Prescribed Drug Spending in Canada, 2019: A Focus on Public Drug Programs

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Abstract

Public drug program spending accounts for 43.1% of prescribed drug spending in Canada. This report provides an in-depth look at public drug program spending in Canada, using the Canadian Institute for Health Information's (CIHI) National Prescription Drug Utilization Information System. Public drug program spending does not include spending on drugs dispensed in hospitals or on those funded through cancer agencies and other special programs.

Public drug program spending increased by 6.8% in 2018, compared to an increase of 5.3% in 2017. The growth in 2018 was largely because of the introduction of Ontario Health Insurance Plan+ (OHIP+), which extended drug coverage to all Ontario residents age 24 years or younger.

Three of the top five classes in spending were biologic drugs, with anti-tumour necrosis factor drugs, used to treat conditions such as rheumatoid arthritis and Crohn's disease, accounting for the highest proportion of drug spending for the seventh consecutive year.

The proportion of public drug program spending on high-cost individuals continued to rise. In 2018, the 2.1% of individuals for whom a drug program paid $10,000 or more accounted for more than one-third of spending (38.8%, up from 36.6% in 2017).

Introduction

Spending on prescribed drugs is forecast to reach $34.3 billion in 2019, an increase of 2.7% over the previous year (CIHI 2019). Multiple payers are involved in the financing of prescribed drugs. In the public sector, these payers include provincial, territorial and federal drug subsidy programs and social security funds (such as workers' compensation boards). In the private sector, payers include private insurers and households or individuals paying out of pocket. Of the prescribed drug spending, $14.8 billion (43.1%) is forecast to have been financed by the public sector in 2019.

Public drug program spending accounts for 43.0% of prescribed drug spending (CIHI 2019). Public drug program spending does not include spending on drugs dispensed in hospitals or on those funded outside public drug programs (e.g., through cancer agencies).

This report provides an in-depth look at public drug program spending in 2018 using drug claims data submitted to CIHI's National Prescription Drug Utilization Information System database.

Growth in Public Drug Program Spending by Drug Class

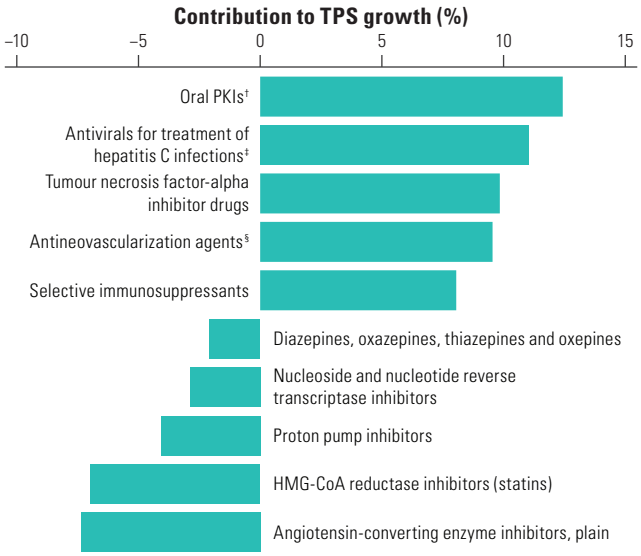
Public drug program spending increased by 6.8% in 2018, compared to an increase of 5.3% in 2017. The growth in 2018 was largely because of the introduction of OHIP+, which extended drug coverage to all Ontario residents age 24 years or younger. Excluding spending on OHIP+ beneficiaries who were not previously covered by an Ontario drug program, spending in all jurisdictions increased by 3.4% in 2018.

Oral protein kinase inhibitors, used to treat various types of cancer, were the largest contributor to growth (Figure 1). This class made up the fourth largest proportion of public drug program spending (2.9%), contributing 12.5% to the overall growth in spending in 2018. Spending on this drug class almost tripled between 2014 and 2018, from $148.6 million to $421.7 million, and grew by 37.2% in 2018.

Hepatitis C drugs were the second largest contributor to growth. This is in part because of some jurisdictions expanding coverage of hepatitis C drugs in 2017 to all eligible individuals who were diagnosed with chronic hepatitis C, regardless of the type and severity of their disease.

