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Utilization of Opioid Agonist Therapies in Canada

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Abbreviations

ATC	Anatomical Therapeutic Chemical
CSC	Correctional Service of Canada
DIN	drug identification number
DPD	Drug Product Database
FPT	federal, provincial, and territorial
HCL	hydrochloride
NIHB	Non-Insured Health Benefit
OAT	opioid agonist therapy
OUD	opioid use disorder

Key Messages

- Canada continues to experience an opioid crisis that has had a devastating impact on public health, highlighting the importance of management strategies for opioid use disorder (OUD). Several opioid agonist therapies (OATs) for the management of OUD are available in Canada, including recent approvals of new brand name drugs and generic versions of widely used OATs.
- Coverage criteria for OATs are comparable across public drug plans in Canada. Methadone hydrochloride (HCL) and the combination of buprenorphine HCL and naloxone HCL (buprenorphine HCL-naloxone HCL) are typically listed as regular or open benefits; generics for these 2 medications have been available since 2020 and 2013, respectively. Sublocade and Probuphine — long-acting buprenorphine preparations approved by Health Canada in 2018 — have varied coverage that is often dependent on prior therapy requirement.
- The annual number of public claims for OATs decreased by 19.5% from 2018 to 2022. The market share of claims during this period was dominated by methadone HCL and buprenorphine HCL-naloxone HCL, with an increase in claims market share for buprenorphine over time (starting in 2020) and a negligible contribution by buprenorphine HCL. Additionally, in a subanalysis on the number of OAT claimants, the results did not indicate a decrease in individual beneficiaries for these medications; therefore, the decrease in OAT claims was likely driven by increased usage of OATs that require fewer claims per patient, as opposed to decreased OAT use in the population.
- Despite the decrease in annual OAT claims during the analysis period, total OAT expenditures increased every year, with a 67.0% increase from 2018 to 2022 (5-year total of $307 million). The increase was initially driven by buprenorphine HCL-naloxone HCL, which increased from $27 million (58.9% of OAT expenditures) in 2018 to $39 million (67.2% of OAT expenditures) in 2019. Thereafter, expenditures for buprenorphine drove overall OAT cost increases from 2020 onward, accounting for $22 million (28.2% of OAT expenditures) in 2022. In contrast, methadone HCL accounted for a decreasing proportion of expenditures each year ($19 million or 41.1% of OAT expenditures in 2018 to $16 million or 21.0% of OAT expenditures in 2022), despite having the greatest proportion of claims throughout the study period.
- The availability of new OAT formulations and generic versions of existing products, as well as other notable regulatory policy changes (e.g., Health Canada's removal of the need for an exemption to prescribe methadone HCL) and reimbursement decisions (e.g., positive reimbursement recommendations from CADTH for the newer branded OATs, Sublocade and Probuphine), impacted the observed utilization and expenditure patterns, and will likely continue to influence decision-making, particularly where coverage has recently changed or has yet to change to reflect the evolving landscape. If the utilization of injectable buprenorphine (Sublocade) continues at the rate observed in this analysis, it will likely continue to drive increases in OAT expenditures; Sublocade has several patents and the earliest patent expiry is not until 2031, so generic versions of this formulation will likely not be available for several more years. Overall, the findings of this analysis may help to inform jurisdictions in funding decisions regarding OATs for the treatment of OUD.

Background

The opioid epidemic has had a devastating impact on public health across Canada and other countries over the last several decades.[1-4] Despite a reduction in opioid prescribing in recent years, rates of opioid use disorder (OUD), along with opioid-related deaths and other harms, have continued to rise.[1-8] The COVID-19 pandemic has exacerbated the crisis by reducing access to evidence-based treatment and increasing the risk for adverse consequences in vulnerable patients.[3,9-11] In Canada, there was a total of 34,455 deaths and 34,886 hospitalizations related to opioid toxicity between January 2016 and September 2022.[6] In 2022 (up to September), there were approximately 20 apparent opioid toxicity deaths per day, which was double the rate observed before the COVID-19 pandemic in 2019 and nearly equivalent to the peak of 21 deaths per day observed in 2021.[6] Approximately 87% of opioid toxicity-related deaths in 2022 occurred in Ontario, British Columbia, and Alberta, with high rates per capita observed in areas with smaller populations (e.g., Saskatchewan, Yukon).[6]

