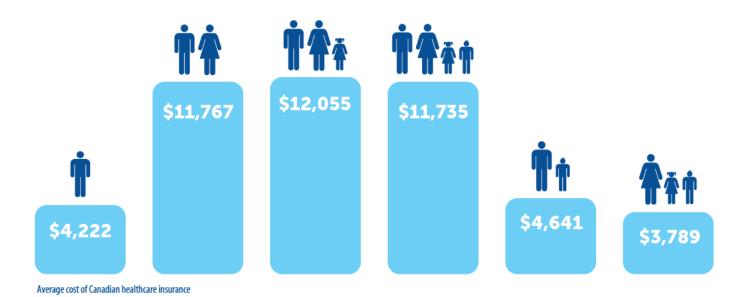
FRASER BULLETIN



August 2015

The Price of Public Health Care Insurance

2015 FDITION



by Milagros Palacios, Bacchus Barua, and Feixue Ren

SUMMARY

- Canadians often misunderstand the true cost of our public health care system. This occurs partly because Canadians do not incur direct expenses for their use of health care, and partly because Canadians cannot readily determine the value of their contribution to public health care insurance.
- In 2015, the estimated average payment for public health care insurance ranges from \$3,789 to \$12,055 for six common Canadian family types, depending on the type of family.
- For the average Canadian family, between 2005 and 2015, the cost of public health care insurance increased 1.6 times faster than average income, 1.3 times as fast as the cost of shelter, and 2.7 times as fast as food.
- The 10% of Canadian families with the lowest incomes will pay an average of about \$477 for public health care insurance in 2015. The 10% of Canadian families who earn an average income of \$59,666 will pay an average of \$5,684 for public health care insurance and the families among the top 10% of income earners in Canada will pay \$37,180.

Introduction

Health care in Canada is not "free." While Canadians may not be billed directly when they use medical services, they pay a substantial amount of money for health care through the country's tax system.

Unfortunately, the size of these tax payments is hard to determine because there is no "dedicated" health insurance tax. As a result, individuals and families often cannot fully appreciate the true cost they pay towards the public health care system.

The purpose of this research bulletin is to help individual Canadians and their families better understand how much health care actually costs them personally so they can determine whether they are receiving good value for their tax dollars.

Why the misunderstanding?

One reason why Canadians don't know the true cost of health care is because the physician and hospital services that are covered by taxfunded health care insurance are free at the point of use. This situation leads many people to grossly underestimate the true cost of health care. When people speak of "free" health care in Canada, they are entirely ignoring the substantial taxpayer-funded cost of the system.²

Furthermore, health care in Canada is financed through general government revenues rather

than through a dedicated tax,³ which blurs the true dollar cost of the service. Indeed, Canadians cannot easily work out precisely what they pay to government each year for health care because there are many different sources of government revenues that may contribute to funding health care, including income taxes, Employment Insurance (EI) and Canada Pension Plan (CPP) premiums, property taxes, profit taxes, sales taxes, taxes on the consumption of alcohol and tobacco, and import duties, among others. Some Canadians might assume that in those provinces that assess them, health care premiums cover the cost of health care. However, the reality is that these premiums cover just a fraction of the cost of health care and are paid into general revenues from which health care is funded.

The available numbers can be difficult to digest. For example, health spending figures are often presented in aggregate, resulting in numbers so large they are almost meaningless. For instance, approximately \$141 billion of our tax dollars were estimated to have been spent on publicly funded health care in 2014 (CIHI, 2014).4

It is more informative to measure the cost of our health care system in per capita dollars: the \$141 billion spent equates to approximately \$3,961 per Canadian (CIHI, 2014; Statistics Canada, 2014; authors' calculations). This would be the cost of the public health care insurance plan if every Canadian resident paid an equal share.

¹ In a monetary sense. There are, however, costs associated with health care use in Canada that are not monetized, such as wait times for access to medical services. For more on this, see Globerman, 2013.

² It is also important to consider the costs associated with funding health care through tax revenues. For more on this, see Esmail, 2008.

³ A dedicated tax is earmarked and separated from other taxes; its revenues are used for a particular purpose.

⁴ This figure includes health spending from provincial and territorial government funds, federal health transfers to the provinces and territories, and provincial government health transfers to local governments.

