

Insights on Canadian Society

Pharmaceutical access and use during the pandemic

by Cassandra Cortes and Leah Smith

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Pharmaceutical access and use during the pandemic

by *Kassandra Cortes and Leah Smith*

Overview of the study

This study examines Canadians' access to and use of pharmaceuticals using data from the 2021 *Survey on Access to Health Care and Pharmaceuticals During the Pandemic*, collected from March to May 2021. First, it examines the proportion and characteristics of Canadians who reported not having prescription insurance to cover medication costs, as well as those who reported that their prescription insurance was affected by the pandemic. Next, medication use, out-of-pocket spending on prescription medication, and non-adherence to prescription medication because of cost were examined. Analyses are presented across province, immigration status, and racialized groups, among other sociodemographic variables, and thus offers insight into potential inequities in access to pharmaceuticals in Canada.

- In 2021, about one fifth (21%) of Canadians reported not having insurance to cover any of the cost of prescription medications in the past 12 months.
- Among the provinces, the proportion without prescription insurance to cover medication costs was highest among residents of British Columbia (26%), especially seniors in British Columbia (33%), as well as residents of Prince Edward Island (25%). It was lowest among people living in Nova Scotia (14%).
- Percentages of people reporting not having prescription insurance to cover medication cost was higher among immigrants (29%) relative to non-immigrants (17%) and among racialized persons (29%) relative to non-racialized and non-Indigenous persons (17%).
- Close to 1 in 5 Canadians reported that the pandemic affected their prescription coverage, with immigrants being nearly twice as likely as non-immigrants to be affected (28% versus 15% of non-immigrants). Similarly, racialized persons were more likely than non-racialized and non-Indigenous groups to report consequences of the pandemic on their coverage (29% versus 14%).
- Prescription medication use was lower among people who did not have prescription medication insurance (56%) compared to those who did (70%).
- Close to 1 in 5 Canadians (18%) spent \$500 or more out-of-pocket on prescription medications over the past year. Spending was higher for those without prescription insurance than for those with coverage.
- One in 10 Canadians (9%) reported not adhering (e.g., skipping doses, delaying filling) to their prescription medication because of cost. The share of Canadians reporting cost-related non-adherence was more than double among people without prescription insurance (17%) compared to those with prescription insurance (7%).

Introduction

Prescription medications are essential in the management of many health issues and chronic conditions.¹ Unlike every other developed country with universal health care, Canada does not have universal coverage of prescription medication (i.e., universal pharmacare).² The decision to implement universal pharmacare is one that has been long debated in Canada, with considerations largely including cost and inequities in accessing prescription medications. In 2018, the Canadian federal government announced the creation of the Advisory Council on the Implementation of National Pharmacare to advise government on introducing a national insurance program for prescription drugs—known as pharmacare. In the 2022 budget, the federal government announced a commitment to passing a Canada Pharmacare Act by the end of 2023. According to the Advisory Council, pharmacare would “replace a patchwork of thousands of plans.”³

Currently, each province and territory offers prescription insurance coverage to some Canadians through public drug plans that vary in terms of eligibility, affordability, and eligible drugs covered. Comprehensive drug coverage with minimal charges is offered to select eligible vulnerable groups, like seniors, people on social assistance, and people with disabilities.⁴ Catastrophic drug coverage is also available in most provinces and territories as an extended drug coverage to qualified Canadians with exceptionally high prescription drug costs.⁵

Alternatively, some Canadians obtain private prescription insurance through their employer or their

spouse’s employer. Others obtain their own private insurance. Those with private or employment-based insurance often have higher paying, full-time jobs and work for larger, often public sector and unionized organizations. In contrast, Canadians who are self-employed, unemployed or who work for smaller companies, and earn lower wages are often left without private prescription insurance.⁶

Based on a report from the 2017 Conference Board of Canada, an estimated 5.2% of Canadians were uninsured for prescription medication, and among those eligible for public drug plans, only 59% were enrolled.⁷ Reasons for not enrolling when eligible could include a lack of awareness about eligibility for the program, difficulty accessing the program, or the deliberate choice not to enrol because of costs associated with prescription plans. Enrolment in public prescription plans is often associated with out-of-pocket costs for premiums, deductibles or co-payments, or caps required by the drug plan, leaving a portion of Canadians underinsured.

Therefore, those who are uninsured, and some who are underinsured, can face significant financial burden because of the out-of-pocket costs associated with prescription medications. The financial burden from out-of-pocket costs for medications can lead to non-adherence to a prescription plan, which has been associated with increased hospital visits and worse health outcomes, including increase in deaths for common conditions.^{8,9,10}

There is currently a lack of recent nationally representative data on overall prescription insurance coverage, access, and spending on

pharmaceuticals in Canada, with the most recent publications using data from 2012 and 2016.¹¹ This study addresses the need for timely data on pharmaceutical access and use (See [Data sources, methods and definitions](#) text box) by examining self-reported data from Canadians in 2020-2021 (during part of the COVID-19 pandemic), with a focus on access inequities across provinces and sociodemographic groups. This study provides estimates of the proportion of Canadians who reported not having prescription insurance to cover their medication costs and who reported that their prescription insurance was affected by the pandemic. It also examines medication use, out-of-pocket spending on prescription medication, and non-adherence to prescription medication because of cost.

