



2019

TELUS Health
Drug Data Trends
& National Benchmarks

 **TELUS**® Health

Report foreword:

Trends in the health and benefits landscape

The 2019 TELUS Health Drug Data Trends and National Benchmarks Report (TELUS Health report) comes just 100 days before this fall's federal election. For most Canadians, the pre-election period is a time to understand the key issues, policy positions and promises from the various political parties. One of these key issues is healthcare, a growing part of the conversation.

Canadian politicians and policymakers have been debating the merits and challenges of prescription drug coverage for decades. While those on one end of the policy spectrum consider government funded, universal coverage as the preferred model, others have identified more of a needs-based approach. An example of how political differences impact Canadians was clearly evident in 2016 with Ontario's OHIP plus policy coverage implementation for the 0 to 24 age patient population.

The 2016 implementation was not without challenges as formularies shifted, leaving some patients to pay out of pocket for a drug that had once been covered by their private insurance. In April 2019, the newly-elected Ontario government scaled back OHIP plus, to reverse this policy to only cover children and young adults up to 24 years old without any private insurance. As in previous years, these types of policy and regulatory changes impacting the workforce will continue to be reflected in the TELUS Health report, along with major trends in private drug plan costs, utilization and design tool adoption.

One key finding in the TELUS Health report demonstrates that the cost for specialty drugs, including those used to treat cancer and rare diseases, have continued to rise and may soon surpass traditional medications. A needs-based approach where public payers shoulder the cost of these high-priced drugs could certainly relieve pressure on employer-sponsored benefit plans. However, patients will need reassurance that they will receive the best treatments and therapies, and continue to enjoy a quality of life should such a model come to fruition.





The most recent policy development came in June with the Advisory Council on the Implementation of National Pharmacare's delivery of its final report, "A Prescription for Canada." While only advisory at this point, the council report calls for a detailed national strategy for funding expensive drugs for rare diseases by 2022. This, and the commitment in the 2019 federal budget of \$500-million per year, beginning in 2022, to pay for expensive drugs for rare diseases represents a distinct change in healthcare funding in Canada.

Another key finding of the TELUS Health report shows that while there is an increase in use of biosimilar medications (alternatives to first-on-market specialty biologic drugs which are made or contain living organisms) in some disease areas, others still lag behind. To encourage use of these innovative medicines, this spring, the British Columbia government became the first public payer to implement a mandatory switching policy for biosimilar drugs, dramatically increasing the focus on the use of these medications. Policy changes like these are expected to drive drug costs down and help to build a more sustainable system. In turn, governments are signaling the use of these savings for investment in other treatment areas.

Change brings opportunity and in light of these shifting policies, we as an industry have an opportunity to take a closer look at what the claims data is telling us. Big data exists and we have the tools to analyze and predict in ways that have not previously been done. Let's use this capability to make informed decisions and build plan designs that fund broader health and wellness initiatives, integrate seamlessly with public funding and help garner the best possible health outcomes for the workforce of today, and the future.

As with any change there is no doubt that many will be having conversations around boardroom tables, examining trends and debating the impact of these major policy shifts on business, private insurance, patients and health providers. I encourage each and every one of us to reach out to our trusted partners and take the time to study the data, contemplate courses of action and determine directions that begin to build out the view of a total health statement for Canada's workforce.

Laura Mensch

Vice President, Health Benefits Management, TELUS Health

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1. Introduction

2018 was a relatively quiet year for private drug plans. Beneath the calm surface, however, is an increasingly intense dynamic between traditional non-specialty drugs on the one hand (representing 71% of eligible costs and 98.9% of claimants) and higher-cost specialty drugs on the other (29% of costs and 1.1% of claimants). Now more than ever, plan sponsors require regular assessments of what's happening in their own drug plan to identify potential risks and implement measures that will fortify their plan's ability to accommodate all claims.

The 2019 TELUS Health Drug Data Trends & National Benchmarks Report (TELUS Health report) presents major trends in private drug-plan costs and utilization, and adoption rates of plan design tools such as mandatory generic substitution and managed formularies. Data for 2018, extracted in May 2019, are drawn from the TELUS Health database of over 12 million insured individuals, with more than 112 million prescription drug claims transacted and total adjudicated amounts of more than \$4.8 billion.



This time of relative calm is a good opportunity for plan sponsors to take a closer look at claims data and plan design, and benchmark against national and regional trends. As program costs for more rare diseases as well as for major chronic conditions associated with age and lifestyle are expected to grow, now is the time to review available plan management strategies to help future-proof the sustainability of the drug program, says Shawn O'Brien, Principal, Data enablement, for TELUS Health.



Terminology

Adjudicated amount:	The amount paid by the plan after the application of any plan design fiscal measures.
Biosimilar:	Biologic drug that is similar but not identical to the originator biologic, produced after patent expiry of the originator.
Certificate:	Employee 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; also referred to as cardholder.
Multi-source brand drug:	Brand-name drug for which one or more generic drugs exist.
Originator biologic:	First-on-market specialty drug that contains living organisms, also referred to as “reference biologic” 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 potentially 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.



2. **Costs** & utilization

Overall cost trends

Ontario's OHIP+ program had a significant impact on results for costs and utilization in 2018. The provincial government implemented this first-payer drug plan for all children and young adults up to the age of 24 (inclusive) in January 2018. As a result, throughout 2018 OHIP+ covered medications previously covered by private plans. In April 2019 the Ontario government restructured OHIP+ to limit eligibility to children and adults up to age 24 who do not have access to any private coverage.

To illustrate the impact of OHIP+, the 2019 TELUS Health report breaks down costs and utilization data by the relevant age groups of zero to 24 years old and zero to 64 years old.

Private drug plans in Canada saw average eligible monthly costs decline by 2.6% in 2018. As expected, Ontario's OHIP+ program was the main factor behind the decline. Nonetheless, even after removing insured individuals under the age of 25 from the results, the national growth rate in 2018 was flat at 0.0%.

"Lower pricing generic drugs is likely another reason why private drug plan costs remained relatively stable in 2018, resulting from the implementation of the latest deal struck between the pan-Canadian pharmaceutical alliance and generic manufacturers," says O'Brien.

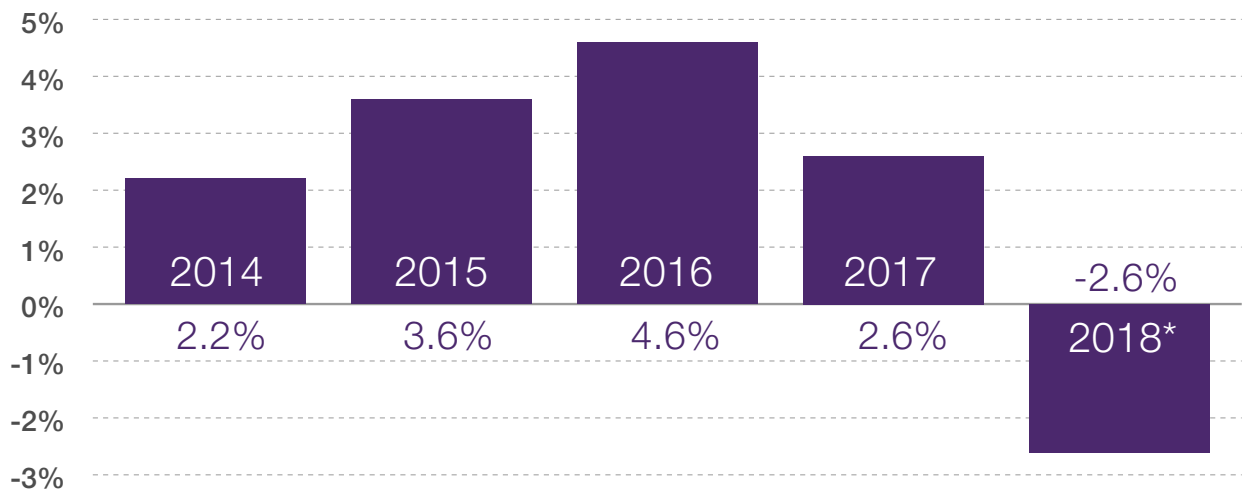
In April 2018 the prices of nearly 70 of the most commonly prescribed generic drugs in Canada decreased further, some by as much as 90% off the brand price.

Some regional variations exist. Across all age groups, average eligible monthly costs per insured increased by 2.9% in Quebec compared to small declines in Western Canada (-0.1%) and Atlantic Canada (-0.9%). In Ontario, eligible monthly costs dropped by 6.8% across all age groups, reflecting the impact of OHIP+. When insureds aged zero to 24 are removed from calculations, Ontario is in line with the rest of Canada (-0.7%).

When we step further back and consider costing trends based on traditional, lower-cost drugs versus specialty, higher-cost drugs, it's clear that the two groups of drugs counterbalance each other. Over the past 10 years, the average cost of traditional (non-specialty) drugs has decreased by 2.1% per year. The average cost of specialty drugs has increased by 10.8% per year over the past 10 years. When the two are combined (keeping in mind that just 1.1% of claimants use specialty drugs), the growth rate in costs averages out to be 0.3% per year over the past 10 years. For more on specialty drugs, [see page 32](#).



