2021 TELUS Health **Drug Data Trends** & National Benchmarks

TELUS Health

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Terminology

Adjudicated amount:	The amount paid by the plan after the application of any plan design fiscal measures.
Biosimilar:	Health Canada defines a biosimilar as a biologic drug that is highly similar to a biologic drug that was already authorized for sale. The biosimilar is produced after patent expiry of the reference biologic drug.
Certificate:	The covered employee (also referred to as the primary cardholder) and his/her linked co-beneficiaries (i.e., spouse, children).
Eligible cost:	Cost of the drug found eligible by TELUS Health, before the application of any plan design fiscal measures (e.g., coinsurance).
Generic:	Bioequivalent copy of a brand-name drug, produced after patent expiry of the brand-name drug.
Insured:	Any covered individual (i.e., employee, spouse, child), whether or not he or she made a claim during the reporting period.
Multi-source brand drug:	Brand-name drug for which one or more generic drugs exist.
Reference biologic:	First-on-market, large molecule specialty drug that contains living organisms, also referred to as “originator” or “innovator” biologic.
Single-source brand drug:	Brand-name drug for which no generic drug exists.
Specialty drugs:	Complex drugs, including biologics, that are higher cost (defined by TELUS Health as costing $10,000 per year per claimant or more).
Traditional prescription drugs:	Chemically based drugs that are typically lower-cost.
Utilization:	Number of claims paid per insured or certificate, as specified.

Report foreword

This report is dedicated to our healthcare professionals who have continued to care for patients through these incredibly difficult times. **Thank you for all that you do**.

The 2021 TELUS Health Drug Data Trends and National Benchmarks report (TELUS Health report) is the second to be released during the COVID-19 pandemic. This report comes just months after variants of concern brought much of the country into a raging third wave of infections.

The pandemic has been a catalyst for change in the health landscape in areas like virtual care, utilization and access to hospitals and emergency departments, and home care. Some of these areas may lead to other innovations even as we await further scientific evidence to show us the path forward on vaccines and best practices for safe and effective patient management in this new environment.

We continue to look for clues on how much life has shifted, what the "new normal" may look like and how policymakers, plan sponsors and employers can drive further improvements and innovative practices for people through health benefit plans.

The TELUS Health report considers the major trends in private drug plan costs, utilization and plan management. It is a snapshot of the past year, but it also provides indications of shifts in trends, giving us a glimpse into the future as we navigate our rapidly changing world.

While the 2021 report found that the growth rate for average eligible monthly costs for all insureds is consistent with previous years, the picture becomes clearer when we consider the average cost per claim. Growth in cost-per-claim in 2020 is again comparable to previous years; however, it is more than three times the average rate of growth recorded for the consumer price index (CPI) in 2020. This illustrates prescription drugs' immunity from the pandemic's deflationary effect on consumer spending, which has led to the lowest change in CPI since the economic downturn more than 10 years ago.

Some shifts in drug costs are continuing to take hold. Specialty drugs now account for a third of costs, for just 1.3% of claimants. The eligible monthly growth rate for these specialty drugs was more than six times that for traditional drugs. If the current trend continues, specialty drugs could account for close to half the average eligible cost per certificate by 2026.

Specialty drugs are complex drugs, including biologics. When examined by top disease states, specialty drugs dominate in:

- Rheumatoid arthritis, where 99% of eligible costs (or 12.4 out of its 12.5 share points) are for specialty drugs, leading to its number-one rank among all drug categories
- Skin disorders, where specialty drugs account for 62% of eligible costs, up from 54% in 2019
- Cancer, where specialty drugs represent 79% of eligible costs

This growing share is the result of a higher average price, utilization and availability of new drugs and drug classes, including targeted therapies and immunotherapies for previously untreated or undertreated conditions.

British Columbia was the first public payer to implement a mandatory switching policy for four reference biologic drugs for which biosimilars are available. The government's policy has had a profound impact on utilization and cost trends for private plans in B.C.

When the policy was announced in May 2019, TELUS Health's claims data for private drug plans in B.C. showed that biosimilars represented 15% of total eligible costs for biologics that had biosimilar options. By the end of 2019 in B.C., biosimilars' share of total costs of biologics, where biosimilars existed, had more than doubled to 37%. In 2020, it almost doubled again, reaching 69%. We expect this trend will take hold in the rest of Canada. Alberta's Biosimilar initiative, affecting six reference biologic drugs, began in January 2021, with other provinces following suit.

Another trend of note last year are the decreasing claims for acute medications such as those to treat infection. In sixth place by total cost as recently as 2015, this category fell off the top-10 list of drug categories by cost in 2020. While that trend partly reflects the impact of generic pricing, volume also dramatically declined when claims for anti-infectives plummeted by 24%.

Claims for acute medications, such as antibiotics, dropped sharply after the start of the COVID-19 pandemic and remained well below usual levels for the rest of 2020. On the one hand, the need to treat infection was reduced due to fewer surgeries and the lower risk of community transfer in schools and workplaces. On the other hand, it is important to take note of emerging data that suggests that this kind of dramatic shift may be linked to accessibility issues and changes in how people seek (or decide not to seek) care in a pandemic environment, which in turn raises questions around the settings in which diagnoses can be made. Claims did gradually increase in later months in 2020, perhaps due to the increased use of virtual care, which enabled Canadians to access medical support and prescriptions for common infections.

In terms of mental health, 2020 saw marked increases in the volume of prescriptions related to mental health. A review of the top 10 categories based on claims reveals that claims for drugs to treat depression increased by 10% for adults and by 22% for dependents in 2020. As longer term impacts of the pandemic continue mental health will be a key area to keep an eye on as society continues to grapple with continued isolation and anxiety, particularly in young people. “We can expect to see aftershocks in 2021, especially in the area of mental health.” Shawn O’Brien, Principal, Health Benefits Management, TELUS Health.”

As we now have more than a year of pandemic-era data trends, we can see ways the healthcare ecosystem is transforming. COVID-19 pushed us into a virtual revolution, and virtual care consultations are becoming prevalent and will continue to evolve. We will continue to examine the longer-term impact and benefit to patients and providers alike.

We’ve all witnessed rapid and unimaginable events in the last while. We’ve learned some lessons and begun to normalize some significant innovations to support our healthcare professionals and patients alike. Importantly, mental health prescribing patterns are an area we will continue to keep an eye on through the coming year, as we expect to see patterns shift and accelerate in response to the mental health needs of Canadians.

Looking forward from a year like no other, we hope our findings and insights contained in this report can facilitate further innovations to make our system even better–a system that continues to demonstrate it is collectively capable of learning and adapting and able to overcome significant obstacles. We look forward to advancing work with our partners in the coming year.

Shawn O’Brien
Principal, Health Benefits Management, TELUS Health.

1. Introduction

The COVID-19 pandemic's effects on private drug plans were wide-ranging, yet its overall net impact was, perhaps surprisingly, relatively minimal.

For example, while claims for maintenance medications jumped during the early months of the pandemic, this was offset by a sustained decline in claims for acute medications. And while the number of claims per claimant increased in 2020, the percentage of insureds who made a claim dropped substantially compared to previous years.

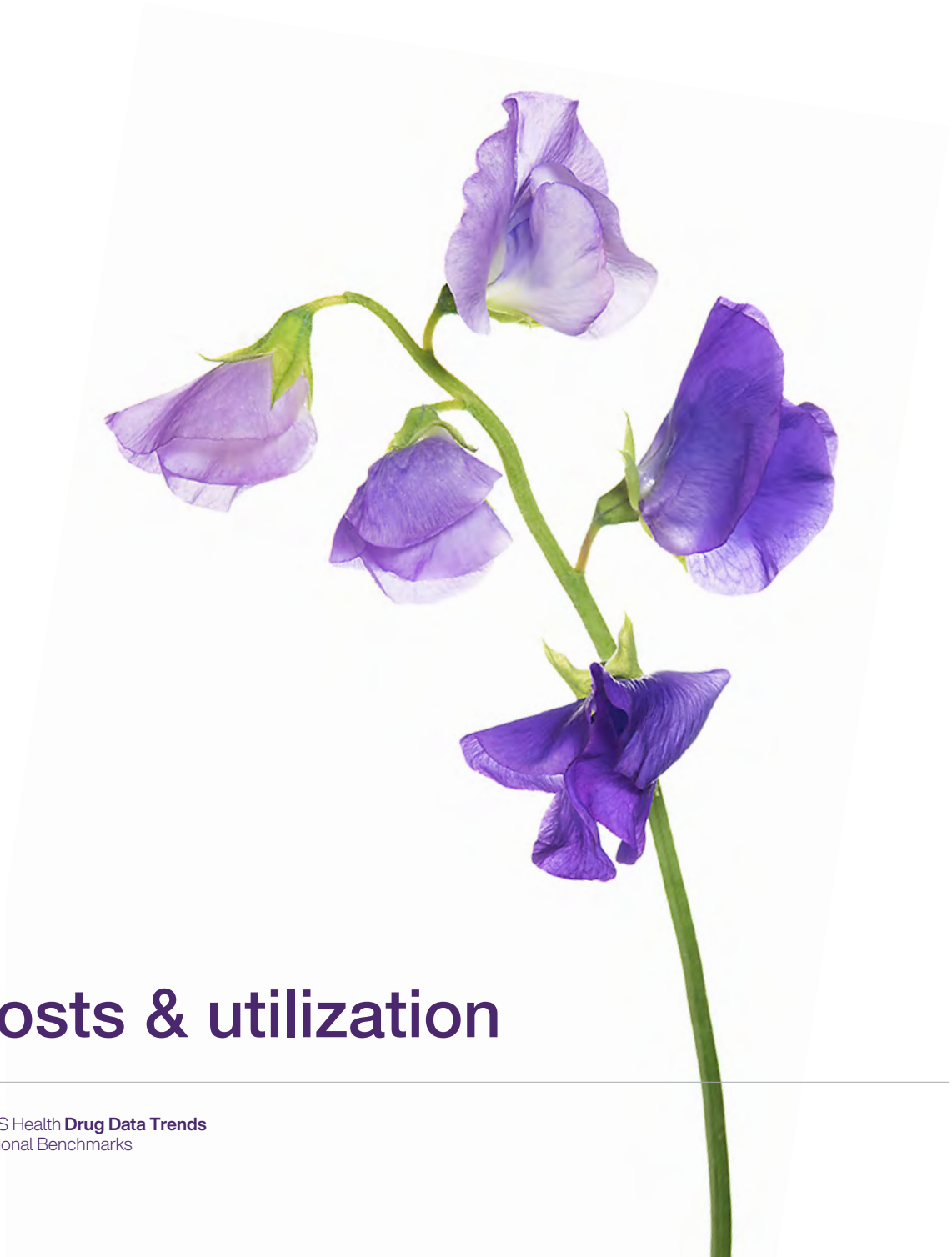
The upshot is that the growth rate for total eligible drug costs for all insureds is not remarkably higher or lower when compared against previous years. It can also be described as "pandemic-proof," given the deflationary trend experienced by many other areas of consumer spending in 2020. Indeed, on a cost-per-claim basis, the growth rate was more than three times the average rate of increase of the consumer price index last year. Specialty drugs are the main driver behind the inexorable climb in costs.

A closer look at the top drug categories by number of claims confirms a disturbing negative impact of the pandemic: an upsurge in claims for drugs to treat depression. It is reasonable to expect this trend to continue in 2021 and beyond, as society adjusts to a new normal when the pandemic finally comes to an end.

The 2021 TELUS Health Drug Data Trends & National Benchmarks report captures the claims activities of more than 4.8 million certificate holders in 2020, representing nearly 13 million insured individuals and 150 million prescription drug claims. In addition to claims data trends, this report summarizes adoption rates of plan management tools such as mandatory generic substitution and managed formularies.

> "While the net impact of the pandemic was somewhat neutral, we can expect to see aftershocks in 2021, especially in the area of mental health. Meanwhile we can't take our attention away from specialty drugs—they remain the single biggest factor influencing the management of private drug plans."

Shawn O'Brien, Principal, Health Benefits Management, TELUS Health.



2. Costs & utilization

Snapshot

The growth rate for monthly eligible costs for all insureds settled back down to “pre-OHIP+” levels in 2020. In 2018 and 2019, this program in Ontario had a significant impact on cost trends. Other key findings include:

- The growth rate in costs for specialty drugs was more than six times that of traditional drugs
- Monthly utilization across all insureds grew by less than half the rate of growth for costs
- Fewer insureds made a claim in 2020; however, among those who did, the average number of claims per claimant increased
- On a cost-per-claim basis, the growth rate was more than three times that of the consumer price index
- Generic drugs continued their slow ascent as a percentage of prescription volume, while their share of costs continued to decline

Cost trends

Private drug plans saw average eligible monthly costs for all claims submitted by all insureds increase by 3.8% in 2020 compared to 2019, comparable to the 3.7% gain in 2017 (Chart 1). In between those years, costs followed a roller-coaster path in large part due to the OHIP+ program in Ontario, which impacted private plans from January 1, 2018 to April 1, 2019.

In 2018, when eligible plan members in Ontario switched to OHIP+ as their first payer for prescription drugs, the impact was such that national average eligible costs dropped by -4.1%. Then in 2019, costs climbed by 4.9% as plan members under age 25 lost their eligibility for OHIP+ and returned to private coverage. Results for 2020 confirm that the “OHIP+ effect” is done, as the growth rate of 3.8% is essentially unchanged after removing insureds under the age of 25 (3.6%).

Specialty drugs remain the biggest year-after-year driver of the growth in eligible costs. When insureds under 25 years of age are excluded to remove the effect of OHIP+ during the first quarter of 2019, average eligible costs for specialty drugs increased by 8.7% compared to 1.3% for non-specialty or traditional drugs. Quebec saw the highest increases for both groups: 10.4% for specialty and 2.2% for traditional drugs. The lowest rate of growth for specialty drugs, 6.3%, occurred in Western Canada, which reflects the Pharmacare/universal drug plans in B.C., Manitoba and Saskatchewan.