Opioid agonist therapy (OAT) is an effective approach for OUD when used in combination with behavioural and social supports.[1,3,12,13] OATs have been shown to reduce overdose risk, prevent high-risk behaviours, improve patients' quality of life, and decrease health care costs.[3,14-25] OATs commonly used for the treatment of OUD in Canada include a combination of buprenorphine hydrochloride (HCL) (a partial opioid agonist) and naloxone HCL dihydrate (an opioid antagonist), hereafter referred to as buprenorphine HCL-naloxone HCL; methadone HCL (a full opioid agonist); buprenorphine; and buprenorphine HCL.[12] Canadian clinical practice guidelines for the management of OUD recommend buprenorphine HCL-naloxone HCL as the preferred first-line treatment whenever feasible, based on the evidence for its superior safety profile and reduced risk of overdose compared with methadone.[1]

Methadone HCL was first approved by Health Canada in 2001 under the brand name Metadol-D for the detoxification and maintenance treatment of opioid addiction.[26] Several other versions of methadone HCL, including Methadose in 2013 and generic versions starting in 2020, have since been approved.[27-29] Buprenorphine HCL-naloxone HCL (sublingual tablet) was first approved in 2007 under the brand name Suboxone for substitution treatment in adults with problematic opioid drug dependance.[30] Additional Suboxone sublingual tablet strengths were approved in 2017, and Suboxone sublingual or buccal film was approved in 2020.[31,32] The first generic version of buprenorphine HCL-naloxone HCL was approved in 2013, followed by 4 additional generic versions over the next several years.[33-37] In addition, 2 branded buprenorphine formulations were approved in 2018: Sublocade, an extended-release solution of buprenorphine for subcutaneous injection (marketed in 2020), and Probuphine, a buprenorphine HCL subdermal implant.[38,39] Sublocade and Probuphine are both indicated for the treatment of moderate to severe OUD in adult patients who have achieved clinical stability on a transmucosal buprenorphine-containing product.[38,39] Overall, the introduction of new brand name OAT formulations and generic versions of OATs that have long been used in Canada has increased the treatment options available for patients with OUD.

Purpose of This Report

The aim of this analysis was to determine the utilization of OATs to assess prescribing patterns and expenditures in Canada.

Policy Issues

Canada continues to experience an opioid crisis, highlighting the importance of management strategies for OUD. OAT is currently considered the most effective treatment option for OUD (combined with behavioural and social supports).[1] Several OATs are currently available in the Canadian market, with some brand name drugs and generic versions entering in recent years.[26-39] With these changes in the treatment landscape, it was hypothesized that there is now increasing use of and associated growing expenditures on OATs in Canada. We conducted an analysis to gain an up-to-date understanding of the current utilization patterns of these drugs to quantify their use in the country and help inform public drug plan funding decisions and future research on OATs.

Policy Question

What is the current utilization of OATs in Canada?

Research Questions

1. What are the funding criteria for OATs across the FPT jurisdictions?
2. How many claims of OATs were there across Canada from 2018 to 2022?
3. How many OAT claimants were there in Ontario from 2018 to 2022?
4. What were the expenditures on OATs across Canada from 2018 to 2022?

Methods

Data Sources

To determine coverage criteria across FPT drug plans, formulary websites and documents containing lists of regular benefit and restricted access drugs were searched. The reimbursed formulations, coverage criteria, and any coverage restrictions and notes were summarized for all FPT drug plans except Quebec, Nunavut, and the Northwest Territories. The data included herein are based on the information available in the formulary listings for each source up to the date of the search (May 1, 2023).