Table 1: Average income and average total tax bill of representative families in Canada, 2015 (preliminary estimates)

| Family Type | Average Cash Income (\$) | Average Total Tax Bill (\$) | Tax Rate | Health Care Insurance (\$) |
|------------------------|-----------------------------|--------------------------------|----------|-------------------------------|
| Unattached Individuals | 42,244 | 17,644 | 41.8% | 4,222 |
| 2 Parents, 0 Children | 104,339 | 49,169 | 47.1% | 11,767 |
| 2 Parents, 1 Child | 121,701 | 50,376 | 41.4% | 12,055 |
| 2 Parents, 2 Children | 119,082 | 49,038 | 41.2% | 11,735 |
| 1 Parent, 1 Child | 54,821 | 19,392 | 35.4% | 4,641 |
| 1 Parent, 2 Children | 53,209 | 15,833 | 29.8% | 3,789 |

Source: The Fraser Institute's Canadian Tax Simulator, 2015.

However, not all Canadians pay equal tax amounts each year. Some Canadians are children and dependents and are not taxpayers. Conversely, higher-income earners bear a greater proportion of the tax burden than lower-income earners and thus contribute proportionally more to our public health care system. Various tax exemptions and credits also further complicate matters. Clearly, the per capita spending measure does not accurately represent the true cost of public health care insurance for Canadian individuals and families.

The cost of health care by family type

In order to more precisely estimate the cost of public health care insurance for the average Canadian family in 2015, we must determine how much tax an average family pays to all levels of government and the percentage of the family's total tax bill⁵ that pays for public health care insurance. In 2014/15, an estimated 23.9% of tax revenues (income) was spent on health care (Statistics Canada, 2009, 2015a, and 2015b; CIHI, 2014; authors' calculations).⁶

Table 1 shows six Canadian family types, the estimated average income⁷ for those family types

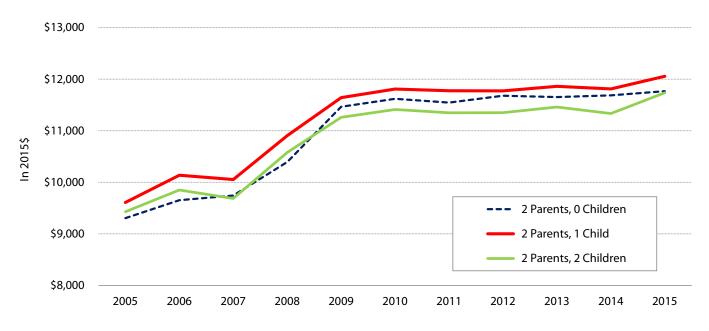
consumption of alcohol and tobacco; fuel taxes and motor vehicle licence fees; natural resource fees; and a host of other levies. For further details on how the total tax bill is calculated for the average Canadian family, see the methodology section at Palacios et al. (2015).

⁵ The total tax bill includes income taxes (personal and business); property taxes; sales taxes; payroll taxes; health taxes; import duties; taxes on the

⁶ The calculations presented in this bulletin assume that the health care insurance paid by each Canadian family comes from their total tax bill. The proportion of the family's tax bill devoted to health care insurance is assumed to be the same proportion of tax revenues spent on health care by the government.

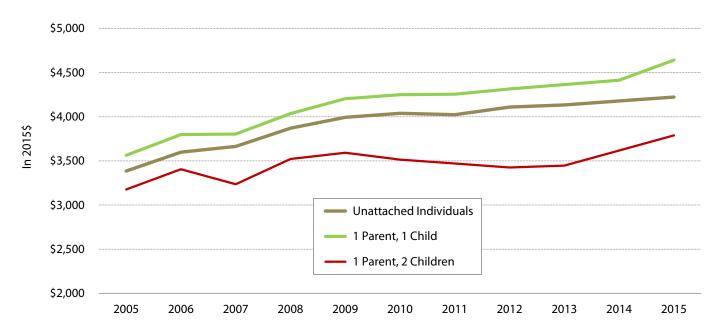
⁷The definition of "income" used throughout this article is cash income, which includes wages and salaries, self-employment income (farm and nonfarm), interest, dividends, private and government pension payments, old age pension payments, and

Figure 1: Inflation-adjusted cost of public health care insurance, for selected types of 2-parent families, 2005-2015



Sources: The Fraser Institute's Canadian Tax Simulator, 2015; Statistics Canada, 2015c; authors' calculations.