Centrally acting sympathomimetics, used to treat attention deficit hyperactivity disorder (ADHD), were new to the top 10 contributors to growth, ranking eighth. This is largely because of the introduction of OHIP+, where this drug class accounted for the second highest proportion of spending. Combinations of oral blood glucose-lowering drugs (used to treat type 2 diabetes) dropped out of the top 10 contributors to growth, to the 11th place.

FIGURE 1.
Top five drug classes by largest (positive and negative) contribution to growth in public drug program spending,* 2018



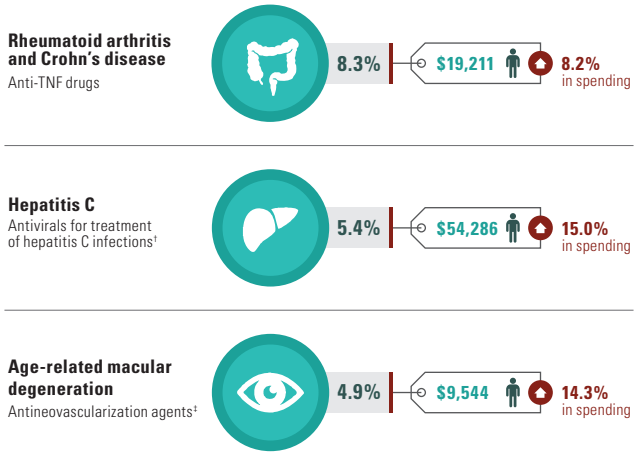
PKIs = protein kinase inhibitors; TPS = total program spending.
*Currently, the Northwest Territories and Nunavut do not submit data to the National Prescription Drug Utilization Information System (NPDUIS).
†The majority of spending on PKIs in Saskatchewan, Alberta and British Columbia is not funded through public drug programs and not included in NPDUIS.
‡Spending on antivirals for treatment of hepatitis C infections in Prince Edward Island is not included in NPDUIS.
§Spending on ranibizumab and aflibercept (which accounted for 99.9% of spending on antineovascularization agents) in Nova Scotia, Manitoba and British Columbia, and the majority of this spending in Alberta, is funded through special programs and not included in NPDUIS.
Sources: National Prescription Drug Utilization Information System, Canadian Institute for Health Information; Banque médicaments, Régie de l'assurance maladie du Québec.

Savings from generic entries and price reductions negotiated through the pan-Canadian Pharmaceutical Alliance (pCPA) continued to offset some of the growth. The negotiated generic prices for 20 of the most commonly prescribed chemicals – including statins, proton pump inhibitors and angiotensin-converting enzyme inhibitors – were further reduced from 15% to 10% of their brand-name counterparts as of April 1, 2018 (Council of the Federation Secretariat 2019). Overall, public drug program spending on the 67 pCPA-negotiated chemicals decreased by $243.0 million, representing 1.7% of overall public drug program spending in 2018. In 2018, generic products accounted for 29.0% of overall public drug program spending and 78.1% of accepted claims.

Public Drug Program Spending by Drug Class

For the seventh consecutive year, anti-tumour necrosis factor (TNF) drugs accounted for the highest proportion (8.3%) of spending (Figure 2). These were followed by hepatitis C drugs (5.4%) and antineovascularization agents, used to treat age-related macular degeneration (4.9%). Direct factor Xa inhibitors, a class of direct oral anticoagulants used to treat or prevent stroke and venous thromboembolic events, were new to the top 10 in 2018.

FIGURE 2.
Top three drug classes by percentage of public drug program spending,* 2018



Anti-TNF = tumour necrosis factor-alpha inhibitor.
*Currently, the Northwest Territories and Nunavut do not submit data to the National Prescription Drug Utilization Information System (NPDUIS).
†Spending on antivirals for treatment of hepatitis C infections in Prince Edward Island is not included in NPDUIS.
‡Spending on ranibizumab and aflibercept (which accounted for 99.9% of spending on antineovascularization agents) in Nova Scotia, Manitoba and British Columbia, and the majority of this spending in Alberta, is funded through special programs and not included in NPDUIS.
Sources: National Prescription Drug Utilization Information System, Canadian Institute for Health Information; Banque médicaments, Régie de l'assurance maladie du Québec.

