Cost Drivers Report 2023
Analysis of Private Drug Plans in Canada
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Executive Summary

Annual cost growth in Canada’s private drug benefit market is driven by increased utilization and chronic disease drugs, with an increase in claimants post-pandemic. Small plan sponsors, defined as having fewer than 50 lives, are the most vulnerable to high-cost drug claims, impacting insurance premiums and cost volatility.

Key Findings

1. Overall annual cost growth in the Canadian private drug benefits market has been steady since 2015.¹

2. The primary driver of cost growth is increased utilization, mainly due to a higher number of claimants that have surpassed pre-pandemic levels.

3. An overall decrease in the number of claims per claimant has offset an increase in cost per claim in 2022. Although growth in cost per claim returned to pre-pandemic rates, it remained significantly lower than inflation.

4. The number of claims per claimant has dropped to pre-pandemic levels.

5. Small plan sponsors make up the majority of plan sponsors, while large plan sponsors have the highest number of claimants.

6. Small plan sponsors, which typically rely on fully insured coverage, are particularly vulnerable to the financial impact of high-cost drug claims. Such claims can potentially result in substantial increases in insurance premiums and pool charges. Since most plan sponsors are small, a significant portion are susceptible to cost volatility when faced with high-cost drug claims.

¹ IQVIA Private Drug Plan (PDP) Claims database. See the “Data Sources and Methodology” section of this report for more information.
Executive Summary

Key Findings continued

7. Small plan sponsors with at least one high-cost claim had a median cost per claimant up to 20 times higher than those without.

8. Chronic disease drugs continued to account for more than two-thirds of private drug plan costs and drove 80% of cost growth.

9. Following a decrease in claimants during the pandemic, the number of claimants rebounded to above pre-pandemic levels. The most significant increase was in the under 25 age group, although the 25-64 age group remains the primary contributor to cost growth.

10. Lower-cost non-specialty drugs\(^2\) contributed to approximately two-thirds of private drug plan costs, while drugs costing over $100,000 per patient per year accounted for the smallest share.

11. The therapeutic classes with the fastest-growing costs were diabetes drugs (20.7%), bronchopulmonary therapy (19.3%), anti-infective agents (16%), and antidepressants, antipsychotics, and ADHD drugs (11.8%). The increased availability and popularity of new innovative diabetes and bronchopulmonary drugs were the main drivers of cost growth by therapeutic class.

\(^2\) Drugs costing less than $10,000 per patient per year
Introduction and Background

Since 2018, Innovative Medicines Canada (IMC) has published an annual cost drivers report in collaboration with IQVIA, a global leader in healthcare market insights, to comprehensively analyze the factors contributing to private drug plan cost growth. It is important to note that this analysis does not account for potential savings resulting from product listing agreements (PLAs) with manufacturers and therefore may overstate growth estimates. However, it does offer valuable insights into overall growth trends that reflect prevailing market conditions.

The findings of this year’s report reveal that in 2022, the contribution to cost growth of both utilization and cost per claim returned to pre-pandemic levels. An increase in utilization due to an increase in the number of claimants was the main driver of cost growth for private drug plans. However, it is notable that claimants are making fewer claims. A closer look at the data indicates that cost per claim did not significantly contribute to the growth; in fact, growth in cost per claim remained below inflation in 2022.

As a new feature, this year’s report examines the impact of high-cost claims based on plan sponsor size. The data confirms that small employers make up the majority of plan sponsors, while large plan sponsors cover most of the claimants. The analysis indicates that smaller plan sponsors are most susceptible to volatility when faced with high-cost drug claims. These findings confirm the need for continued innovation in insurance models and risk management strategies for fully insured plans.