Figure 2: Inflation-adjusted cost of public health care insurance, for other selected types of families, 2005-2015



Sources: The Fraser Institute's Canadian Tax Simulator, 2015; Statistics Canada, 2015c; authors' calculations.

in 2015, and their estimated dollar contribution to health care. In 2015, the average unattached (single) individual, earning an average income of \$42,224, will pay approximately \$4,222 for public health care insurance. An average Canadian family consisting of two adults and two children (earning approximately \$119,082) will pay about \$11,735 for public health care insurance.

The impact of the increasing cost of health care on Canadian individuals and families

Figures 1 and 2 show the inflation-adjusted⁸ cost of public health care insurance for the six representative family types from 2005 to 2015. Over the last decade, the cost of public health care insurance (adjusted for inflation) has increased by:

- 26.5% for the average family consisting of 2 adults and no children⁹ (from \$9,305 to \$11,767);
- 25.5% for the average family consisting of 2 parents and 1 child (from \$9,607 to \$12,055);
- 24.5% for the average family consisting of 2 parents and 2 children (from \$9,428 to \$11,735);
- 24.7% for the average unattached individual (from \$3,385 to \$4,222);

other transfers from governments (such as universal child care benefit).

- 30.2% for the average family consisting of 1 parent and 1 child (from \$3,563 to \$4,641);
- 19.3% for the average family consisting of 1 parent and 2 children (from \$3,175 to \$3,789).

One way to understand the impact of the growing financing burden of public health care insurance on Canadian families is to compare it with changes in income, and the cost of basic necessities (food, clothing, and shelter).

Table 2 and figure 3 show that between 2005 and 2015, the average Canadian family's cash income increased by 30.8%. 10 At the same time, spending on clothing increased by 64.1%, 11 expenditures on shelter increased by 35.9%, and spending on food rose by 18.2%. Over that decade, the cost of health care insurance for the average Canadian family (all family types) increased by 48.5%.

Put differently, the cost of public health care insurance for the average Canadian family grew 1.6 times faster than the average income between 2005 and 2015. Further, over the decade the cost of public health care insurance in-

⁸ Calculated using the consumer price index (CPI), and presented in constant 2015 dollars. For the year 2015, the CPI index was forecast to December based on the average of the monthly index up to April (the most recent month for which information was available).

⁹ "2 adults, 0 children" includes elderly couples who might have children, but those children do not live with them.

¹⁰ The results showed in table 2 and figure 3 are not adjusted by inflation since the consumer price index (CPI) is used as one of the measures to compare health care insurance, income and other expenditures.

¹¹ Expenditures on food, shelter and clothing are based on a special request tabulation from Statistics Canada's Survey of Household Spending (SHS). Based on the 2012 and 2013 SHS results, the average Canadian household substantially increased its spending on clothing from \$3,125 to \$3,949 (26.4%). While this may reflect an actual change in spending patterns and preferences, it may also be due to sampling variability that arises as a result of sampling different households in different years.

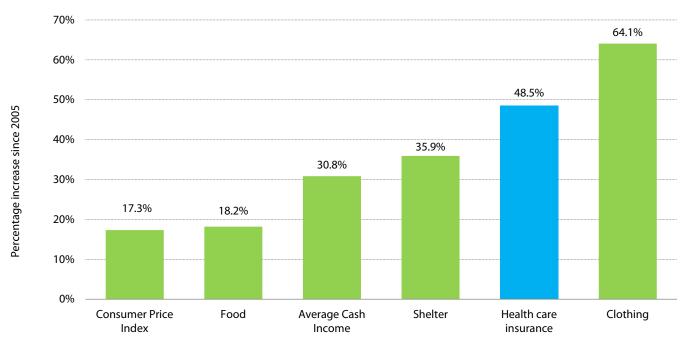
Table 2: Income, cost of health care, and selected expenditures of the average **Canadian family* (current dollars)**