CHART 1 | Change in eligible monthly costs per insured, 2014-2018

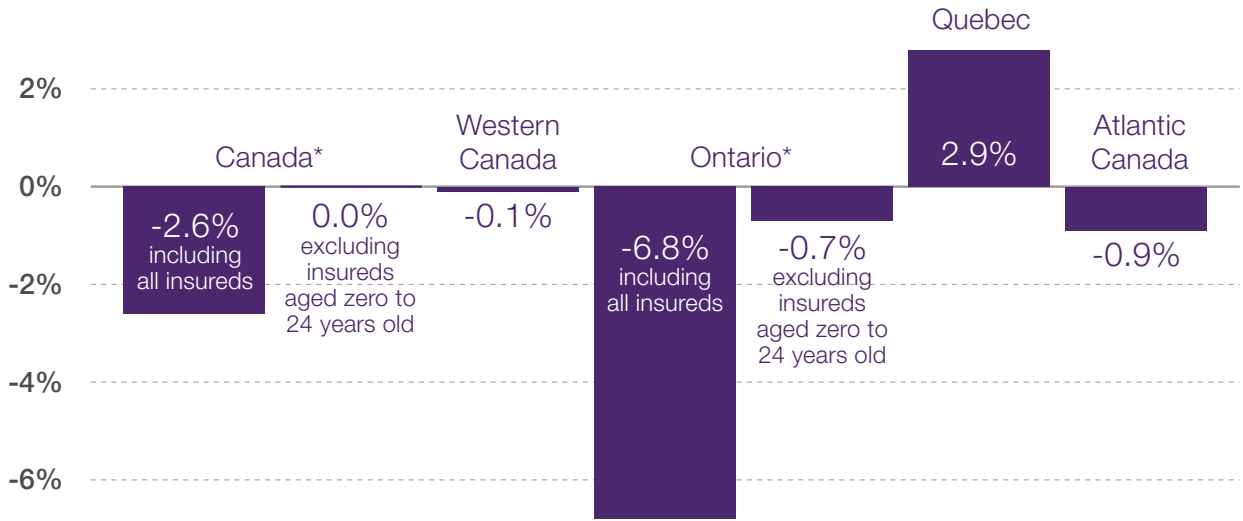


*0.0% excluding insureds aged zero to 24 years old.

*Results for 2018 broken down by age to illustrate impact of OHIP+ in Ontario.

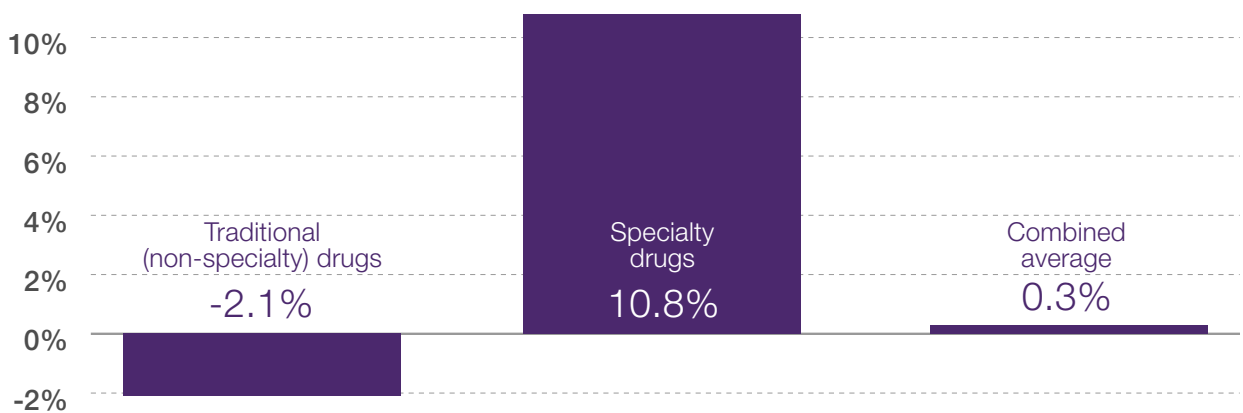


CHART 2 | Change in eligible monthly costs per insured, 2018 compared to 2017, by region



*Includes for 2018 broken down by age to illustrate impact of 0.1% in Ontario.

CHART 3 | Average annual increase in cost of drugs based on monthly cost per certificate for traditional and specialty drugs, 2009-2018



Overall utilization trends

Fewer insureds made a claim in 2018: 59.4%, down from 62.9% in 2017 and 65.6% in 2016. However, the impact of OHIP+ suggests that it would be premature to interpret this as an ongoing trend. When insureds aged zero to 24 are removed from the database, 70.3% of insureds made a claim in 2018, unchanged from 2017 (70.3%).

The average number of claims per claimant is generally steady, with slight increases over the years: 10.3 in 2018, compared to 10.0 in 2017 and 9.8 five years ago, in 2014.

Overall, private drug plans have experienced little change in average monthly utilization per insured over the past five years. Utilization was 0.52 claims per insured in 2018, compared to 0.54 in 2017 and 0.52 for the three previous years. When insureds aged zero to 24 are removed, average utilization climbed to 0.71 for insureds aged 25 to 64, unchanged from 2017 and 2016 (0.71 for both years) and comparable to 2015 and 2014 (0.69 for both years).





CHART 4 | Number of insureds who made a claim, 2014-2018, age groups 0-64 and 25-64

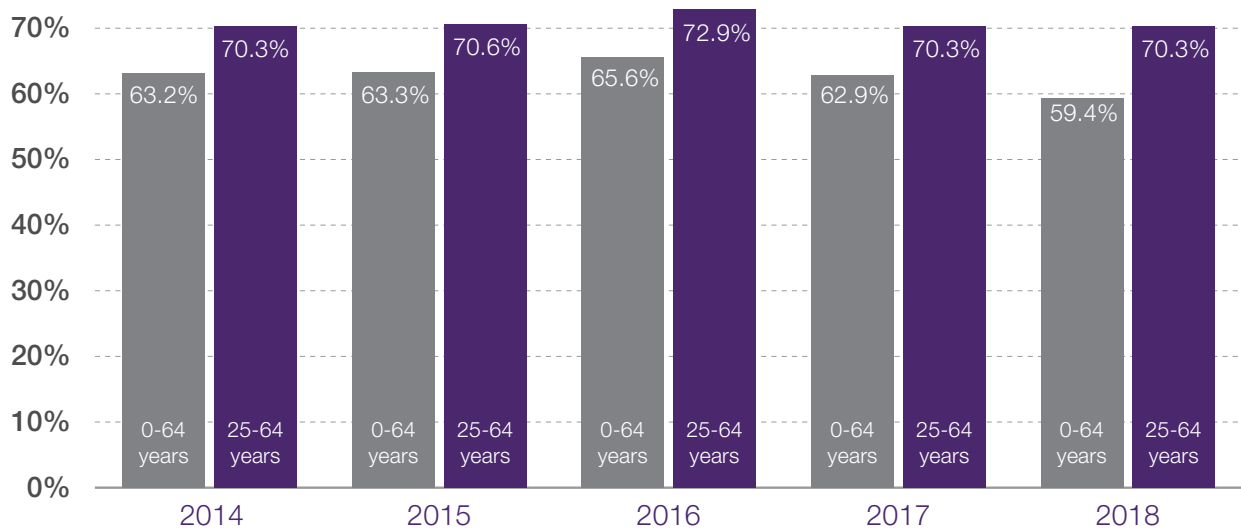
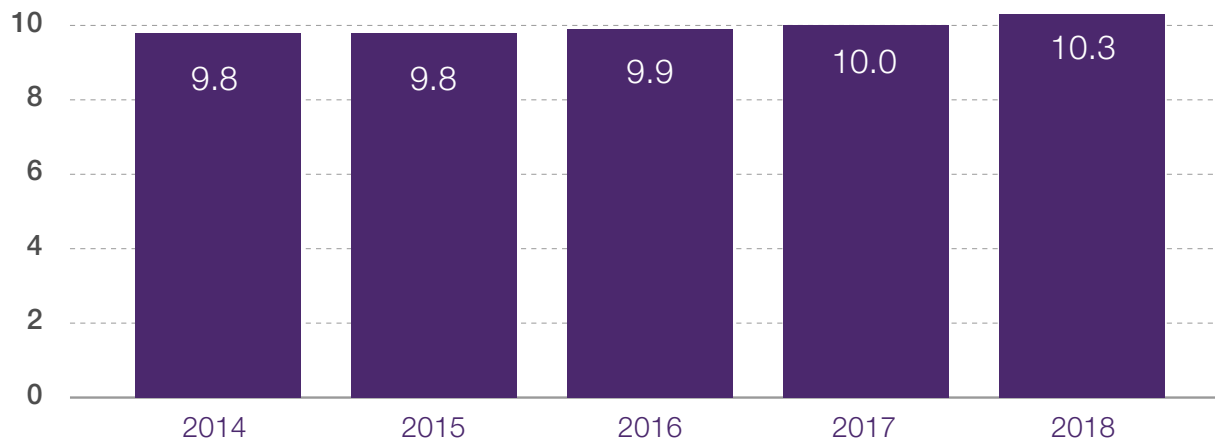


CHART 5 | Number of claims per claimant, 2014-2018





Claims & eligible costs per insured

The average eligible cost of claims, when spread out across all insured lives, was \$37.40 per month or \$448.80 per year. Regionally, the average eligible cost per insured was lower in Western Canada (\$29.28), due to the presence of Pharmacare plans that automatically take over coverage when members reach income-based out-of-pocket maximums.

The average eligible cost per claim was \$72.61 in 2018. When this is multiplied by the average of 10.3 claims per claimant per year, the total average cost of claims per claimant was \$747.88. In Quebec, private plans experienced a lower average cost per claim, at \$51.82 compared to \$72.61 nationally, but monthly utilization is much higher, at 0.86 per insured compared to 0.52 nationally. These differences reflect the fact that patients in Quebec fill their prescriptions more often, since pharmacists typically dispense 30-day supplies of medications (compared to 60- or 90-day supplies in other provinces).

As expected, eligible costs increase with age. Insureds who are less than 10 years old cost the drug plan just \$6.42 monthly, versus a high of \$94.72 for insureds aged 60 to 69.