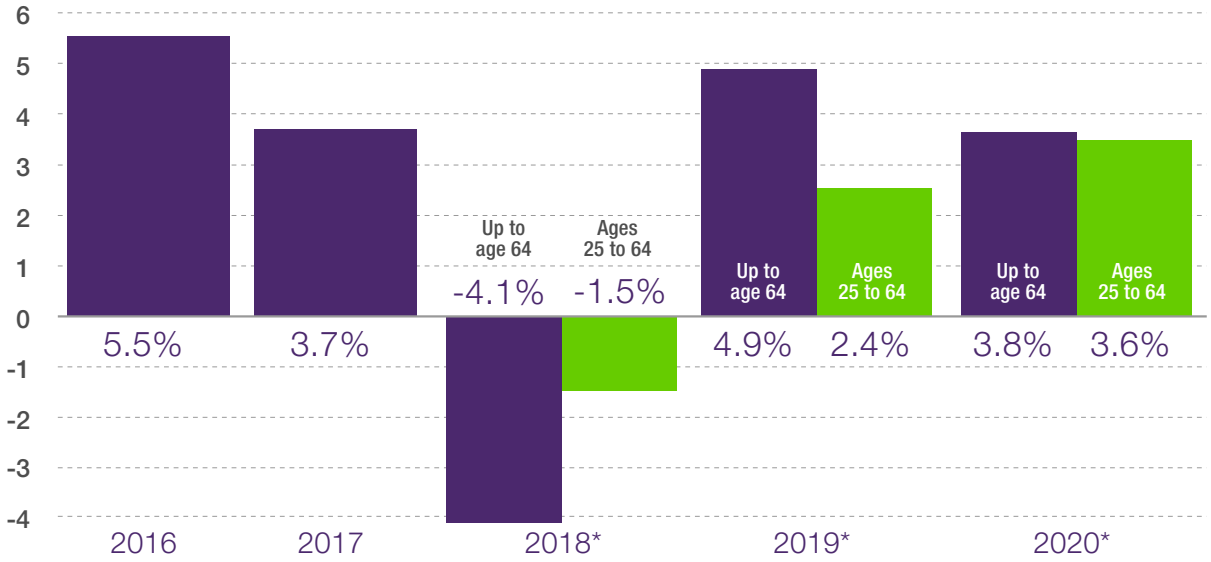
"Specialty drugs continue to outpace traditional drugs with respect to year-over-year growth rates. This is due not only to increased costs as more specialty drugs for rare diseases come to market, but also the broader utilization of specialty drugs as novel treatment options for more common conditions emerge," says O'Brien.

Regionally for all claims, it follows that Quebec also saw the biggest increase in overall average eligible monthly costs among all insureds for all claims, at 5.0%, followed by Ontario at 4.3%. Meanwhile, the lowest rate of growth, 1.8%, occurred in Western Canada (Chart 2).

A look at costs by age reveals a shift between ages 25 to 29 and 30 to 39. Among those aged 25 to 29, average eligible costs increased by 5.0% in 2020 compared to 2019, which is the highest rate of growth across all age groups. This drops to 1.5%—the lowest rate of growth—among insureds aged 30 to 39 (Chart 4). Remaining age groups are close to the overall average of 3.8%.

A consideration of actual costs helps put these growth rates into better perspective (Chart 5). For example, the 5.0% increase among 25- to 29-year-old insureds translated into an actual average eligible cost of just $22.47 in 2020, while the 3.3% increase among those aged 60 to 64 pushed the average actual cost for this age group into triple digits for the first time, to $101.83.

CHART 1 | Change in eligible monthly cost per insured, 2016 – 2020



* Results from 2018 onward broken down by age illustrate the impact of OHIP+ in Ontario, which affected private drug plans from January 1, 2018 to April 1, 2019.

CHART 2 | Change in eligible monthly cost per insured by region, 2019 – 2020

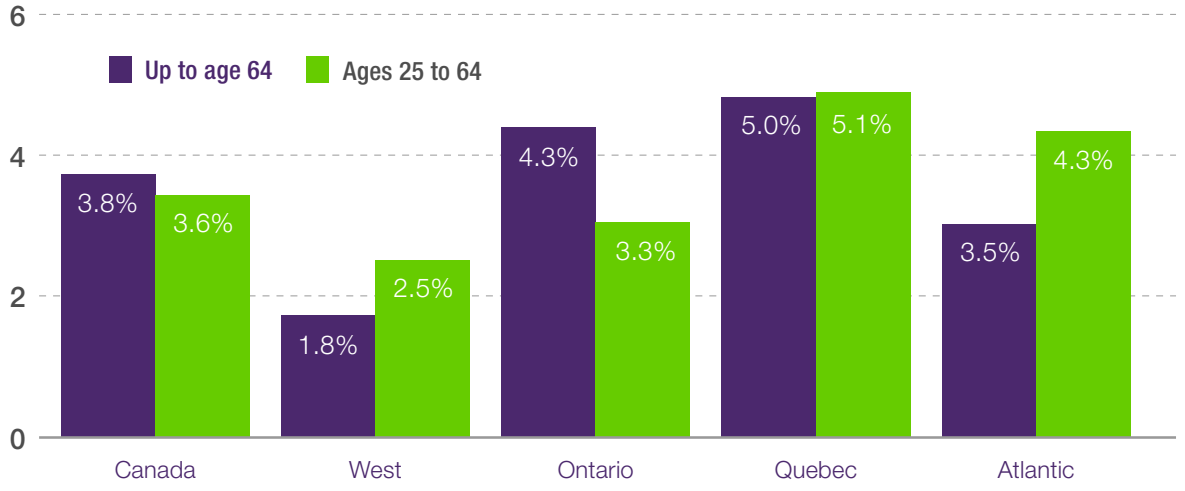


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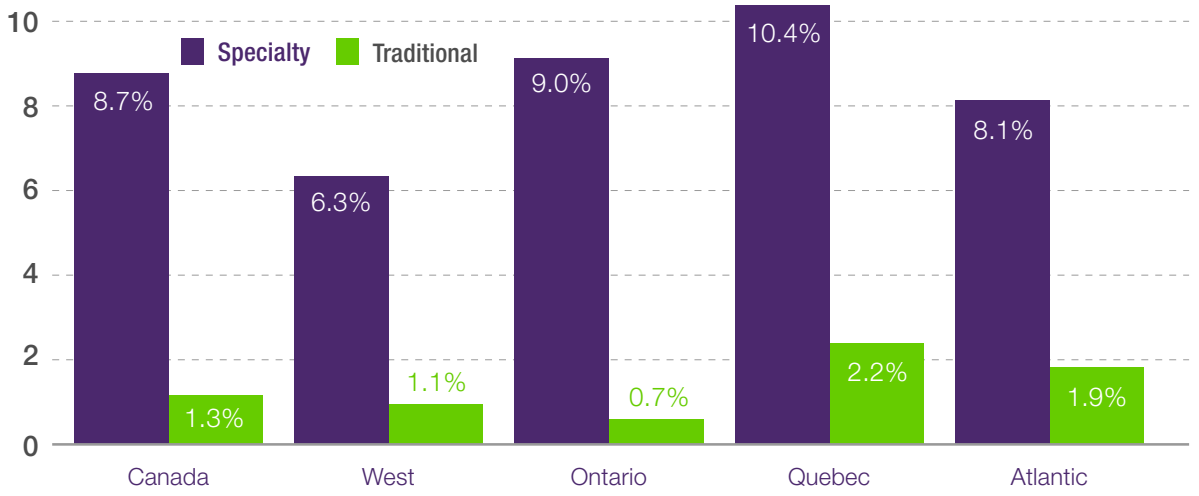
CHART 3 | Change in eligible monthly cost per insureds aged 25 to 64* by type of drug, 2019 – 2020



* Insureds under age 25 excluded to remove the effect of OHIP+ in Ontario during the first quarter of 2019.

CHART 4 | Change in eligible monthly cost per insured by age, 2019 – 2020

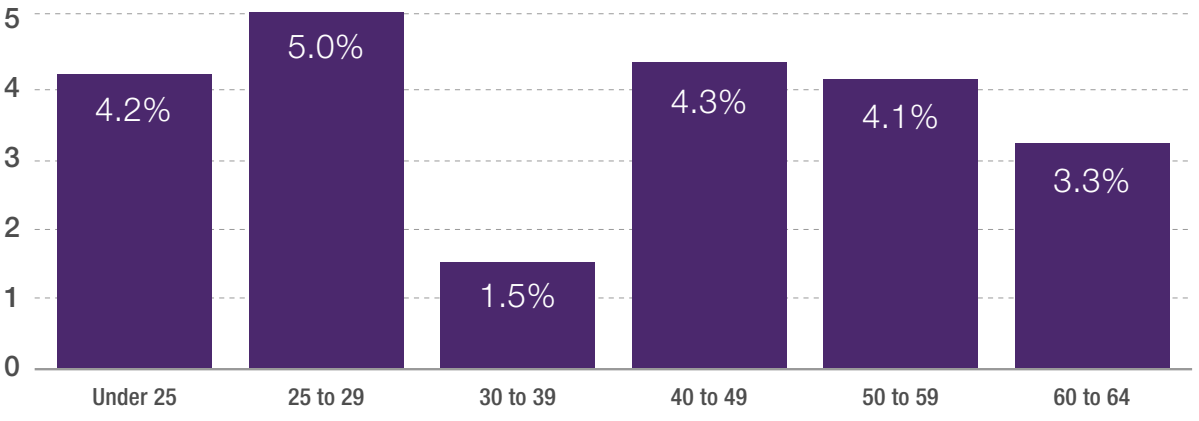


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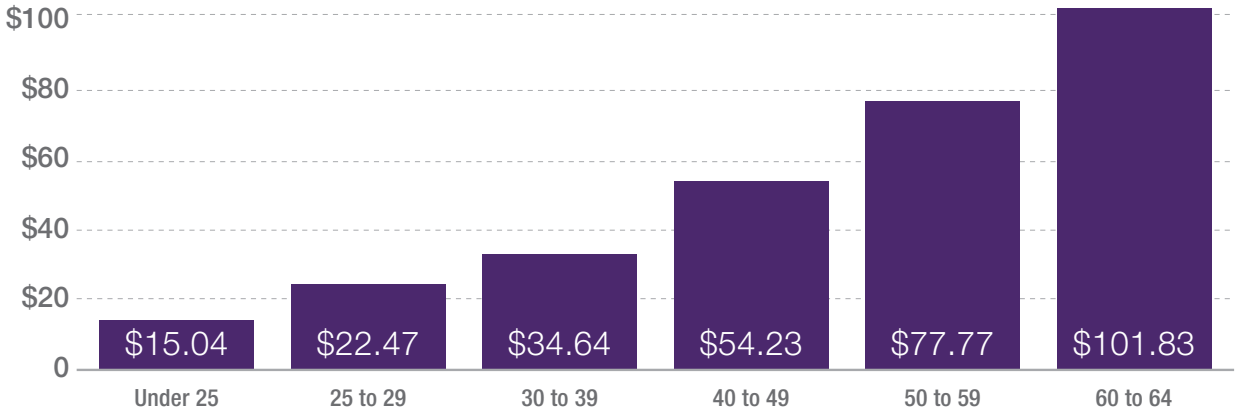
CHART 5 | Monthly eligible cost per insured by age, 2019 – 2020



Utilization trends

Monthly utilization across all insureds (i.e., whether or not they made a claim in 2020) grew by 1.4% in 2020 compared to 2019, less than half the rate of growth for eligible monthly costs (3.8%) (Chart 6). When insureds under 25 years old are excluded to remove the effect of OHIP+ during the first quarter of 2019, the change in monthly utilization increases to 2.1% (compared to a cost-growth of 3.6% for insureds 25 to 64).

However, the change in utilization (and associated eligible costs) may be artificially low for 2020 due to COVID-19. The number of insureds who made a claim was 57.3% last year, compared to 63.1% in 2019 and 62.0% in 2018 (when OHIP+ was a mitigating factor), and 67.4% and 67.0% in 2017 and 2016, respectively (Chart 7). This suggests that insureds put off seeing physicians and/or getting prescriptions filled.

> When you take away OHIP+, we are looking at a drop of about nine points in claims activity in 2020 compared to previous years. That's significant," says O'Brien. "We observed a material reduction in claims volumes over 2020, particularly for acute medications. Insureds may have decided to forgo less essential medications, such as antibiotics, to treat common ailments."

He adds that utilization began to pick up in the latter half of 2020. "This likely aligns with the increased uptake of virtual consultations with physicians, including by phone."

For those who did submit claims, the number of average claims per claimant jumped to 11.5, compared to approximately 10 for the previous four years (Chart 8). This partly reflects the fact that plan members with chronic medications had to refill them more frequently during the early months of the pandemic due to drug-supply policies in most provinces (i.e., refill amounts were limited to 30-day supplies instead of the usual 90 days). (See page 36 for details.)

The average eligible cost per claim across all age groups was $76.52, ranging from a low of $65.05 in Quebec (a reflection of its standard 30-day supply policy) to highs of $86.76 in Ontario and $86.74 in Atlantic Canada (Charts 9 and 11). The growth rate in cost per claim was 2.3% over 2019 ($74.77), which is comparable to previous years (Chart 9). Having said that, 2.3% is 3.3 times the average annual growth rate of the consumer price index (CPI) in 2020, which was 0.7%. This is the lowest rate of CPI growth since 2009.

Due in part to the higher number of claims per claimant, total average annual eligible costs per claimant jumped by 14.1% in 2020 to reach $877.59, compared to $769.05 in 2019 (Chart 10). This compares to average annual increases of between 2.7% and 4.1% during the previous four years.

Chart 11 presents a regional overview of costs and utilization in 2020.

