



Summary Report

Physicians in Canada, 2015



Canadian Institute
for Health Information

Institut canadien
d'information sur la santé

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Highlights

This report contains information on the supply of physicians in Canada, as well as on service utilization and payments administered through the provincial and territorial medical care plans. Data on the supply, demographics and mobility of physicians is as of December 2015. The service utilization and payments data is for fiscal year 2014–2015.

For the ninth year in a row, the number of physicians and the number of physicians per population increased.

- In 2015, there were 82,198 physicians in Canada, representing a 2.9% increase over 2014.
- Between 2011 and 2015, growth in the number of physicians outpaced population growth threefold, resulting in 228 physicians per 100,000 population in 2015.
- Based solely on the number of MD degrees currently being awarded by Canadian universities, the number of physicians is expected to continue to increase for the next several years.¹

The number of women in the physician workforce continues to rise, particularly among family physicians.

- Between 2011 and 2015, the number of female physicians increased by 23.7%, while the number of male physicians increased by 7.3%.
- By specialty, 44.6% of family medicine physicians and 35.1% of specialists were women in 2015. Across all provinces, women represented a larger proportion of family medicine physicians than of specialists.

Clinical payments to physicians increased 3.7% over the previous year.

- In 2014–2015, total clinical payments to physicians increased 3.7% over the previous year to \$25 billion; this is the second-lowest increase in clinical payments since CIHI began collecting aggregate alternative payment data in 1999.
- The average gross clinical payment per physician in 2014–2015 was \$339,000; this number remained virtually unchanged from 2013–2014. The average gross clinical payment per physician ranged from \$258,000 in Nova Scotia to \$366,000 in Alberta.
- This year, CIHI combined fee-for-service data with detailed alternative payment data and for the first time is able to report average gross clinical payments per physician by specialty for 8 provinces (Alberta and Saskatchewan excluded) and Yukon. The average gross clinical payment to family medicine physicians for these selected jurisdictions combined was just more than \$271,000, while the average gross payment per medical specialist was \$338,000 and that per surgical specialist was \$446,000.

Consultations and visits made up the majority of both services and payments.

- In 2014–2015, fee-for-service payments to physicians for clinical services were approximately \$16.4 billion. Consultations and visits accounted for 73% of services and 66% of payments to physicians, while procedures accounted for the balance (27% of services and 34% of payments).
- In 2014–2015, the average cost per service paid to physicians was \$62.23. Family physicians billed an average cost per service of \$45.61, while medical and surgical specialists billed an average of \$79.81 and \$87.26 per service, respectively.

More information

The following companion products to the *Physicians in Canada, 2015: Summary Report* are available on CIHI's website at www.cihi.ca/hhr:

- *Physicians in Canada, 2015: Chartbook* (.pptx)
- *A profile of physicians in Canada, 2015* (infographic; .pdf)
- *Supply, Distribution and Migration of Physicians in Canada, 2015: Data Tables* (.xlsx)
- *Supply, Distribution and Migration of Physicians in Canada, 2015: Quick Stats* (.xlsx)
- *Supply, Distribution and Migration of Physicians in Canada, 2015: Methodological Notes* (.pdf)
- *National Physician Database — Payments Data, 2014–2015* (.xlsx)
- *National Physician Database — Utilization Data, 2014–2015* (.xlsx)
- *National Physician Database Historical Data Series* (.xlsx)
- *National Physician Database Data Release, 2014–2015: Methodological Notes* (.pdf)
- *Physician Services Benefit Rates, 2014–2015: Methodological Notes* (.pdf)
- *Physician Services Benefit Rates, 2014–2015: Data Tables* (.xlsx)

The following Health Human Resources (HHR) product is also available at www.cihi.ca/hhr:

- *Regulated Nurses, 2015*

Feedback and questions are welcome at hhr@cihi.ca.

About CIHI's physician data

Collecting and reporting physician information assists decision-makers in the planning, distribution and funding of physicians. Information on the supply, distribution and migration of physicians from the data sources used in this report has been collected since 1970, and information on physician service utilization and payments has been collected since 1989. The Canadian Institute for Health Information (CIHI) has collected this information since its inception in 1994.

Starting in 2014, CIHI merged data from Scott's Medical Database and the National Physician Database into 1 report. This provides readers with 1 set of documents for all physician-related data on the supply of physicians, their payments and the services they provide. The report includes a series of related products:

- A summary report on physician supply, distribution, migration, payment and utilization information;
- Data tables in Excel to enable readers to conduct their own analyses;
- An infographic to visually showcase report highlights; and
- PowerPoint slides of key findings for use in presentations.

To ensure that our work reflects priority needs, we invite our readers to join the discussion using CIHI's Facebook page (www.facebook.com/CIHI.ICIS), Twitter account (twitter.com/CIHI_ICIS) or email (physicians@cihi.ca).

Any questions regarding this publication should be directed to

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Notes to readers

This report contains information on the supply of physicians in Canada as well as on their service utilization and payments that are administered through the provincial and territorial medical care plans. Data on the supply, demographics and mobility of physicians is as of December 2015. The service utilization and payments data is for fiscal year 2014–2015.