There is also a lack of disaggregated pharmaceutical use data, with the bulk of disaggregated analyses being on medication use across age and gender.¹² Therefore, pharmaceutical access and use is examined across regions and sociodemographic groups. The analysis focuses primarily on immigration status and racialized groups, which are not criteria to determine eligibility for provincial pharmacare plans but have significant associations with employment factors linked to having private prescription insurance.¹³ This research provides insight into Canadians’ access to and use of pharmaceuticals during the pandemic. Findings on pharmaceutical access and use among the Indigenous population will be released in a forthcoming article.

One fifth of Canadians (21%) reported not having prescription insurance to cover medication costs

According to the 2021 *Survey on Access to Health Care and Pharmaceuticals During the Pandemic* (SAHCPDP), 1 in 5 (21%) Canadians reported not having insurance to cover any of the cost of prescription medication in the past 12 months. This proportion was similar for men (21%) and women (20%) and across age groups up to

the age of 64. For adults 65 and over, a higher percentage (25%) reported not having prescription insurance compared to adults aged 25-64 (18%) (Table 1).¹⁴

Seniors are the most likely to need prescriptions yet have the lowest percentages of reporting having prescription insurance to cover medication costs. All seniors are eligible for prescription insurance under provincial and territorial plans, but these plans vary in access and coverage.¹⁵ Depending on the public plan and at times, on

income, some seniors are eligible for public prescription insurance but have deductibles that exceed their medication cost. Some may require drugs that are not eligible under provincial plans. It is also possible that some lost their employer-sponsored insurance upon retirement and may not realize that provincial drug coverage is available, are unaware of their insurance eligibility, or have not signed up for insurance due to choice or lack of knowledge about the programs or resources accessing them.¹⁶

Table 1
Percentages of Canadians who reported not having prescription insurance to cover medication costs in the past 12 months, by demographic variables, 2021

	Percentage
All Canadians	21
Gender	
Males	21†
Females (ref.)	20
Age	
18-24	21†
25-34	20*
35-44	18**
45-54	18**
55-64	21*
65+ (ref.)	25
Immigration status	
Immigrant (all)	29**
Recent immigrant (within 10 years of landing)	31**
Established immigrant (10 years or more since landing)	28**
Non-immigrant (ref.)	17
Racialized groups	
South Asian	27**
Chinese	33**
Black	27*
Filipino	21‡
Arab	25‡
Latin American	32‡
Southeast Asian	30‡
West Asian	41‡
Other racialized groups	22‡
Non-racialized and non-Indigenous (ref.)	17

*significantly different from reference group (ref.) ($p < .05$)

**significantly different from reference group (ref.) ($p < .001$)

†Non-significant difference ($p \geq .05$)

‡Unable to test difference (low statistical power)

Note: High sampling variability (coefficients of variation $> 15\%$) is associated with estimates for: Filipinos, Arabs, Latin Americans, Southeast Asians, West Asians, and the "other" racialized group category. These estimates should be interpreted with caution.

Source: Statistics Canada, Survey on Access to Health Care and Pharmaceuticals During the Pandemic, 2021.

Pharmaceutical access and use during the pandemic

Provincial and territorial differences in prescription insurance coverage are especially relevant because of the different drug benefit programs across provinces and territories. Chart 1 shows the overall proportion of people not having prescription insurance compared to Canadians aged 65 and over, by province. Data were not collected in the territories.

Overall, the share of Canadians reporting no prescription coverage varied considerably across the provinces, ranging from a high of 26% in British Columbia to a low of 14% in Nova Scotia. The situation for seniors was similar – the highest percentages of reporting no prescription coverage were among seniors living in B.C. (33%) and Manitoba (33%) and lowest among seniors in Alberta (9%) and Nova Scotia (11%). Differences in provincial plans likely play a role

in the observed differences. For example, British Columbia and Manitoba, the provinces with the highest percentages of seniors without prescription coverage, have income-based deductible public coverage for all residents (including seniors). Therefore, for some seniors, especially higher income seniors, deductibles may surpass prescription cost, meaning they pay 100% out of pocket for their medication, and therefore, may have reported that they did not have insurance to cover the cost of medication in the last 12 months.