Consistent with previous years, chronic disease drugs continued to make up a substantial portion (more than two-thirds) of private drug plan costs and contributed to 80% of the overall cost growth. Despite an increase in claimants for specialty medications, non-specialty drugs continued to account for most private drug plan costs. The top-growing therapeutic classes include diabetes drugs, bronchopulmonary therapy (primarily for cystic fibrosis treatment), anti-infective agents, and antidepressants, antipsychotics, and ADHD drugs.
Overall Private Drug Plan Claims Growth

The overall growth in private drug plan costs in 2022 was 7.6%, mainly driven by increased utilization, which was mostly due to an increase in claimants. (See Figure 2 and Figure 3.) The cumulative annual growth rate (CAGR) was 5.9% from 2015 to 2022. (See Figure 1.) While this overall growth rate is potentially sustainable for plan sponsors, the current underwriting and pooling strategies used to determine premiums based on a plan’s specific claims could result in unaffordable premiums or pool charges for smaller plan sponsors. Consequently, plan sponsors may choose to limit coverage to mitigate their costs. For a more detailed analysis of the risks, see Section 3 “Impact of High-Cost Products on Drug Plans.”

Figure 1. Average cost growth was 5.9% over the last 7 years

Data source: IQVIA Private Drug Plan (PDP) Claims database
Private drug plan claims have three main cost drivers

Growth in private plan drug claims can be attributed to three main drivers: increases in the number of claimants (more people making claims), increases in the number of claims by each claimant (more claims per person), and increases in cost per claim (due to the adoption of new innovative medicines or factors such as dispensing fees, mark-ups and the frequency of dispensing). The combination of the first two factors — an increased number of claimants and an increased number of claims — represents the increase in utilization.

Figure 2. Private drug plan cost drivers, 2021-2022: Cost growth driven by utilization

Private Drug Plan Cost Drivers, 2022-2023

- Claims per claimant effect: -2.8%
- Claimant effect: 8.2%
- Utilization: 5.4%
- Cost per claim growth: 2.3%
- Total drug cost*: 7.6%

Data source: IQVIA Private Drug Plan (PDP) Claims database

* Cost per claim growth and utilization do not add up to total drug costs growth due to the cross effect not being shown. The cross effect contributed -0.1% to total drug costs. Cross effects are attributable to the impact of the interaction of the main cost drivers given that they happen simultaneously and not in isolation.
Prior to the pandemic, there was relatively consistent growth in the number of claimants and the number of claims per claimant. In 2018, cost growth decreased due to the introduction of OHIP+, but in 2019, claimant growth increased as a result of changes in the implementation of OHIP+. Since the onset of the COVID-19 pandemic in 2020, there have been significant shifts in utilization patterns compared with pre-pandemic trends.

3 OHIP+ offered free medication to Ontarians under age 25 starting on January 1, 2018, but require those with private coverage to switch claims back to their private health plans on March 31, 2019.
In 2021, there was a decrease in the number of claimants using lower-cost acute-care drugs coupled with an increase in the number of claimants using higher-cost drugs, which led to an increase in the overall cost per claim. In 2022, the number of claimants rebounded to levels comparable to 2019. This increase can partially be attributed to an increase in claimants in the <25 age group. (See Figure 4.)

**Figure 4.** Growth of 8.2% in 2022 pushed the number of claimants back to pre-pandemic levels.

Data source: IQVIA Private Drug Plan (PDP) Claims database
While the number of claimants has returned to pre-pandemic levels, the average number of claims made by claimants has declined in the last couple of years. This indicates that claimants are making fewer claims than in previous years. (See Figure 5.)

Figure 5. Total number of claimants grew in 2022, while claims per claimant dropped

Prior to the pandemic, the increase in cost per claim was either below or close to inflation levels. However, in 2021, there was a temporary increase in cost per claim due to the effects of the pandemic. During this time, there was a reduction in the use of medications that were lower-cost acute, short-term, and for the treatment of less serious conditions. Consequently, there was higher relative demand for higher-cost drugs, used to treat more serious and chronic conditions, resulting in an overall increase in the average cost per claim.
In 2022, there was a shift back to the pre-pandemic trend: the cost per claim increased by 2.1%, but below the 6.8% inflation rate. (See Figure 6.)