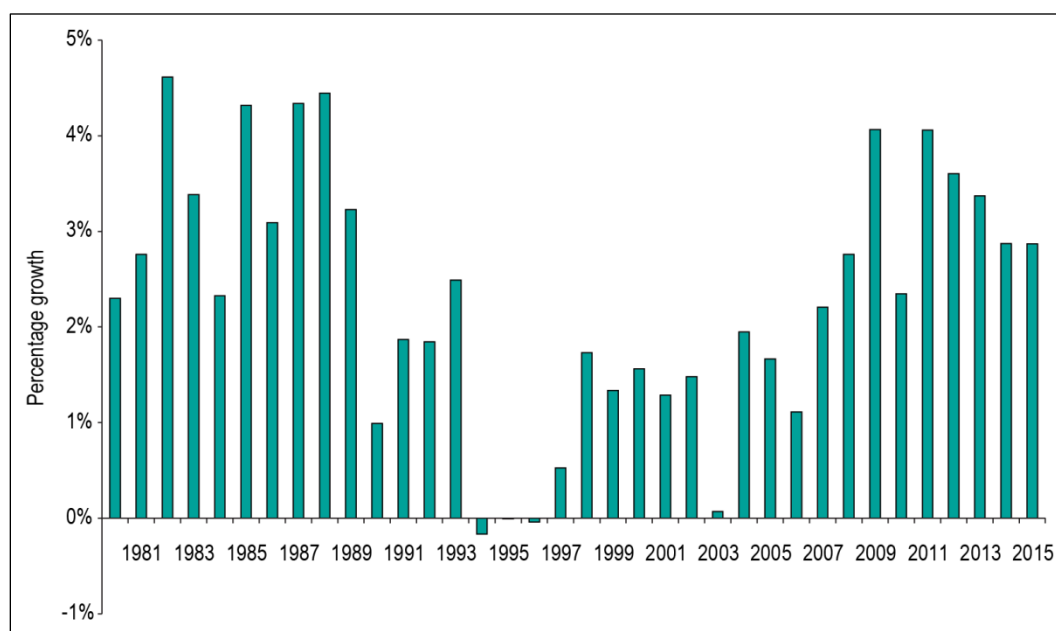
Report summary

How many physicians are there in Canada?

2015 saw the highest number of physicians ever recorded in Canada, and the increases are likely to continue.

- In 2015, there were 82,198 physicians in Canada, representing an increase of 2.9% over the previous year.
- Looking back, Canada has sustained yearly physician increases of more than 2% since 2007, with increases of more than 4% in 2009 and 2011. The increases over the past 10 years are reminiscent of the 1980s, which also saw large yearly increases (ranging from 2.3% to 4.6%) (see Figure 1).

Figure 1 Percentage growth in the supply of physicians, Canada, 1980 to 2015



Source

Scott's Medical Database, Canadian Institute for Health Information.

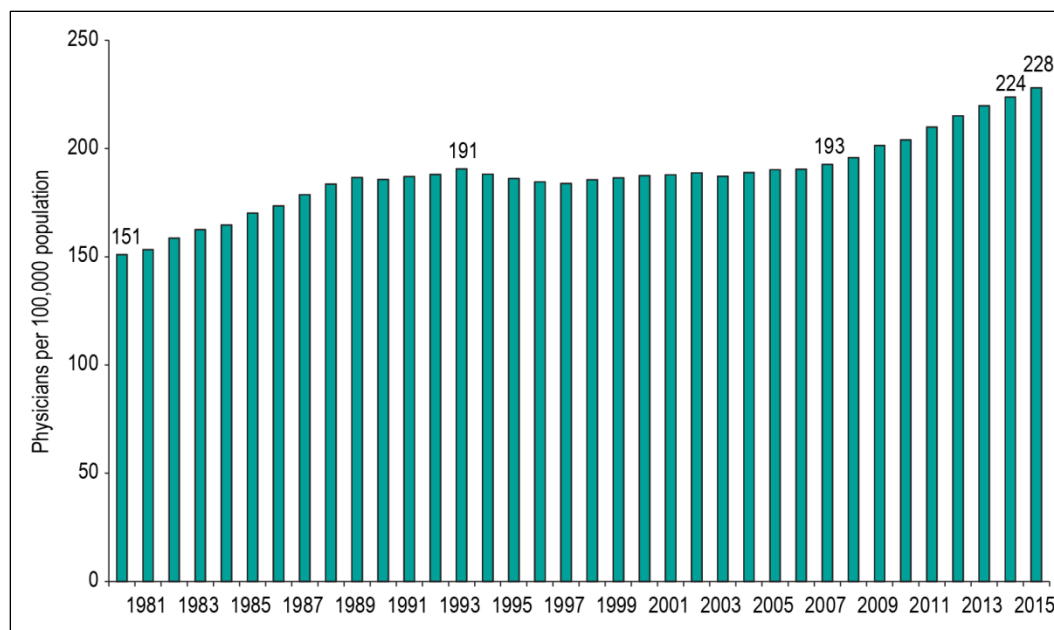
- In 2015, most provinces reported an increase in the number of physicians, with Alberta reporting the largest increase (5.2%). Newfoundland and Labrador and New Brunswick were the 2 jurisdictions reporting a decrease in the number of physicians (-1.7% and -3.1%, respectively).ⁱ
- Based solely on the number of MD degrees awarded by Canadian universities, the number of physicians is likely to continue to increase.
 - In 2015, Canadian universities awarded 2,817 MD degrees, representing an increase of 0.8% from the previous year.¹ Between 2011 and 2015, the number of MD degrees awarded in Canada increased by 11.5%.

i. 2 of the territories (Northwest Territories and Nunavut) did not have any increase in the number of physicians, while Yukon had the largest increase (9.7%). These numbers should be interpreted with caution, as the territories rely heavily on physicians who work on temporary arrangements to provide care, and data for these physicians is not included in our analysis.