Claims data related to OATs (buprenorphine, buprenorphine HCL, buprenorphine HCL-naloxone HCL, and methadone HCL; refer to Appendix 1) were extracted from IQVIA's PharmaStat drug claims database for public drug plans. This database is sourced from all provincial drug plans (with the exception of Prince Edward Island) and the Non-Insured Health Benefit (NIHB) (refer to Appendix 2). Data are updated monthly for most jurisdictions, but are updated quarterly for British Columbia, Saskatchewan, and Manitoba. Public

claims data in PharmaStat include pay-direct claims from all public insurers on the PharmaStat panel. Claims that were reversed, claims that were submitted but not paid, paper claims, nonretail claims, and cash or out-of-pocket expenses are not included in PharmaStat. The statements, findings, conclusions, views, and opinions expressed in this report are based in part on data obtained under licence from IQVIA Solutions Canada Inc. concerning the following information service(s): Pharmastat, 2018 to 2022. All rights reserved. The statements, findings, conclusions, views, and opinions expressed herein are not necessarily those of IQVIA Solutions Canada Inc. or any of its affiliated or subsidiary entities.

The IQVIA PharmaStat database does not include Alberta Health and Wellness Social Service plan data (approximately 20% of public data in Alberta); therefore, data for this province was provided by the Government of Alberta (Blue Cross) and used in the analysis.

Data Analysis

Reimbursement Criteria

The reimbursement criteria of OATs were tabulated and summarized descriptively.

Utilization Patterns and Drug Expenditures

The total number of public drug plan claims and total public drug plan costs for OATs overall, and by OAT in each year from 2018 to 2022, were calculated. The total number of claims and expenditures were aggregated from province-level data and presented at the national level. Number of public claims is defined as the total number of claims made through the public drug plan for a particular drug identification number (DIN), searched under the Anatomic Therapeutic Chemical (ATC) code N07BC (drugs used in opioid dependence) (Appendix 1). Total costs represent the full cost of the claim and include ingredient costs plus markup for most provinces (at list price); markup is not included for British Columbia, New Brunswick, or Nova Scotia. The cost value does not include dispensing fees, with the exception of Newfoundland and Labrador.

In addition, a subanalysis was conducted to analyze the trends in number of claimants (as opposed to number of claims) from 2018 to 2022. Data for the number of claimants were only available for Ontario in the data source. The number of claimants was calculated as the number of people with claims for each of the included OATs (by DIN) in each month from January 2018 to December 2022. Claimants could have had claims for different OATs throughout the analysis period.

Findings

Funding Criteria for OATs

Buprenorphine HCL-naloxone HCL and methadone HCL are the most consistently covered OATs across public drug plans, with regular or open benefit status across all FPT jurisdictions except for Yukon (where methadone HCL is listed under exception drug status) and the NIHB program (where both treatments have limited use coverage) (Table 1). Buprenorphine (Sublocade) is covered with regular or open benefit status across most FPT jurisdictions, but it is not covered in Yukon and has limited or restricted coverage in

Saskatchewan (exception drug status), Manitoba (part 2 benefit), Ontario (limited use), and NIHB (limited use). Buprenorphine HCL (Probuphine) is either not listed as a benefit (British Columbia, Alberta, Yukon, and Correctional Service of Canada [CSC]) or is covered with exception drug status (Saskatchewan, Nova Scotia), limited or restricted use (Ontario, NIHB, Manitoba), or special authorization (New Brunswick, Prince Edward Island, Newfoundland and Labrador, Canadian Armed Forces, Veterans Affairs Canada). The specific criteria for reimbursement across public drug plans are presented in Appendix 3.