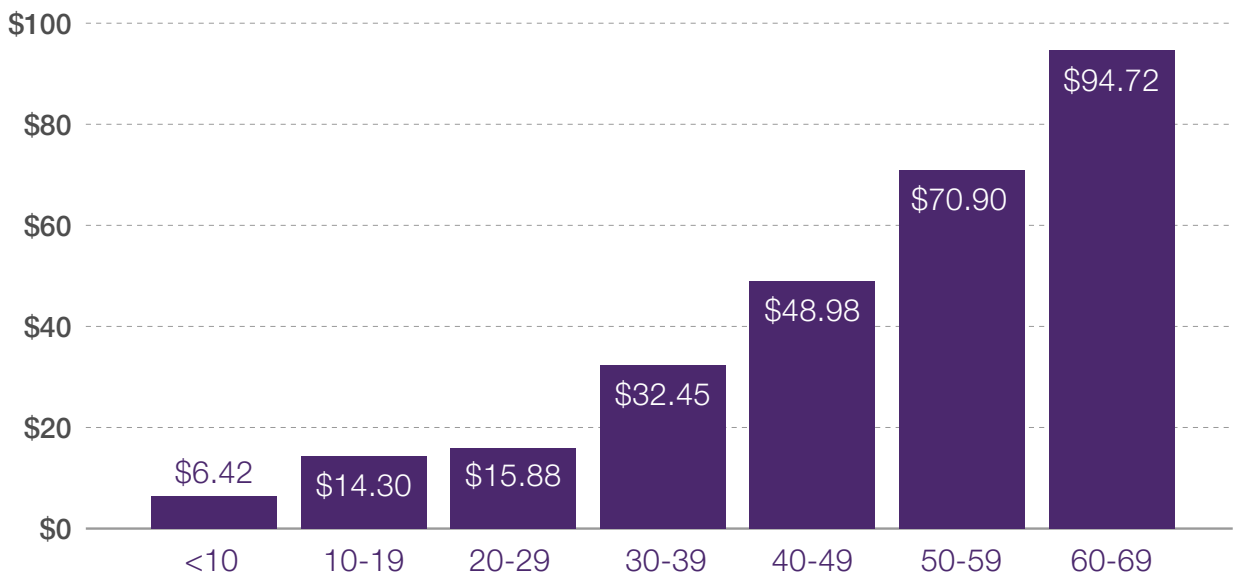


CHART 6 | Overview of costs & utilization in 2018, by region

	Canada	West	Ontario	Quebec	Atlantic Canada
Eligible monthly cost per insured	\$37.40	\$29.28 ¹	\$37.31	\$51.82	\$49.58
Monthly utilization per insured	0.52	0.43	0.45	0.86 ²	0.62
Eligible cost per claim	\$72.61	\$68.06	\$83.54	\$59.91 ²	\$80.22
Average age of employee/cardholder	44.1	43.3	44.5	44.4	45.3

- 1 Western Canada has the lowest eligible monthly costs per insured because provincial pharmacare/universal drug plans in B.C., Manitoba and Saskatchewan automatically become primary payer once plan members pay an out-of-pocket deductible.
- 2 Quebec has the lowest average eligible cost and the highest rate of monthly utilization per insured because Quebec pharmacies typically dispense chronic medications in 30-day supplies, whereas pharmacies in other provinces typically dispense 60- or 90-day supplies.

CHART 7 | Monthly eligible cost per insured in 2018, by age group

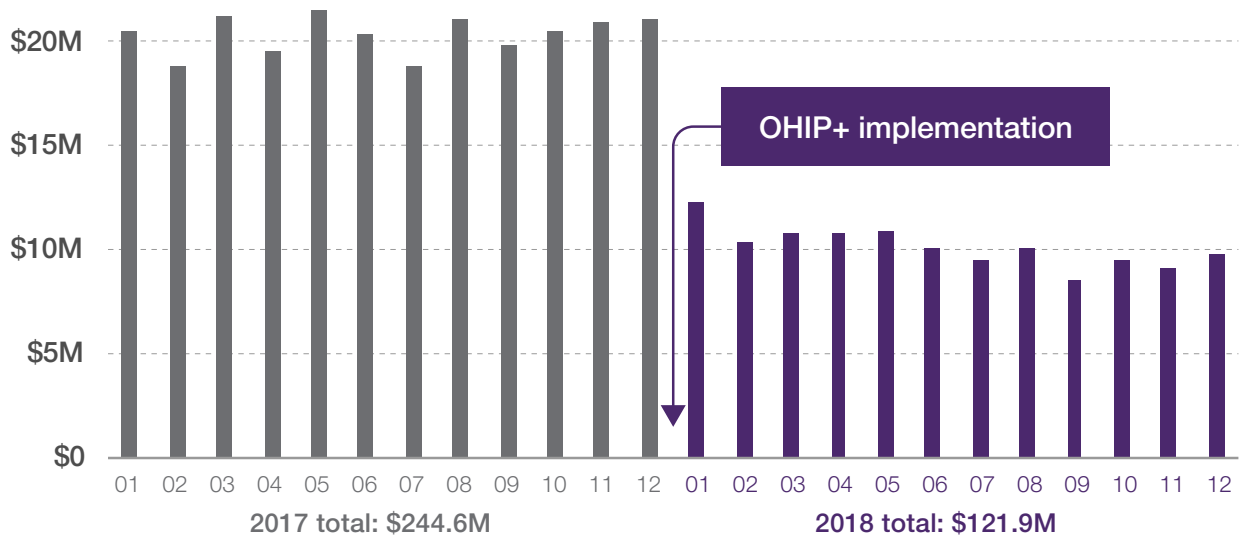


Impact of OHIP+ in Ontario

In Ontario, monthly eligible cost plummeted by 54.4% in 2018 compared to 2017 for insureds aged 24 and younger, following the government's implementation of OHIP+ in January 2018. This led to an overall decline of 6.8% in costs across all ages in province, which in turn became a major factor behind the national decline of 2.6%.

In April 2019, the Ontario government significantly scaled back OHIP+, so that only children and young adults (up to 24 years old) without any private insurance are eligible. "Private plans in Ontario can expect costs for insured members under the age of 25 to revert back almost totally to what they were prior to OHIP+," says Vishal Ravikanti, manager, professional services, for TELUS Health.

CHART 8 | OHIP+: pre and post implementation



Utilization of generic drugs

Generic drugs as a percentage of prescriptions filled by private plans ranges from 60% in Ontario to 69% in Atlantic Canada. All regions report steady growth over the past five years, particularly in Quebec, where generic dispensing has climbed from 53% in 2014 to 62% in 2018. “The slow but steady adoption of mandatory generic substitution policies drive this trend,” notes O’Brien ([see page 22](#)).

Recommendation: Private plans may be able to pick up a few more points in generic utilization by reducing the number of multi-source brand drugs reimbursed, again through the implementation of mandatory generic substitution. For the past several years, 7% of drugs paid by private plans are for multi-source brand drugs, which means that one or more generic drugs are available for that drug.

“The generic drug is considered to be bioequivalent to the branded drug, therefore most patients will respond to the generic as effectively as to the brand. If the patient does not tolerate the generic or has an adverse reaction to the non-medicinal ingredient, and the evidence is there to support this, mandatory generic plans have a method to dispense the brand at the brand price,” says O’Brien.

Utilization of multi-source drugs varies by region, from just 4% in Atlantic Canada to 11% in Quebec.



Recommendation: In addition to mandatory generic substitution, direct billing of claimants may also bring down the number of multi-source brand drugs dispensed. In Quebec, for example, legislation that enables private plans to charge plan members the difference between generic and brand prices has seen multi-source brand utilization decline from 14% in 2015 to 11% in 2018.

Nationally, generic drugs accounted for 63% of prescriptions dispensed and 26% of eligible costs for private plans in 2018, compared to 57% and 26% respectively, in 2014. The unchanged share in costs, despite the gain in volume, reflects the drops in generic drug pricing over the past five years. Single-source brand drugs account for 33% of prescriptions and 69% of costs in 2018, leaving 7% and 5%, respectively, for multi-source drugs.