Over the past 5 years (2011 to 2015), the number of physicians increased at a considerably faster rate than the population, resulting in more physicians per population than ever before (see Figure 2). In 2015, there were 228 physicians per 100,000 population.

- The Canadian population increased by 4.4% between 2011 and 2015, while the physician population increase was 13.3% — about 3 times the Canadian population increase.

Figure 2 Number of physicians per 100,000 population, Canada, 1980 to 2015



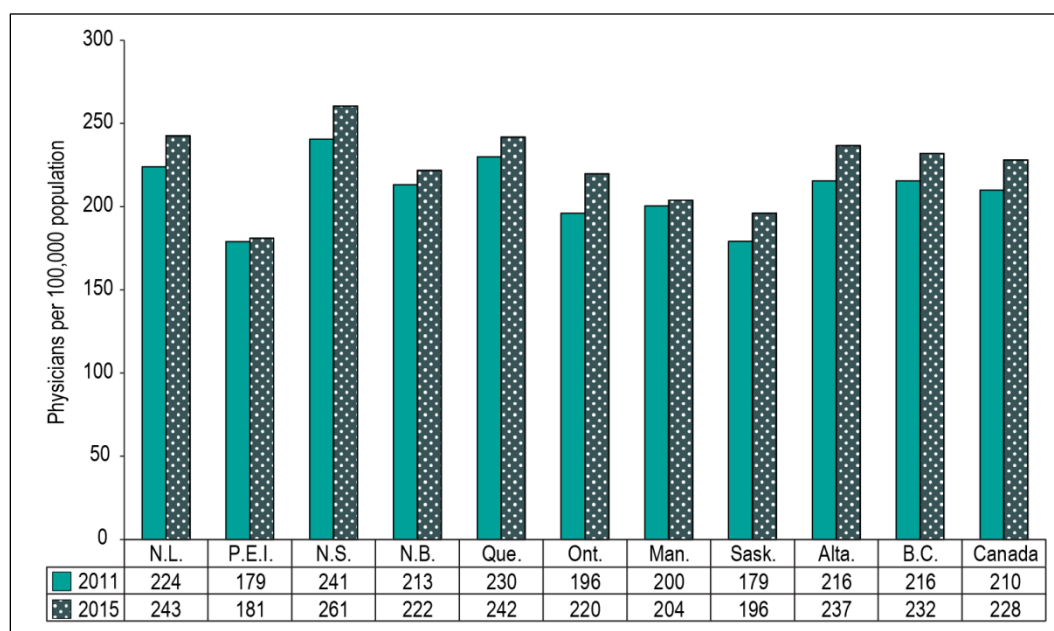
Sources

Scott's Medical Database, Canadian Institute for Health Information.

Statistics Canada. [Quarterly population estimates](#). 2016.

- Across all provinces,ⁱⁱ except Newfoundland and Labrador, Prince Edward Island and New Brunswick, the physician-per-population ratio in 2015 was the highest ever recorded. Provinces with the highest ratios included Nova Scotia, Newfoundland and Labrador and Quebec (261, 243 and 242 physicians per 100,000 population, respectively) (see Figure 3).

ii. The territories were excluded from this analysis due to small numbers.

Figure 3 Number of physicians per population, by province, 2011 and 2015**Source**

Scott's Medical Database, Canadian Institute for Health Information.

Nationally, the proportions of family medicine and specialist physicians were relatively equal, with family medicine physicians representing between 50% and 53% of the physician workforce since the late 1970s.

- In 2015, family medicine physicians represented 50.5% of the physician workforce in Canada and approximately half of the physician workforce in each province,ⁱⁱⁱ ranging from 55.6% in Saskatchewan to 48.4% in Quebec.