Along with pharmacare policies, provincial differences in prescription coverage could also be explained by factors including provincial variations in age or other sociodemographic characteristics. However, even when excluding seniors (65+ years) from analyses, provincial variations

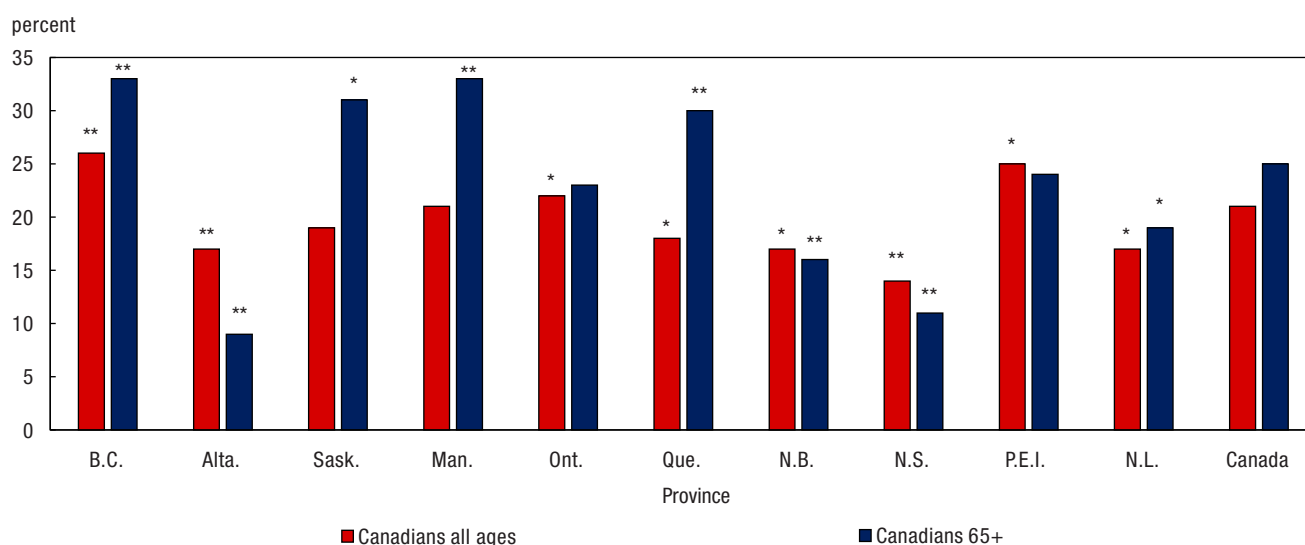
in insurance coverage mirrored the overall patterns suggesting that differences in coverage among seniors cannot account for provincial differences in prescription insurance coverage.

A higher percentage of immigrants and racialized persons reported not having insurance to cover medication costs

Close to one-third (29%) of immigrants reported not having prescription insurance to cover medication costs, compared with only one-sixth (17%) of non-immigrants.¹⁷ This self-reported non-coverage was heightened among recent immigrants, where 31% of immigrants who landed within 10 years reported having no coverage, compared to 28%

Chart 1

Percentage of all Canadians and Canadians aged 65 years and older who reported no prescription insurance coverage, by province, 2021



*significantly different from the estimate for the rest of Canada in the respective age group ($p < .05$)

**significantly different from the estimate for the rest of Canada in the respective age group ($p < .001$)

Note: High sampling variability (coefficient of variation >15%) is associated with the estimate for the estimate for Canadians aged 65 years and older in Alberta.

Source: Statistics Canada, Survey on Access to Health Care and Pharmaceuticals During the Pandemic, 2021.

Pharmaceutical access and use during the pandemic

of established immigrants.¹⁸ The higher percentage of immigrants without prescription insurance was consistent across all age groups, with the percentage point difference between immigrants and non-immigrants being highest for the youngest age group – 18 to 24 years (19 percentage points) (Chart 2).¹⁹

Given that prescription insurance can be offered by employers, employment factors likely contribute to differences in prescription insurance coverage by immigration status and racialized groups.²⁰ For example, in 2021, the unemployment rate for immigrants was higher at 8.4% compared to 7.0% for non-immigrants.²¹ The unemployment rate for racialized persons is also generally higher. This difference varies over time but the inequity appears to persist.²² Immigrants also

