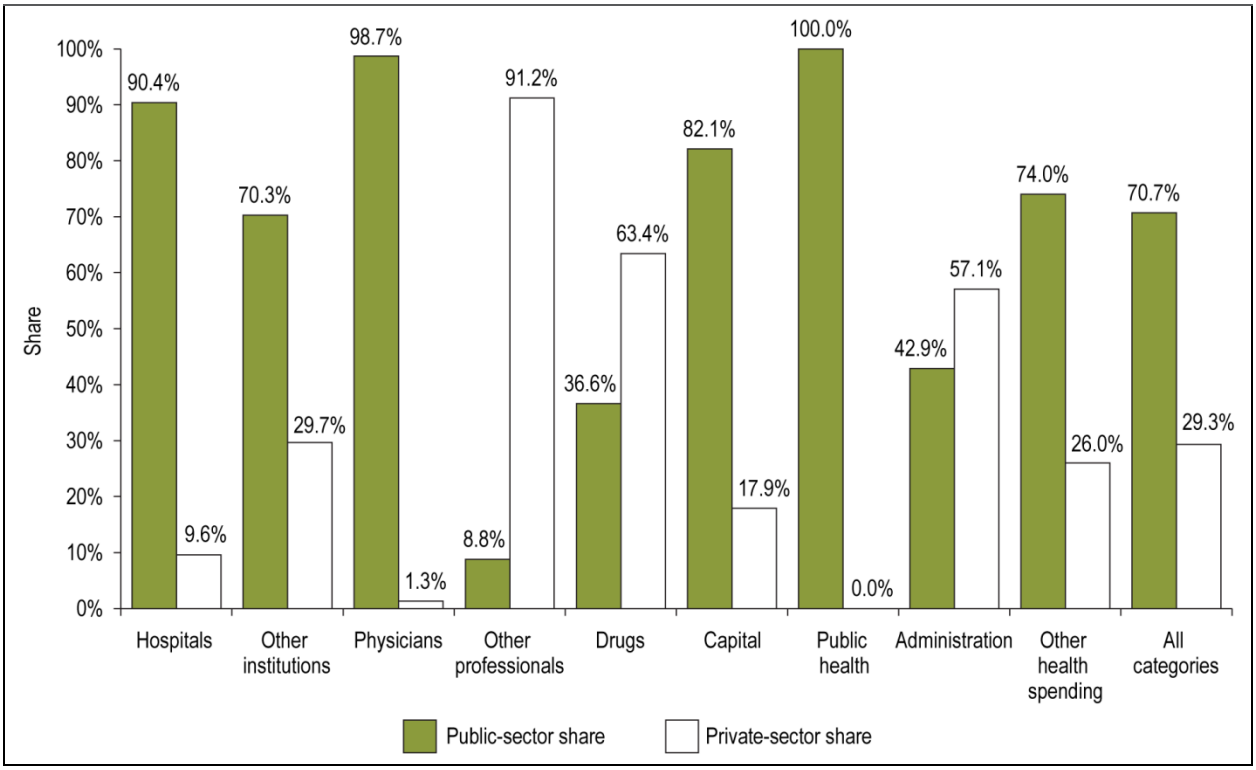


Notes
f: Forecast.
See data tables A.3.1.2 and A.3.1.3 and the Methodology Notes for definitions.
Source
National Health Expenditure Database, Canadian Institute for Health Information.

Financing of health care goods and services differs

Services covered under the *Canada Health Act*, such as hospitals and physicians, are financed mainly by the public sector, while drugs and other professionals are financed primarily from private-sector sources (Figure 7).

Figure 7: Public and private shares of total health expenditure, by use of funds, Canada, 2015[f]



Notes
f: Forecast.
See data tables C.2.4 and C.3.4 and the Methodology Notes for definitions.
Source
National Health Expenditure Database, Canadian Institute for Health Information.