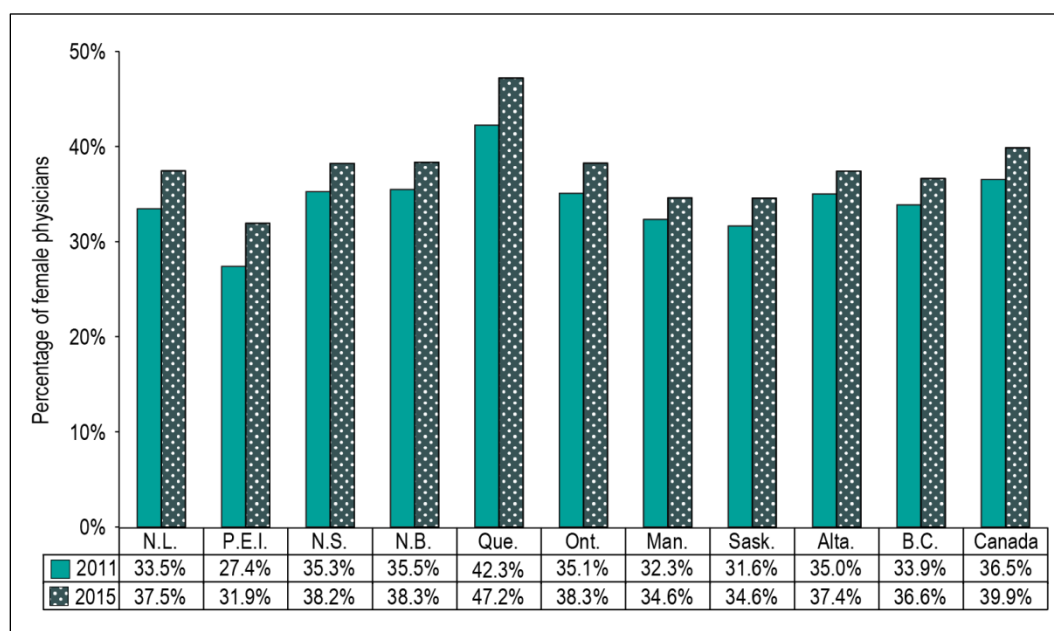
ⁱⁱⁱ. The territories were excluded from this analysis due to small numbers.

What are the demographic profiles of the Canadian physician workforce?

In 2015, almost 40% of Canada's physicians were women (39.9%); the proportion was higher among family medicine physicians (44.6%) and younger physicians (53.5% of those younger than age 40).

- Between 2011 and 2015, the number of female physicians increased by 23.7%, while the number of male physicians increased by 7.3%. In 2015, 39.9% of physicians were women, compared with 36.5% in 2011.
- Quebec, Ontario and New Brunswick had the highest proportion of women in their physician workforces overall (47.2%, 38.3% and 38.3%, respectively),^{iv} while P.E.I., Manitoba and Saskatchewan reported the lowest percentages of women in their physician workforces (31.9%, 34.6% and 34.6%, respectively) (see Figure 4).
- Across all provinces, women represented a larger proportion of family medicine physicians than of specialists. In 2015, women accounted for 44.6% of family medicine physicians and 35.1% of specialists.
- In 2015, among the provinces, 53.5% of physicians younger than 40 were women. The rate was highest in Quebec, at 63.6% of younger physicians. Females represented more than half of younger physicians in British Columbia, Ontario and all provinces east of Ontario. In the Prairie provinces, female physicians represented 45.6% (Manitoba), 46.6% (Alberta) and 47.9% (Saskatchewan) of all physicians younger than 40.^{iv}

^{iv}. The territories were excluded from this analysis due to small numbers.

Figure 4 Percentage of female physicians, by jurisdiction, 2011 and 2015**Source**

Scott's Medical Database, Canadian Institute for Health Information.

The average age of physicians has declined slightly over the past 5 years (50.5 in 2011 and 50.0 in 2015). The growing number of younger physicians entering the workforce is influencing this trend.

- On average, family medicine physicians and specialists were about the same age in 2015 (49.9 and 50.0 years old).
 - Family medicine physicians in Alberta, Saskatchewan and Newfoundland and Labrador were the youngest (average age of 47.5, 48.3 and 48.5, respectively), while those in P.E.I. were the oldest (average age of 52.1).^v
 - Specialist physicians in Alberta and Saskatchewan were the youngest (average age of 48.1 in both provinces), while those in P.E.I. and Ontario were the oldest (average age of 52.9 and 50.8, respectively).
 - The average age of female physicians was 46.0, while the average age of male physicians was 52.6.

v. The territories were excluded from this analysis due to small numbers.

- Across Canada, nearly equal proportions of the workforce were younger than age 40 or older than age 60 (25.6% and 25.4%, respectively).
 - Alberta and Saskatchewan had both the highest proportions of physicians younger than 40 (31.2% and 30.5%, respectively) and the smallest proportions of physicians older than 60 (each at 20.2%). Conversely, P.E.I. had an older workforce, with 15.9% of physicians younger than 40 and 31.7% of physicians older than 60.^{vi}

Approximately one-quarter (25.6%) of Canada's physicians received their MD degree outside of Canada.

- In 2015, 28.5% of Canada's family medicine physicians and 22.7% of specialists received their MD degrees outside of Canada.
- The percentage of physicians in Canada who were trained internationally has increased slightly in recent years, from 24.9% in 2011 to 25.6% in 2015.
- Saskatchewan, Newfoundland and Labrador and Manitoba had the largest proportions of internationally trained physicians in their physician workforces (52.5%, 36.3% and 34.3%, respectively), while Quebec and P.E.I.^{vi} had the smallest (9.9% and 17.9%, respectively).

What are the migration patterns of physicians?

Migration patterns suggest that Canada continues to gain more physicians from other countries than it is losing. Meanwhile, the number of physicians migrating between jurisdictions in Canada has remained relatively constant.