CHART 9 | Utilization of generic drugs, 2014-2018, by region

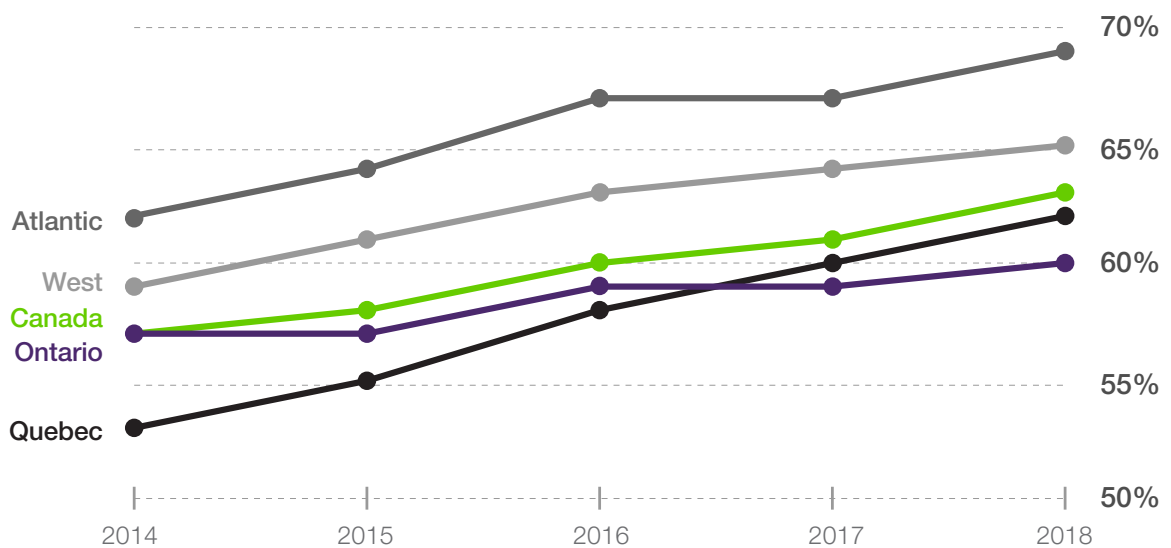




CHART 10 | Utilization by type of drug, 2014 compared to 2018

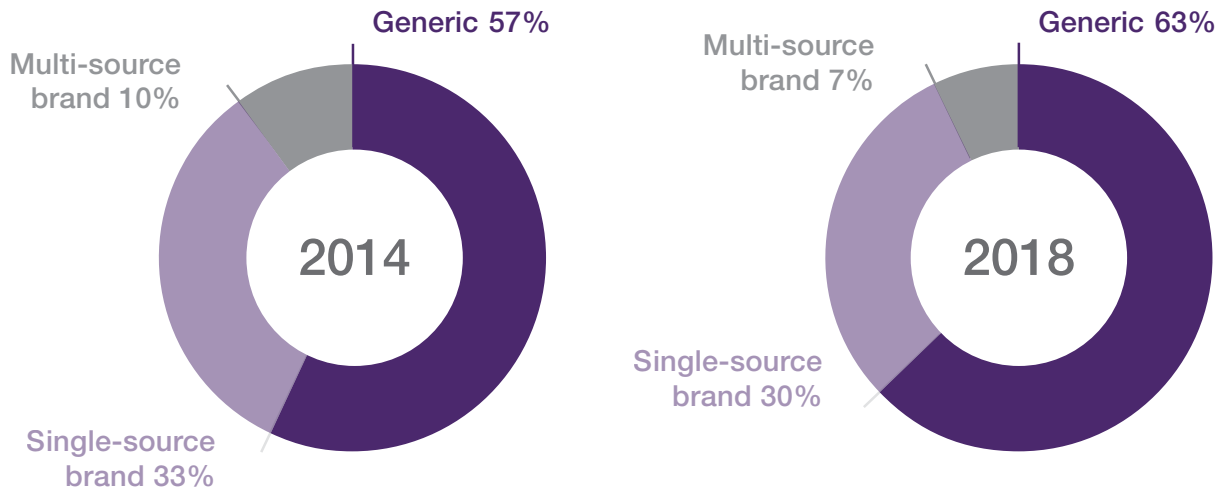
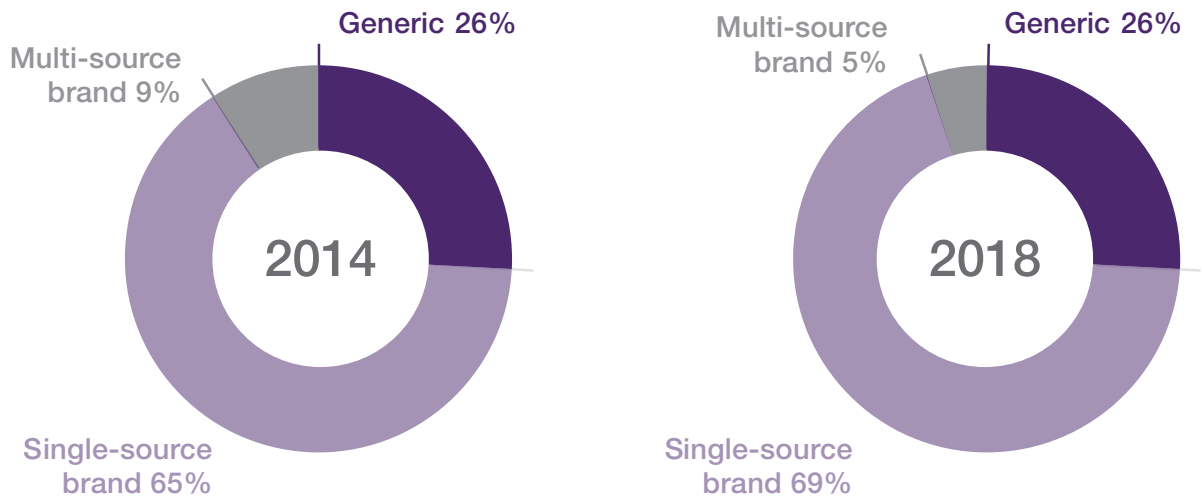


CHART 11 | Eligible prescription costs by type of drug, 2014 compared to 2018



Summary & recommendations

Ontario's OHIP+ program had a significant impact in 2018, resulting in a decline of 2.6% in average eligible monthly costs for private drug plans. Plan sponsors with significant employee distribution in Ontario will have seen a savings from the implementation of OHIP+; however, these savings ended as of April 2019, when the government limited eligibility for the program.



When the age group of zero to 24 is removed from national results, to neutralize the impact of OHIP+, both costs and utilization were flat in 2018 compared to 2017. The number of claims per claimant, however, appears to be climbing in small increments. A deflationary cost trend for traditional, non-specialty drugs clearly counterbalances an inflationary trend for specialty drugs, due to steadily increasing price points.

- This period of relative stability is a good time to implement and/or evaluate plan design tools to ensure that they effectively manage utilization and coverage for traditional, chronic medications, so that private plans are better able to afford coverage for higher-cost specialty claims.
- Private plans may be able to pick up a few more points in generic utilization by reducing the number of multi-source brand drugs reimbursed, through the implementation of mandatory generic substitution.
- Direct billing of claimants (i.e., charging them the difference between generic and brand prices) may also bring down the number of multi-source brand drugs dispensed.



3. **Drug plan** design tools

The 2019 TELUS Health report presents adoption rates for five drug plan design tools that help employers strike the balance between sustainability and competitive benefits valued by employees. These design policies can also encourage plan members to be more mindful consumers of their health benefit plan. This report also summarizes uptake of annual drug plan maximums over the past five years.

Generic drug policies

TELUS Health reports the slow and steady adoption of mandatory generic substitution into plan designs. In 2018, 61% of insureds had plans with mandatory substitution, up from 55% in 2017 and 44% five years ago, in 2014. “Mandatory substitution is basically a default now in carriers’ contracts, so continued uptake should occur unless plan sponsors opt out,” says O’Brien.

An additional 23% of insureds had plans with a regular generic substitution policy, which means that claimants or physicians can refuse the substitution and the plan covers the cost of the brand-name drug. When the two forms of generic drug policy are combined, 84% of insureds now have plans that involve substitution, up from 82% in 2017 and 75% in 2014.

As in past years, however, a gap emerges when we compare the number of insureds with the number of group plans. More groups (94%) than insureds (84%) have generic policies, and the gap is larger when we look at just mandatory generic substitution: 85% of groups, versus 61% of insureds. This indicates that a handful of employers with very large workforces have not adopted generic substitution, or have opted out. Unions are a possible factor. “Mandatory substitution is something that will need to be discussed during collective bargaining, and it can take time to change the minds of union leaders who feel it’s a takeaway,” says O’Brien.

Recommendation: Private drug plans without a generic substitution policy can work with their benefits advisor to identify and address the major barriers to adoption. Education and collaboration may be key, to assure plan members and union groups that members will not be negatively impacted and that savings can be reinvested in other areas of the health benefit plan.



CHART 12 | Insureds with plans that include generic drug policies, 2014-2018

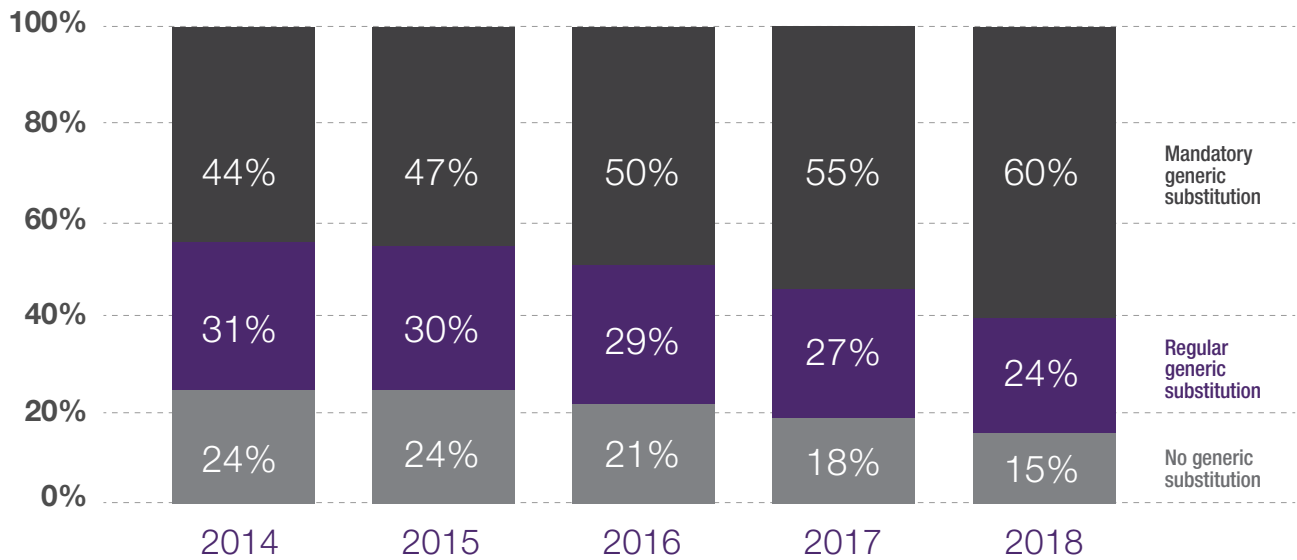


CHART 13 | Generic drug policies in 2018, insureds versus groups

	Insureds	Groups
Mandatory generic substitution	61%	85%
Regular (optional) generic substitution	23%	9%
No generic drug policy	15%	6%



Co-insurance & deductibles

Two-thirds (66%) of insureds had plans that incorporated co-insurance in 2018, comparable to 69% in 2017. This increases to 76% among group plans. As with generic substitution policies, the gap between insureds and groups reflects the fact that a relatively small number of very large employers continue to provide 100% coverage.

Among insureds with plans that include co-insurance, the majority by far (63%) pay 20%, followed by one in five (21%) who pay 10% toward the cost of their medication. “The 20% co-pay has become well-established among those with co-insurance, which suggests that this is a reasonable amount to help plan members understand the value of their plan and assist in plan costs,” notes O’Brien.