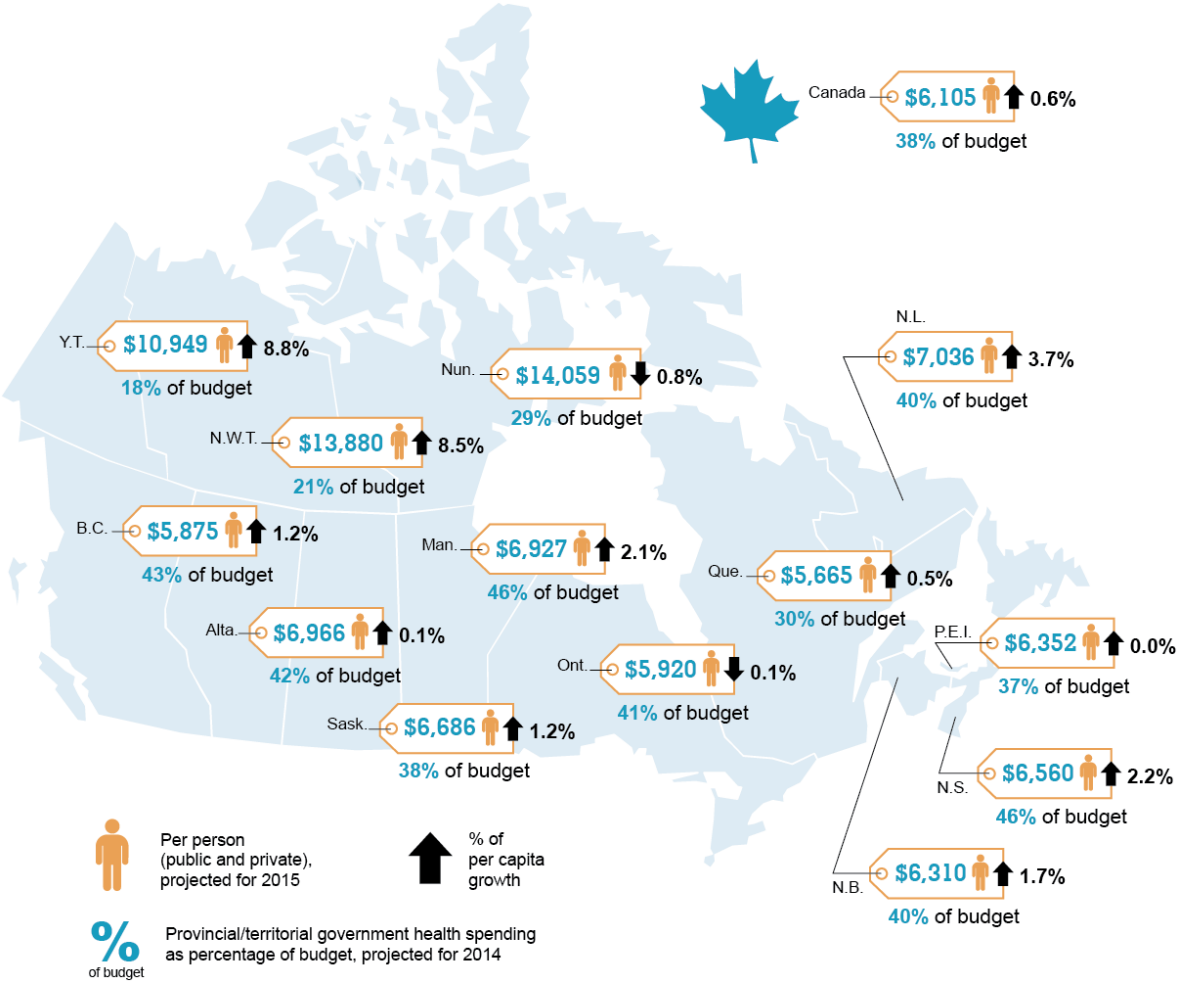
Health expenditure in the provinces and territories

Provincial/territorial health expenditures vary

Health expenditure per capita varies among provinces/territories in part because of different age distributions.[iii] Population density and geography also affect health expenditure, particularly in the case of the territories. Other factors that affect health expenditure include population health needs, the manner in which health care is delivered (including the balance between institutional and ambulatory care) and differences in the remuneration of health care workers across the country. The manner in which health care is financed is also an important consideration, including the degree of public coverage and private insurance for services not included in the *Canada Health Act*.

iii. Provincial/territorial comparisons in this discussion are based on figures that are not adjusted for variations in age and sex.

Health expenditure per capita is highest in the territories because of, among other things, their large geographical areas and low populations. In the provinces in 2015, total health expenditure per capita is forecast to range from $7,036 in Newfoundland and Labrador and $6,966 in Alberta to $5,665 in Quebec and $5,875 in British Columbia.