- In 2015, more physicians returned from abroad than moved abroad, resulting in a net gain of 110 physicians from international migration.
- Within Canada, 739 physicians moved from one province/territory to another, representing 0.9% of the physician workforce.
- Since the late 1970s, approximately 1% of physicians have moved between jurisdictions each year.²

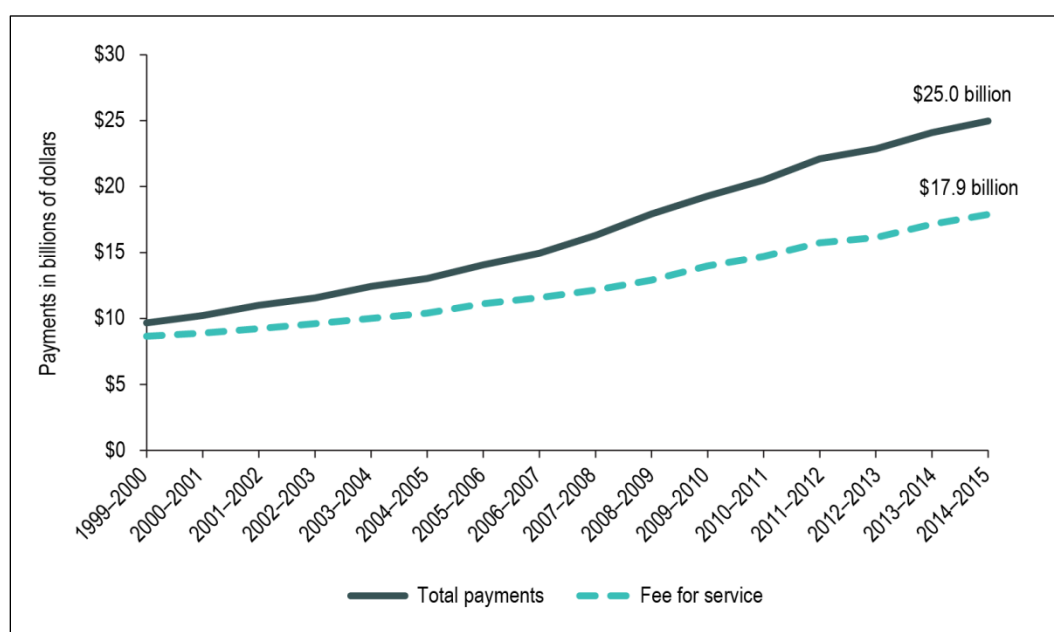
^{vi}. The territories were excluded from this analysis due to small numbers.

How much are physicians paid?

The cost of physician services in Canada can be understood by examining total and average clinical payments to physicians, the types of services paid for, and information about the providers and recipients of these services.

Gross clinical payments to physicians — defined as payments for insured medical services through provincial/territorial medical care plans — reached \$25.0 billion in 2014–2015 (see Figure 5). This represents an increase of 3.7% over the previous year, which is the second-lowest increase since 1999–2000 (gross clinical payments increased 3.4% in 2012–2013).

Figure 5 Total gross and fee-for-service clinical payments to physicians, 1999–2000 to 2014–2015



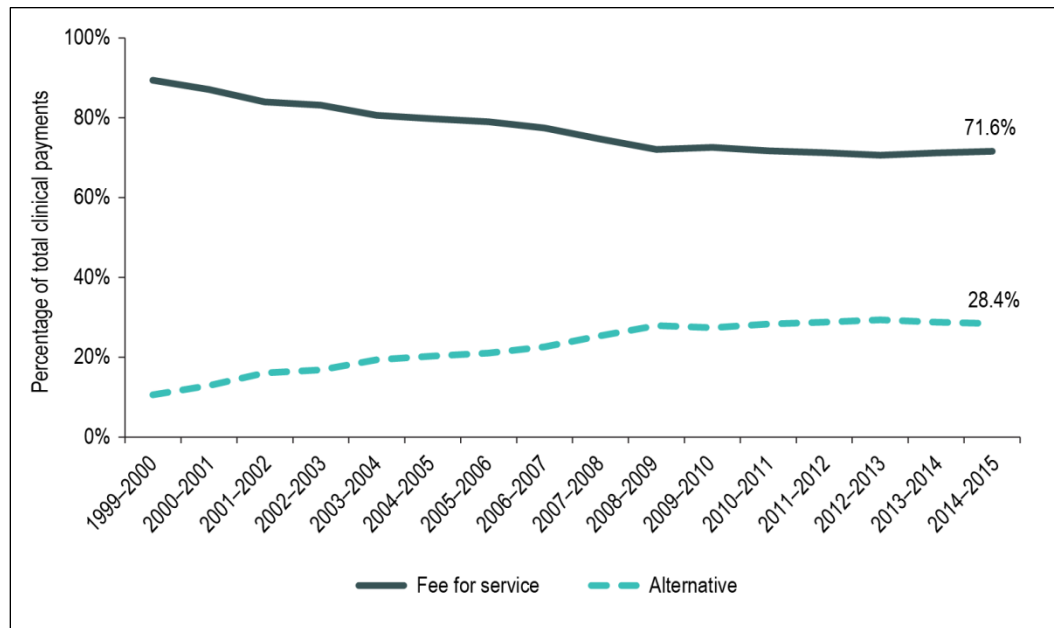
Source

National Physician Database, Canadian Institute for Health Information.