Recommendation: To help ensure that plan members’ total contributions remain reasonable over time, an out-of-pocket maximum is recommended.

“ A co-pay serves as a tool to highlight the value of a plan. Without it, there is no communication with plan members on costs and a lack of shared accountability for drug plan management, explains O’Brien. ”

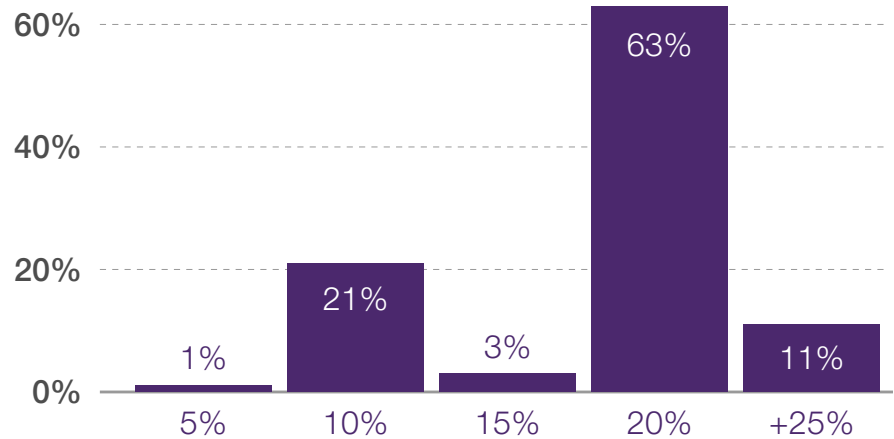
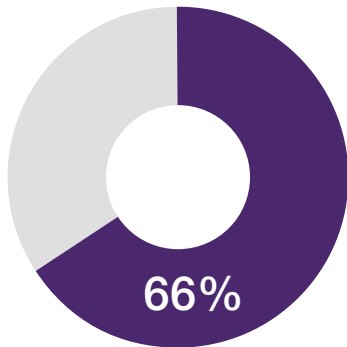
The adoption of co-insurance has changed very little for at least five years, which suggests that labour agreements could be a limiting factor among the remaining 24% of groups without any co-insurance. As well, plan sponsors may be concerned about negative reactions from employees.

Far fewer insureds have plans that require annual (10%) or per claim (14%) deductibles, and these numbers have changed very little in the past five years. Among those who have per-claim deductibles, they are most likely to pay between \$4.00 to \$5.99 (43%) or \$2.00 and \$3.99 (29%).



CHART 14 | Breakdown of co-insurance amounts (co-pays) paid by insureds

Insureds with plans that include co-insurance, 2018



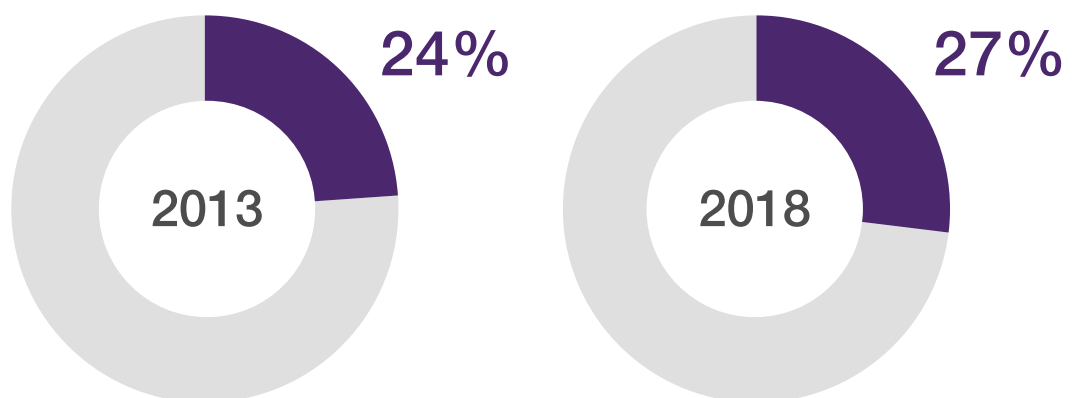
Managed formularies

In Ontario, the number of insureds with open drug plans—also known as “prescription-required-by-law” plans, meaning that any prescription is covered—has slowly declined from 72% in 2013 to 66% in 2018. Remaining plans are categorized as either managed (27% of insureds, up from 24%) or provincial-mimic (6%, up from 4%, referring to plans that have adopted the provincial formulary).

“We are seeing a slow shift over the past five years, with fewer open formularies and more managed formularies. We’re also seeing many variations of the managed formulary, but essentially all are looking at drugs in terms of cost-effectiveness and their place in therapy,” says O’Brien.

Recommendation: Plan sponsors can work with their benefits advisors to determine the estimated cost savings of a managed formulary for their plan, and the impact on plan member experience (e.g., how many members will be affected). A communications strategy, initiated well before implementation of the managed formulary, is essential for plan member acceptance.

CHART 15 | Insureds with managed formularies, 2018 compared to 2013*



* Based on data for Ontario only

Dispensing fee caps

Just over a third of insureds (36%) have plans with capped reimbursement for pharmacists' dispensing fees, unchanged from 2014 (36%). Meanwhile, 12% of group plans have capped dispensing fees. The gap between insureds and plans (36% versus 12%) indicates that employers with very large workforces are more likely than smaller employers to adopt this plan design tool.



Among insureds whose plans have dispensing fee caps, 32% have a cap of up to \$7.99, followed by 23% with a cap of \$8 to \$8.99, and 19% with a cap of \$10 - \$10.99.

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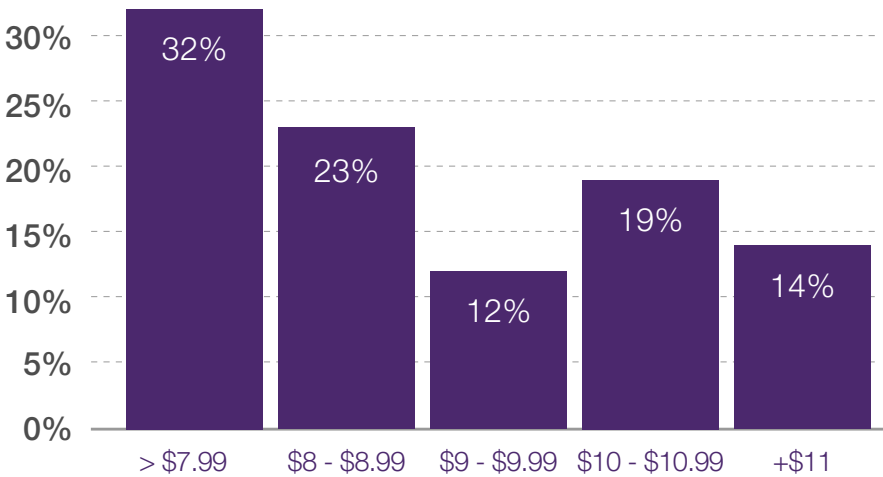
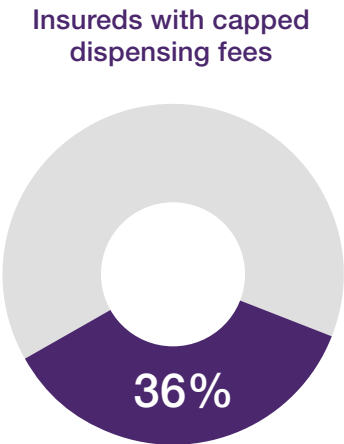
Not a lot has changed year over year when it comes to dispensing fee caps, despite the fact that they are a simple way to add consumerism to a plan. Plan members can weigh convenience against savings when choosing where to fill their prescriptions, says O'Brien.

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Recommendation: Plan sponsors can review their dispensing fee costs—both as an average fee paid by the plan and in terms of the distribution of fees across different dollar bands—to determine if potential cost savings warrant a capped fee. “This assessment would also give plan sponsors a good idea of the number of claimants who would be impacted by various fee caps and by how much,” notes O’Brien.



CHART 16 | Breakdown of capped fees



Annual & lifetime maximums

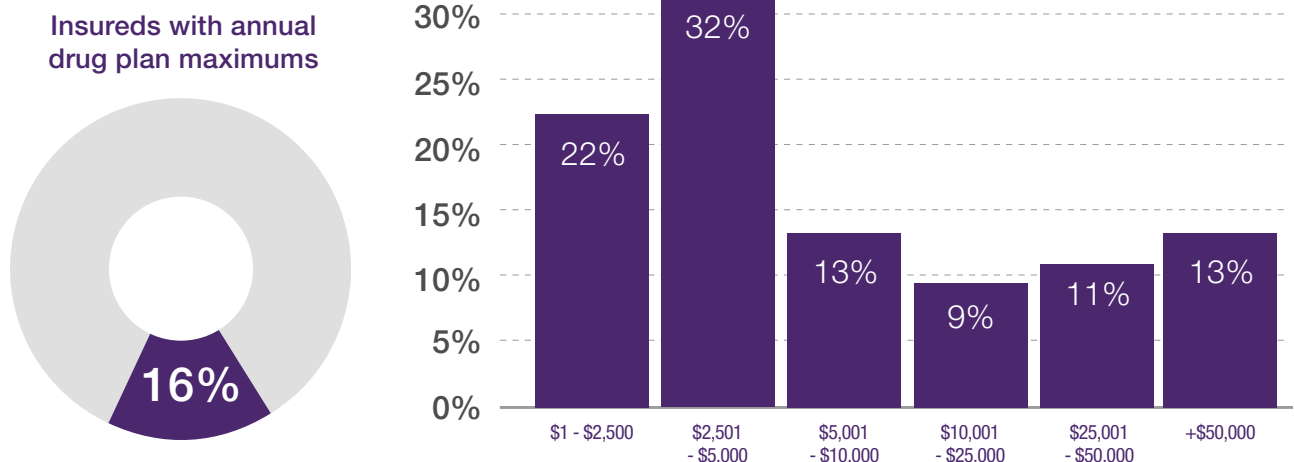
Fifteen percent (15%) of insureds have drug plans with annual maximums, compared to 12% five years ago, in 2014. Among those that do, they are most likely to have maximums that range from \$2,500 to \$5,000 per year (32%), followed by maximums of up to \$2,500 (22%).