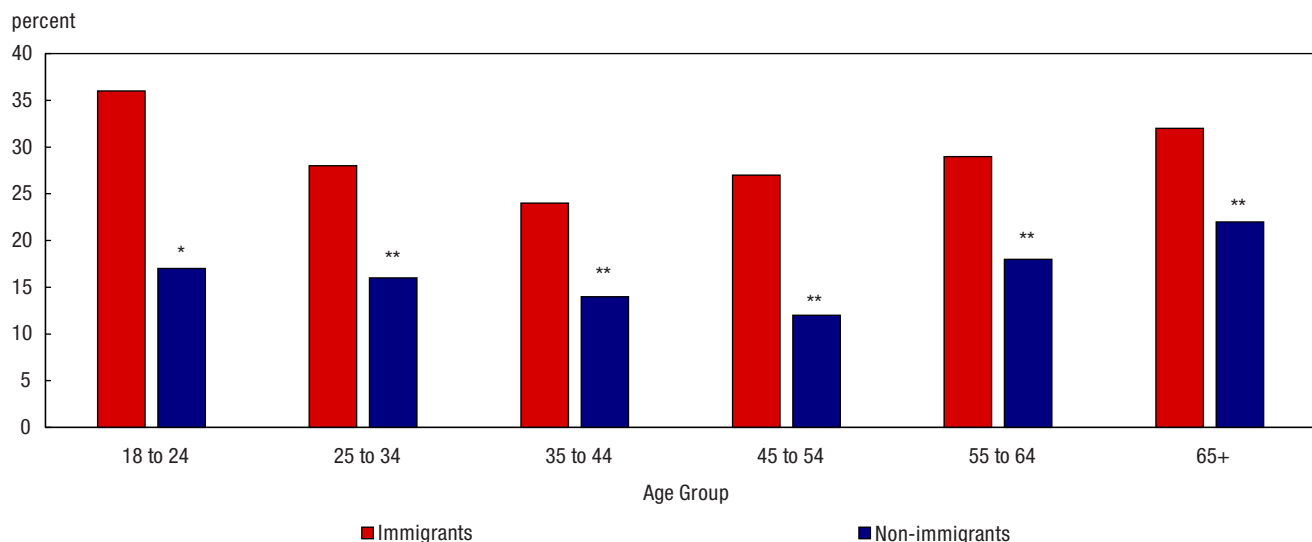
tend to have shorter-tenure jobs and work in lower paying jobs, which in addition to being more susceptible to lay-offs, are also the kinds of jobs that are less likely to offer insurance plans for prescription drugs.²³

Racialized persons also had a higher percentage of reporting not having prescription insurance coverage (29%) compared to non-racialized and non-Indigenous groups (17%). This was the case for all age groups. Among racialized persons, reports of not having prescription medication coverage were highest for West Asians (41%), Chinese (33%), and Latin Americans (32%) (see Table 1).²⁴

To assess whether differences in reports of prescription insurance coverage observed across immigration status and racialized groups were driven by other factors,

a multivariable model was run with the outcome variable of insurance coverage and covariates related to personal characteristics including immigration status, racialized group, age, disability status, as well as reported overall health and province, all of which were univariately associated with insurance coverage. Immigration status and the racialized person variable remained significant predictors of insurance coverage with the above covariates in the model ($p < .001$), suggesting their robustness as independent predictors. However, future research should run additional modeling to better understand the role of a variety of factors (e.g., health beliefs, access-related factors, enabling factors like marital status, person-level income, employment factors, living arrangements) when it comes to insurance coverage.

Chart 2
Percentage of Canadians who reported not having prescription insurance coverage, by age and immigration status, 2021



*significantly different from the immigrants estimate in the same age group ($p < .01$)

**significantly different from the immigrants estimate in the same age group ($p < .001$)

Note: High sampling variability (coefficient of variation >15%) is associated with the estimate for immigrants in the 18-24 age group.

Source: Statistics Canada, Survey on Access to Health Care and Pharmaceuticals During the Pandemic, 2021.

A higher share of immigrants reported that their prescription insurance coverage was affected by the pandemic

Just as the pandemic has affected [access to health care services](#), it also affected prescription insurance coverage. When asked ‘was your coverage affected by the COVID-19 pandemic (e.g., loss of job or benefits)?’, close to 1 in 5 Canadians (19%) said it had been.²⁵ While the survey did not ask whether coverage was affected in a positive or negative way, this question was only asked to those without prescription insurance for the entire 12-month period preceding the survey (i.e., people who did not have any insurance and those who had coverage at some point in the preceding 12 months). Findings from a poll suggest that the majority of insurance coverage

