FRASER BULLETIN



August 2020

The Price of Public Health Care Insurance, 2020



by Milagros Palacios and Bacchus Barua

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 2020, preliminary estimates suggest the average payment for public health care insurance ranges from \$4,190 to \$14,474 for six com-

- mon Canadian family types, depending on the type of family.
- The 10 percent of Canadian families with the lowest incomes will pay an average of about \$471 for public health care insurance in 2020. The 10 percent of Canadian families who earn an average income of \$65,522 will pay an average of \$6,627 for public health care insurance, and the families among the top 10 percent of income earners in Canada will pay \$39,731.

Introduction

The purpose of this research bulletin is to help individual Canadians and their families better understand how much they annually contribute to Canada's public health care system.

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.

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 tax-funded health care insurance are free at the point of use. This situation leads many people to underestimate the true cost of health care as it ignores 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, which blurs the true dollar cost of the service. Indeed, Canadi-

¹ Free 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.

ans 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 revenue 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 \$172 billion of our tax dollars were estimated to have been spent on publicly funded health care in 2019 (CIHI, 2019).4

It is more informative to measure the cost of our health care system in per capita dollars: the \$172 billion spent equates to approximately \$4,582 per Canadian (CIHI, 2019; Statistics Canada, 2020b; authors' calculations). This would be the cost of the public health care insurance plan if every Canadian resident paid an equal share.

However, Canadians do not pay equal tax amounts each year. Some Canadians are chil-

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

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. It does not include federal direct, municipal government, and social security funds, which together accounted for 7.6 percent of total public sector spending on health care in 2019 (CIHI, 2019).

Table 1: Average Income and Average Total Tax Bill of Representative Families, 2020*

Family Type	Average Cash Income (\$)	Average Total Tax Bill (\$)	Tax Rate	Health Care Insurance (\$)
Unattached Individuals	44,153	17,000	38.5%	4,894
2 Parents, 0 Children	115,066	47,749	41.5%	13,745
2 Parents, 1 Child	133,119	46,072	34.6%	13,262
2 Parents, 2 Children	142,449	50,282	35.3%	14,474
1 Parent, 1 Child	58,649	14,940	25.5%	4,301
1 Parent, 2 Children	64,133	14,555	22.7%	4,190

^{*} Preliminary estimates

Source: The Fraser Institute's Canadian Tax Simulator, 2020.

dren 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 2020, 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. The estimated total tax bill for the average Canadian family in 2020 is derived from Palacios and Fuss (2020) while total health care expenditures for 2020 are based on the average growth rate for the five-year period from 2015 to 2019. 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. In 2020/21, an estimated 28.8 percent of tax revenues (income) will be spent on health care (Statistics Canada, 2020a; CIHI, 2019; Fraser Institute, 2020; authors' calculations).

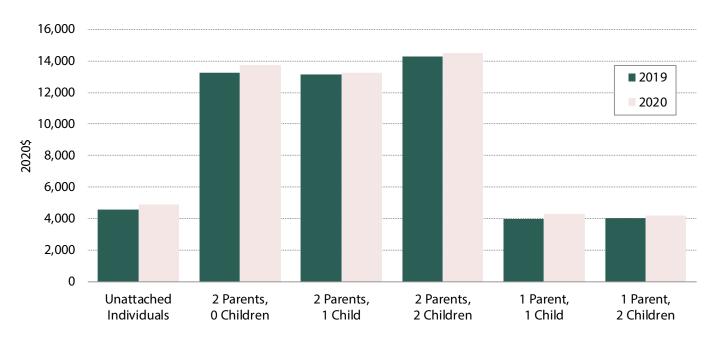
Table 1 shows six Canadian family types, the estimated average income⁶ for those family types

⁵ The total tax bill includes income taxes (personal and business), property taxes, sales taxes, payroll taxes, health taxes, import duties, taxes on the consumption of alcohol and tobacco, fuel taxes, carbon

taxes, 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 and Fuss (2020).

⁶ The definition of "income" used throughout this article is cash income, which includes wages and

Figure 1: Inflation-adjusted Cost of Public Health Care Insurance, for Representative Families, 2019 and 2020



Sources: The Fraser Institute's Canadian Tax Simulator, 2020; BMO, 2020; CIBC, 2020; RBC, 2020; authors' calculations.

in 2020, and their estimated dollar contribution to health care. The calculations presented assume that the health care insurance paid by each Canadian family comes from their total tax bill.

In 2020, the average unattached (single) individual, earning an average income of \$44,153, will pay approximately \$4,894 for public health care insurance. An average Canadian family consisting of two adults and two children (earning approximately \$142,449) will pay about \$14,474 for public health care insurance.

salaries, self-employment income (farm and nonfarm), interest, dividends, private and government pension payments, old age pension payments, and other transfers from governments (such as the universal child care benefit).