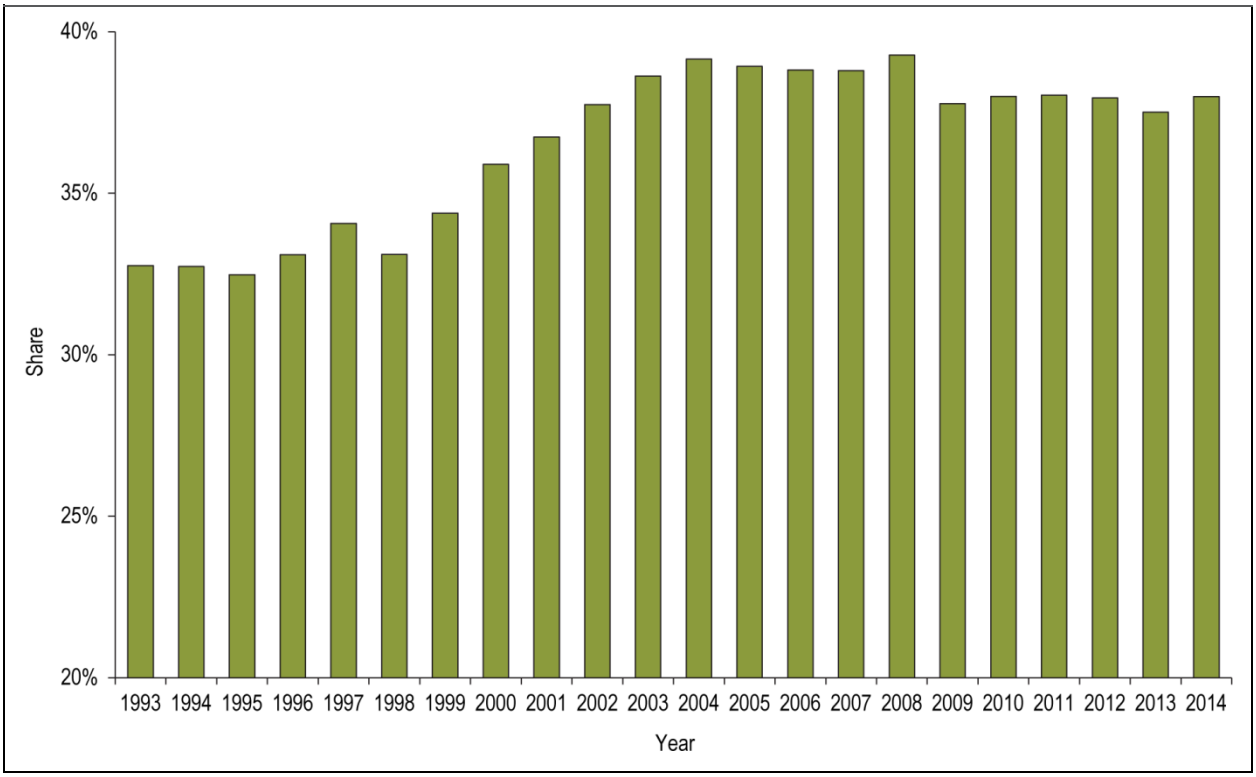
Source
National Health Expenditure Database, Canadian Institute for Health Information.

The companion chartbook to this report presents trends for each province and territory.

Health spending as a share of total program spending has stabilized

Since 2009, health expenditures as a share of total provincial/territorial government program expenditures (health, education, transportation/communication and social services) have stabilized at around 38% (Figure 8).

Figure 8: Provincial/territorial government health expenditure as a proportion of total provincial/territorial government programs, Canada, 1993 to 2014



Note

Financial Management System data is estimated for 2009 to 2014.