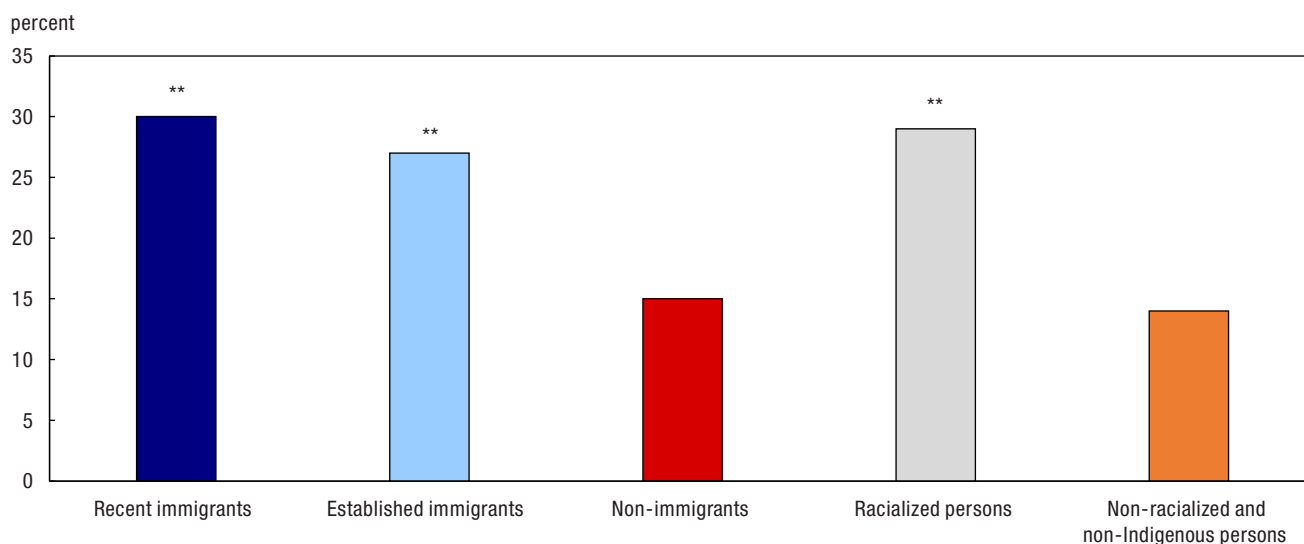
changes due to the pandemic were negative (e.g., job loss), albeit the impact of such changes could vary by region or other factors. In some cases, however, it is possible that insurance changes could be positive in nature, with people acquiring employer-sponsored insurance during the pandemic due to job changes.

Overall, as many men as women reported that the pandemic affected their prescription insurance coverage (19% each). Age appeared to be more important than gender in the reported impact of the pandemic on insurance coverage. Among working aged adults, those aged 35 to 44 years were most likely to report an impact on their insurance, with 33% saying that their prescription coverage was affected in some way. Reasons could include job loss, change in benefits, or some other event. Seniors aged 65 and

over stood out, with only 4% of them indicating that their coverage was affected by the pandemic. This may be because seniors are often retired and therefore unaffected by employment changes.

Certain population groups were more likely to report insurance changes because of the pandemic (Chart 3). The percentage of people reporting that their prescription coverage was affected by the pandemic was almost double for immigrants (28%) compared to non-immigrants (15%). The pandemic may have exacerbated pre-existing gaps in immigrants’ access to prescription insurance, particularly employment-based private insurance.²⁶ Previous research has suggested recent immigrants were more likely than non-immigrants to shift out of employment during the pandemic due to their shorter job tenure and

Chart 3
Percentage of Canadians who reported that their prescription insurance was affected by COVID, by immigration status and population group, 2021



**significantly different from the respective “Non-immigrants” or “Non-racialized and non-Indigenous” group estimates (p < .001)
Note: High sampling variability (coefficient of variation >15%) is associated with the estimates for recent immigrants, and results should be interpreted with caution.
Source: Statistics Canada, Survey on Access to Health Care and Pharmaceuticals During the Pandemic, 2021.

overrepresentation in lower-wage jobs that were more susceptible to layoffs.²⁷ Similar to immigrant populations, the pandemic's impact on insurance was more commonly reported by racialized people (29%) than by non-racialized and non-Indigenous people (14%).

Two-thirds of Canadians were taking or prescribed medication during the pandemic

In 2021, two-thirds (67%) of Canadians reported taking or being prescribed medication in the last 12 months. Medication use tended to

vary in the same way as provincial patterns in prescription coverage. The three provinces with the highest percentages of residents without prescription insurance coverage – British Columbia, Prince Edward Island and Ontario – were also the provinces with the lowest percentages of medication use

Table 2
Percentages of Canadians who took or were prescribed medication in the past year, 2021

	Percentage
All Canadians	67
Gender	
Males	60**
Females (ref.)	73
Age	
18-24	47**
25-34	55**
35-44	59**
45-54	66**
55-64	74**
65+ (ref.)	86
Provinces	
B.C.	63*
Alta.	69†
Sask.	68†
Man.	67†
Ont.	65*
Que.	70*
N.B.	73**
N.S.	70*
P.E.I.	67†
N.L.	75**
Canada (ref.)	67
Immigration status	
Immigrant (all)	60**
Recent immigrant (within 10 years of landing)	46**
Established immigrant (10 years or more since landing)	65*
Non-immigrant (ref.)	70
Racialized groups	
South Asian	60**
Chinese	49**
Black	56**
Filipino	49**
Arab	60**
Latin American	62†
Southeast Asian	56**
Other racialized groups	61*
Non-racialized and non-Indigenous (ref.)	71

*significantly different from reference group (ref.) ($p < .05$)

**significantly different from reference group (ref.) ($p < .001$)

†Non-significant difference ($p \geq .05$)

Note: Provincial differences compare to the rest of Canada (excluding the province being compared).

Source: Statistics Canada, Survey on Access to Health Care and Pharmaceuticals During the Pandemic, 2021.