“Smaller plans are the most likely to have annual maximums, which is to be expected. For this size of employer even one very high cost claimant can significantly impact plan costs. Many employers are struggling both to offer and to afford a benefits program, so they may institute a maximum to limit their exposure,” says O’Brien.

Recommendation: Before considering an annual drug plan maximum that could negatively affect plan members, plan sponsors can explore other design features such as mandatory generic substitution and a managed formulary, so that their plan is better able to afford claims for higher-cost drugs.

Four percent (4%) of insureds have drug plans with lifetime maximums. Among those that do, they are most likely to have lifetime maximums of \$250,001 to \$500,000 (43%), followed by \$100,001 to \$250,000 (29%).

CHART 17 | Breakdown of annual maximums

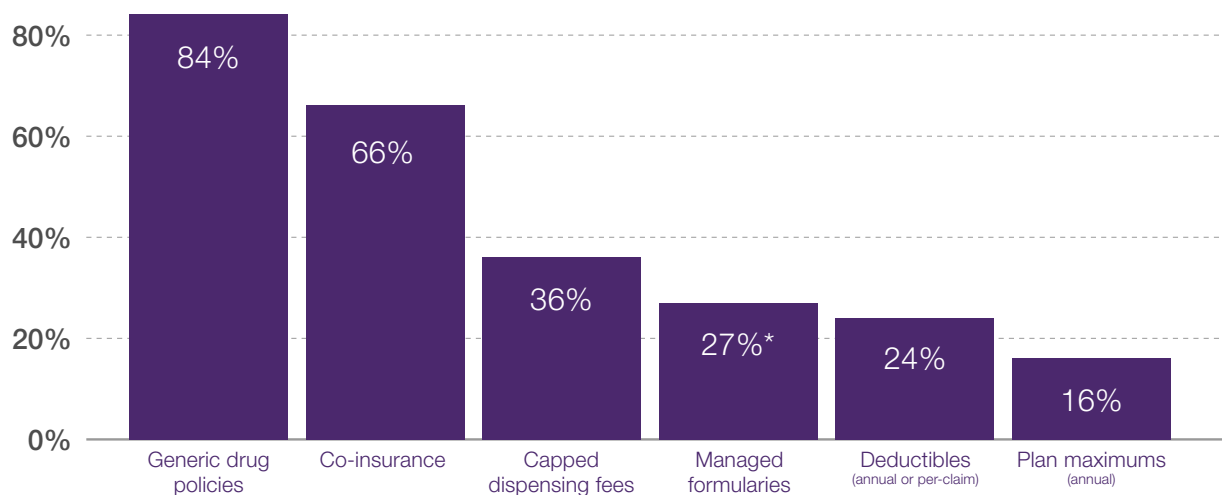


Summary & recommendations

The industry is witnessing a slow but steady trend towards the adoption of a generic drug policy, particularly for mandatory generic substitution. Co-insurance is the second most popular plan design tool, although uptake appears to have plateaued. Momentum for managed formularies appears to be building, while capped dispensing fees and deductibles have seen little change in the past five years.

- Private drug plans without policies for generic substitution policy and/or co-insurance can work with their benefits advisor to identify and address the major barriers to adoption.
- To help ensure that plan members' contributions to co-insurance remain reasonable over time, private plans should include an out-of-pocket maximum.
- To assess the feasibility and possible benefits of a managed formulary, plan sponsors can work with their benefits advisor to estimate cost savings and the impact on plan members.
- Plan sponsors can review their dispensing fee costs—both as an average fee paid by the plan and in terms of the distribution of fees across different dollar bands—to determine if potential cost savings warrant a capped fee.

CHART 18 | Summary of insureds with the following tools for drug plan management



* Based on data for Ontario only



4. Specialty drugs



Share of costs & claimants

The growing cost of claims for specialty drugs continues to significantly outpace the growth in claimants, illustrating a steady upward curve in price points. The upper limit of eligible costs per medication per year has ballooned from about \$30,000 during the 1990s to hundreds of thousands of dollars today. A few exceed \$1 million. All of these “ultra” high-cost specialty drugs represent significant advancements in treatment, most often for cancers or rare diseases.

With that in mind, TELUS Health claims data analysis for 2018 reveals that specialty drugs accounted for 29% of all eligible costs, up from 27% in 2017. Meanwhile, just 1.1% of all claimants use specialty drugs, compared to 1.0% in 2017. Ten years ago, in 2009, specialty drugs accounted for 12% of costs and 0.5% of claimants.

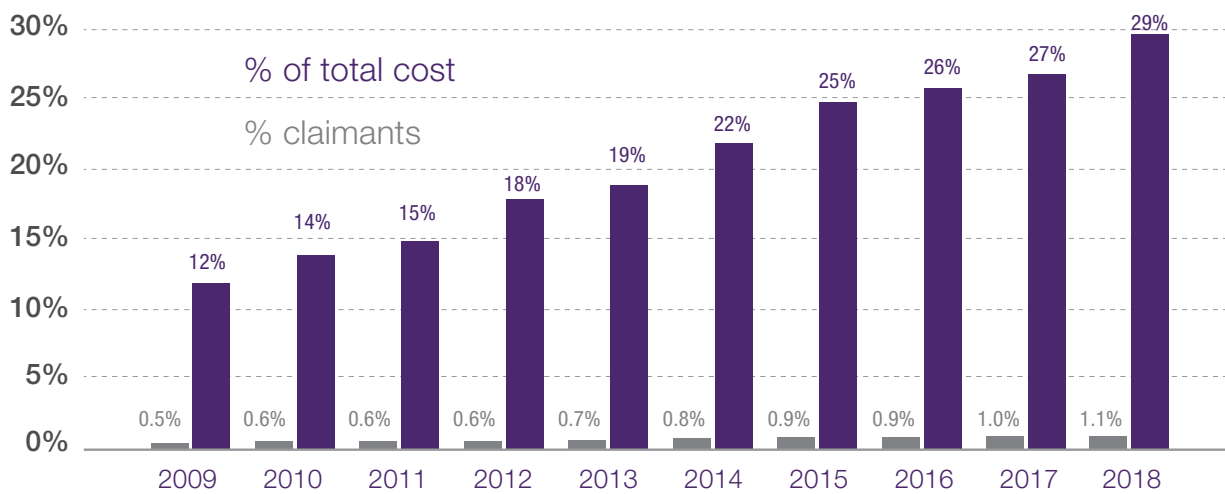
When expressed in terms of the average monthly cost per certificate, plan sponsors’ spending on specialty drugs has more than doubled in the past 10 years, from \$10 per certificate in 2009 to \$26 in 2018. This reflects an average growth rate of 10.8% per year in costs. Non-specialty drugs, on the other hand, have seen certificate costs decrease from \$73 in 2009 to \$62 in 2018.

If these trends continue, by 2024 the average monthly certificate cost for specialty drugs would intersect and then overtake costs for non-specialty drugs. “Is this sustainable? There clearly needs to be discussion on how best to support this,” says O’Brien. “These drugs come at a high cost but they are life changing and in many cases the cost is offset by keeping employees healthy and productive at work.”

Regionally, it's worth noting that private drug plans in the Atlantic provinces have much higher specialty drug costs than the rest of Canada, with 36% of eligible costs stemming from specialty drugs. "Our data show that drugs to treat Fabry disease for a rare genetic disorder, such as Fabrazyme, an \$800,000 drug, and other high-cost enzyme replacement therapy drugs are disproportionately represented in Atlantic Canada given the size of its population. The population base is more predisposed to certain rare diseases," notes O'Brien.

At the other end of the scale, specialty drugs account for a relatively low 23% of eligible costs for private drug plans in Western Canada. This regional variation is due to pharmacare programs in B.C., Saskatchewan and Manitoba, which automatically become first-payer after plan members pay an income-based out-of-pocket deductible.

CHART 19 | Specialty drugs by share of claimants and eligible costs, 2009-2018



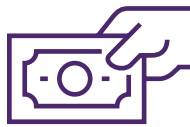


CHART 20 | Monthly costs per certificate by type of drug, 2009-2025 (forecast)