**Figure 6.** Growth in cost per claim returned to pre-pandemic levels in 2022

![Growth in Total Private Drug Plan Cost per Claim, 2015-2022](chart)

*Data source: IQVIA Private Drug Plan (PDP) Claims database*
Impact of High-Cost Products on Drug Plans

Smaller plan sponsors outside Quebec remain vulnerable to the financial impact of high-cost drug claims within their benefit plans because of existing risk-sharing and pooling mechanisms. The impact of high-cost drug claims often leads to substantial increases in their insurance premiums for subsequent years. Since the majority of plan sponsors are smaller in size, high-cost claims have serious financial consequences for a significant portion of plan sponsors.

To evaluate the volatility experienced by drug plan sponsors, we analyzed the impact of high-cost claims data by the size of the plan sponsor as measured by the number of unique claimants. The analysis highlights the need to implement effective risk pooling and insurance strategies. For this analysis, we defined high-cost claims as claims costing $25,000 or more per year per claimant.

Figure 7 illustrates an inverse relationship between the number of plan sponsors in each size category and their share of total claimants. Almost three-quarters of plan sponsors (72.7%) had 25 claimants or fewer but had a relatively small portion (5.6%) of total claimants. In contrast, only 0.3% of plan sponsors had over 4,000 claimants, yet they accounted for nearly half (45.6%) of all claimants.

Figure 7. Inverse relationship between number of plan sponsors in each size category and share of total claimants

Data source: IQVIA Private Drug Plan (PDP) Claims database

* See Quebec’s drug pooling model regime section of this report.
The proportion of plan sponsors having claims for high-cost drugs (> $25,000 and > $50,000) is incrementally higher with larger plan sponsors. Notably, 96.1% of larger plan sponsors have at least one claim for drugs costing $25,000 or more per year per patient (see Figure 8), while 82.8% of them have at least one claim for drugs exceeding $50,000 per year per patient (see Figure 9). In contrast, smaller plan sponsors encounter fewer high-cost claims, with only 1.9% having claims exceeding $25,000 and 0.3% having claims exceeding $50,000.

While this situation may seem positive for smaller plans, for those outside Quebec the consequences of high-cost claims can be significant due to current insurance industry pooling models. Although smaller plans may initially benefit from lower insurance costs, they face a risk of substantial premium increases when they encounter a high-cost drug claim. This risk highlights the importance of proper risk management and pooling mechanisms for smaller plan sponsors that opt for fully insured health benefit plans, so they can navigate the potential financial challenges associated with high-cost claims.

Figure 8. Large plan sponsors have a higher share of claims for drugs that cost over $25K
Figure 9. Large plan sponsors have a higher share of claims for drugs that cost over $50K

Share of Plan Sponsors With & Without Claims for Drugs Costing ≥$50K/patient/year, by Size of Plan Sponsor, 2022

Data source: IQVIA Private Drug Plan (PDP) Claims database
Figures 10 and 11 examine the median cost per claimant by size of plan sponsor with and without high-cost claims. The data demonstrates that for small plan sponsors (with fewer than 25 claimants) that had a claim for drugs costing over $25,000 per year per patient, the median cost per claimant was 10 times higher than for plan sponsors without such claims. For drugs exceeding $50,000 per patient per year (Figure 11), the median cost per patient for plan sponsors with fewer than 25 claimants was 20 times higher.

**Figure 10.** Median cost per claimant up to 10x larger for plan sponsors with a claim for drugs that cost over $25K

Data source: IQVIA Private Drug Plan (PDP) Claims database
Conversely, for larger plan sponsors (with 500 claimants or more), the median cost per claim was significantly lower regardless of whether they had a high-cost claim. The disproportionate impact on smaller plan sponsors highlights the need for improved risk management and pooling strategies to sustain comprehensive insurance coverage.

**Figure 11.** Median cost per claimant up to 20x larger for plan sponsors with a claim for drugs that cost over $50K

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**Risk management: Time for a change?**

The current insurer risk management methods applied outside Quebec to assess risk and determine premiums do not meet the needs of many plan sponsors. To mitigate the risk, oftentimes the plans made available to small plan sponsors do not offer the insurance protection they need in today’s market.