(63% to 67%, compared to the highest percentages of 75% for Newfoundland and 73% for New Brunswick). Finally, consistent with previous research from data collected between 2007 and 2011, as well as between 2016 and 2019, medication use was higher for women (74%) compared to men (60%) and for older adults (86% for 65+) compared to younger adults (47% for adults aged 18-24) (Table 2).²⁸

Just as a lower percentage of immigrants (versus non-immigrants) and racialized persons (vs. non-racialized and non-Indigenous groups) reported having prescription insurance coverage, a lower percentage of immigrants (60%)—especially recent immigrants (46%)—and racialized people (55%) also reported taking or having been prescribed medication in the past 12 months.²⁹ Across groups, percentages of reports of medication use were lowest for those who identified as Chinese (49%) and Filipino (49%) and were highest for those who identified as Latin American (62%).

Although the sample was not large enough to run multivariable analyses with covariates while contrasting racialized persons individually, a multivariable model was run with medication use as the outcome variable and immigration status, belonging to a racialized group, gender, age, province, disability status, and reported overall health as covariates. Immigration status remained a significant predictor of medication use, whereas being racialized was no longer significant in predicting prescription use. A larger sample size is needed to run models while comparing across individual

racialized groups to determine the significance of group differences when accounting for other variables.

Prescription medication use lower among people who did not have prescription medication insurance

Given the cost of taking prescription medication, having prescription insurance may be important to accessing medication when needed. In the current study, for Canadians who reported having some level of prescription insurance coverage, 70% reported having taken or been prescribed medication in the past 12 months. This was higher than the proportion (56%) of those without prescription insurance. There is some research showing that compared to insured Canadians, those who are uninsured are less likely to get the medication they need because of cost.³⁰ That being said, it is also possible that there are other reasons for not taking or being prescribed medication. In some cases, people may not sign-up for insurance because they do not need it. There can also be health care barriers, such as not having a regular health care provider. Indeed, among those who needed health care services, 9% reported they were not able to schedule an appointment during the pandemic.³¹ There can also be differences in perspectives on prescription medicine versus traditional medicine.

Close to 1 in 5 Canadians who took or were prescribed medications spent \$500 or more out-of-pocket on prescription medications over the past year

In Canada, the cost of medications is the third highest among the Organisation for Economic Co-

operation and Development (OECD) countries.³² Most often, Canadians who took or were prescribed medication were spending less than \$250 out-of-pocket per year, with almost two-thirds (65%) either having no out-of-pocket expenses or paying up to \$249 annually. Still, close to 1 in 5 (18%) were spending \$500 or more out-of-pocket for their prescription medication over the past year, with no difference between men and women. Not unexpectedly, the amount spent out-of-pocket differed between those with and without prescription insurance coverage. In particular, 27% without prescription insurance spent \$500 or more, compared to 16% with insurance.

Immigrants who took or were prescribed medications spent less per year out-of-pocket (14% spent \$500 or more) compared to non-immigrants (19% spent \$500 or more). Similarly, racialized people who took or were prescribed medications spent less per year out-of-pocket (13% spent \$500 or more) compared to the non-racialized and non-Indigenous population (20% spent \$500 or more). Although it is possible that in some cases, immigrants and racialized people have better prescription insurance coverage than non-immigrants and non-racialized and non-Indigenous people, data from this and past research suggest that better coverage is likely not the leading explaining factor. Rather, more immigrants and racialized people reported not having prescription insurance compared to non-immigrants and non-racialized and non-Indigenous people. It is possible that immigrants and racialized people are less likely to fill their prescription or that they take fewer medications due to issues accessing medication, financial

constraints, or a greater preference for alternative remedies, with drug usage being a last resort.^{33, 34}

One in 10 Canadians reported not adhering to their prescription because of cost

Among Canadians who took or were prescribed medication in the past 12 months, close to 1 in 10 (9%) reported not adhering to their prescription medication (e.g., delayed filling, skipped doses) because of cost. Cost-related non-adherence did not vary by gender but generally decreased with age, from 16% for adults aged 25 to 34 to 4% for seniors aged 65 years and older.

Not having insurance coverage proved to be a barrier for some. Specifically, individuals without prescription insurance were almost 2.5 times more likely than those with coverage to report not adhering to their prescription because of cost (17% versus 7%).

Despite lower levels of prescription coverage, cost-related non-adherence was not higher among immigrants. That is, the same percentage (9%) of immigrants and non-immigrants reported not adhering to prescriptions due to cost. However, it is possible that some immigrants may have trouble accessing health care services in the first place, and therefore, were never asked the question on cost-related non-adherence. Only those who took or were prescribed medication were asked about cost barriers.

There was, however, a difference between racialized and non-racialized and non-Indigenous Canadians in adherence, with 12% of racialized people not adhering because of cost, compared to 8% of non-racialized and non-Indigenous people.