CHART 6 | Change in monthly utilization per insured by region, 2019 – 2020

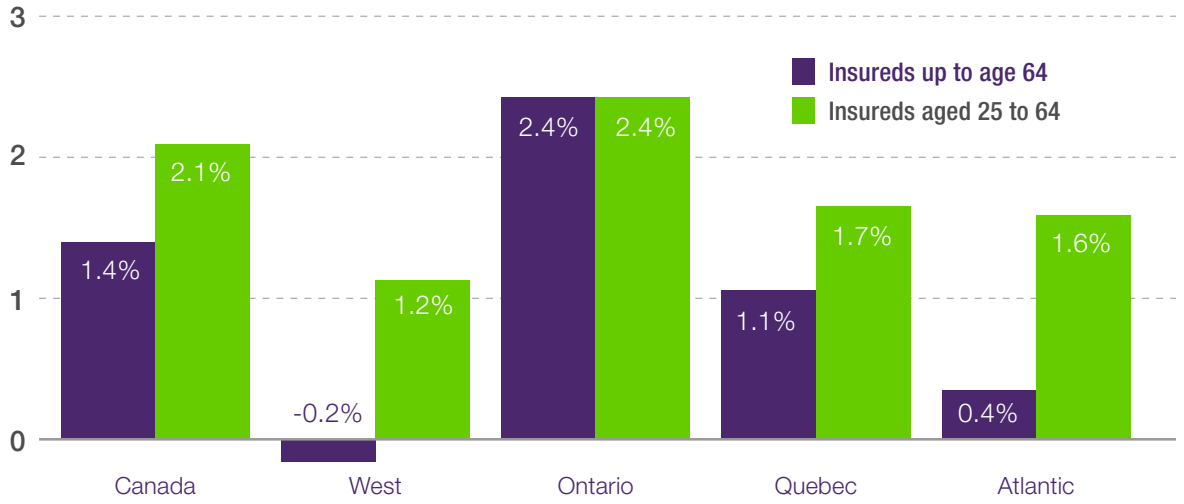


CHART 7 | Number of insureds who made a claim, 2016 – 2020

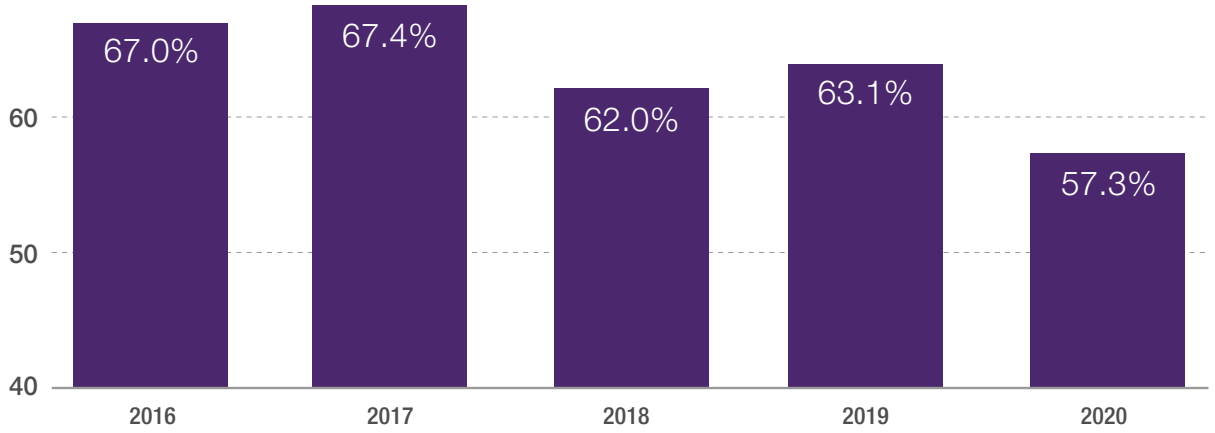


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CHART 8 | Number of claims per distinct claimant, 2016 – 2020

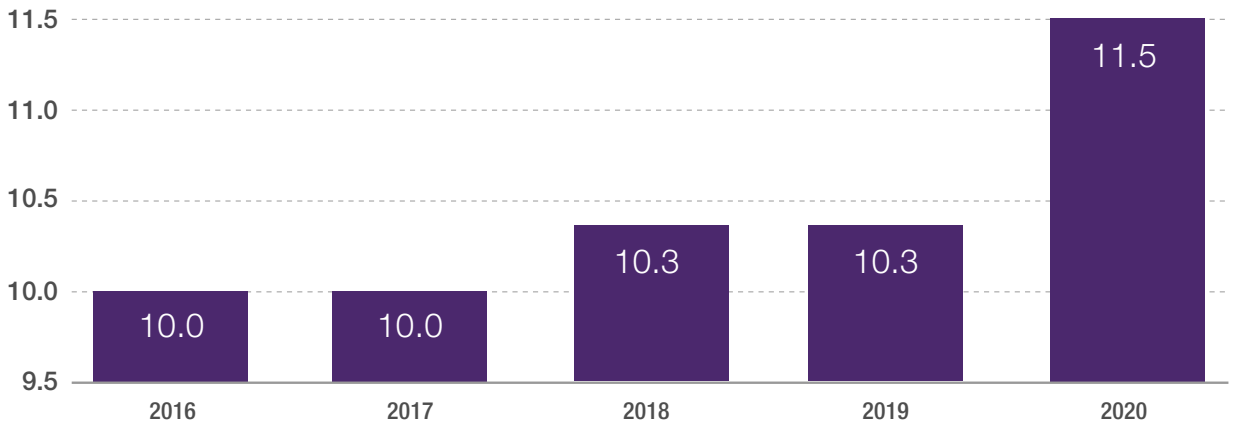


CHART 9 | Average eligible cost per claim, 2016 – 2020

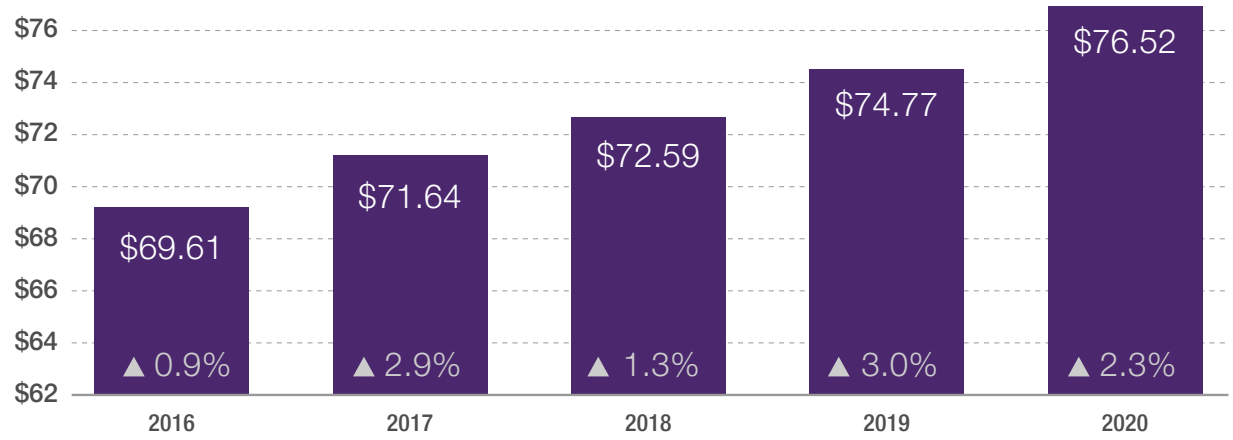


CHART 10 | Average annual eligible cost per distinct claimant, 2016 – 2020

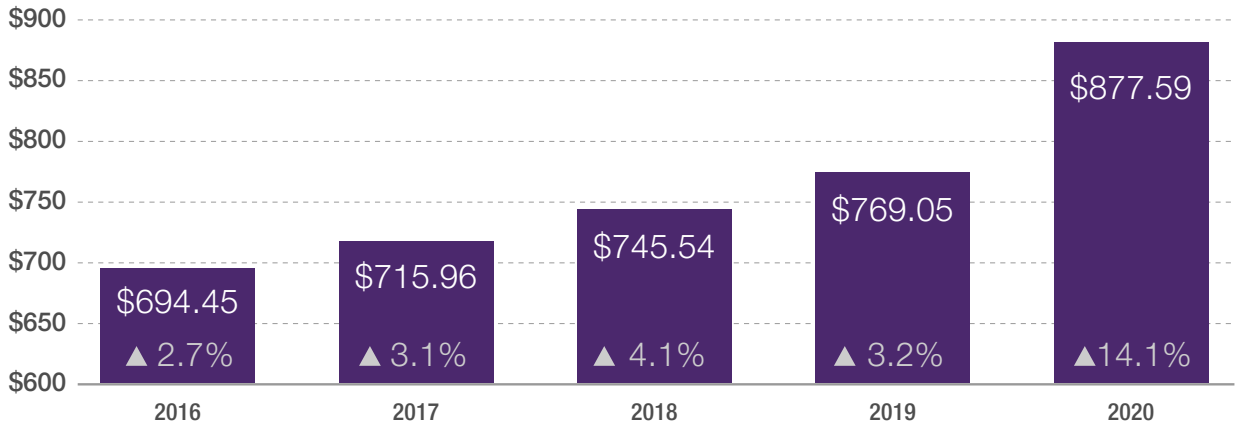


CHART 11 | Overview of costs & utilization by region, 2020

	Canada	West	Ontario	Quebec	Atlantic
Eligible monthly cost per insured	$41.93	$31.19[1]	$43.05	$57.93	$53.74
Monthly utilization per insured	0.55	0.44	0.50	0.89[2]	0.62
Insureds who made a claim	57.3%	55.1%	55.7%	64.2%	65.2%
Average eligible cost per claim	$76.52	$71.33	$86.76	$65.05[2]	$86.74
Average claims per claimant	11.5	9.5	10.7	16.7[2]	11.4
Average age of employee/cardholder	42.0	41.1	42.2	43.0	43.5

1 Western Canada has the lowest eligible monthly cost per insured because provincial Pharmacare/universal drug plans in B.C., Manitoba and Saskatchewan automatically become the primary payer once plan members pay an out-of-pocket deductible.

2 Quebec has the highest rate of monthly utilization per insured, the lowest average eligible cost per claim and the highest average number of claims per claimant because Quebec pharmacies typically dispense chronic medications in 30-day supplies, whereas pharmacies in other provinces typically dispense 90-day supplies.

Utilization of generic drugs

Generic drugs continue their slow ascent, accounting for 64% of prescriptions dispensed to private drug plan members in 2020, up from 60% five years ago in 2016 (Chart 12). Casting further back, to 2013, 56% of prescriptions dispensed were for generics. Mandatory generic substitution policies are the main driver behind this trend (see pages 20 and 44).

Generics' share of prescriptions gained a percentage point in 2020 in all regions except Western Canada. As in previous years, Atlantic Canada is well ahead of the rest of Canada, with a generic penetration level of 71% (compared to 68% in 2016). Meanwhile, Ontario continues to lag behind all other regions: generic prescriptions inched forward to 62% in 2020, compared to 59% in 2016. And Quebec solidifies a relatively rapid rate of growth, reaching 64% in 2020 compared to 58% in 2016.

The remaining 36% of prescription drugs dispensed to members of private drug plans breaks down into 30% for single-source drugs (for which no generic options are available) and 6% for multi-source drugs (for which generic options are available) (Chart 13). In 2013, 10% of drugs dispensed were multi-source.

As expected, the multi-source fill rate steadily declines as the generic fill rate goes up. In Atlantic Canada, multi-source drugs accounted for only 3% of prescriptions filled in 2020. However, the multi-source fill rate can never drop to zero, for two reasons: a small percentage of patients have adverse reactions after switching from a brand to a generic and must go back to the brand drug; and mandatory generic substitution policies allow for the dispensing of a multi-source brand when the patient pays the difference in price between the generic and the brand.

When expressed as a share of costs, generics accounted for 24% of eligible amounts in 2020, which is down from 27% in 2016 and 26% in 2013 (Chart 14). This is partly due to lower generic drug prices, spearheaded by the pan-Canadian Pharmaceutical Alliance, despite their growing volume. It is also due to cost trends for single-source brand drugs. “Single-source drugs continue to dominate overall eligible costs, largely driven by the significant cost of specialty medications,” says O’Brien.