Historically, physicians have been remunerated for clinical services primarily through fee-for-service payment systems. Over time, there has been a growing shift toward alternative payment plans in place of fee-for-service payments. However, this trend appears to have stabilized: from 2008–2009 to 2014–2015, fee-for-service payments remained between 71% and 73% of total clinical payments (see Figure 6).

- In 1999–2000, alternative payments totalled \$1.0 billion and made up 10.6% of total gross clinical payments. By 2014–2015, alternative payments had reached almost \$7.1 billion, which accounted for more than one-quarter (28.4%) of all clinical payments.

Figure 6 Fee-for-service and alternative payments as a percentage of total clinical payments to physicians, 1999–2000 to 2014–2015

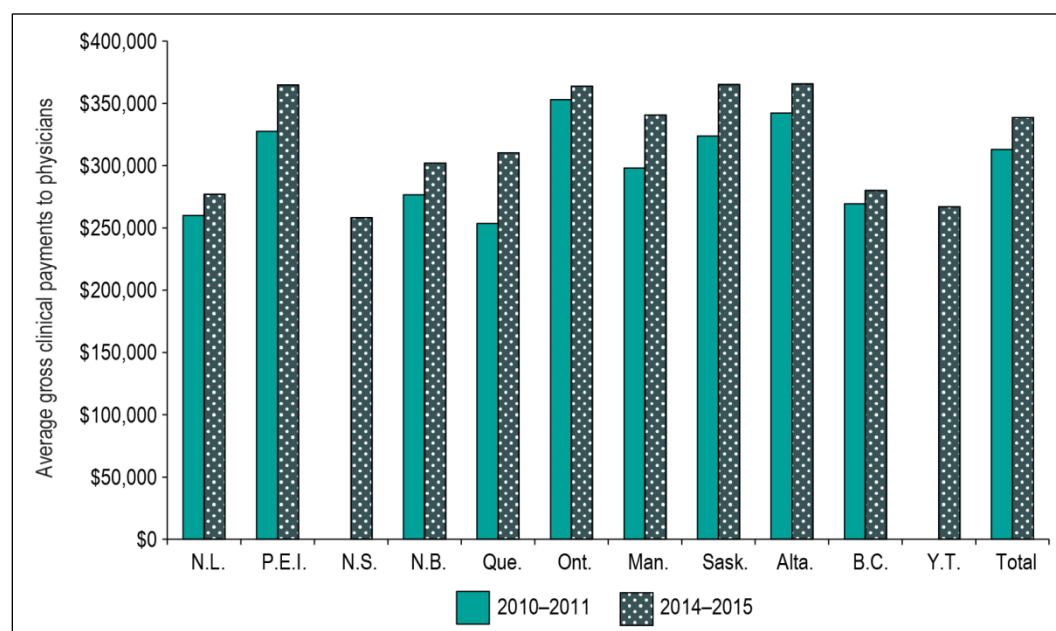


Source

National Physician Database, Canadian Institute for Health Information.

As total clinical payments have risen, physicians have been earning more on average. In 2014–2015, the average gross clinical payment per physician was slightly less than \$339,000, virtually unchanged from the year before. The average gross clinical payment per physician ranged from \$258,000 in Nova Scotia to \$366,000 in Alberta. Over the past 5 years, average gross clinical payments to physicians increased 8.2%, from \$313,000 to \$339,000 (see Figure 7).

Figure 7 Average gross clinical payments to physicians, 2010–2011 and 2014–2015



Notes

A portion of Ontario's alternative payments was not available and was estimated by applying the growth rate of existing payment information.

Due to the greater proportion of short-term, visiting and locum physicians and their lower associated payments in certain smaller jurisdictions relative to larger ones, in an attempt to improve comparability, CIHI has agreed to calculate the average payment per physician using only permanent in-province physicians in P.E.I. and physicians whose total gross payments are at least \$60,000 in Yukon (2010–2011 not reported).

The average payment for Nova Scotia in 2010 was not available.

Data for Newfoundland and Labrador is not finalized and should be considered preliminary.