Table 1: Overview of Listing Status of OATs by Public Drug Plans

Province or plan	Buprenorphine	Buprenorphine HCL	Buprenorphine HCL-naloxone HCL	Methadone HCL
Alberta[a]	RB	NAB	RB	RB
British Columbia[b]	RB	NAB	RB[c]	RB
Manitoba	P2B	P2B	P1B	P1B[d]
New Brunswick	OB	SA	OB	OB
Newfoundland and Labrador	OB	SA	OB	OB
Nova Scotia	OB	ES	OB	OB
Ontario	LU	LU	OB	OB
Prince Edward Island	OB	SA	OB	OB
Saskatchewan	EDS	EDS	OB	OB
Yukon	NAB	NAB	OB	EDS[e]
Canadian Armed Forces	OB	SA	OB	OB
Correctional Service of Canada	OB	NAB	OB	OB
Non-Insured Health Benefits	LU	LU	LU	LU
Veterans Affairs Canada	SB	SA	SB	SB

EDS = exception drug status; ES = exception status; HCL = hydrochloride; LU = limited use; NAB = not a benefit; OAT = opioid agonist therapy; OB = open benefit; OUD = opioid use disorder; P1B = part 1 benefit; P2B = part 2 benefit; RB = regular benefit; SA = special authorization; SB = standard benefit.

Note: Data in the table specifically refer to formulations indicated for the treatment of OUD and reflect information in publicly available formulary lists and databases.

[a]The Alberta OAT Gap Coverage Program covers OAT medications for 120 days at no cost for individuals without health benefits coverage.

[b]Brand name drugs require special authorization for full coverage if a generic version is available.

[c]High-dose buprenorphine-naloxone requires special authorization.

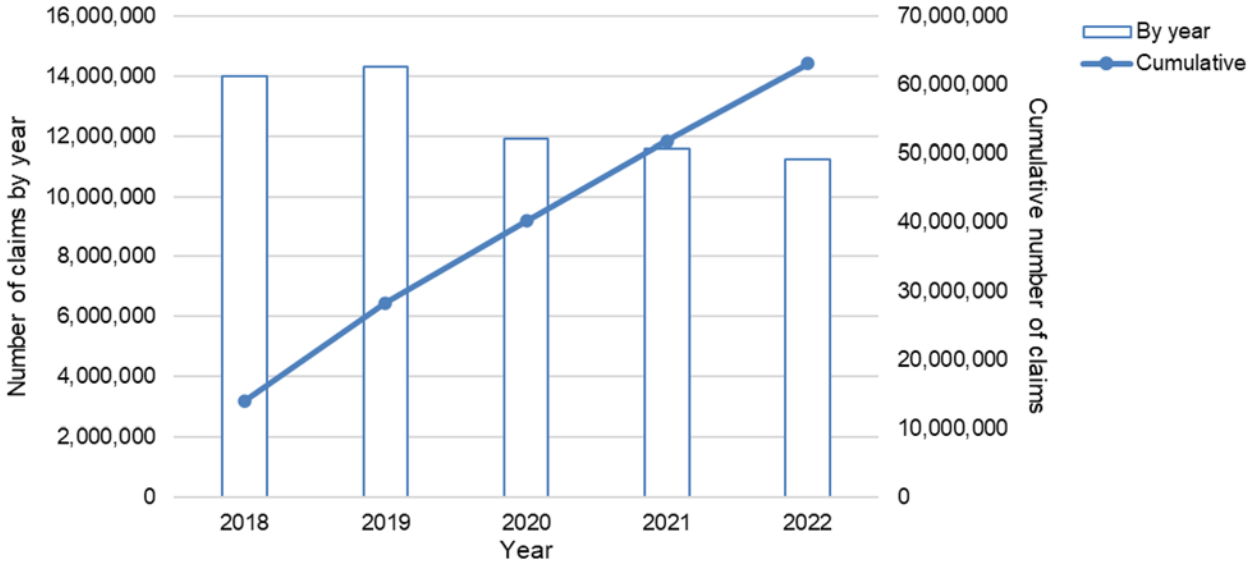
[d]Generic versions of methadone oral liquid have part 1 benefit coverage; brand name versions have part 2 benefit coverage.