CHART 12 | Utilization of generic drugs by region, 2016 – 2020

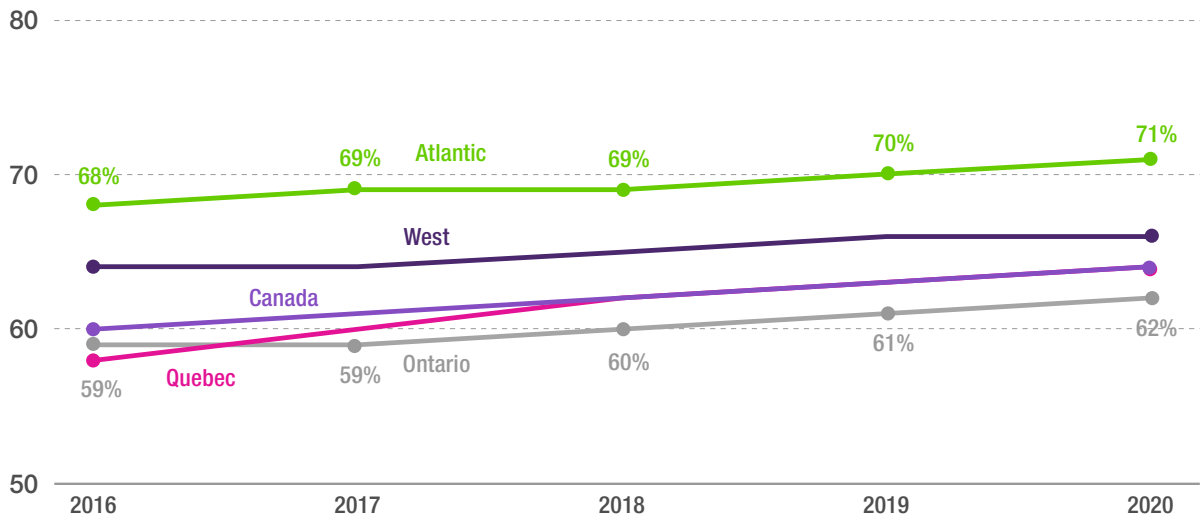


CHART 13 | Utilization by type of drug, 2016 versus 2020

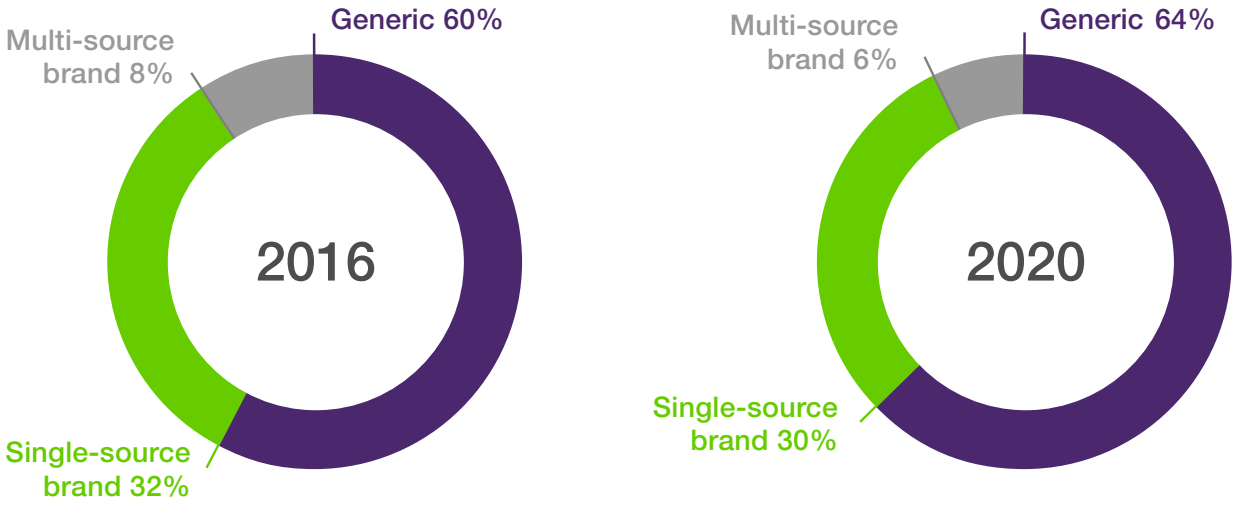
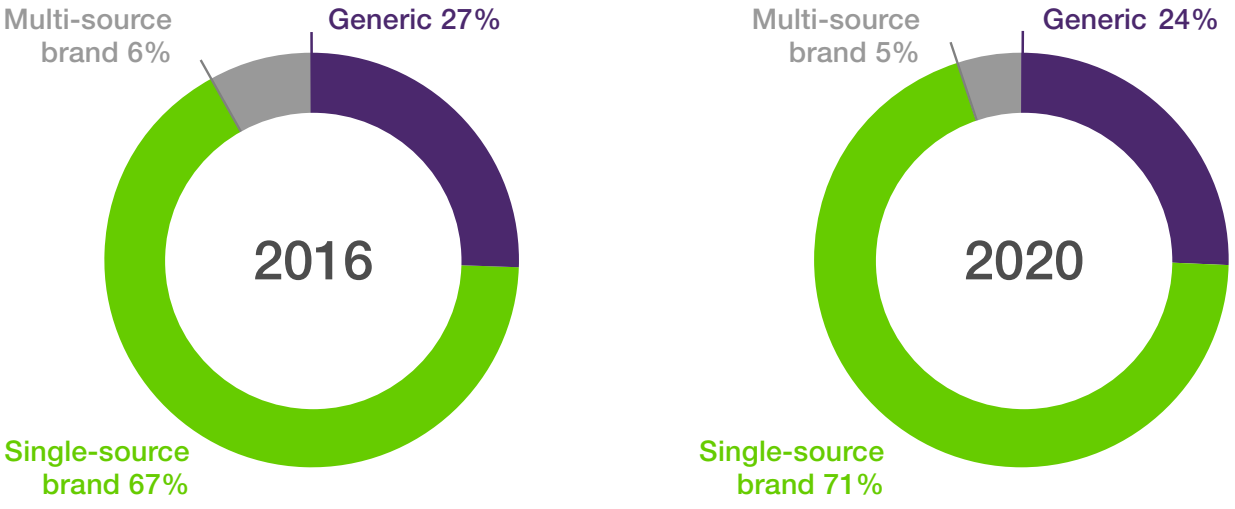


CHART 14 | Eligible cost by type of drug, 2016 versus 2020



Summary & recommendations

Specialty drugs continued to have a disproportionate influence on growth rates for both costs and utilization. On a cost-per-claim basis, the growth rate for all eligible costs was more than three times that of the consumer price index in 2020, which was exceptionally low due to the pandemic. While the pandemic did not appear to have a notable net impact, it jostled traditionally steadfast measures such as the number of insureds making a claim (which decreased) and the number of claims per claimant (which increased).

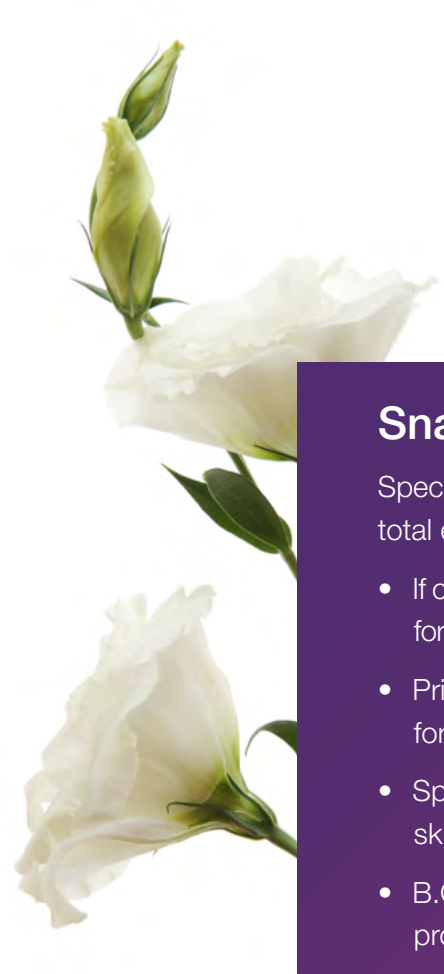
- Measures to support biosimilar adoption and the evolution of prior authorization help ensure the most cost-effective and appropriate therapy is provided based on the individual clinical need of the patient
- Mandatory generic substitution is an effective plan design mechanism to protect sustainability. It may provide additional savings that can be re-invested to fund newer, more advanced drug therapies that are helping employees remain healthy and productive at work
- It is important to always think member-centric. Plan sponsors can find a sustainable win-win by starting to take advantage of many existing strategies that can reduce costs without having a material impact on their plan members' experience
- Accessing data and regular plan performance monitoring are key to understand program cost drivers and risks. This is more important than ever in light of the possible ripple or rebound effects of the pandemic. Once the pockets of risk are understood, the following fundamental questions can be answered:

  - How can you improve the performance of the plan?

  - Will the change be worthwhile?

  - What is the impact on plan member experience?

3. Specialty drugs



Snapshot

Specialty drugs' share of market has reached about a third of total eligible costs, coming from less than 2% of claimants.

- If current trends continue, specialty drugs are on track to account for almost half the average eligible cost per certificate by 2026
- Private plans in Atlantic Canada bear the highest-cost burden for specialty drugs
- Specialty drugs dominate treatments for rheumatoid arthritis, skin disorders and cancer
- B.C.'s switching policy for biosimilar biologics has had a profound impact on private plans in that province

Share of costs & claimants

Specialty drugs' share of eligible costs continues its steady climb, gaining two points in 2020 to reach 32% (Chart 15). Their share has more than doubled in the past 10 years, from 15% in 2011.

Their share of claimants, meanwhile, has consistently hovered around just 1.0%. In 2020 that inched forward to 1.3% from 1.1%, although at least another year's worth of claims data is required to assess whether the claimant base is indeed growing. Even so, the consistently huge gap between costs and claimants illustrates that pricing is the main driver of growth. Increased utilization among existing claimants may also be a factor, but to a limited extent relative to pricing.

Private plans in Atlantic Canada continue to experience the highest volume of specialty claims—accounting for 40% of eligible costs in 2020, up from 38% in 2019 (Chart 16). The main reason can be traced to disease epidemiology, as the prevalence of certain genetic, rare diseases is higher in Atlantic Canada.

Plans in Quebec and Ontario also saw two-point gains, reaching 36% and 33%, respectively. Meanwhile, plans in Western Canada continue to experience a much lower share of eligible costs attributable to specialty drugs, coming in at 24% in 2020 (compared to 23% in 2019). Pharmacare programs in B.C., Saskatchewan and Manitoba are the mitigating factor in that region, as public coverage automatically kicks in once plan members have paid an income-based deductible.

When considered by top disease states and related drug categories by eligible costs (Chart 17), specialty drugs dominate in three (see page 33 for more detail):

- rheumatoid arthritis, where 99% of eligible costs (or 12.4 out of its 12.5 share points) are for specialty drugs, leading to its number-one rank among all drug categories;
- skin disorders, primarily autoimmune conditions such as psoriasis, where specialty drugs account for 62% of eligible costs, up from 54% in 2019; and
- cancer, where specialty drugs represent 79% of eligible costs, unchanged from 2019.

When eligible costs are expressed as a monthly average per certificate, specialty drugs accounted for 32% of costs in 2020, or $31 out of the monthly average of $97 per certificate (Chart 18). This compares to a 26% share five years ago, in 2016, and a 16% share 10 years ago, in 2011.

> “Over the past 12 years, the cost per certificate for specialty drugs has increased on average by nearly 14% each year. This compares to an average annual decrease of 0.6% per year for non-specialty drugs, says O’Brien.”

Should current trends continue, basic linear forecasting suggests that specialty drugs could represent as much as 48% of the average eligible cost per certificate, or $60 out of a total certificate amount of $124.

Specialty drugs' growing share is primarily due to a higher average price point, the introduction of new drugs and new disease categories, and increased utilization. The cost trend for traditional drugs also plays a part, as their average monthly certificate cost has steadily declined, from $71 in 2011 to $68 in 2016, and $66 in 2020. By 2026, the forecasted average cost will be $64.

"While adoption rates for biosimilar biologics are encouraging as a means to temper overall specialty drug costs, the expanding specialty drug pipeline will continue to put upward pressure on plan costs," says O'Brien. "For example, in coming years private plans will feel the impact of new specialty drugs marketed for chronic migraine and multiple sclerosis. The pipeline is also filled with high-cost cancer drugs, some in oral form that could increase utilization, and very high-cost enzyme replacement therapies."

CHART 15 | Specialty drugs by share of claimants and eligible costs, 2011 – 2020

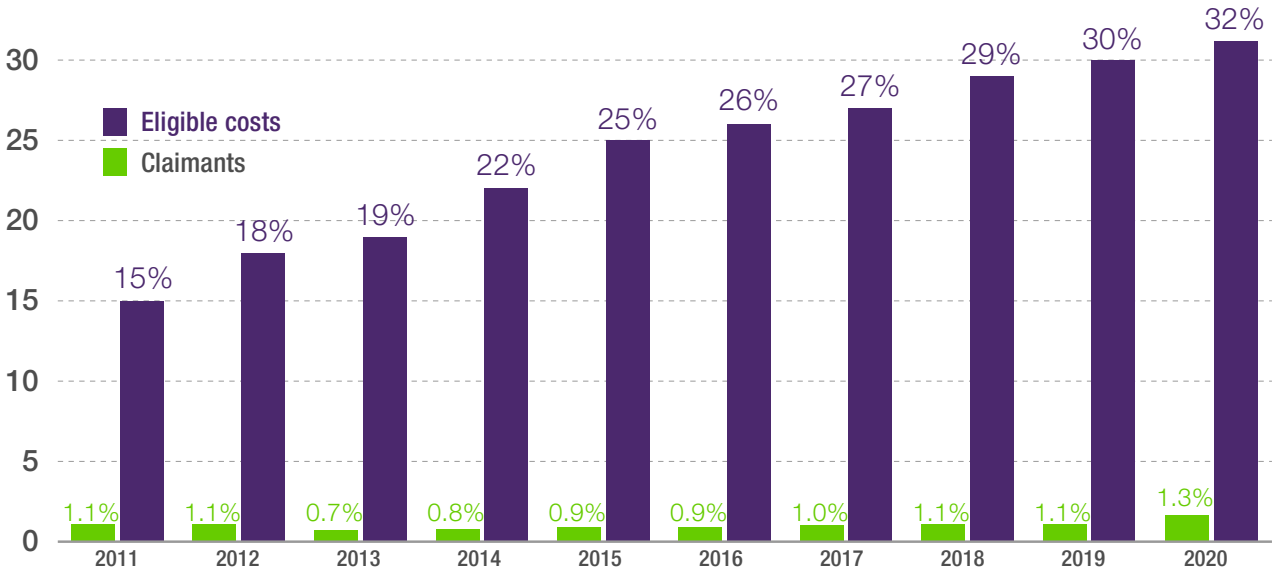


CHART 16 | Specialty drugs' share of eligible costs by region, 2020

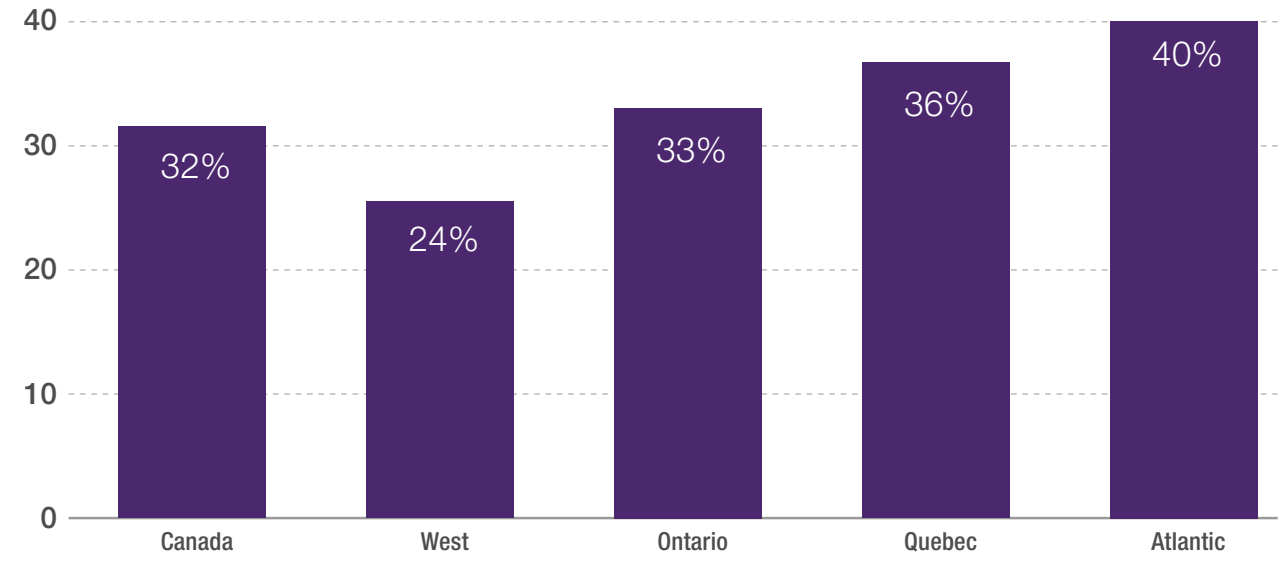


CHART 17 | Breakdown of shares of eligible costs between specialty and traditional drugs for top-ranking drug categories in 2020