Figure 1 shows the inflation-adjusted⁷ cost of public health care insurance for the six representative family types from 20198 to 2020. Based on the assumptions detailed above, preliminary estimates suggest that the cost of public health care insurance in 2020 will increase:

⁷ Calculated using the consumer price index (CPI), and presented in constant 2020 dollars. For the year 2020, the CPI index was estimated based on the average of private forecasters (BMO Capital Markets, 2020; CIBC Economics, 2020; TD Economics, 2020; and RBC Economics, 2020).

⁸ Estimates in this study are based calculations by Palacios and Fuss (2020), who use Statistics Canada's Social Policy Simulation Database and Model (SPSD/M) to allocate federal taxes to the provinces as well as cash income and tax shares to various family types.

Table 2: Average Income and Total Tax Bill in Each Decile, 2020*

Decile	Average Cash Income (\$)	Average Total Tax Bill (\$)	Tax Rate	Health Care Insurance (\$)
1	14,168	1,636	11.5%	471
2	29,989	5,521	18.4%	1,589
3	40,760	10,958	26.9%	3,154
4	52,077	16,940	32.5%	4,876
5	65,522	23,020	35.1%	6,627
6	81,820	29,270	35.8%	8,426
7	99,817	37,774	37.8%	10,874
8	123,868	47,494	38.3%	13,672
9	158,939	63,778	40.1%	18,359
10	281,988	138,023	48.9%	39,731

Notes:

Source: The Fraser Institute's Canadian Tax Simulator, 2020.

- 3.5% for the average family consisting of 2 adults and no children⁹ (from \$13,276 to \$13,745);
- 0.9% for the average family consisting of 2 parents and 1 child (from \$13,138 to \$13,262);
- 1.3% for the average family consisting of 2 parents and 2 children (from \$14,287 to \$14,474);
- 7.4% for the average unattached individual (from \$4,555 to \$4,894);
- 7.6% for the average family consisting of 1 parent and 1 child (from \$3,997 to \$4,301);

3.8% for the average family consisting of 1 parent and 2 children (from \$4,035 to \$4,190).

The cost of health care by income group

Table 2 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 2020.

According to this calculation, the 10 percent of Canadian families with the lowest incomes will pay an average of about \$471 for public health care insurance in 2020. The 10 percent of Canadian families who earn an average income of \$65,522 will pay an average of \$6,627 for public health care insurance, and the families among

^{*} Preliminary estimates

^{**} Deciles group families from lowest to highest incomes with each group containing 10% of all families. The first decile, for example, represents the 10% of families with the lowest incomes.

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

Table 3: Average income and average total tax bill of representative families, 2020 (assuming healthcare spending unchanged from 2019)*

verage Cash Income (\$)	Average Total Tax Bill (\$)	Tax Rate	Health Care Insurance (\$)	
44,153	17,000	38.5%	4,729	
115,066	47,749	41.5%	13,283	
133,119	46,072	34.6%	12,816	
142,449	50,282	35.3%	13,987	
58,649	14,940	25.5%	4,156	
64,133	14,555	22.7%	4,049	
	,			

^{*} Preliminary estimates

Sources: The Fraser Institute's Canadian Tax Simulator, 2020; calculations by authors.

the top 10 percent of income earners in Canada will pay \$39,731.

Limitations

The estimates of the total tax bill for families in 2020 are based on preliminary estimates from Palacios and Fuss (2020) who note that "[e]stimates of both income and total taxes for 2020 have been significantly affected by the economic 'shutdown' in response to COVID-19." Their estimates for the tax burden on families in 2020 also do not account for deficits which will have to be paid for by taxes on future generations.

Of course, COVID-19 has also affected Canada's public health care system in a number of ways that are yet to be accounted for by official estimates of health care spending in 2020. This study estimates the proportion of the family's tax bill devoted to health care insurance (28.8 percent) based on the average growth rate of health care spending for the five-year period

from 2015 to 2019. This rate (3.5 percent) is smaller than projected increases in provinces like Saskatchewan (4.9 percent) and PEI (8 percent), but larger than others (like Alberta)¹¹ which project little to no change in overall spending (Alberta, 2020a; Saskatchewan, 2020; Campbell and Williams, 2020; Alberta, 2020b and 2020c). In order to provide a more conservative estimate, table 3 presents the amount that families would pay through the country's

¹⁰ Specifically, we assume that health care spending will grow by 3.5 percent from \$172,227 million in 2019 to \$178,218 million in 2020.

¹¹ According to Budget 2020, the operating expenses of the Ministry of Health was projected to decrease slightly from \$20,828 million in 2019/20 to \$20,616 million in 2020/21. In the update released in March 2020, the government announced that it was providing an additional \$500 million in 2020/21 to the Ministry of Health, which means that the ministry's operating spending is projected to increase by 1.4 percent from 2019/20.

tax system assuming total provincial-territorial health care spending is unchanged from 2019.