Of note, three of the top five classes in spending were biologic drugs: anti-TNF drugs (8.3%), antineovascularization agents (4.9%) and selective immunosuppressants (2.6%). Each of these classes was used by a small proportion of beneficiaries (about 0.5%) but had a high cost per patient. Similarly, hepatitis C drugs have a low rate of use (0.1% of beneficiaries) but the highest average cost of any class in the top 10, at $54,286 per paid beneficiary.

Biosimilars are a highly similar version of a biologic drug that comes to the market after the patent for the reference biologic product has expired (Health Canada 2019). In 2018, biosimilars accounted for 2.6% of spending on biologics, and 2.3% of biologic users took at least one biosimilar.

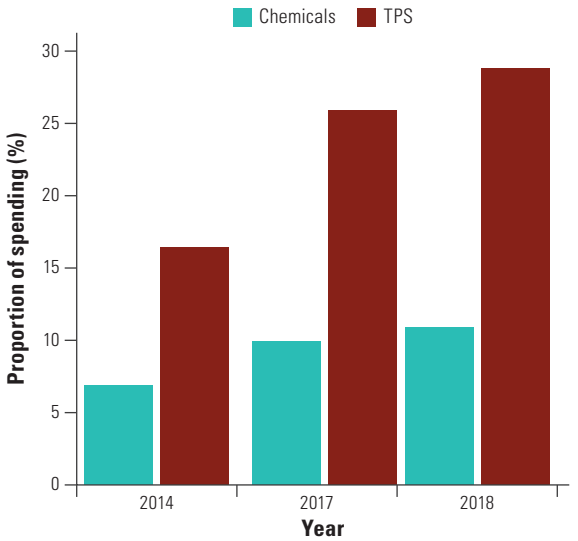
When biosimilars were available, these accounted for 9.1% of biologic spending (11.9% of biologic users) in 2018, up from 3.5% (3.9% of biologic users) in 2017. To date, the uptake of biosimilars has been slower in Canada than in other countries in the Organisation for Economic Co-operation and Development (CADTH 2018; PMPRB 2017, 2019).

High-Cost, High-Volume Individuals

The proportion of drug program spending on beneficiaries for whom the drug program paid $10,000 or more (referred to as high-cost individuals) increased from 36.6% in 2017 to 38.8% in 2018, even though the proportion of beneficiaries the program accounted for decreased from 2.3% to 2.1%. Although people prescribed 15 or more drugs are much more likely to be high-cost individuals than those prescribed fewer drugs, it is not only those prescribed a higher number of drug classes who end up with high annual drug costs. One in five high-cost individuals was prescribed fewer than five drug classes, whereas one in four was prescribed 15 or more drug classes.

The proportion of spending on high-cost drugs also continued to rise. In 2018, chemicals with an average cost of $10,000 or more per paid beneficiary (referred to as high-cost drugs) accounted for 28.8% of spending, compared to 25.9% in 2017 (Figure 3) and 16.4% in 2014. Anti-TNF and hepatitis C drugs accounted for 49.5% of this spending. In 2018, 60.7% of high-cost individuals had a claim for at least one high-cost drug, compared to 0.3% of all other beneficiaries.

FIGURE 3.
Proportion of public drug program spending on chemicals that cost on average $10,000 or more per paid beneficiary and the proportion of total chemicals paid,* 2014, 2017 and 2018



TPS = total program spending.

*Currently, the Northwest Territories and Nunavut do not submit data to the National Prescription Drug Utilization Information System (NPDUIS).

Drug products without an Anatomical Therapeutic Chemical code assigned by Health Canada and products assigned as pseudo-drug identification numbers are excluded.

Sources: National Prescription Drug Utilization Information System, Canadian Institute for Health Information; Banque médicaments, Régie de l'assurance maladie du Québec.

These findings and others – as well as more information on data, terminology and methods – are described in detail in *Prescribed Drug Spending in Canada, 2019: A Focus on Public Drug Programs*. This report is available free of charge at: https://www.cihi.ca/en/prescribed-drug-spending-in-canada-2019. HQ

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