| Year | Average Cash Income (\$) | Health care insurance (\$) | Consumer Price Index (2002=100) | Average Expenditures (\$)** | | |
|----------------------|-----------------------------|----------------------------|---------------------------------------|-----------------------------|-------|----------|
| | | | | Shelter | Food | Clothing |
| 2005 | 61,506 | 5,527 | 107.0 | 12,277 | 7,244 | 2,463 |
| 2007 | 68,356 | 5,992 | 111.4 | 14,057 | 7,633 | 2,780 |
| 2009 | 70,748 | 7,205 | 114.4 | 14,191 | 7,418 | 2,696 |
| 2011 | 74,079 | 7,632 | 119.9 | 15,702 | 8,456 | 3,040 |
| 2013 | 77,385 | 7,874 | 122.8 | 16,130 | 8,133 | 3,949 |
| 2014*** | 79,010 | 7,962 | 125.2 | 16,568 | 8,323 | 3,996 |
| 2015*** | 80,475 | 8,205 | 125.6 | 16,687 | 8,561 | 4,041 |
| % increase 2005-2015 | 30.8% | 48.5% | 17.3% | 35.9% | 18.2% | 64.1% |

Notes:

Sources: Statistics Canada (various issues), Spending Patterns in Canada; Statistics Canada, 2015c and 2015d; The Fraser Institute's Canadian Tax Simulator, 2015; authors' calculations.

Figure 3: How health care insurance has increased relative to other costs, 2005-2015



Source: Statistics Canada (various issues), Spending Patterns in Canada; Statistics Canada, 2015c and 2015d; The Fraser Institute's Canadian Tax Simulator, 2015; authors' calculations.

^{*} The average family includes unattached individuals.

^{**} All expenditure items include indirect taxes.

^{***} Expenditures for 2014 and 2015 were estimated using the results of the 2013 Survey of Household Spending and adjusting final results for inflation. Inflation numbers for 2015 are estimates.

Table 3: Average income and total tax bill in each decile, 2015 (preliminary estimates)

| Decile | Average Cash Income (\$) | Average Total Tax Bill (\$) | Tax Rate | Health Care Insurance (\$) |
|--------|--------------------------|--------------------------------|----------|-------------------------------|
| 1 | 13,742 | 1,992 | 14.5% | 477 |
| 2 | 28,380 | 5,338 | 18.8% | 1,277 |
| 3 | 38,714 | 10,604 | 27.4% | 2,538 |
| 4 | 48,268 | 17,202 | 35.6% | 4,117 |
| 5 | 59,666 | 23,752 | 39.8% | 5,684 |
| 6 | 72,630 | 30,583 | 42.1% | 7,319 |
| 7 | 88,826 | 39,115 | 44.0% | 9,361 |
| 8 | 110,420 | 49,072 | 44.4% | 11,743 |
| 9 | 142,455 | 65,681 | 46.1% | 15,718 |
| 10 | 282,206 | 155,367 | 55.1% | 37,180 |

Note: Deciles group families from lowest to highest incomes with each group containing ten percent of all families. The first decile, for example, represents the ten percent of families with the lowest incomes.

Source: The Fraser Institute's Canadian Tax Simulator, 2015.

creased 1.3 times as fast as the cost of shelter and almost three times (2.7) as fast as food.¹²

The cost of health care by income group

Table 3 divides Canadian families into 10 income groups (or "deciles") to show what families from various income brackets will pay for public health care insurance in 2015.

According to this calculation, the 10% of Canadian families with the lowest incomes will pay an average of about \$477 for public health care insurance in 2015. The 10% of Canadian families who earn an average income of \$59,666 will pay an average of \$5,684 for public health care insurance and the families among the top 10% of income earners in Canada will pay \$37,180.

Conclusion

Tables 1 and 3 present a much different perspective on the costs of public health care insurance from the CIHI figure of \$3,961 per capita given earlier. In addition, the large gap between the growth rate of income and that of public health care insurance provides an important insight into the increasing cost of health care for Canadian individuals and families. Our hope is that these figures will enable Canadians to more clearly understand just how much they pay for public health care insurance, and how that amount is changing. With a more precise estimate of what they really pay, Canadians will be in a better position to decide whether they are getting a good return on the money they spend on health care.

¹² Over the last ten years, the cost of clothing increased 1.3 times as fast as the cost of public health care insurance. But, since 2000, the cost of public health care increased 1.2 times faster than clothing.

References

Canadian Institute for Health Information [CIHI] (2014). National Health Expenditure Trends, 1975-2014. Canadian Institute for Health Information. http://www.cihi.ca/web/ resource/en/nhex_2014_report_en.pdf>, as of June 10, 2015.