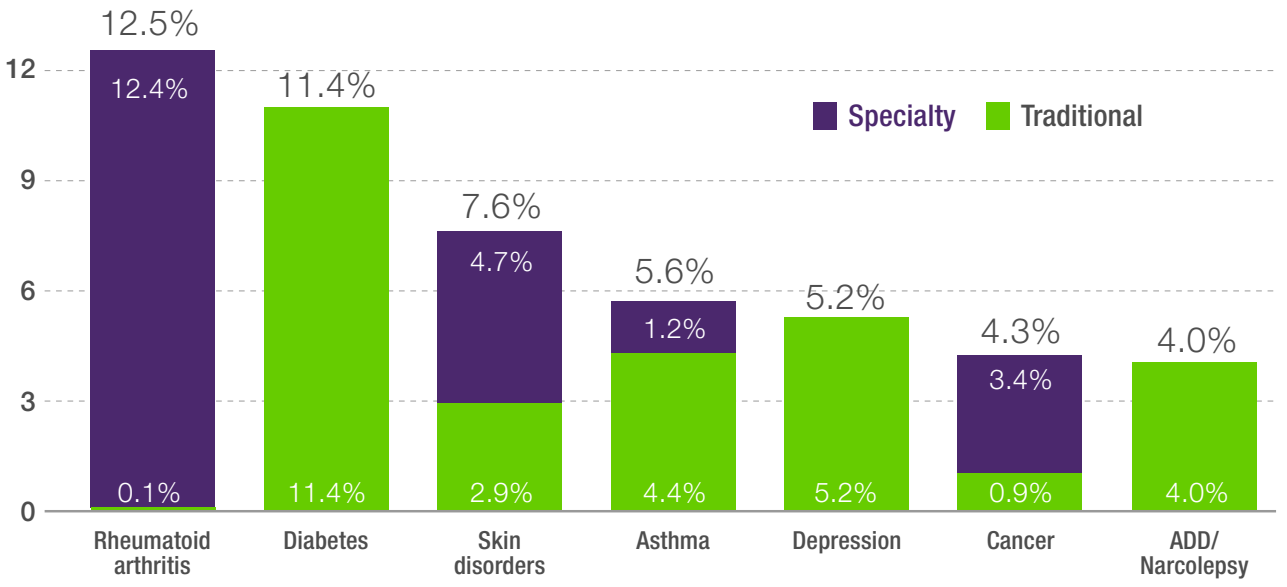
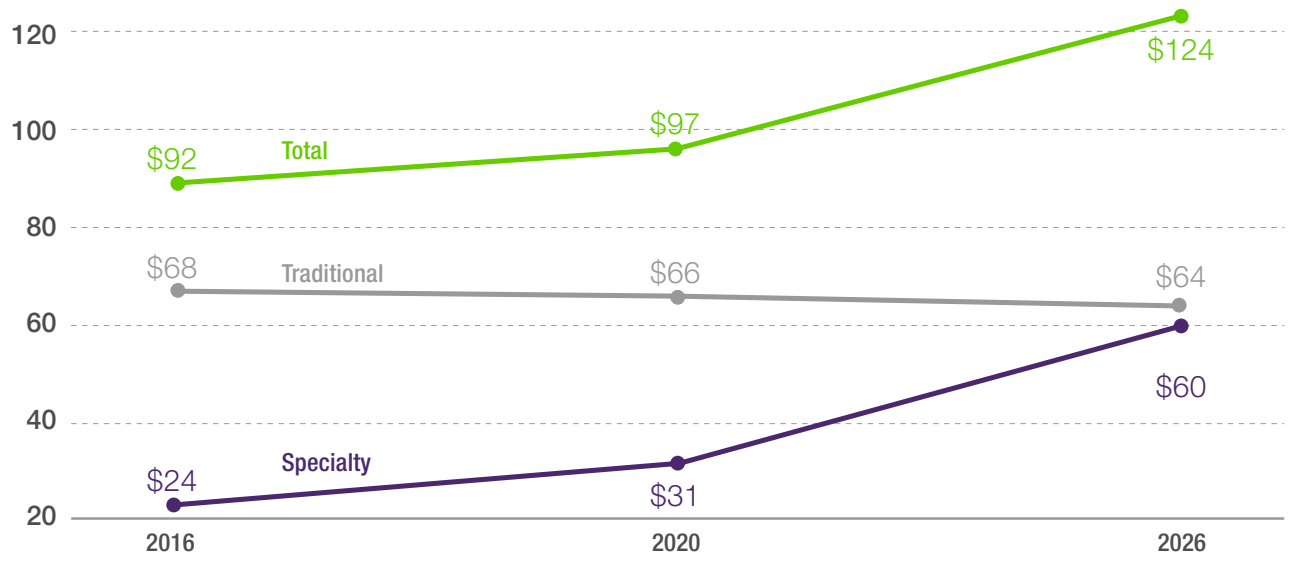


CHART 18 | Average monthly cost per certificate by type of drug, 2016 – 2026 (forecast)



Biosimilar biologics

B.C.'s switching policy for biosimilar biologics has had a profound impact on utilization and cost trends for private plans in that province.

In May 2019, B.C. became the first public payer to implement a mandatory switching policy for four reference biologic drugs for which biosimilars are available. The program has rolled out in three phases so far, with each phase having a six-month transition period. Phase 1 took effect in November 2019 (applying to the reference biologics of Remicade, Enbrel and Lantus), phase 2 in March 2020 (applying to Remicade for Crohn's disease) and phase 3 in February 2021 (for Rituxan).

When the program was announced, TELUS Health's claims data for private drug plans in B.C. showed that biosimilar biologics represented 15% of total eligible costs for biologics that had biosimilar options (Chart 19). This was already ahead of the rest of Canada, where biosimilars held a share of just 8% in May 2019.

By the end of 2019 in B.C., biosimilars' share of total costs for biologics with biosimilar options had more than doubled, to 37%. By the end of 2020, it had almost doubled again, reaching 69%.

Two factors are behind the large impact of a public policy on private plans: first, in light of the province's PharmaCare program, it's in the best interest of private drug plans to adopt a switching policy as well, in order to avoid having to take on the full cost of reference biologics for patients who turn to their private plan for coverage.

Second, physicians have become more likely to prescribe biosimilars.

> "The public initiative in B.C. has influenced physician prescribing habits for all patients, and we can likely expect the same result in other provinces as other public payers implement switching policies, says O'Brien."

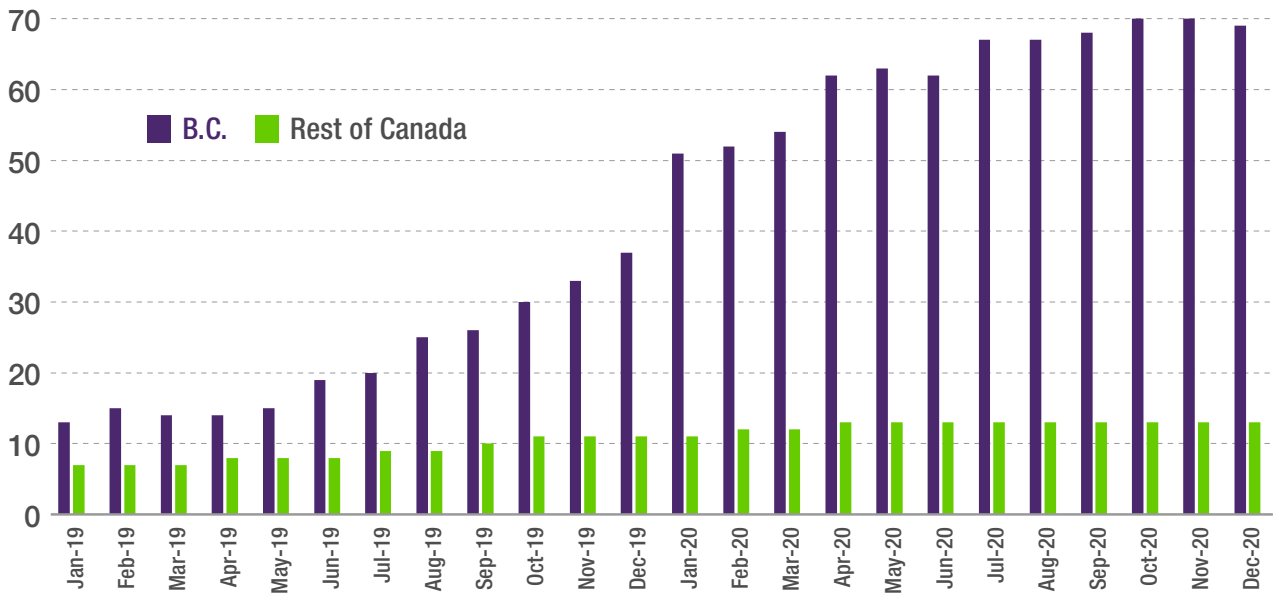
Interestingly, a ripple effect already appears to have begun in the rest of Canada, as biosimilars' share of eligible costs in private drug plans increased to 11% by the end of 2019 (from 8% in May) and 13% by the end of 2020. "B.C. has made evidence publicly available on the impact of its switching policy, which may have further influenced the prescribing of biosimilars in place of their respective reference biologic in other provinces," notes O'Brien.

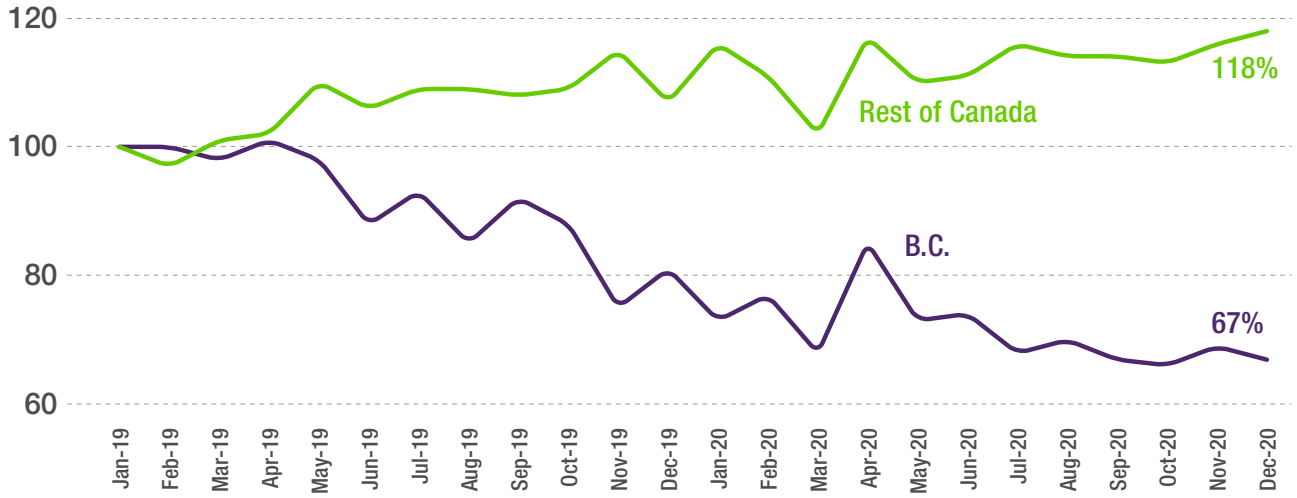
Uptake in the rest of Canada can be expected to accelerate. Alberta's Biosimilar Initiative, affecting six reference biologic drugs, began to go into effect in January 2021. In April 2021, New Brunswick announced its switching policy, scheduled to go into effect on November 30. Ontario announced a switching policy in March 2020, although implementation was delayed due to the COVID-19 pandemic.

Private plans with biosimilar switching policies based on the indication of the drug will be well positioned to maximize savings in the future. “It is important that the switching take into account the condition treated. This is because Health Canada’s approval of the biosimilar may not include all of the conditions approved for the reference biologic,” says O’Brien.

In B.C., the impact of the switching policy on cost per claimant was almost immediate. In June 2019, the cost per claimant in B.C. had dropped to 88% of the baseline national per-claimant cost recorded for January 2019 (Chart 20). In the rest of Canada, the per-claimant cost in June 2019 was 106% when compared against January. By the end of 2020, the per-claimant cost in B.C. was 67% of the cost in January 2019, 51 points below the relative per-claimant cost in the rest of Canada (118%).

CHART 19 | Share of total eligible costs for biosimilar biologics in B.C. versus rest of Canada, January 2019 – December 2020





Summary & recommendations

Specialty drugs' share of eligible costs grew to just shy of one third in 2020, bolstered in part by an increase in the number of claimants. There are significant regional variations: from a high of 40% in Atlantic Canada to a low of 24% in Western Canada. Forecasting suggests that specialty drugs could account for almost half of the monthly certificate cost by 2025. B.C.'s policy for switching to biosimilars dramatically improved biosimilar uptake and cost-per-claimant for private plans.

- Plan sponsors and their advisors should continue to work with insurance carriers and third-party payers/administrators to determine solutions to contain plan costs and maximize coverage
- As more provinces adopt biosimilar switching policies, more private plans will likely follow suit. It is important to have a mechanism in place to ensure that such non-medical switching occurs for approved treatment indications only. Similarly, a reference drug program for certain biologics needs to consider the indication in order to be effective
- Reference and biosimilar biologic drugs offer superior means of treatment, for the most part, over legacy drugs. However, their use should be reviewed on a case-by-case basis to ensure therapy guidelines are met. Prior authorization and, more recently, electronic prior authorization (ePA) ensure a more efficient method of approval and quicker access to medications for those who need them

4. Drugs by therapeutic class

Snapshot

Drugs to treat rheumatoid arthritis and diabetes easily maintained their number-one and number-two positions on the top-10 list based on eligible costs.