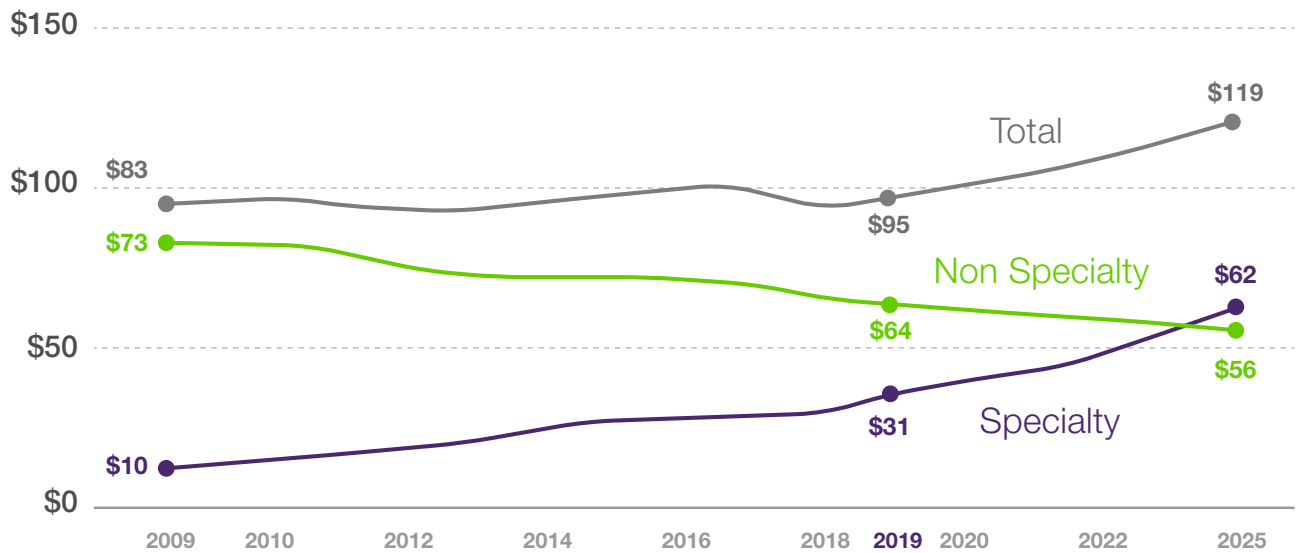
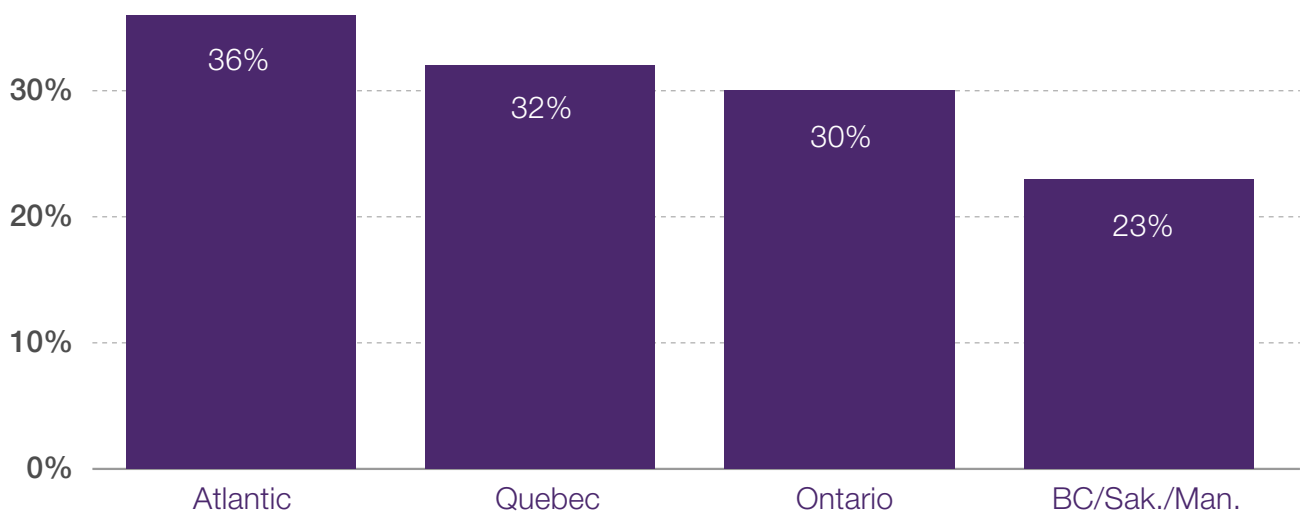


CHART 21 | Specialty drugs' share of eligible costs, 2018, by region





Biosimilar biologics

Private drug-plan funding for the biosimilar Grastofil, used as an acute therapy for people undergoing chemotherapy treatment, increased significantly in 2018, such that the drug now accounts for more than half of claimants (58%) and almost half of eligible costs (49%) versus the originator biologic (Neupogen). With a public list price that is 17% lower than the originator, the rapid uptake of Grastofil is good news for private plans.

In contrast, biosimilar biologics for chronic conditions, such as rheumatoid arthritis (RA), very slowly inch their way forward in private drug plan disbursements. Despite growing medical evidence that biosimilars are as effective and safe as the originator, the majority of existing patients choose not to switch from the originator to a biosimilar. For example, Inflectra, with a list price that is 46% lower than the list price for the originator, Remicade, accounts for just 8% of claimants and 4% of costs after three years on the market.

For their part, public drug plans are attempting to boost uptake by making it easier for physicians to prescribe biosimilars. For instance, the biosimilars Inflectra and Renflexis are available as limited-use drugs in Ontario, which takes less paperwork than the exceptional access process required for Remicade. While these public policies have a spillover effect for private plans, their impact so far is subtle, as the numbers attest.

Mandatory switching policies are widely regarded as the necessary catalyst to accelerate uptake of biosimilars. Public payers will likely drive this strategy, as is already the case in several European markets. In May 2019, B.C. became the first public payer in Canada to implement such a [policy](#). Specifically, PharmaCare beneficiaries taking one of three originator biologics (Remicade, Enbrel or Lantus) will need to transition to a biosimilar by November 25, 2019. After that date, PharmaCare will no longer cover the originator drugs (although exceptions can be made on a case-by-case basis).

The pan-Canadian pharmaceutical alliance, in its 2018 document on policy directions for biologics, states that the “switching of patients from a reference biologic molecule to a biosimilar may be [implemented](#).” For more on the mandatory switching of originator biologics to biosimilar biologics, see the TELUS Health article entitled, “Biosimilars update: switching on the [horizon](#)?”

In the next three years, up to 17 biosimilar medications may launch in Canada. The originator biologics currently represent more than \$212 million in TELUS Health’s book of business. More than half of these biosimilars, however, will likely be administered in the hospital setting, in which case private plans will not be impacted. The biggest activity for private plans will come from the launch of up to six biosimilars for Humira, used to treat RA and other autoimmune conditions. These will be the first biosimilars for Humira.

CHART 22 | National uptake of biosimilar biologics¹

Biosimilar brand name (chemical entity; reference brand)	Price difference vs. reference drug	% of new claimants			% of eligible costs		
		2016	2017	2018	2016	2017	2018
Grastofil (filgrastim; Neupogen)	-17%	0.96%	31.34%	57.82%	0.40%	23.66%	49.27%
Inflectra (infliximab; Remicade)	-46%	0.84%	3.83%	8.12%	0.36%	1.48%	3.94%
Brenzys & Erelzi (etanercept; Enbrel)	-37%	0.09%	2.70%	9.24%	0.01%	1.00%	4.53%
Basaglar (insulin glargine; Lantus)	-25%	0.56%	1.66%	3.97%	0.22%	0.76%	1.93%
Glatect ² (glatiramer; Copaxone)	-29%	-	-	2.27%	-	-	0.69%

¹ Excluding Renflexis, since claims did not begin until late 2018.

² Glatect is a non-biologic subsequent-entry specialty drug. While it is not a biologic, its regulatory pathway is similar to that of biologics. In November 2018, B.C.’s PharmaCare program announced that all patients using the originator drug (Copaxone) must transition to Glatect in order to maintain coverage.

Summary & recommendations

The 1.1% of claimants who require specialty drugs accounted for 29% of eligible costs for private drug plans in 2018. The emergence of ultra-high-cost drugs for targeted cancers and rare diseases will continue to drive total costs for specialty drugs. Lower-priced biosimilars for relatively more common chronic conditions, such as rheumatoid arthritis, may reduce the growth curve, although uptake needs to increase significantly.



- Plan sponsors can work with their benefits providers (insurers and advisors) to develop a long-term strategy for the coverage of specialty drugs, particularly in the event of claims for ultra-high-cost drugs for rare diseases. A province-by-province process can be put in place to coordinate with public drug plans that assist with catastrophic drug costs.
- Prior authorization policies and managed formularies can direct first-time claimants with prescriptions for a biologic to start with the biosimilar.
- Working with their benefits providers and using public drug plans as a model (limited to B.C. at this point), plan sponsors can investigate and consider a mandatory switching policy for claimants already taking an originator biologic.

5. **Drugs** by therapeutic class



Top 10 drug classes: rheumatoid arthritis continues reign

Drugs to treat rheumatoid arthritis (RA) retain their number-one ranking on the top-10 list of drug categories by adjudicated amount, for the ninth straight year. In 2010, RA drugs ranked third, after drugs to treat high blood pressure and depression.

In 2018, RA drugs accounted for 12.3% of the total adjudicated amount, compared to 12.1% in 2017 and 10.9% five years ago, in 2014.

Diabetes drugs also solidify their number-two position, held since 2012. They accounted for 10.5% of adjudicated claims in 2018, up from 9.5% in 2017 and 8.3% in 2014.

When we change our lens to the number of claimants, 6.9% of claimants submitted claims for diabetes drugs in 2018, compared to just 0.6% who submitted claims for RA drugs.

Skin disorders have overtaken asthma in third position, with 6.4% of the adjudicated amount (up from 5.5% last year) and 20.9% of claimants (21.4% in 2017). The growth of this class can be linked to the use of biologics for psoriasis and other skin disorders.

Drugs for depression hold fast in the fifth position, though it's worth noting that the adjudicated amount steadily declines year after year, coming in at 5.2% in 2018 and 5.5% in 2017, compared to 7.1% in 2014. Meanwhile, the percentage of claimants has climbed from 13.4% in 2014 to 16.1% in 2018, a trend that reflects the growing utilization of lower-cost generic drugs to treat a growing patient population.

Cancer drugs have moved up a level to rank sixth in 2018, with 4.4% of the adjudicated amount (up from 3.8%) last year. Multiple sclerosis has also moved up one level, to eighth position, with a 3.7% share (up slightly from 3.4%). Drugs to treat attention deficit hyperactivity disorder (ADHD) and narcolepsy come in at ninth position and account for 3.4% of the adjudicated amount. The percentage of claimants for all of these categories range from a relative high of 3.4% for ADHD/narcolepsy, to 1.5% for cancer and 0.2% for multiple sclerosis.



Last but not least, antibiotics and anti-infectives round out the list in tenth position, accounting for 3.2% of the adjudicated amount. In terms of claimants, however, they are number one by far, with a 40.6% of share of claimants.