Conclusion

Tables 1 and 2 present a much different perspective on the costs of public health care insurance from the average cost of \$4,694 per capita given earlier. 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 pay, Canadians can also better prepare for the fiscal impact of COVID-19.

References

- Alberta (2020a). Budget 2020: A Plan for Jobs and the Economy. Government of Alberta. https://open.alberta.ca/dataset/05bd4008- c8e3-4c84-949e-cc18170bc7f7/ resource/79caa22e-e417-44bd-8cac-64d7bb045509/download/budget-2020-fiscal-plan-2020-23.pdf>, as of July 17, 2020.
- Alberta (2020b). Fiscal Plan Update 2020-23. Government of Alberta. https://open.alberta.ca/ dataset/05bd4008-c8e3-4c84-949e-cc18170bc7f7/resource/d6b74209-c60d-44f9-8498f0b5408476e8/download/budget-2020-fiscalplan-2020-23-update.pdf>, as of July 15, 2020.
- Alberta (2020c). Budget 2020: Fiscal Plan Update 2020-23. Government of Alberta. https:// open.alberta.ca/dataset/05bd4008-c8e3-4c84-949e-cc18170bc7f7/resource/d6b74209c60d-44f9-8498-f0b5408476e8/download/ budget-2020-fiscal-plan-2020-23-update. pdf>, as of July 15, 2020.
- BMO Capital Markets (2020). Canadian Economic Outlook for July 3, 2020. BMO Capital Markets Economic Research. <a href="https://economics.bmo.com/media/filer_public/cb/

- c2/cbc28681-ebd8-409f-9ede-107117bdb276/ cdamodel.pdf>, as of July 7, 2020.
- Campbell, Kerry, and Nicole Williams (2020). P.E.I. Projects Biggest-Ever Deficit as Spending Increases During Pandemic. CBC News (June 17). https://www.cbc.ca/news/ canada/prince-edward-island/pei-budget-2020-1.5615959>, as of July 28, 2020.
- Canadian Institute for Health Information [CIHI] (2019). National Health Expenditure Trends, 1975 to 2019. Canadian Institute for Health Information. https://www.cihi.ca/ en/national-health-expenditure-trends-1975-to-2019>, as of June 30, 2020.
- CIBC Capital Markets (2020). Forecast-June 16. CIBC Capital Markets. , as of July 7, 2020.
- Esmail, Nadeem (2008). Medicare's Steep Price: An In-depth Look at the Hidden Costs of Health Care. Fraser Forum (September): 31-34.
- Saskatchewan (2020). Saskatchewan Provincial Budget 2020-21. Government of Saskatchewan. https://www.saskatchewan.ca/govern- ment/budget-planning-and-reporting/budget-2020-21>, as of July 10, 2020.
- Globerman, Steven (ed.) (2013). Reducing Wait Times for Health Care: What Canada Can Learn from Theory and International Experience. Fraser Institute. https://www.fraserinstitute. org/sites/default/files/reducing-wait-timesfor-health-care.pdf>, as of July 28, 2020.
- Palacios, Milagros, and Jake Fuss (2020). Tax Freedom Day: 2020 Report. Research Bulletin (May). Fraser Institute. https://www.fraserin- stitute.org/sites/default/files/tax-freedomday-2020-report.pdf>, as of June 30, 2020.
- RBC Economics (2020). Economic Forecast Detail – Canada (June). RBC Economics. http://

www.rbc.com/economics/economic-data/ pdf/economy_can.pdf>, as of July 7, 2020.

Statistics Canada (2020a). Table 10-10-0039-01: Consolidated Federal, Provincial, Territorial and Local Government Revenue and Expenditures. Statistics Canada. https://www150.statcan. gc.ca/t1/tbl1/en/tv.action?pid=1010003901>, as of June 30, 2020.

Statistics Canada (2020b). Table 17-10-0005-01: Population Estimates on July 1st, by Age Group and Sex. Statistics Canada. https://www150.statcan.gc.ca/t1/tbl1/en/ tv.action?pid=1710000501>, as of June 30, 2020.

TD Economics (2020). Canadian Economic Outlook. TD Economics. https://economics. td.com/domains/economics.td.com/documents/reports/qef/2020-jun/5-ca-outlook. htm>, as of July 7, 2020.



Milagros Palacios is the Associate Director of the Addington Centre for Measurement at the Fraser Institute. She holds a BSc in Industrial Engineering from the Pontifical Catholic University of Peru and an MSc in Economics from the University of Concepción, Chile. She has published or co-published over 150 research studies and over 100 commentaries on a wide range of public policy issues.



Bacchus Barua is Associate Director of 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 wait times, hospital performance, access to new pharmaceuticals, the impact of aging on health care expenditures, and international comparisons of health care systems.

Copyright © 2020 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

Acknowledgments

The authors wish to thank the Lotte and John Hecht Memorial Foundation for their generous support of this project. 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.