Conclusion

In the Advisory Council on the Implementation of National Pharmacare's final 2019 report, The Advisory Council stated that national pharmacare will "replace a patchwork of thousands of plans that are nearing their financial breaking point (and yet leaving millions of Canadians unable to get the medicine they need) with one that is sustainable, fair and equitable, where all Canadians have access to prescription medicines based on need, and not their ability to pay."³⁵

This research highlighted the problems with the varying provincial plans by identifying some of the gaps in the current system. About one in five Canadians reported not having prescription insurance to cover their medication costs in the past 12 months. There was considerable inter-provincial variation, and coverage was lower among immigrants and for all racialized groups, highlighting medication access inequities across regions and subpopulations. Future research could assess more clearly the proportion of Canadians with insurance coverage, distinguishing clearly from private versus public insurance, and among those with insurance, the percentage of their prescription costs covered by those insurance plans. This would help inform the effectiveness of provincial drug plans in particular.

Among those who reported having prescription insurance, 1 in 5 said the pandemic affected their prescription insurance coverage, and disproportionately more for immigrants and racialized people.

The provinces and groups (i.e., immigrants, racialized people) with the lowest prescription insurance coverage were also the same as those

with the lowest shares of medication use. This suggests that prescription insurance is one important route to accessing medication. Indeed, people without prescription insurance spent more money out-of-pocket annually on prescription medications than people with coverage, and they also had a higher percentage of reporting not adhering to their medication because of cost—a serious problem when untreated conditions result in poorer health and higher death rates.³⁶

Future studies could be designed to examine the intersection of various sociodemographic characteristics, including age, gender, immigrant status, racialized group, and province and territory of residence on pharmaceutical use and access. Such intersectionality would allow for a more granular understanding of Canadians' experiences with pharmaceutical use and access.

In the 2022 budget, the federal government announced a commitment to "tabling a Canada Pharmacare bill and working to have it passed by the end of 2023" and task the Canadian Drug Agency to develop a national formulary of essential medicines and bulk purchasing plan. The government allocated \$35 million over four years for Prince Edward Island to advance the implementation of universal national pharmacare.³⁷ However, the future of universal pharmacare and achieving equitable access to pharmaceuticals in Canada, is still uncertain.

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Data sources, methods and definitions

The Survey on Access to Health Care and Pharmaceuticals During the Pandemic (SAHCPDP) was a voluntary survey conducted from March 8, 2021 to May 15, 2021 and collected information from over 25,000 respondents. The target population of the survey included persons 18 years of age or older living in the ten provinces and excluded persons living on reserves and other Indigenous settlements in the provinces and the institutionalized population. An oversample of Indigenous people living in the ten provinces was included to increase the reliability of estimates for First Nations people living off reserve, Métis and Inuit living in the ten provinces. The additional sample was drawn from those who identified as Indigenous in the 2016 Census.

The SAHCPDP is a sample survey with a stratified sample and a cross sectional design. Survey weights were derived using Dwelling Universe File (DUF) to target all Canadians aged 18+ years old and the 2016 Census long form for respondents who self-identified as Indigenous in order to target the subpopulation of Canadian Indigenous people aged 18+ years old.

All estimates were produced using survey weights, which addresses non-response bias and makes the results representative of the Canadian population. The sampling variance was calculated by using bootstrap weights. Multivariable analyses were conducted using binary logistic regression and all analyses were conducted using SAS 9.4 software.

The questions about prescription insurance coverage, prescription insurance affected by the COVID-19 pandemic, medication use, amount spent out-of-pocket, and not adhering to prescription medication because of cost are listed in order below:

1. In the past 12 months, did you have insurance to cover at least some of the cost of prescription medications?

- A. Yes, had insurance for all of the last 12 months
- B. Yes, had insurance for part of the last 12 months
- C. No

For the purposes of this study, respondents who answered to either one of the two “yes” options were coded as having prescription insurance to cover at least some of the cost of prescription medications for all or part of the past year.

2A. Was your coverage affected by the COVID-19 pandemic (e.g., loss of job or benefits)?

- A. Yes
- B. No

2B. Was your coverage affected due to the COVID-19 pandemic (e.g., loss of job or benefits)?

- A. Yes
- B. No

For the purposes of this study, respondents who answered “yes” to either 2A or 2B were coded as reporting that the pandemic affected their prescription insurance. Question 2A was asked to respondents who indicated they had insurance for part of the last 12 months. Question 2B was asked to respondents who said they had no insurance in the past year but that they had previous insurance more than 12 months ago.

3. In the past 12 months, have you taken or were you prescribed any prescription medications?

- A. Yes
- B. No

4. What was the approximate out of pocket cost in the past 12 months?

- A. \$0 to \$249
- B. \$250 to \$499
- C. \$500 to \$749
- D. \$750 to \$999
- E. \$1000 or more

5. In the past 12 months, did you do any of the following because of the cost of your prescriptions? Did you:

- A. Not fill or collect a prescription
- B. Skip doses of your medication
- C. Reduce the dosage of your medication
- D. Delay filling a prescription
- E. None of the above

For the purposes of this study, respondents who answered to at least one of A-D responses were coded as not adhering to prescription medication because of cost, which was in contrast to those selecting “none of the above” who were coded as not engaging in non-adherence because of cost.