Health insurance premium renewals generally follow a transparent process, where the methodology and data used to determine health benefit premiums are shared with the plan sponsor and their plan advisor. This allows plan sponsors to better understand the factors driving their plan’s cost and assess the proposed premium.

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Data source: IQVIA Private Drug Plan (PDP) Claims database
However, since the pooling methodology combines multiple plan sponsor claims, there is a lack of transparency in how the pool charges are determined. Plan sponsors have limited data to understand how these charges are calculated and whether they offer reasonable protection relative to their costs.

Nevertheless, plan sponsors feel compelled to purchase pooling protection due to the experience-rating of their plans and the potential impact of higher-cost claims. Unfortunately, there are limited pooling options available outside their current health benefit plan insurer.

If the cost of pooling becomes unaffordable for plan sponsors, they may resort to more restrictive drug plan designs, such as plans with maximums or formularies with limited coverage. However, these approaches can prevent plan members from accessing necessary medications for maintaining their health and productivity. Restrictive drug plans also fail to address the underlying issue of sub-optimal risk management.

Spreading overall private drug plan costs equitably across all claimants by the Canadian benefits insurance industry could lead to more affordable and comprehensive coverage for plan sponsors. It could also facilitate faster access to innovative therapies by eliminating the need for extensive reviews that often cause delays. Since the current experience-rating and pooling methodology used by Canadian insurers for individual plans outside Quebec poses a threat to their long-term sustainability, new approaches to mitigate plan sponsor risk should be implemented.

The Quebec Drug Pooling Model

The Quebec drug pooling model has emerged as an example the rest of Canada can learn from. The Quebec Drug Insurance Pooling Corporation (QDIPC) was set up as part of the province’s Act Respecting Prescription Drug Insurance in 1997. It ensures that a plan sponsor with a large drug claim will not face excessive cost increases that could threaten its plan’s sustainability. All insurers and administrators of employee benefit plans for Quebec residents are required to pool the risks inherent in the cost of pharmaceutical services and medications. In the Quebec model, plans with fewer than 6,000 members are mandated to join the Quebec pool. As a result, they experience less volatility and receive greater protection against high-cost claims compared with plan sponsors in the rest of Canada.
As the data above demonstrates, the current insurance industry risk model outside Quebec that sets premiums and determines pool charges is inconsistent and does not meet the needs of small drug plan sponsors, who collectively comprise up the majority of drug plans and account for a large portion of claimants. Stakeholders need to collaborate to improve risk management and pooling systems to ensure faster access to more comprehensive therapies for patients.

**Impact of Chronic Disease**

In 2022, chronic disease drugs remained the main driver of private drug plan claim costs, accounting for most (70.5%) of the overall costs. This proportion was consistent with the previous year. Furthermore, chronic disease drugs continue to be the largest contributor to annual cost growth, accounting for 80% of total growth. (See Figure 12 and Figure 13.)

**Figure 12.** Chronic disease drugs accounted for over two-thirds of private drug plan costs

![Share of Private Drug Plan Costs, by Chronic, Non-Chronic, and Cancer Therapy, 2022](Data source: IQVIA Private Drug Plan (PDP) Claims database)
Figure 13. Chronic disease drugs contributed the most to cost growth.

It is important to note that while chronic diseases are often managed with low-cost generic medications, certain chronic autoimmune diseases, such as colitis and psoriasis, are unpreventable and often require treatments with specialty or biologic drugs that are generally more expensive.
Impact of Age

Consistent with previous reports, the 25-44 and 45-64 age groups remained the greatest contributors to private drug plan claims cost growth from 2021 to 2022. Together, these age groups accounted for 71% of total cost growth. This trend is expected and aligned with previous years, given that individuals aged 25-64 make up 66% of claimants and 73% of claims in private drug plans. (See Figure 14.)

Figure 14. The 25-65 age groups contributed the most to 2021-2022 cost growth

Due to the pandemic, there was a decrease in the number of claimants across all age groups from 2019 to 2021, except for the over 65 age group. However, in 2022, the number of claimants rebounded to 2019 pre-pandemic levels, with the most significant increase in the under 25 age group.
While the number of claimants in the under 25 age group has increased, young people have fewer claims and lower costs per claim. This age group is typically younger and healthier, requiring both fewer medications and lower-cost medications. Consequently, the 25-64 age group remains the primary contributor to cost growth. (See Figure 15.)