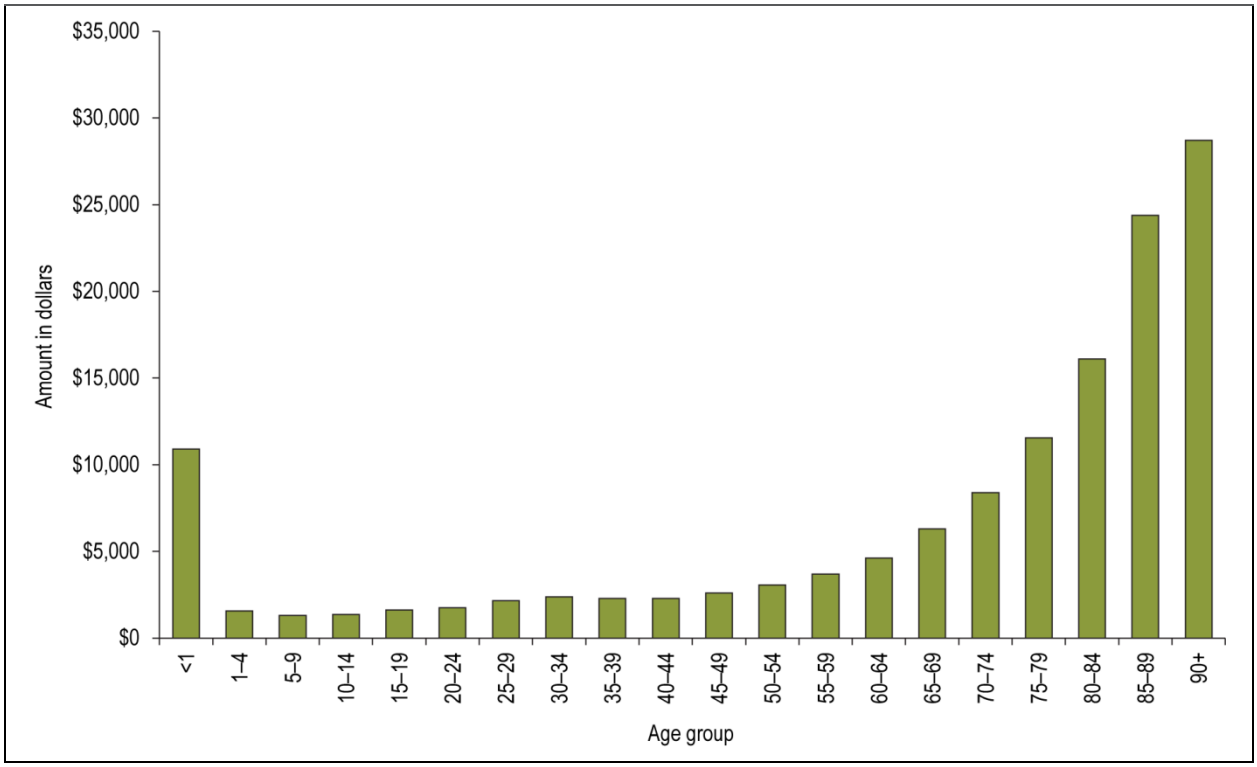
Sources

National Health Expenditure Database, Canadian Institute for Health Information; Financial Management System, Statistics Canada; provincial public accounts, budgets, main estimates.

Provincial/territorial government health spending differs among population groups

Per capita health care spending by provincial and territorial governments is highest for seniors and infants (Figure 9). In 2013 (the latest available year for data broken down by age group), the cost for Canadians younger than age 1 was an estimated $10,897 per person, on average. For youths age 1 to 14, per-person average spending on health was $1,408; the equivalent for those age 15 to 64 was $2,637 and $11,598 for those 65 and older.

Figure 9: Provincial/territorial government health expenditure per capita, by age group, Canada, 2013



Note
See data table E.1.16.2.
Source
National Health Expenditure Database, Canadian Institute for Health Information.