For the purposes of this study, immigrants refer to persons who are, or who have ever been, landed immigrants or permanent residents. Such persons have been granted the right to live in Canada permanently by immigration authorities. Immigrants who have obtained Canadian citizenship by naturalization are included in this category. Non-immigrants refer to the Canadian-born.

“Racialized persons” refers to whether or not a person belongs to one of the ‘visible minority’ population groups defined by the Employment Equity Act. The Employment Equity Act defines ‘visible minorities’ as “persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour.” The racialized population consists mainly of the following groups: South Asian, Chinese, Black, Filipino, Latin American, Arab, Southeast Asian, West Asian, Korean and Japanese.

Notes

1. See Sabaté (2003).
2. p. 7 of the Final Report of The Advisory Council on the Implementation of National Pharmacare: [A Prescription for Canada: Achieving Pharmacare for All - Final Report of the Advisory Council on the Implementation of National Pharmacare - Canada.ca](#)
3. p. 113 of the Final Report of The Advisory Council on the Implementation of National Pharmacare: [A Prescription for Canada: Achieving Pharmacare for All - Final Report of the Advisory Council on the Implementation of National Pharmacare - Canada.ca](#)
4. [Provincial and Territorial Public Drug Benefit Programs](#): <https://www.canada.ca/en/health-canada/services/health-care-system/pharmaceuticals/access-insurance-coverage-prescription-medicines/provincial-territorial-public-drug-benefit-programs.html>
5. Final Report of The Advisory Council on the Implementation of National Pharmacare: [A Prescription for Canada: Achieving Pharmacare for All - Final Report of the Advisory Council on the Implementation of National Pharmacare - Canada.ca](#)
6. Angus Reid (2015); Barnes and Anderson (2015); Bolatova and Law (2019).
7. Sutherland and Dinh (2017).
8. Blanchard et al. (2013); Booth, et al. (2012); Tamblyn, et al. (2001).
9. Hennessey, et al. (2016).
10. Law, et al. (2018).
11. Hennessey, et al. (2016); Law, et al. (2018)
12. Servais, et al. (2021); Statistics Canada (2021a).
13. Ng and Gagnon (2020).
14. It is important to note that reporting not having prescription insurance to cover the cost of medication is not a direct measure of insurance eligibility or status. For example, some may have prescription insurance, but have deductibles that are higher than the cost of their prescription(s). Others may be eligible for prescription insurance under a public plan but have not enrolled.
15. See Campbell et al. (2017).
16. Grootendorst et al. (2003).
17. Non-immigrants include all Canadian born individuals.
18. In Canada, there is an [Interim Federal Health Program \(IFHP\)](#) that “covers certain health-care benefits for specific groups of people until they become eligible for provincial or territorial health insurance, such as: protected people, including resettled refugees, refugee claimants, and certain other groups (Government of Canada, <https://www.cic.gc.ca/>).” The data from Survey on Health Care Workers and Pharmaceuticals During the Pandemic did not include questions that allowed for identification of refugee status.
19. The estimates for immigration status in the age 18-24 group has high sampling variability (coefficients of variation > 15%) and should be interpreted with caution.
20. Ng and Gagnon (2020).
21. Statistics Canada (2022).
22. Statistics Canada (2021b).
23. Chan, et al. (2020); Hou, et al. (2020).
24. High sampling variability (coefficients of variation > 15%) is associated with estimates for: Filipinos, Arabs, Latin Americans, Southeast Asians, West Asians, and the “other” visible minority group category, and should be interpreted with caution.
25. Statistics Canada (2021c).
26. Bolatova and Law (2019).
27. E.g., see Hou, et al. (2020).
28. Servais, et al. (2021); Statistics Canada, (2021a), respectively
29. In a multivariate model with medication use as the outcome variable, immigration status and visible minority group remained as significant predictors ($p < .001$) when age and gender were included as covariates.
30. Law, et al. (2018).
31. The Daily (November 23, 2021) Survey on Access to Health Care and Pharmaceuticals During the Pandemic, March 2020 to May 2021
32. See [Prescription drug pricing and costs - Canada.ca](#)
33. E.g., see Antonipillai et al. (2022).
34. Adams et al. (2018)
35. p. 113 of the Final Report of The Advisory Council on the Implementation of National Pharmacare: [A Prescription for Canada: Achieving Pharmacare for All - Final Report of the Advisory Council on the Implementation of National Pharmacare - Canada.ca](#)
36. Booth, et al. (2012); Tamblyn, et al. (2001).
37. [Budget 2022](#). <https://budget.gc.ca/2022/report-rapport/toc-tdm-en.html>

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