- The drug category for skin disorders strengthened its hold on third position, ahead of asthma
- The top-10 list is evenly split between categories dominated by high-cost, specialty drugs for small patient populations and low-cost, traditional drugs for large populations
- Claims for acute medications dropped sharply after the start of the COVID-19 pandemic and remained well below usual levels for the rest of 2020
- Claims for maintenance drugs spiked during the early months of the pandemic due to limits placed on the quantity of drugs dispensed for refills

Top 10 drug categories

The top three drug categories by eligible cost strengthened their positions in 2020 (Chart 21):

- drugs to treat rheumatoid arthritis (RA) grew their share to 12.5%, from 12.1% of eligible costs in 2019
- diabetes drugs laid claim to a share of 11.4%, up from 10.6%, and closing the gap behind RA drugs
- drugs for skin disorders climbed to reach 7.6% of all eligible costs, compared to 6.9%

At the other end of the scale, drugs to treat infection (e.g., antibiotics) fell off the top-10 list after steadily dropping position year after year (it was sixth in 2015). While that trend likely reflects the impact of generic pricing, volume took a major hit in 2020 when claims for anti-infectives plummeted by 24%.

“The pandemic led to a steep drop in the use of anti-infectives, which may be due in part to fewer elective surgeries but is more likely due to the public’s hesitancy to go to their doctor for minor ailments and access healthcare resources,” says Vishal Ravikanti, Director, Operations, TELUS Health.

While delayed surgeries may lead to long-term negative implications for healthcare costs, the reduced use of antibiotics for minor ailments, such as the common cold, may become a positive.

> The overuse of antibiotics has long been an issue. It will be interesting to see if the lower usage of anti-infectives will carry through after the pandemic, observes Ravikanti.

A five-year view reveals no other change in rankings in 2020 compared to 2019, after three years of jostling among some of the categories (Chart 22). Skin disorder drugs appear to have settled into third position, after climbing to fifth in 2016 (up from seventh in 2015). Drugs for asthma and depression recorded their third year in fourth and fifth position, respectively. Cancer drugs appear to be solidly ranked sixth, after joining the list for the first time in 2017 (in ninth position).

Five of the top-10 categories are dominated by high-cost, specialty drugs for relatively small patient populations.

As captured in Chart 21, each category tells a different story about whether price, volume or a combination of the two are the main factors behind their ranking. As expected, pricing is clearly the driving factor in the top-ranked RA category, as less than half of one percent of claims are for RA drugs and 99% of these claims are for specialty drugs. Time will tell if the average cost per claim will decrease as utilization of lower-cost biosimilars gains momentum (page 28).

Pricing is also the biggest factor behind the rising status of drug categories to treat skin disorders (7.6% of costs, 3.7% of claims), cancer (4.3% of costs, 0.6% of claims), attention deficit hyperactivity disorder (ADHD)/narcolepsy (4.0% of costs, 2.8% of claims) and multiple sclerosis (3.5% of costs, 0.1% of claims).

A combination of price and volume has led diabetes drugs to the

number-two position. It accounted for 7.5% of claims in 2020, up from 7.0% in 2019, and 11.4% of eligible cost, up from 10.6%. Two products in particular help account for the recent rise in eligible costs:

- Freestyle Libre, a next-generation monitor that uses a small sensor to automatically and continuously measure blood glucose levels, removing the need for lancets and test strips; and
- Ozempic, a second-line, self-injectable drug that belongs in the class of glucagon-like peptide-1 receptor agonists (GLP-1 RAs). The average annual eligible cost per GLP-1 RA claimant was $1,885 in 2020, at least double that of other second-line therapies and more than 10 times the average annual eligible cost of $121 for metformin, the first line of therapy. (For more on the diabetes category, get TELUS Health's 2021 Category Watch: The impact of new drugs.)

Three of the top-10 drug categories are there by virtue of volume rather than price: drugs for depression account for 10.5% of claims but half that amount in costs (5.2%); drugs for high blood pressure represent 9.3% of claims and just 3.2% of costs; and ulcer drugs represent 4.8% of claims and 2.8% of costs. All three categories are heavily genericized.

CHART 21 | Top 10 drug categories by eligible cost in 2020

For treatment of:	Rank	% eligible cost	% claims
Rheumatoid arthritis	1	12.5%	0.4%
Diabetes	2	11.4%	7.5%
Skin disorders	3	7.6%	3.7%
Asthma	4	5.6%	5.3%
Depression	5	5.2%	10.5%
Cancer	6	4.3%	0.6%
ADHD/narcolepsy	7	4.0%	2.8%
Multiple sclerosis	8	3.5%	0.1%
High blood pressure	9	3.2%	9.3%
Ulcers	10	2.8%	4.8%
% of total eligible costs and claims		**60.1%**	**44.9%**

CHART 22 | Rankings of top 10 drug categories by eligible cost, 2016 – 2020

For treatment of:	2016	2017	2018	2019	2020
Rheumatoid arthritis	1	1	1	1	1
Diabetes	2	2	2	2	2
Skin disorders	5	5	3	3	3
Asthma	4	3	4	4	4
Depression	3	4	5	5	5
Cancer	11	9	6	6	6
ADHD/narcolepsy	10	10	9	7	7
Multiple sclerosis	9	8	8	8	8
High blood pressure	6	6	7	9	9
Infection	7	7	10	10	-
Ulcers	-	-	-	-	10

Impact of COVID-19

In March 2020, in a move to protect the drug supply and stop Canadians from stockpiling medications, all provinces except B.C. recommended or required that pharmacies dispense no more than 30-day supplies when refilling medications for chronic conditions. The usual refill amounts are 90 or 60 days. These policies were discontinued in May or June 2020.

This story line is reflected in TELUS Health claims data. Prior to provincial policies, as Canadians attempted to stockpile their maintenance medications, private plans experienced a 19% spike in claims for these medications in March compared to February (Chart 23). In April, claims dropped by 11% as the policies took hold, and the average supply per prescription fill fell from 44 days to 30 days. Claims activity jumped again in May and in June, well ahead of usual levels reported in 2019, as patients were required to fill their medications more often. At the peak of activity in June, claims for maintenance medications were 32% higher than in June 2019. After the policies lifted, claims settled back down to levels comparable to or slightly below levels in 2019.

"We saw almost a two-fold increase in the number of drug shortages, topping out at 135 shortages in April 2020. Without the measures that governments put in place to limit quantities dispensed to protect the drug supply, this number might have been higher," says Ravikanti.

COVID-19 also had a significant impact on the number of claims submitted for acute medications, such as antibiotics. In April 2020, average claims dropped by 22% compared to March 2020, and remained consistently well below the previous year's results for the rest of 2020 (Chart 24). As an example, claims for azithromycin, an antibiotic used for common infections such as ear infections and strep throat, plummeted by 73% during the second quarter of 2020 compared to 2019.

What about hydroxychloroquine, a drug that is commonly used to treat rheumatoid arthritis but which briefly made headlines as a possible treatment for COVID-19? While the evidence eventually did not support its use against COVID-19, private plans still experienced a 21% increase in claims for the drug during the second quarter of 2020.

CHART 23 | Impact of COVID-19 on days' supply and claims for maintenance medications

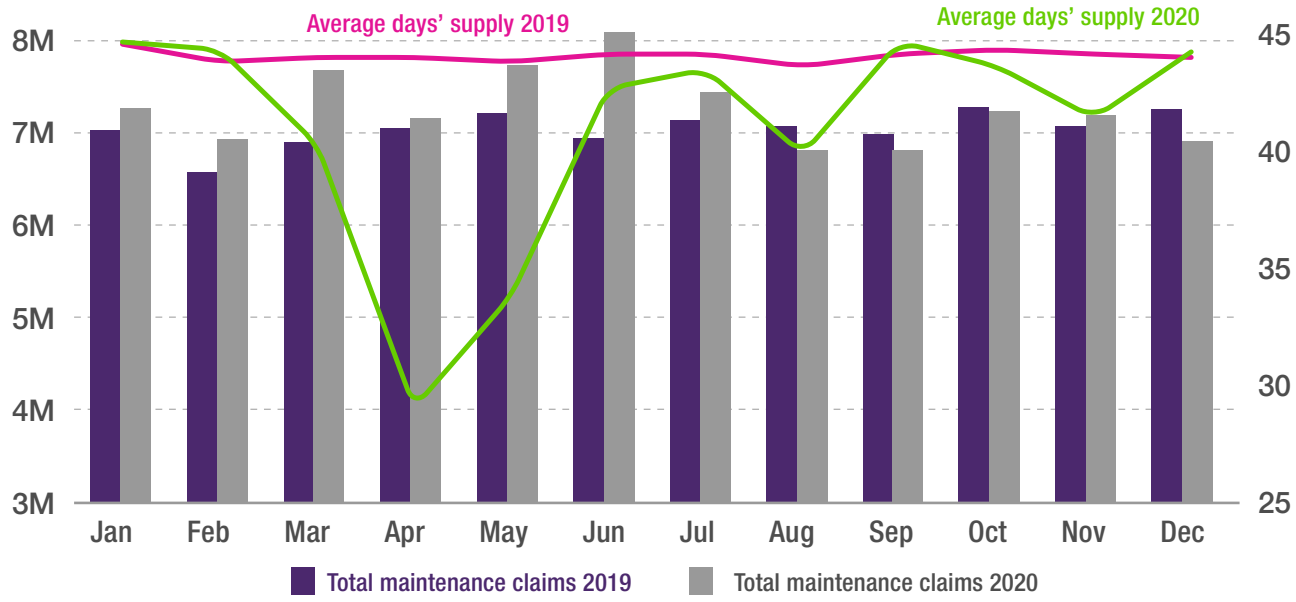
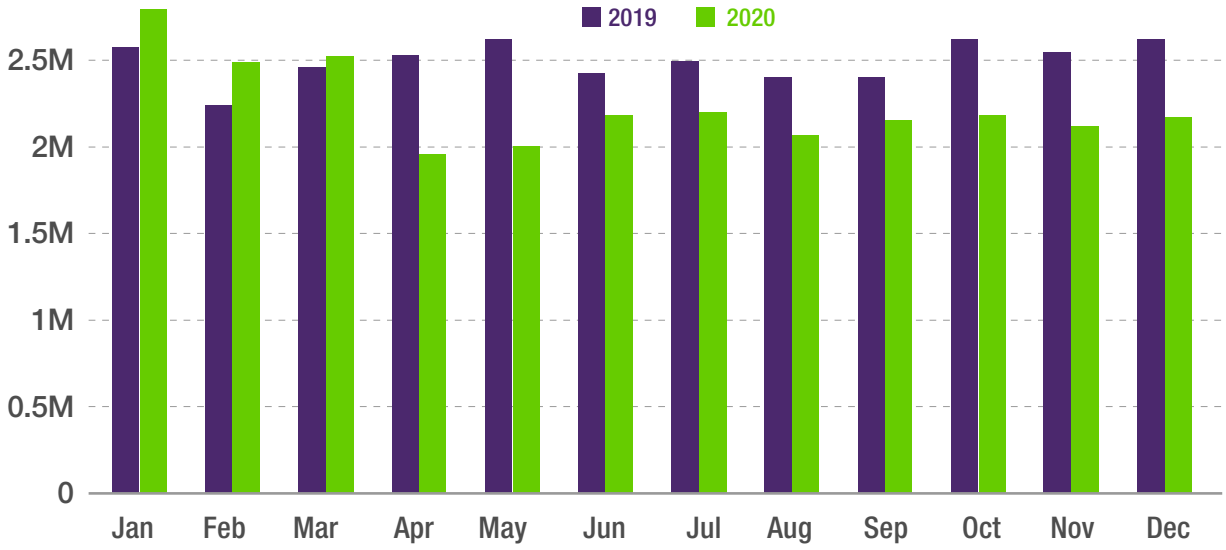


CHART 24 | Impact of COVID-19 on claims for acute medications



Mental health

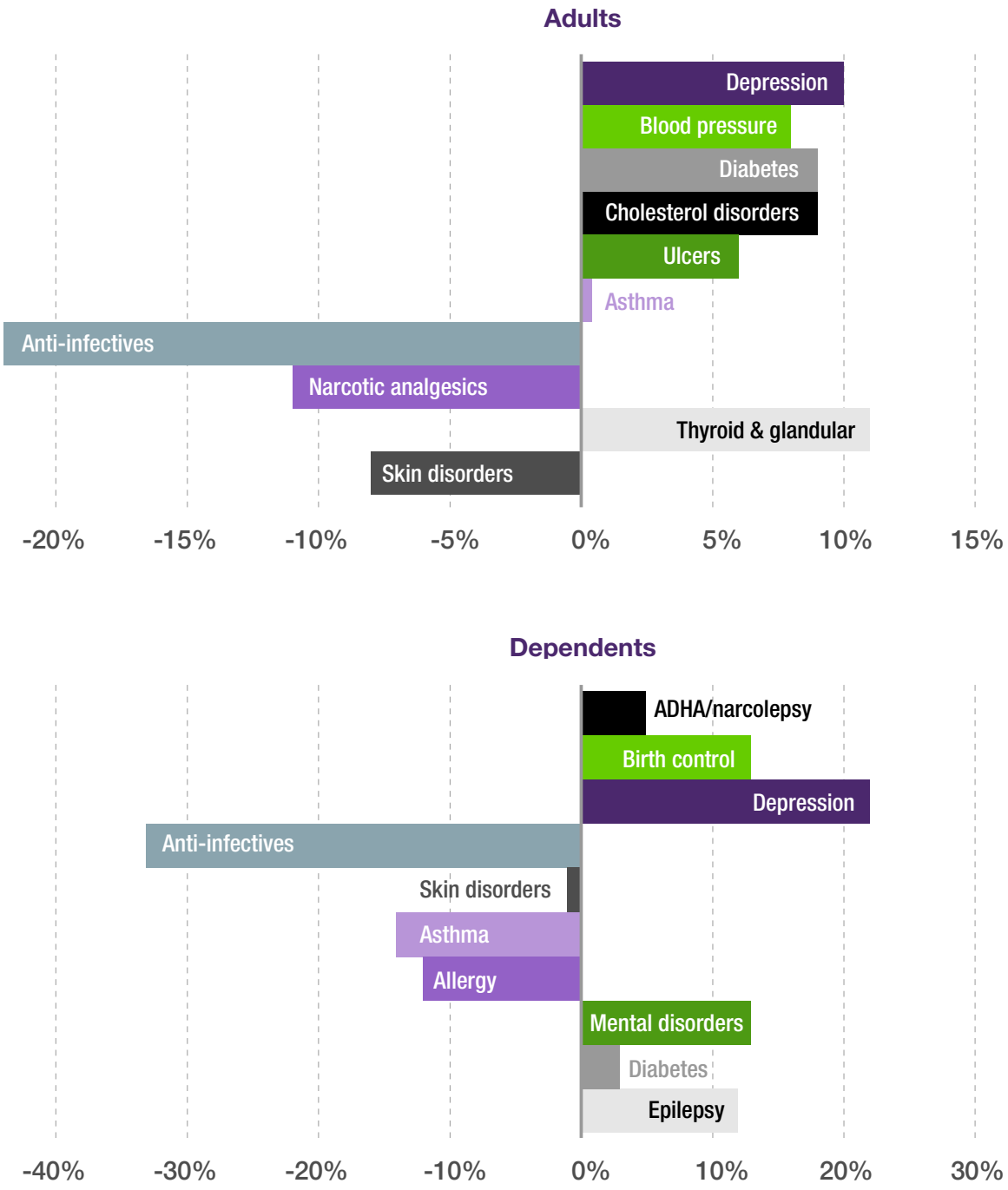
While the depression category's share of eligible costs did not really change in 2020 (5.2% compared to 5.1% in 2019), claims volume tells a different story.