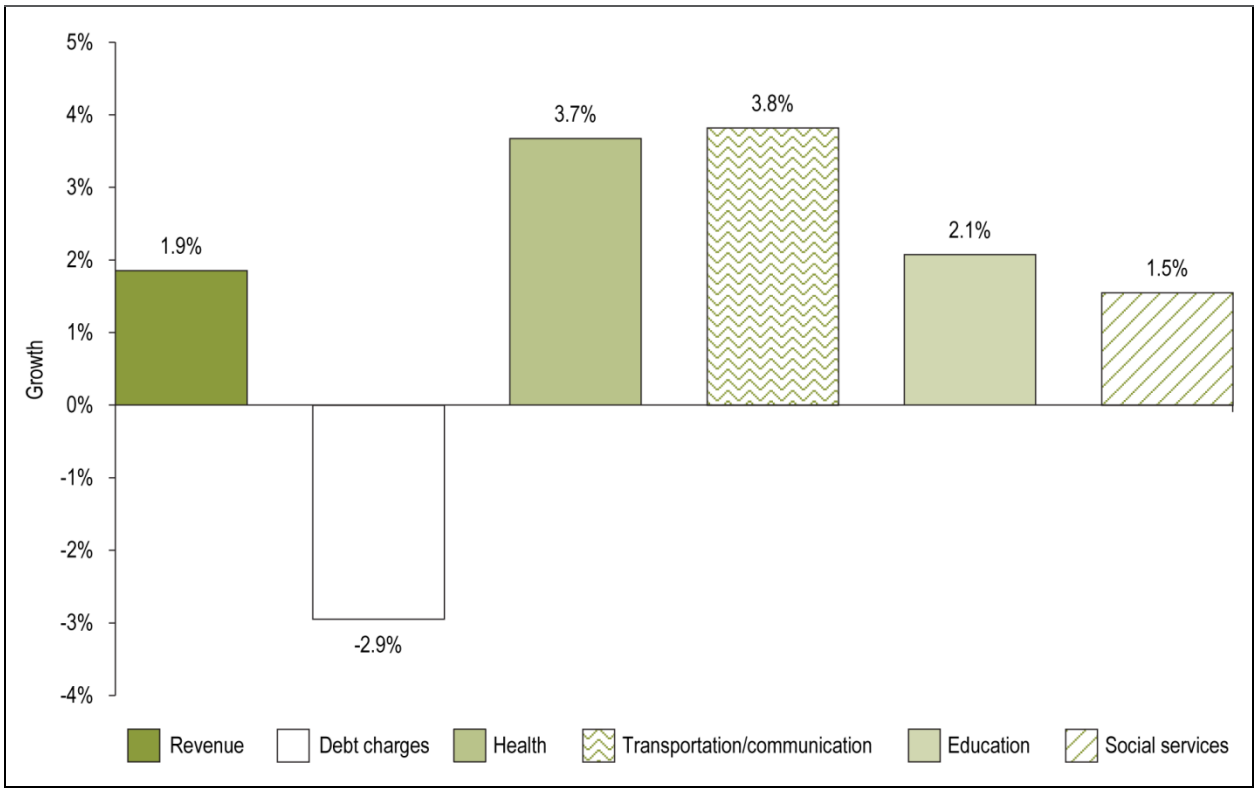
The companion data tables (Series E) for this report present results for each province/territory and age group, back to 1996.

Analysis

Governments' fiscal position influences health spending trends

From the late 1990s and through the last decade, public-sector health spending grew faster than government revenue. However, spending growth in other major sectors, including transportation/communication and education, also exceeded revenue growth. This was a result of the fiscal dividend that governments earned through eliminating deficits and bringing down debt loads in the 1990s, thereby reducing — quite substantially — the interest they had to pay on outstanding debt in the years following. However, not all of the fiscal dividend was invested in government programs such as health care. Some of the dividend was returned to Canadians in the form of major tax cuts, thus also explaining the relatively weak growth of government revenues during the decade (Figure 10).

Figure 10: Provincial/territorial government spending growth (health, transportation/ communication, education and social services) compared with revenue and debt charges, average annual real per capita growth, Canada, 1998 to 2009