The top 10 drug classes by adjudicated amount account for 58.8% of the total adjudicated amount.



Canada's drug pipeline

At the start of 2018, Health Canada was reviewing more than 140 drugs for possible launch in Canada. Cancer drugs account for a third of all of these submissions, and more than half (including the cancer therapies) are higher-cost, specialty drugs.

Among the specialty drugs that would be covered by private drug plans, the lowest anticipated cost is approximately \$6,400 per year, for a biologic to help prevent migraines. The highest-cost drug, for a very rare form of muscular dystrophy, carries a cost of at least \$700,000 per year. Get more details on the pipeline's potential impact on private plans in the TELUS Health article entitled, [The Drug Pipeline: What's Coming for Private Drug Plans](#).

CHART 23 | Top 10 drug classes by adjudicated amounts and claimants, 2018

Therapeutic class	Rank	% adjudicated amount	% claimants
Rheumatoid arthritis	1	12.3%	0.6%
Diabetes	2	10.5%	6.9%
Skin disorders	3	6.4%	20.9%
Asthma	4	5.8%	17.5%
Depression	5	5.2%	16.1%
Cancer	6	4.4%	1.5%
Blood pressure	7	3.9%	15.4%
Multiple sclerosis	8	3.7%	0.2%
ADHD/narcolepsy	9	3.4%	3.4%
Antibiotics/anti-infectives	10	3.2%	40.6%

CHART 24 | Top 10 drug classes by adjudicated amounts, 2014-2018

Therapeutic class	Rank					% adjudicated amount				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Rheumatoid arthritis	1	1	1	1	1	10.9	11.3	12.1	12.1	12.3
Diabetes	2	2	2	2	2	8.3	8.6	9.1	9.5	10.5
Skin disorders	7	7	5	4	3	4.1	4.3	4.8	5.5	6.4
Asthma	4	4	4	3	4	5.7	5.6	5.8	5.9	5.8
Depression	3	3	3	5	5	7.1	6.1	5.9	5.5	5.2
Cancer	-	-	-	7	6	2.9	2.9	3.1	3.8	4.4
Blood pressure	5	5	6	6	7	4.8	4.6	4.6	4.5	3.9
Multiple sclerosis	-	-	9	9	8	3.1	3.2	3.4	3.4	3.7
ADHD/narcolepsy	-	-	10	10	9	2.8	3.0	3.2	3.3	3.4
Antibiotics/anti-infectives	6	6	7	8	10	4.4	4.5	3.9	3.7	3.2



Summary & recommendations

The list of top 10 drug classes illustrates the duality of drug plans today: at the top of the list are drugs to treat rheumatoid arthritis, which represent 12.3% of adjudicated amounts and 0.6% of claimants; at the bottom of the list are antibiotics/anti-infectives, presenting 3.2% of adjudicated amounts and 40.6% of claimants. More than half of the drugs in Canada's pipeline are specialty drugs, including ultra-high-cost drugs that treat cancer and rare diseases, as well as relatively lower-cost biologics (less than \$10,000 per year) for larger patient populations (e.g., episodic migraine).

- Claims data analyses and actionable reporting are increasingly important to monitor risks specific to a plan sponsor's workforce and to ensure strategies focus on high-priority areas.
- Plan design tools such as mandatory generic substitution, co-insurance, prior authorization, managed formularies and step therapy lay the foundation for a stable drug plan that can accommodate all claims.
- Plan sponsors can bring in or expand benefits outside the traditional drug plan to support members living with chronic disease. For example, health coaching services (face-to-face or via virtual care) can improve success rates for lifestyle changes such as weight loss.



6. Categories

up close

Diabetes

Eligible costs for diabetes drugs have grown steadily over the past five years, driven by new second-line therapies.

“What’s interesting to see is that the use of insulin is declining at the same time, which may suggest that type 2 diabetes is not progressing as much as it used to. Patients are using these newer oral anti-diabetic medications with great success, potentially reducing the need to start insulin, says Ravikanti.”

Growing clinical evidence of the efficacy of these latest oral anti-diabetic agents also encourages prescribing by physicians, he adds.

Insulin saw its total amount decrease from \$92.5 million in 2017 to \$85.9 million in 2018 (-7%).

Meanwhile, new oral drugs have seen steady growth over the past five years. Jardiance, an oral drug that entered the market in 2015, saw the biggest gain in eligible costs, growing by 88% to reach \$26.1 million in 2018. Janumet also saw double-digit growth, climbing by 19% to reach \$49.5 million.

Growth is also strong in the GLP-1 RA (glucagon-like peptide-1 receptor agonist) category, which consists of five self-injectable drugs (e.g., Victoza). Eligible costs climbed by 29% in 2018, reaching \$48.0 million.

The average eligible cost per claim for insulin was \$146.80 in 2018, compared to \$165.83 for Jardiance and \$194.50 for Janumet. However, total annual costs per claimant for insulin were highest, at \$980.61, compared to \$720.64 for Jardiance and \$868.46 for Janumet.

The average eligible cost per claim for a drug in the GLP-1 class was \$367.22 in 2018, with an average annual cost per claimant of \$1,833.25.

“ Private drug plans can incorporate step therapy to manage claims for diabetes drugs, recommends Ravikanti. Clinical guidelines recommend metformin as the first line of treatment, and step therapy helps confirm that claimants have tried metformin first, before coverage begins for a second line of treatment. ”

CHART 25 | Trends in diabetes medications

	Total eligible cost (\$ millions)				
	2014	2015	2016	2017	2018
Insulin	\$87.8	\$91.1	\$93.8	\$92.5	\$85.9
Janumet	\$22.6	\$28.8	\$35.8	\$41.5	\$49.5
Jardiance	-	\$0.2	\$5.0	\$13.9	\$26.1
GLP-1 class	\$24.4	\$27.7	\$31.3	\$37.2	\$48.0
Invokana	\$2.2	\$13.6	\$21.4	\$22.6	\$20.5

CHART 26 | Average eligible cost per claim and average cost per claimant, 2018

	Eligible cost per claim	Average cost per claimant
Insulin	\$146.80	\$980.61
Janumet	\$194.50	\$868.46
Jardiance	\$165.83	\$720.64
Invokana	\$163.88	\$836.21
GLP-1 class	\$367.22	\$1,833.25

HIV

Outside of the top-10 list for drug classes, a recent development in HIV drugs is worth noting. HIV drugs are considered specialty medications, since the average annual cost is more than \$10,000. In late 2017 and throughout 2018, several generic options became available, which offer savings of up to 75%.

Claims data for 2018 indicate strong uptake of all four generic drug options for HIV. Indeed, at least 90% of all HIV drug claims were for a generic. “This is a good news story for private plans. Again, a formal generic substitution policy is a simple tool to ensure continued maximum uptake,” says Ravikanti.

Migraine

In late 2018, Health Canada approved the first biologic, Aimovig, for the prevention of migraine headaches in patients diagnosed with episodic (or chronic) migraines. The cost is about \$6,400 per patient annually. TELUS Health began adjudicating claims for Aimovig at the end of 2018.

Based on five months of claims data (December 2018 to April 2019), Aimovig has had a moderate impact so far on overall eligible costs per claimant. As of April 2019, the average monthly eligible cost for all migraine treatments was \$125.35. When Aimovig is removed from all claims, the average monthly eligible cost declines to \$109.55. A full year of claims experience will give a more accurate picture of the impact of this new class of drugs, which is the first biologic product indicated to prevent migraine. As well, at least one more biologic for migraine (Emgality) is expected to launch in 2019.

Recommendation: Prior authorization will be important to validate a claimant’s eligibility for these biologic drugs, based on the diagnosis of episodic migraines. While about three million Canadians experience migraine headaches, it’s estimated that just a quarter of them (about 700,000) have episodic migraines.

“ For those who require acute treatment of migraines, traditional triptan drugs, where many generics are available, should remain the primary option for treatment, says Ravikanti. ”



Summary & recommendations

The diabetes category has evolved significantly in recent years, with a wider range of therapies that effectively slow the progression of the disease and reduce the need for insulin. In the majority of cases, clinical guidelines recommend that these new drugs be used when the diabetes can't be managed with first-line therapies (including lifestyle changes). In the area of HIV therapy, new generic options for HIV drugs offer savings of up to 75%. Claims for migraine therapies are worth watching, as biologics to treat episodic migraine enter the market.

- For large categories such as diabetes drugs, where prior authorization is not feasible, plans can use step therapy to manage claims. Based on clinical guidelines, step therapy seeks to confirm that claimants have tried first-line treatments before coverage begins for a second line of treatment.
- Prior authorization needs to be in place to validate eligibility for biologic drugs to treat episodic migraines.
- A formal generic substitution policy, ideally for mandatory substitution, will ensure maximum uptake of generics for higher-cost drugs, such as HIV drugs.



7. Conclusion



An analysis of the drug claims data shows a solidification of the insurance role of private drug plans. Higher-cost specialty drugs, used by just 1% of claimants, account for 29% of eligible costs. Given their growing pipeline and efficacy for people who might otherwise be on disability, specialty drugs will likely account for a third of all costs within a few years.

Private drug plans' emergent role as insurance also raises questions about the role of the public sector. While serious discussion about a national pharmacare program appears finally to be underway, it will take years, and likely multiple governments, for full implementation. During that time, providers of private plans may have to assume more of a leadership role in the coordination of coverage for higher-cost specialty drugs.

Against this backdrop of evolution in drug plans, it's important not to take attention away from the 99% of claimants who do not use specialty drugs. The 2019 TELUS Health Drug Data Trends & National Benchmarks Report indicates a steady adoption of some of the plan design tools available to manage the costs and utilization of traditional drugs, but there is much room for growth. These measures are essential to help ensure overall sustainability, and to encourage plan members to become more educated, and accountable, consumers of their drug benefit plan.

2019
TELUS Health
Drug Data Trends
& National Benchmarks