A review of the top 10 categories based on claims reveals that claims for drugs to treat depression increased by 10% for adults and by 22% for dependents in 2020 (Chart 25). For dependents, the additional category of mental disorders also increased, by 13%.

Stepping back, the results for 2020 may represent an acceleration of a longer-term trend, particularly among younger plan members. In the 20 to 39 age group, the number of claimants for antidepressants has climbed from 5.6% in 2016 to 7.9% in 2020. When based on the number of claimants, antidepressants have risen from seventh to fourth over the period of 2016 to 2020.

"The five-year trend partly reflects the success of steady efforts to reduce stigma around seeking treatment. We need to see this as a positive step forward—and in hindsight, those efforts were well timed now that we face the exceptional mental health burden of the pandemic," says Ravikanti.

CHART 25 | Change in claims for top 10 categories for adults and dependents, 2019 – 2020



Adherence

For several high-volume drug categories, which represented 27.2% of total eligible costs in 2020, a significant number of claimants do not appear to be taking their medications as prescribed. For example, 27.0% of claimants were not adherent to their diabetes medications, a category that accounted for 11.4% of total eligible costs (Chart 26).

TELUS Health uses a calculation called the "medication possession ratio" (MPR) to capture rates of non-adherence. The ratio captures whether claimants are refilling their prescriptions on time. Non-adherence occurs when the MPR is less than 0.8. For example, if a person had a prescription dispensed for a 90 days' supply but filled the next prescription after 115 days had passed, they would have an adherence rate of about 0.78 (i.e., they had a 90 days' supply in their position for 115 days before the next fill). Anything below 0.8 is considered non-adherent. When this occurs, a medication for treating a chronic condition is likely not as effective as it could be.

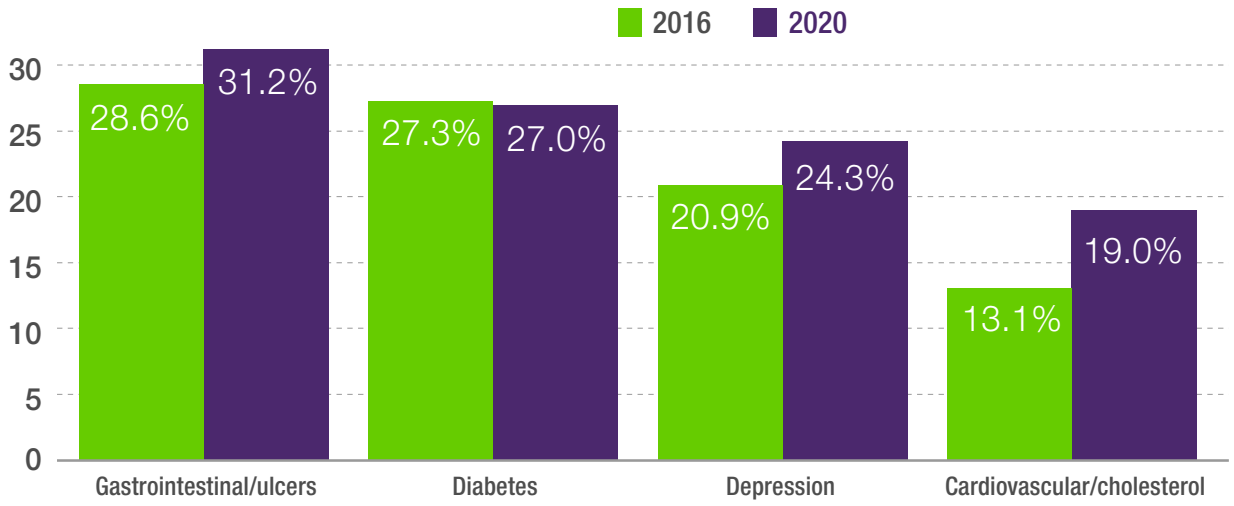
Between 19.0% and 31.2% of claimants were non-adherent to their drug regimen in three other categories, which together represented 15.8% of total costs in 2020:

- 31.2% among claimants for gastrointestinal conditions, including ulcers, which accounted for 5.2% of total eligible costs;
- 24.3% among those taking medication for depression (5.2% of total costs); and
- 19.0% among those with cardiovascular conditions such as high blood pressure and high cholesterol (5.4%).

With the exception of diabetes, rates of non-adherence have increased over the past five years. For drugs to treat depression, for example, the number of claimants who were non-adherent increased from 20.9% in 2016 to 24.3% in 2020.

"There are no easy solutions for non-adherence, but we must see this as an opportunity to better understand its drivers in order to create programs or policies that successfully support adherence," stresses Ravikanti. "Better adherence will improve health outcomes and prevent drug plan dollars from being wasted because medications are not delivering their full value."

CHART 26 | Rates of non-adherence by therapeutic area, 2020 versus 2016



Drug pipeline

Out of more than 150 new drugs under review by Health Canada, TELUS Health anticipates that 10—including a potential treatment for COVID-19—will likely have an impact on private drug plans.

Three of the new drugs could have a significant impact. One is a new option for acute migraine, which affects more than 3 million Canadians and has not seen an advance in treatment in almost 30 years. The other two treat rare diseases: one for spinal muscular atrophy and the other for cystic fibrosis. While their patient populations are very small, they join a growing list of "ultra-high cost" drugs in Canada, with estimated annual costs of more than $250,000 per patient.

Private plans may see savings from more biosimilars in the marketplace, backed by public switching policies in at least two provinces. Up to six biosimilar launches are expected for Humira, a reference biologic that ranks second in TELUS Health's top-10 list of drugs by eligible costs.

Get the details in the TELUS Health report, The Drug Pipeline: What private plans can expect in 2021.

Categories up close

Breakthrough therapies in the categories of diabetes, migraine and multiple sclerosis have set in motion a transformation of their respective markets. The new options represent major advances in treatment, particularly for those who struggle to manage their condition or who could not use previous therapies. As a result, patients who meet the treatment criteria appear to be steadily adding or switching to one of the new therapies.

On the other hand, the new therapies' price points are significantly higher than those of older therapies, resulting in higher growth rates overall for eligible costs. While a positive return on investment is expected in terms of greater workplace productivity and reduced benefits costs in other areas, including disability, measures to monitor utilization and optimize outcomes are increasingly important.

Learn more from the TELUS Health report, 2021 Category Watch: The impact of new drugs.

Summary & recommendations

The top-10 list of drug categories is evenly split between those dominated by high-cost, specialty drugs for small patient populations and those with low-cost, traditional drugs for large populations. Drugs for diabetes can be described as landing in both camps, with first-line therapies that are low-cost generics and new targeted therapies with relatively much higher price points. Claims for anti-infectives dropped sharply due to COVID-19 while claims for depression increased, particularly among dependents. Adherence is a challenge for four high-volume drug categories, including depression, which collectively represent more than a quarter of total eligible costs.

- It is important for plan sponsors to work with their benefits advisors to get regular reporting on the top drug categories for their workforce, ranked by costs as well as by volume, to identify and address high-priority areas with plan management strategies
- Now that the pandemic has accelerated the use of virtual healthcare services and health apps, it is time to take a fresh look at incorporating these technology tools into benefits plans to improve adherence rates and to support chronic disease management
- Health spending accounts, wellness accounts and increased maximums on paramedical services are possible options to help plan members tailor benefits to better meet personal healthcare needs
- As more ultra-high-cost drugs become available, plan sponsors need to proactively work with their advisor and insurance carrier or third-party payer/administrator to determine if—and how—their plan will absorb their cost

5. Plan management

Snapshot

Adoption levels of all seven tools for plan management did not change in 2020 compared to 2019.

- Generic drug policies, prior authorization and coinsurance are by far the most popular tools
- While more private drug plans have a managed formulary compared to five years ago, the rate of adoption does not appear to be accelerating
- The adoption of annual maximums for drug plans appears to have plateaued

> The marginal adoption of plan design tools focused on cost containment persists. Given COVID, 2020 was likely not an ideal time for changes to the design of benefits programs. However, as many organizations struggle to remain in business, we may see more cost containment strategies implemented in the near future to ensure sustainability of the benefits plan.
>
> **Shawn O'Brien**, Principal, Health Benefits Management, TELUS Health.

Generic drug policies

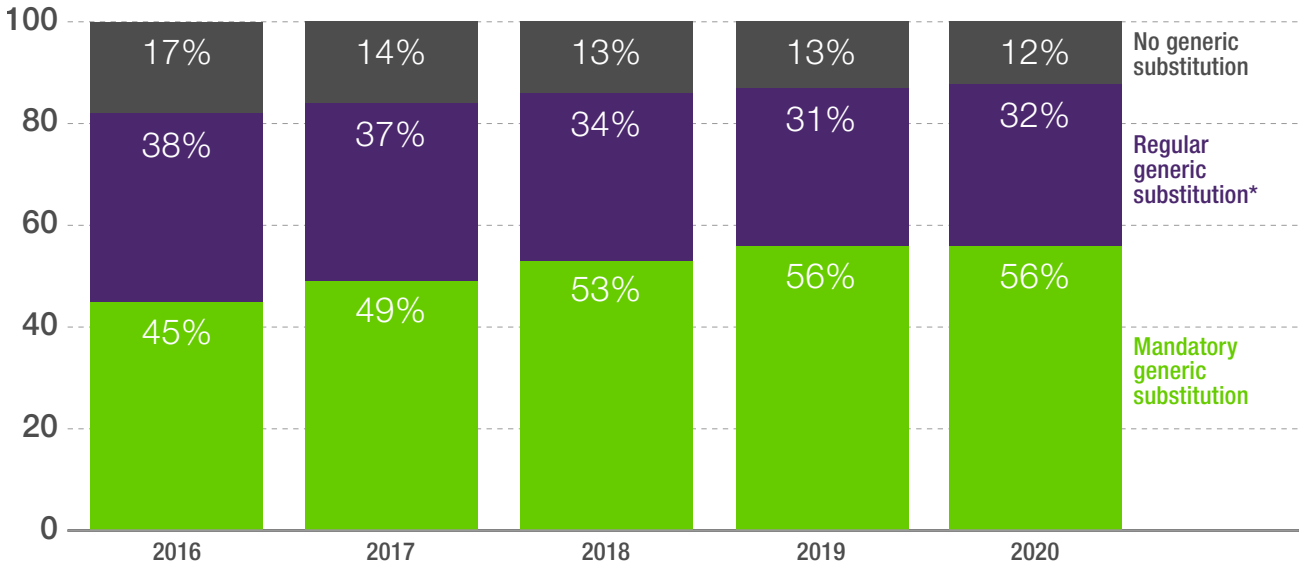
The incidence of mandatory generic substitution policies did not change in 2020, remaining at 56% among all certificates (Chart 27). Five years ago, 45% of certificates had plans with mandatory substitution policies in place.

An additional 32% of certificates had plans with regular generic substitution policies (i.e., where physicians can override the policy to prevent the substitution), meaning a total of 88% of certificates had a plan with a generic substitution policy in place, compared to 87% in 2019 and 83% in 2016.

The breakdown shifts when considered by group plan: 86% of groups have a mandatory substitution policy in place, leaving just 8% with a regular substitution policy and 6% with no generic policy at all (Chart 28). This reflects in part the fact that mandatory substitution has become the default policy in insurance carriers' contracts over the past several years.

The differences in the breakdown also illustrate that groups without a generic policy or without mandatory generic substitution tend to represent very large workplaces, which may be unionized.

CHART 27 | Certificates with plans that include generic drug policies, 2016 – 2020



*Under a regular generic substitution policy, the physician can override the policy and trigger coverage of the brand drug by indicating "no substitution" on the prescription.

CHART 28 | Generic drug policies in 2020, certificates versus groups

	Certificates	Groups
Mandatory generic substitution	56%	86%
Regular generic substitution*	32%	8%
No generic substitution	12%	6%

*Under a regular generic substitution policy, the physician can override the policy and trigger coverage of the brand drug by indicating "no substitution" on the prescription.