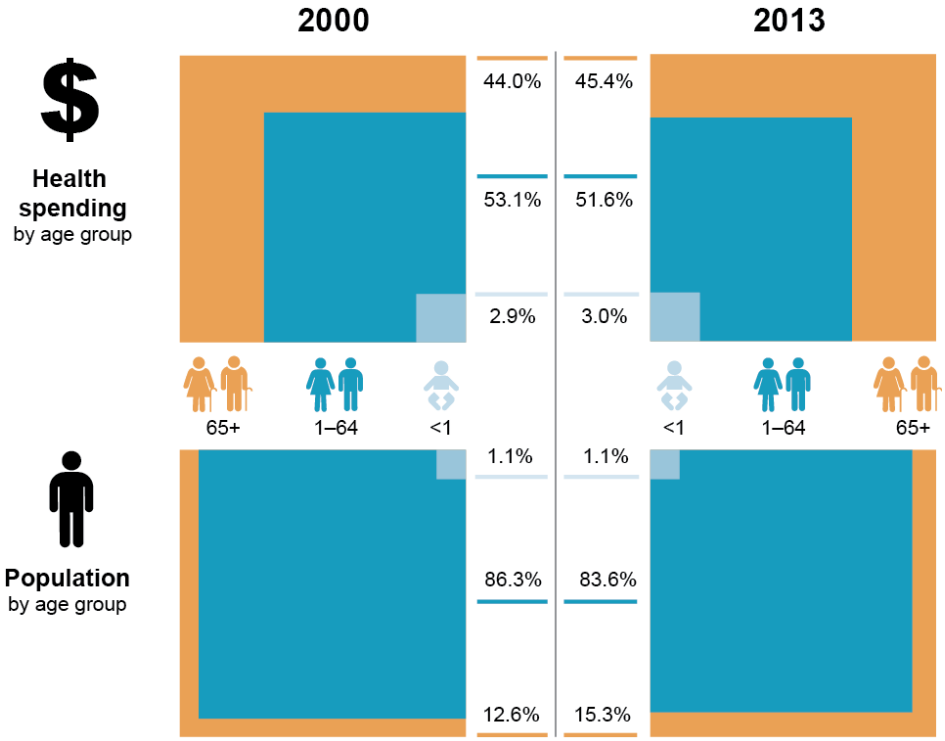


In the wake of the global recession in 2008, and with the return of large provincial/territorial fiscal deficits and lower GDP growth, the foundation for a fiscal dividend has not continued.

Spending is highest on seniors but population aging is a modest cost driver

While Canadians age 65 and older account for about 15% of the Canadian population, they consume more than 45% of all public-sector health care dollars spent by provinces and territories. However, seniors are a diverse group. In 2013 (the latest available year for data broken down by age group), per-person spending for seniors increased with age: $6,298 for those age 65 to 69, $8,384 for those 70 to 74, $11,557 for those 75 to 79, and $20,917 for those 80 and older.

Overall, population aging is a modest driver of increasing health care costs, estimated at 0.9% per year. The share of public-sector health care dollars spent on Canadian seniors has not changed significantly over the past decade — from 44.0% in 2000 to 45.4% in 2013. During the same time period, the percentage of seniors in the population grew from 12.6% to 15.3%.



Source
National Health Expenditure Database, Canadian Institute for Health Information.