Esmail, Nadeem (2008). Medicare's steep price: An in-depth look at the hidden costs of health care. Fraser Forum (September): 31-34.

Fraser Institute (2015). Canadian Tax Simulator, 2015. Fraser Institute.

Globerman, Steven (2013). Reducing Wait Times for Health Care: What Canada Can Learn from Theory and International Experience. Fraser Institute.

Palacios, Milagros, Charles Lammam, and Feixue Ren (2015). Canadians Celebrate Tax Freedom Day on June 10, 2015. Research Bulletin (June). Fraser Institute. <http://www.fraserinstitute.org/uploadedFiles/fraser-ca/Content/ research-news/research/publications/Tax-**Freedom-Day-2015.pdf>**, as of June 10, 2015.

Statistics Canada (2009). CANSIM Table 385-0001: Consolidated federal, provincial, territorial and local government revenue and expenditures, annual. http://www5.statcan.gc.ca/ cansim/a26?lang=eng&id=3850001>, as of June 10, 2014.

Statistics Canada (2014). CANSIM Table 051-0001: Estimates of population, by age group and sex for July 1, Canada, provinces and territories. http://www5.statcan.gc.ca/cansim/ a26?lang=eng&id=510001>, as of June 10, 2015.

Statistics Canada (2015a). CANSIM Table 380-0080: Revenue, expenditure and budgetary balance - General governments. http://www5.statcan.gc.ca/cansim/ a26?lang=eng&id=3800080>, as of June 10, 2015. Statistics Canada (2015b). CANSIM Table 380-0081: Revenue, expenditure and budgetary balance - Provincial administration, education and health. http://www5.statcan.gc.ca/can-dealth. sim/a26?lang=eng&id=3800081>, as of June 10, 2015.

Statistics Canada (2015c). CANSIM Table 326-0020: Consumer Price Index (CPI), 2011 basket, monthly (2002=100). http://www5.statcan. gc.ca/cansim/a26?lang=eng&id=3260020>, as of June 10, 2015.

Statistics Canada (2015d). Survey of Household Spending (SHS) 2013. Custom tabulation. Statistics Canada.

Statistics Canada (various issues). Spending Patterns in Canada. Catalogue No. 62-202-XIE. Statistics Canada.

Acknowledgments

This edition of The Price of Public Health Care Insurance draws extensively on previous editions. We would therefore like to acknowledge the important contributions of the original authors of this report, Nadeem Esmail and Niels Veldhuis. We also thank the Lotte and John Hecht Memorial Foundation for their generous funding of this paper.

Copyright © 2015 by the Fraser Institute. All rights reserved. Without written permission, only brief passages may be quoted in critical articles and reviews.

ISSN 2291-8620

Media queries: call 604.714.4582 or e-mail: communications@fraserinstitute.org

Support the Institute: call 1.800.665.3558, ext. 586 or e-mail: development@fraserinstitute.org

Visit our website: www.fraserinstitute.org



Milagros Palacios is a Senior Research Economist at the Fraser Institute. Since joining the Institute, Ms. Palacios has authored or coauthored over 75 research studies and 75 commentaries on a wide range of public policy issues including taxation, government finances, investment, productivity, labour markets, and charitable giving, among others. She has also co-written four books. Ms. Palacios holds a BA in Industrial Engineering from the Pontifical Catholic University of Peru and an MSc in Economics from the University of Concepcion, Chile.



Bacchus Barua is a Senior Economist in the Fraser Institute's Centre for Health Policy Studies. He completed his BA (Honours) in Economics at the University of Delhi (Ramjas College) and received an MA in Economics from Simon Fraser University. Bacchus has conducted research on a range of key health care topics including hospital performance, access to new pharmaceuticals, the impact of aging on health care expenditures, and international comparisons of health care systems. He also designed the Provincial Healthcare Index (2013) and is the lead author of **The Effect** of Wait Times on Mortality in Canada, and Waiting Your Turn: Wait Times for Health Care in Canada (2010-2014).



Feixue Ren is an Economist at the Fraser Institute. She holds a Master's Degree in Economics from Lakehead University and a BA in Statistics from Hunan Normal University in China. Since joining the institute, she has co-authored an assortment of studies on fiscal policy including tax competitiveness and government debt.