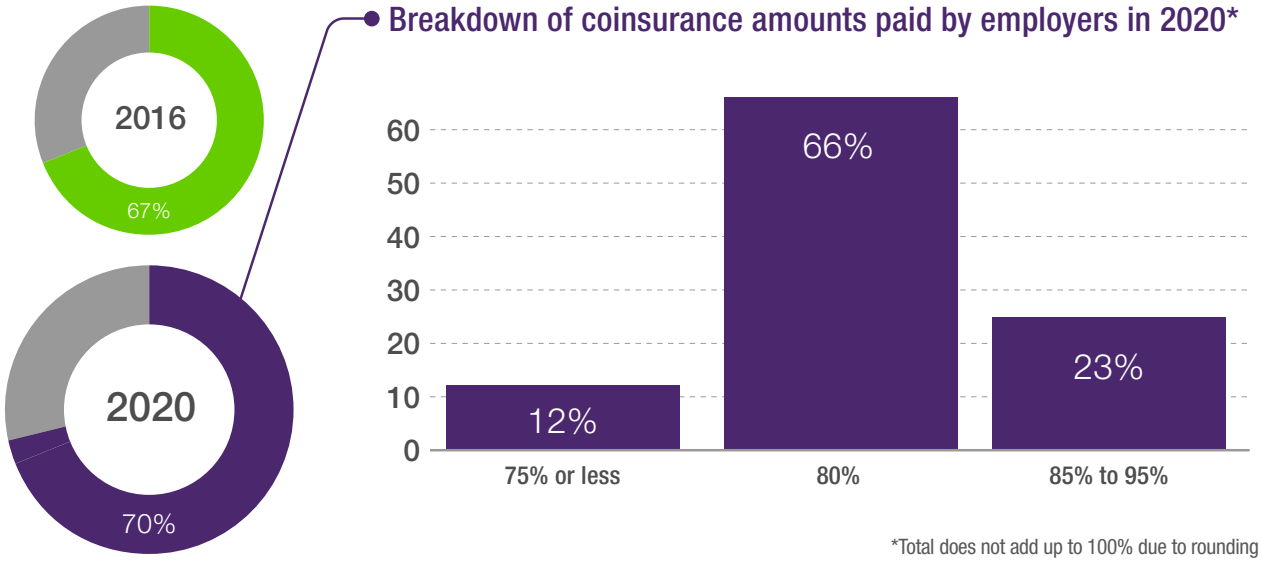
Coinsurance & deductibles

Seven out of 10 certificates have a drug plan that includes coinsurance, comparable to last year (69%) and up from 67% in 2016 (Chart 29).

Among those with coinsurance, 80% is the most common amount paid by employers, leaving 20% for plan members. Sixty-six percent of certificate holders have plans with this breakdown in coinsurance, compared to 63% five years ago. Among remaining certificate holders, employers pay 85% to 95% of the cost (23%) or 75% or less of the costs (12%).

Deductibles are much less common: only 10% of certificates have annual deductibles and only 13% must pay a deductible per claim. These results are unchanged from 2019 and virtually unchanged from five years ago. The most common annual deductible is between $50 and $100 (for 39% of certificates), followed by more than $100 (32%) and less than $50 (30%). The most likely per-claim deductible is between $4.00 and $5.99 (39%), followed by $2.00 to $3.99 (27%) and $10 or more (18%).

CHART 29 | Certificates with plans that include coinsurance, 2020 versus 2016



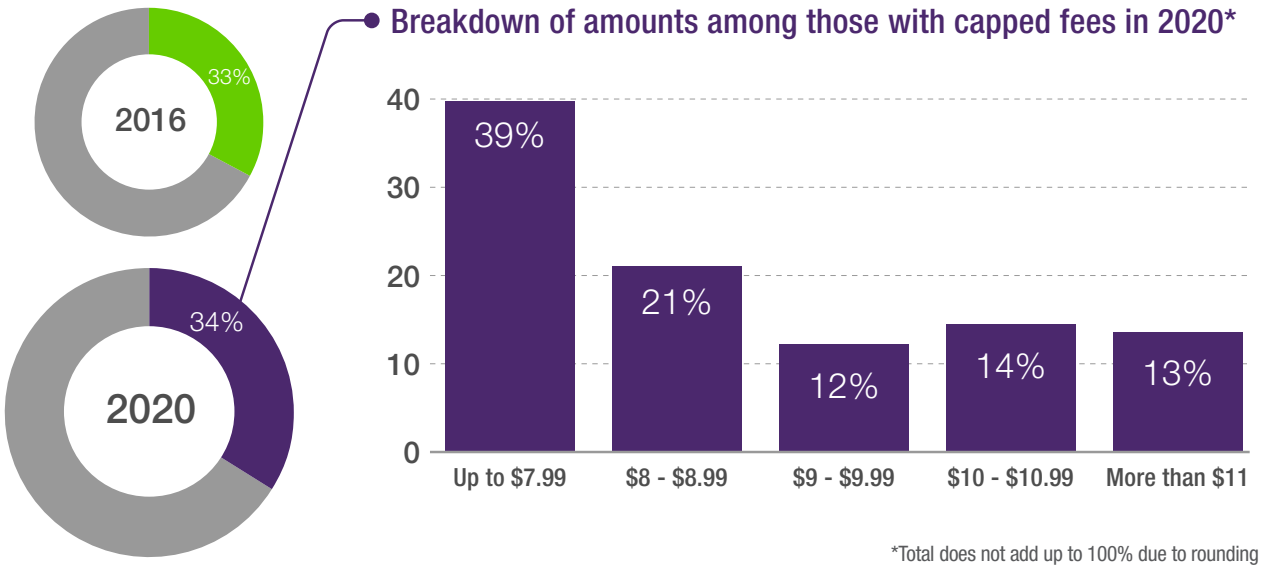
*Total does not add up to 100% due to rounding

Dispensing fee caps

One-third of certificates (34%) had drug plans with dispensing fee caps in 2020, virtually unchanged from five years ago (33%) (Chart 30). Of those certificates, 39% saw their coverage for the dispensing fee capped at an amount of up to $7.99, followed by 21% with a cap of $8.00 to $8.99. For one in 10 certificates (13%), the cap did not kick in until $11.00.

“Dispensing fee caps are a good way to incentivize members to shop around and save on out-of-pocket costs, yet it gives them the choice as well to still pay the difference if they prefer to use a particular pharmacy, for example due to convenience,” says O’Brien.

CHART 30 | Certificates with plans that include capped dispensing fees, 2020 versus 2016



*Total does not add up to 100% due to rounding

Managed formularies

Almost a quarter (23%) of certificates had a drug plan with a managed formulary in 2020, compared to 19% in 2016 (Chart 31). The shift came from open plans, which saw their share decline from 73% to 70%. The remaining 7% of certificates had plans that mimic the provincial formulary; this is unchanged from 2016.

"It is surprising that one of the most effective cost containment measures, a managed formulary, still shows slow adoption," says O'Brien. "However, it is very important to ensure the philosophy makes sense for any particular organization and its plan members."

Barriers to adoption include employers' reluctance to make a change that employees may interpret as limiting their access to prescription drugs. To prevent this misconception, "ensure that the formulary is easy to understand, offers choice, empowers plan members to become smart consumers and, most importantly, is communicated effectively," recommends O'Brien.

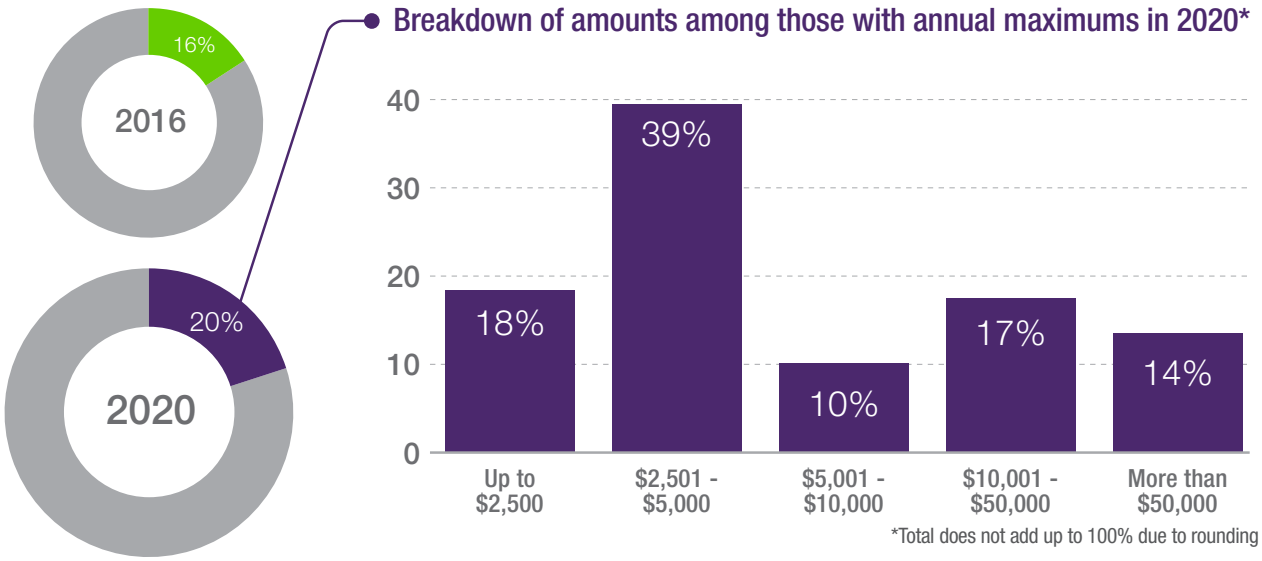
CHART 31 | Certificates with plans that include managed formularies, 2020 versus 2016

Annual maximums

One in five certificates had drug plans with annual maximums in 2020, comparable to 2019 (21%) and up from 16% in 2016 (Chart 32). For more than half of them (57%), the maximum was $5,000 or less. One in six (18%) had coverage capped at up to $2,500.

Ten percent of certificates had caps of between $5,001 and $10,000 annually, leaving 31% with caps exceeding $10,000.

CHART 32 | Certificates with plans that include annual drug plan maximums, 2020 versus 2016



Prior authorization

On the surface, the use of prior authorization (PA) appears to be in decline: from 89% in 2019 to 87% in 2020, and down from 90% in 2016 and 93% in 2015 (Chart 33). However, the trend is more a reflection of the evolution of PAs rather than a possible cause for concern.

> Prior authorization will continue to be an effective tool in making sure the right drug is taken at the right time, particularly given the evolution of therapies in certain classes. Although the new therapies may be more effective, they can come at an increased cost, notes O'Brien.

And now that electronic prior authorization (ePA) is becoming available in Canada, private plans will see improved efficiencies. "Advancements in the patient and physician experience through ePA will also support increased adoption," says O'Brien.

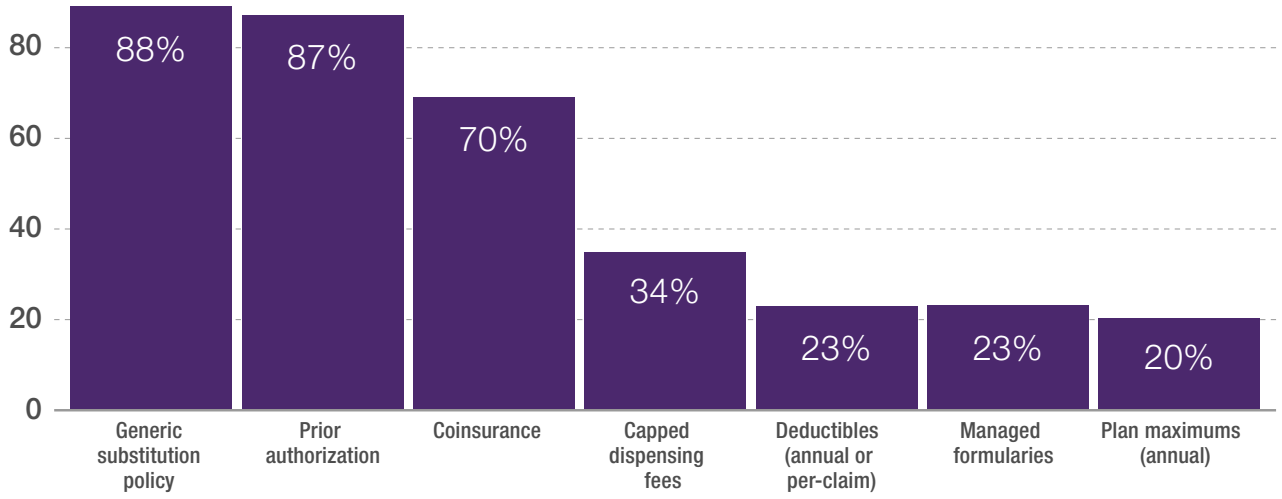
CHART 33 | Certificates with plans that include prior authorization, 2020 versus 2016

Summary & recommendations

The incidence of mandatory generic substitution policies did not increase in 2020 after five years of steady growth. All seven tools saw little or no change in adoption, which may reflect that plan sponsors' priorities lay elsewhere due to the pandemic.

- Private drug plans without policies for generic substitution and/or coinsurance can work with their benefits advisor to identify and address the barriers to adoption
- As part of coinsurance, private plans can include an out-of-pocket maximum to help ensure that plan members' contributions do not exceed a threshold that may create financial hardship
- To assess the feasibility and benefits of a managed formulary, plan sponsors can work with their benefits advisor to estimate cost savings and the impact on plan members—and to determine approaches for implementation that support a positive plan member experience
- Plan sponsors can review their dispensing fee cost distribution to determine if potential cost savings warrant a capped fee
- In addition to the seven tools described here, possible plan management tools include product listing agreements, biosimilar adoption programs and chronic disease management programs for high-cost claimants

CHART 34 | Summary of certificates with the following tools for drug plan management



6. Conclusion

On the one hand, claims activities in 2020 can be described as anomalous given the singular influence of COVID-19. The number of insureds who made claims was at its lowest level for at least the past five years, while the number of claims per claimant was noticeably higher compared to previous years. Claims for anti-infectives dropped precipitously, while antidepressants saw accelerated growth, especially among dependents.

On the other hand, last year's results illustrate how the fundamental measures of change in private drug plans—eligible costs, utilization and cost per claim—are essentially pandemic-proof. By the end of the year, none of these measures were remarkably higher or lower than previous years. In fact, the cost-per-claim growth rate was more than three times the average annual rate of the consumer price index, which had dropped to a level not seen since 2009 during the economic downturn.

Specialty drugs are the main factor behind the unremitting forward momentum in cost trends. These medications, which are typically life-changing for patients, accounted for 32% of costs and 1.3% of claimants in 2020. While B.C.'s biosimilars initiative dramatically illustrated how biosimilars can slow the cost trajectory for biologics with biosimilar options, the resulting savings will be needed for the new, higher-cost targeted therapies for plan members struggling to manage chronic conditions, as well as for very high-cost drugs for rare diseases.

Between COVID-19 and Canada's drug pipeline, private drug plans are in a period of intense, complex transition. Accurate, actionable reporting on cost and volume drivers is more important than ever for plan sponsors—as is practical, evidence-based guidance from benefits advisors and providers.

2021

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