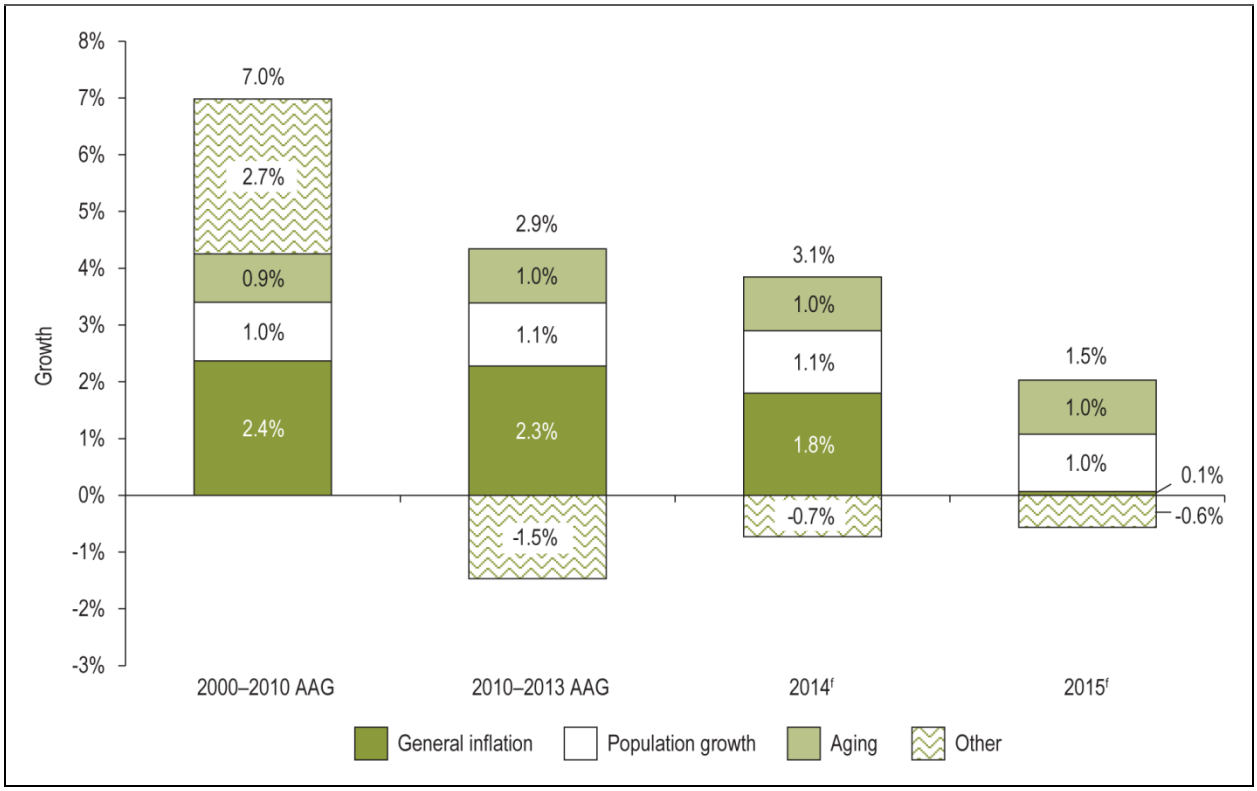
Health care cost drivers

In November 2011, CIHI published a special report titled *Health Care Cost Drivers: The Facts.*, which shed light on the underlying factors influencing health care costs.[1–4] The report examined growth in public-sector health care spending from 1998 to 2008 in relation to macroeconomic factors such as fiscal capacity and growth in GDP. As well, the major spending categories of hospitals, drugs and physicians were analyzed. The analysis used a common analytical framework that focused on price effects, demographics (population growth and aging) and other effects, such as volume and mix of services, technology and innovation.

Price effects have been a significant driver of overall health spending.[iv] Population growth added, on average, 1.0 to 1.1 percentage points per year to public-sector health care spending, while population aging, at 0.9 to 1.0 percentage points per year, added even less to the total growth (Figure 11). Demographic factors (both population growth and population aging), estimated at 2% combined, have been a relatively modest contributor to the growth in health spending in the last decade. However, these 2 factors vary considerably among provinces and territories.

The Other category (see Figure 11) includes all other factors as a residual, such as health-sector inflation above the rate of general inflation, health system efficiency, and changes in technology and service utilization.

Figure 11: Cost driver shares of average annual growth in public-sector health spending, 2000 to 2010 and 2010 to 2013, compared with annual growth in 2014 and 2015



Notes
AAG: Average annual growth.
f: Forecast.
Health spending data by age and sex is available up to 2013.
Sources
National Health Expenditure Database, Canadian Institute for Health Information; GDP, Statistics Canada.

iv. Since no ideal measure of inflation for the entire health care sector exists, economy-wide inflation was used for the purpose of the cost drivers study.

Issues to monitor in the future

Health care system policy- and decision-makers will continue to be challenged to innovate in order to reform the way health care is provided. The following key issues must be considered as the health care system evolves to better serve the needs of Canadians.

- **Weaker prospects for economic growth**, combined with fiscal deficits and less savings from debt service charges, would have a dampening effect on the future growth of health spending.
- **Changes in the growth of the Canada Health Transfer**, starting in 2017–2018, may affect provincial/territorial government health care spending. In the past, increases in federal transfers were reflected primarily in increased expenditures by provincial and territorial governments.
- **As the population continues to age**, decision-makers will be faced with the challenge of determining the levels of care (hospital, long-term institutional and community) for older Canadians that balance access to and quality and appropriateness of care with the cost of care.
- **Managing health-specific price inflation** for core medicare goods and services — including doctors, nurses, other health care professionals and advanced diagnostics — will be a challenge. There has been a recent trend for public drug programs to regulate generic drug prices as a percentage of the equivalent brand name product (these prices are often applied by private drug programs as well).
- **More services and increased use** would contribute to a rise in health expenditure. Recent examples include growth in the number of physicians and physician compensation, and expansion of hospital services, such as hip and knee replacements and diagnostic imaging.
- **Innovation in and reform of health care** in Canada continue to evolve. Shifting care from an inpatient to an outpatient setting presents potential cost savings. Substituting generic drugs for more expensive brand name drugs may present some cost savings in drug spending. Many non-physician health professionals are expanding or changing their scope of practice by offering services previously delivered by another provider but at a lower cost. The possibility of technological change could create cost savings due to process efficiency or could generate cost increases due to new or expanded diagnostic services and treatments.

References

1. Canadian Institute for Health Information. *Health Care Cost Drivers: The Facts*. 2011.
2. Canadian Institute for Health Information. *Hospital Cost Drivers Technical Report: What Factors Have Determined Hospital Expenditure Trends in Canada?* 2012.
3. Canadian Institute for Health Information. *Drivers of Prescription Drug Spending in Canada*. 2012.
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