**Figure 15.** The <25 age group made up 50% of the increase in claimants from 2021 to 2022

![Cost Growth Drivers, 2021-2022, by Age Group](chart.png)

Data source: IQVIA Private Drug Plan (PDP) Claims database
**Impact of Treatment Costs**

The analysis of private drug plan claims by treatment cost categories reveals that lower-cost non-specialty drugs, i.e., those with an annual cost of less than $10,000 per patient, accounted for the largest share of costs (67.8%) in 2022. The second highest category was drugs that cost between $10,000 and $25,000 annually per patient, representing 17.8% of total costs.

Conversely, the two most expensive categories had the smallest share of private drug plan claims costs. Drugs costing between $25,000 and $100,000 annually per patient made up 11.8% of costs, while drugs exceeding $100,000 per patient annually accounted for 2.6%. (See Figure 16.)

**Figure 16.** Lower-cost non-specialty drugs accounted for two-thirds of private drug plan costs

**Share of Private Drug Plan Costs, by Treatment Cost Category, 2022**

![Pie chart showing the share of private drug plan costs by treatment cost category in 2022.](image)

Data source: IQVIA Private Drug Plan (PDP) Claims database
Figure 17. Almost all the cost growth came from lower-cost non-specialty drugs

Non-specialty drugs (with an annual cost of <$10,000 per patient) accounted for almost all the growth in private drug plan costs in 2022. (See Figure 17.) The main factor driving this growth was increased utilization, which can be attributed to the introduction of new subclasses of diabetes drugs.
In addition, the increase in the share of drugs with an annual cost of $100,000 or more per patient per year can be attributed to the availability of new innovative bronchopulmonary therapies for cystic fibrosis. This growth is primarily driven by new claimants initiating therapy. Further analysis in the next section, focusing on therapeutic class, provides more insight into these trends. (See Figure 18.)

**Figure 18.** Overall costs decreased in all treatment cost categories except non-specialty drugs and drugs that cost >$100K

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**Cost Growth Drivers, 2021-2022, by Treatment Cost Category**

<table>
<thead>
<tr>
<th>Treatment Cost Category</th>
<th>Claims per Claimant Effect</th>
<th>Claimant Effect</th>
<th>Cost per Claim Effect</th>
<th>Cost Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$10K</td>
<td>11.8%</td>
<td>-0.1%</td>
<td>-0.8%</td>
<td>45.4%</td>
</tr>
<tr>
<td>All ≥$10K Drugs</td>
<td>8.2%</td>
<td>4.5%</td>
<td>4.9%</td>
<td>9.3%</td>
</tr>
<tr>
<td>≥$10K - &lt;$25K</td>
<td>-2.7%</td>
<td>-0.3%</td>
<td>-5.2%</td>
<td>82.9%</td>
</tr>
<tr>
<td>≥$25K - &lt;$100K</td>
<td>-0.1%</td>
<td>-1.0%</td>
<td>-4.3%</td>
<td>-44.5%</td>
</tr>
<tr>
<td>≥$100K</td>
<td>-0.4%</td>
<td>-1.0%</td>
<td>-4.3%</td>
<td>-44.5%</td>
</tr>
</tbody>
</table>

Data source: IQVIA Private Drug Plan (PDP) Claims database
Growth by Therapeutic Class

Diabetes drugs were the leading class in terms of cost growth, accounting for a significant portion (27%) of the overall increase in drug claims cost in 2022. Biologic drugs for autoimmune diseases (including rheumatoid arthritis, psoriasis, irritable bowel syndrome, and age-related macular degeneration), bronchopulmonary therapy drugs, and the category that includes antidepressants, antipsychotics, and ADHD drugs each contributed approximately 20% to overall cost growth. Cancer drugs, which were the third-highest contributor to cost growth in 2020, were not among the top 4 contributors in 2022. (See Figure 19.)