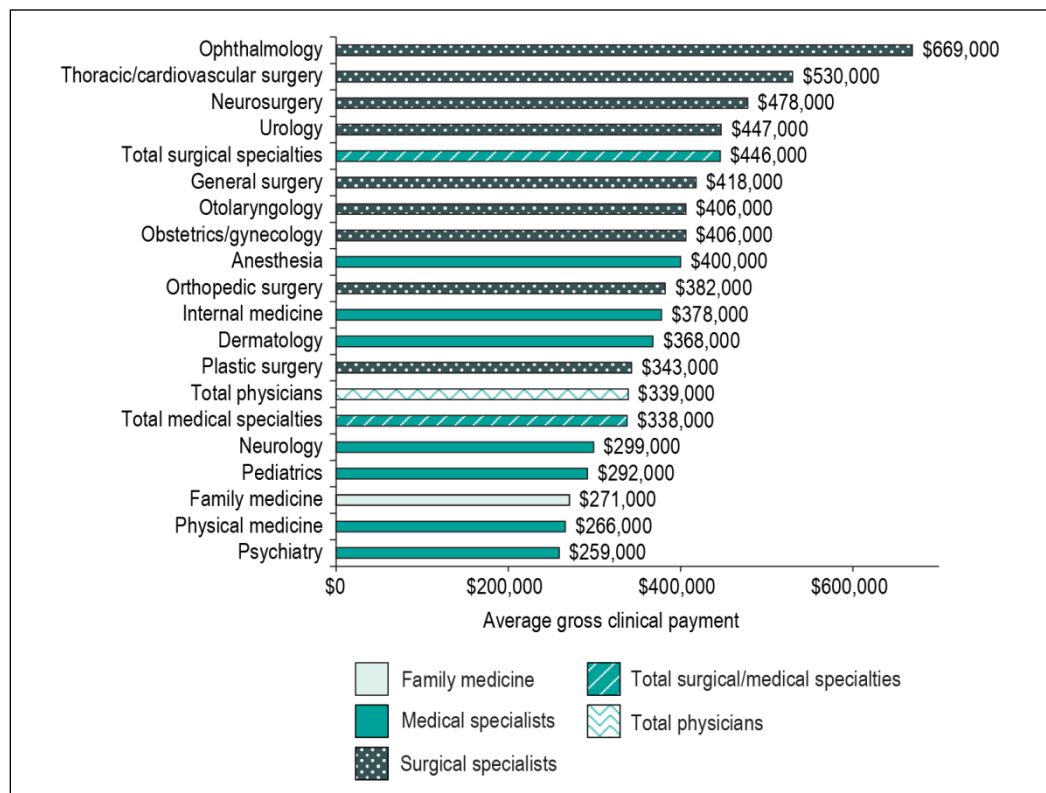
Source

National Physician Database, Canadian Institute for Health Information.

Since 2009, CIHI has reported average gross clinical payments made to physicians by provincial/territorial medical care plans. These payment amounts are calculated as the sum of all gross clinical payments (fee-for-service and alternative payments) divided by the total number of physicians reported to CIHI by the jurisdictions. Beginning with 2014–2015, CIHI acquired physician-level alternative payments data from 8 provinces and 1 territory, permitting the calculation and publication of average gross clinical payments by specialty for the first time.

The average gross clinical payment to family medicine physicians in Canada in 2014–2015 was just more than \$271,000, while payments to medical specialists and surgical specialists were \$338,000 and \$446,000, respectively. Ophthalmologists had the highest average gross clinical payment, at \$669,000, and psychiatrists had the lowest, at \$259,000 per physician (see Figure 8).

Figure 8 Average gross clinical payments, by physician specialty, 2014–2015



Source

National Physician Database, Canadian Institute for Health Information.

What is the average cost per service?

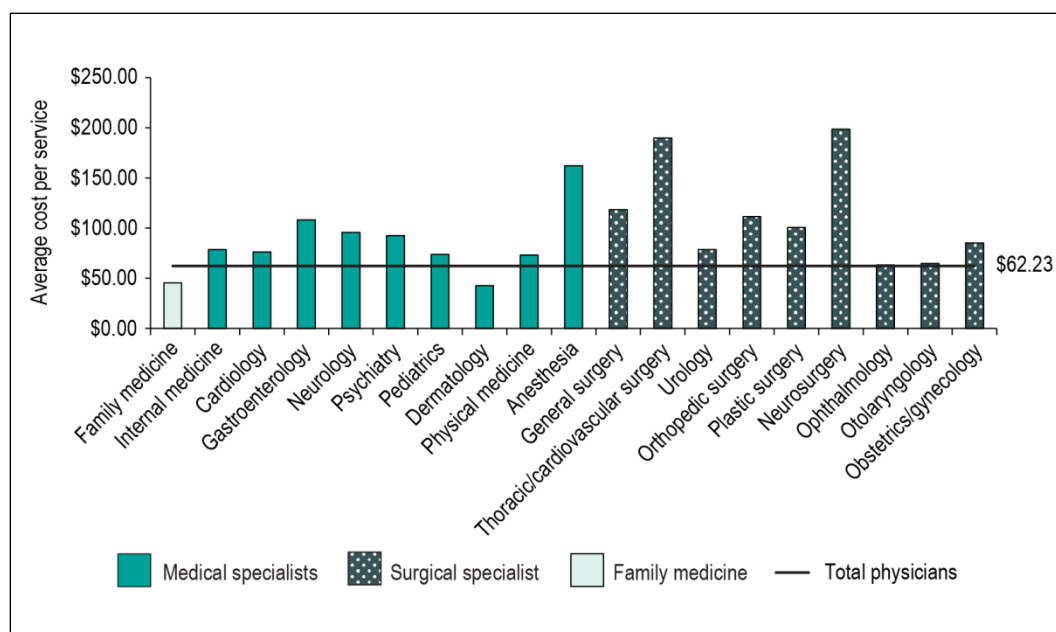
Fee-for-service payments (\$17.9 billion) accounted for 72% of the \$25.0 billion in gross clinical payments (excluding payments to imaging and laboratory specialists). Of the total fee-for-service payments paid out by provincial/territorial medical care plans, \$16.4 billion was paid for the 264 million clinical services that were provided in 2014–2015. These payments can be analyzed to determine which types of services physicians are providing, who is providing them and who is receiving them. The remaining \$1.5 billion, which account for reciprocal billing, anesthesia services and anesthesiology specialists, is excluded.