[e]For palliative patients in some plans, on advice of palliative care physician.

Claims for OATs

The national yearly and cumulative numbers of OAT claims in public drug plans from 2018 to 2022 are presented in Figure 1. There was a total of 63,022,662 claims for OATs during this period. The number of claims was 13,971,344 in 2018 and 14,287,368 in 2019, before decreasing by 16.5% from 2019 to 2020 (11,925,881) and decreasing again by 5.6% from 2020 to 2022 (11,252,228). When analyzing the number of claims by molecule (refer to Table 5 in Appendix 4), claims decreased for both buprenorphine HCL-naloxone HCL and methadone HCL, while claims increased for both buprenorphine and buprenorphine HCL from 2018 to 2022.

Figure 1: Yearly and Cumulative Public Claims for OATs

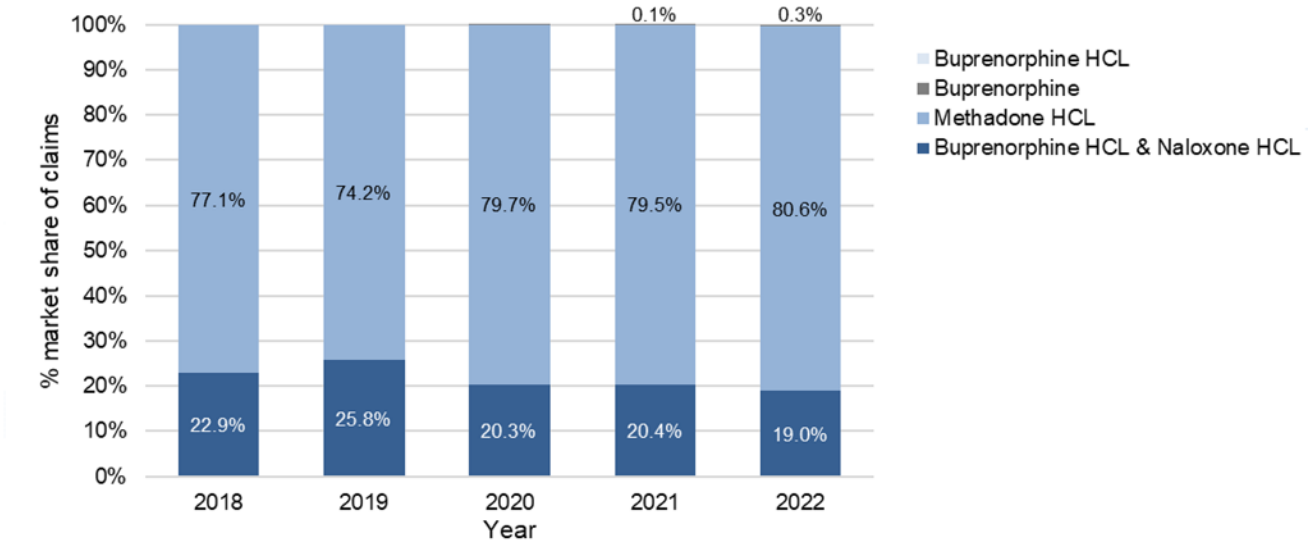


OAT = opioid agonist therapy.
Source: IQVIA's PharmaStat.

Market Share of Claims for OATs

The market share of claims for buprenorphine, buprenorphine HCL, buprenorphine HCL-naloxone HCL, and methadone HCL in each year included in the analysis is shown in Figure 2 (for additional details, refer to Table 5 in Appendix 4). Buprenorphine HCL-naloxone HCL and methadone HCL accounted for all public OAT claims in 2018, and more than 99% of OAT claims from 2019 to 2022. There was an increase in market share for buprenorphine HCL-naloxone HCL from 2018 (22.9%) to 2019 (25.8%), followed by a decrease from 2019 to 2020 (20.3%), before declining to a low of 19.0% of total OAT claims in 2022. The opposite pattern was observed with methadone HCL, for which the lowest claims market share was 74.2% in 2019 and the highest was 80.6% in 2022. Although its overall market share of claims was small, the market share for buprenorphine increased from 2020 (< 0.1%) to 2022 (0.3%). The market share of claims for buprenorphine HCL was negligible compared to the other OATs during the study period.