Figure 19. Antidiabetic medications were the highest contributor to cost growth

Top 4 Therapeutic Classes by Contribution to Cost Growth, 2021-2022

<table>
<thead>
<tr>
<th>Therapeutic Class</th>
<th>Contribution to Cost Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antidiabetic</td>
<td>27.0%</td>
</tr>
<tr>
<td>Bronchopulmonary Therapy</td>
<td>19.8%</td>
</tr>
<tr>
<td>Antidepressants, Antipsychotics and ADHD</td>
<td>16.8%</td>
</tr>
<tr>
<td>Biologic Disease Modifiers for RA/PsO/IBD/AMD</td>
<td>11.1%</td>
</tr>
</tbody>
</table>

Data source: IQVIA Private Drug Plan (PDP) Claims database
In 2022, the therapeutic classes with the highest cost growth were diabetes drugs (20.7%), followed closely by bronchopulmonary therapy (19.3%), anti-infective agents (16%), antidepressants, antipsychotics, and ADHD drugs (11.8%). (See Figure 20.) As previously noted, the growth in the diabetes and bronchopulmonary therapy drug classes can be attributed to the introduction and increased utilization of new innovative medications in these drug categories.\(^5\)

**Figure 20.** Antidiabetic medications had the highest cost growth

![Top 4 Therapeutic Classes by Cost Growth, 2021-2022](image)

Data source: IQVIA Private Drug Plan (PDP) Claims database

\(^5\) Non-drug diabetes claims, such as test strips, meters, insulin pumps, and associated supplies that are often reimbursed by private drug plans have been excluded from the Cost Drivers analysis since the 2022 report. This results in a reduction in the diabetes drug contribution to cost growth relative to previous years.
Summary

Analysis of private drug plan costs in Canada for 2022 reveals that overall cost growth increased due to utilization driven by growth in the number of claimants, rather than the number of claims or the cost per claim. The analysis also demonstrated the following:

- High-cost claims had a significant impact on smaller plan sponsors. Current underwriting and pooling strategies may lead to unaffordable premiums for smaller plan sponsors and threaten comprehensive coverage, highlighting the need for innovative insurance risk models and risk management strategies. The Quebec pooling model provides greater protection against high-cost claims and could serve as a model for the rest of Canada.
- Chronic disease drugs accounted for a substantial portion of private drug plan costs and contributed to 80% of cost growth.
- The 25-64 age group remained the primary contributor to cost growth, while the under 25 age group had the largest increase in claimants but with a lower cost per claim.
- Lower-cost non-specialty drugs accounted for approximately two-thirds of private drug plan costs, while drugs costing over $100,000 per patient per year accounted for the smallest share.
- Diabetes drugs, bronchopulmonary therapy drugs, anti-infective agents, and antidepressants, antipsychotics, and ADHD drugs were the main therapeutic classes contributing to cost growth in 2022.
Data Sources and Methodology

1. The analysis in this report is based on the IQVIA Private Drug Plan Claims database, the largest pan-Canadian private drug plan claims database. It covers approximately 80% of pay-direct private drug claims nationally. The database includes 9 of the top 10 private insurance carriers, third-party administrators, and benefit plan managers, providing insights from over 12 million active claimants with over 129 million drug claims. Figures in this report have not been adjusted to represent 100% of the market.

2. Drug claims represent only one component of the overall cost of a private drug benefit plan. The actual cost borne by plan sponsors is influenced by various factors, including the insurer’s risk management process, premium setting processes, and pooling methodology.

3. Claims costs are based on eligible amount, including both the plan-paid and the patient-paid portions, and include drug ingredient costs as well as pharmacy and wholesaler markups. Dispensing fees are not included, except in Quebec.

4. A “claim” in this analysis is defined as one fill for one drug identification number (DIN) at a given time. The cost of each claim may vary depending on the number of days supplied for each claim.

5. This analysis includes only drug pay-direct claims processed through group or individual private drug plans and does not include cash-paying customers with private coverage.

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