- Services provided by physicians can be split into 2 broad types: consultations/visits and procedures. Consultations and visits accounted for the majority of services (73%) and payments (66%) in 2014–2015; procedures accounted for the balance (27% of services and 34% of payments).

- The average cost per service paid to physicians was \$62.23 in 2014–2015. Family physicians billed an average cost per service of \$45.61, while medical and surgical specialists billed an average of \$79.81 and \$87.26 per service, respectively.

Although family medicine physicians perform the greatest number of services and receive the largest proportion of payments, medical and surgical specialists are paid more per service on average. However, services may not always be comparable, as the amount of work required differs depending on the type of service. Figure 9 highlights the average cost per service across the different specialties.

Figure 9 Average fee-for-service cost per service by specialty, 2014–2015



Source

National Physician Database, Canadian Institute for Health Information.

Appendix: Text alternatives for figures

Figure 1 Percentage growth in the supply of physicians, Canada, 1980 to 2015

Canada has sustained yearly physician number increases of more than 2% since 2007. These increases are reminiscent of those experienced during the 1980s.

Figure 2 Number of physicians per 100,000 population, Canada, 1980 to 2015

The number of physicians per 100,000 population initially peaked in 1993 with 191 physicians. A relative plateau occurred between 1993 and 2006. In 2007, a new record of 193 physicians per 100,000 population was recorded. Since 2007, the number of physicians per 100,000 population has increased yearly, reaching 228 in 2015.

Figure 3 Number of physicians per population, by province, 2011 and 2015

Between 2011 and 2015, the number of physicians per population increased in all provinces. In 2015, there were 228 physicians per 100,000 population, compared with 210 physicians per 100,000 population in 2011.

Figure 4 Percentage of female physicians, by jurisdiction, 2011 and 2015

Women represented a growing proportion of the workforce. In 2015, almost 40% of Canada's physicians were women (39.9%), compared with 36.5% in 2011. The percentage of female physicians increased in all provinces.

Figure 5 Total gross and fee-for-service clinical payments to physicians, 1999–2000 to 2014–2015

Gross clinical payments to physicians reached \$25 billion in 2014–2015, an increase of 3.7% over the previous year.

Figure 6 Fee-for-service and alternative payments as a percentage of total clinical payments to physicians, 1999–2000 to 2014–2015

Over time, there has been a shift toward alternative payment plans in place of fee-for-service payments. This trend appears to have stabilized between 2008 and 2015, with fee-for-service payments remaining between 72% and 73% of total clinical payments.

Figure 7 Average gross clinical payments to physicians, 2010–2011 and 2014–2015

Over the past 5 years, average gross payments to physicians have increased 8% (from \$313,000 to \$339,000). There are 3 notes for this figure: First, a portion of Ontario's alternative payments was not available and was estimated by applying the growth rate of existing payment information. Second, due to the greater proportion of short-term, visiting and locum physicians and their lower associated payments in certain smaller jurisdictions relative to larger ones, in an attempt to improve comparability, CIHI has agreed to calculate the average payment per physician using only permanent in-province physicians in P.E.I. and physicians whose total gross payments are at least \$60,000 in Yukon (2010–2011 not reported). Third, the average payment for Nova Scotia in 2010 was not available.

Figure 8 Average gross clinical payments, by physician specialty, 2014–2015

The average gross clinical payment to family medicine physicians in Canada was just more than \$271,000, while medical specialists' average gross payment per physician was \$338,000 and surgical specialists' average payment was \$446,000. Ophthalmologists grossed the highest average payment, at \$669,000, and psychiatrists grossed the lowest, at \$259,000 per physician.

Specialty	Average gross clinical payment	Rounded to nearest '000
Psychiatry	\$258,697	\$259,000
Physical medicine	\$265,739	\$266,000
Family medicine	\$271,417	\$271,000
Pediatrics	\$292,242	\$292,000
Neurology	\$299,263	\$299,000
Total medical specialties	\$337,767	\$338,000
Total physicians	\$338,605	\$339,000
Plastic surgery	\$343,280	\$343,000
Dermatology	\$368,003	\$368,000
Internal medicine	\$378,468	\$378,000
Orthopedic surgery	\$382,356	\$382,000
Anesthesia	\$399,925	\$400,000
Obstetrics/gynecology	\$405,504	\$406,000
Otolaryngology	\$405,938	\$406,000
General surgery	\$417,773	\$418,000
Total surgical specialties	\$445,814	\$446,000

Specialty	Average gross clinical payment	Rounded to nearest '000
Urology	\$447,284	\$447,000
Neurosurgery	\$477,549	\$478,000
Thoracic/cardiovascular surgery	\$529,829	\$530,000
Ophthalmology	\$668,887	\$669,000

Figure 9 Average fee-for-service cost per service by specialty, 2014–2015

The average cost per service paid to physicians in 2014–2015 was \$62.23. Family physicians billed an average cost per service of \$45.61, while medical and surgical specialists received an average of \$79.81 and \$87.26 per service, respectively.

References

1. Office of Research and Information Services, The Association of Faculties of Medicine of Canada. [*Canadian Medical Education Statistics 2015*](#). 2015.
2. Canadian Institute for Health Information. [*Supply, Distribution and Migration of Canadian Physicians, 2008*](#). 2009.

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