Figure 2: Market Share of Public Claims for OATs by Molecule and Year



HCL = hydrochloride; OAT = opioid agonist therapy.
Data Source: IQVIA's PharmaStat.

Subanalysis of Number of Claimants With OAT Claims

Results of a subanalysis for the number of OAT claimants in Ontario (by DIN) in each month from January 2018 to December 2022 for buprenorphine, buprenorphine HCL-naloxone HCL, and methadone HCL are shown in Figure 3, Figure 4, and Figure 5, respectively; there were no claimants for buprenorphine HCL identified in this jurisdiction during this study period.

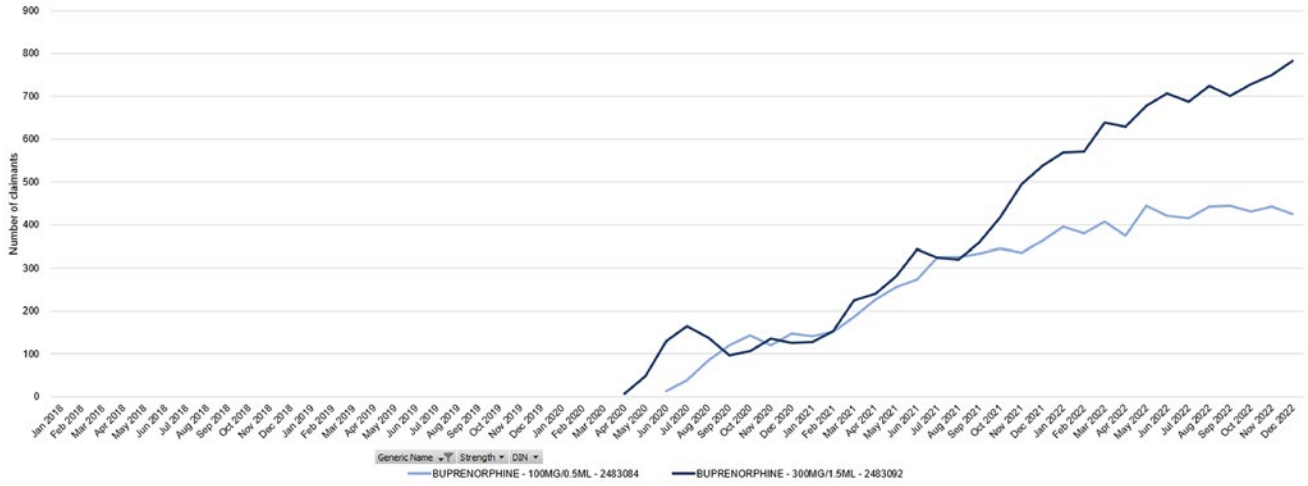
For buprenorphine, the number of claimants increased over time for both doses of Sublocade since their market entry in 2020 (Figure 3). The number of claimants for the 100 mg per 0.5 mL dose (DIN 2483084) increased from 12 in June 2020 to 425 in December 2022 and, for the 300 mg per 1.5 mL dose (DIN 2483092), the number of claimants increased from 6 in April 2020 to 782 in December 2022.

Trends in the number of claimants for buprenorphine HCL-naloxone HCL products demonstrated that although the number of claimants for Suboxone (across both doses; DINs 2295695 and 2295709) decreased over time, the number of claimants for 2 of the buprenorphine HCL-naloxone HCL generic manufacturers (Pharmascience [DINs 2424851 and 2424878] and Teva [DINs 2453908 and 2453916]) increased during this period (Figure 4); the number of claimants for the Mylan buprenorphine HCL-naloxone HCL generics (DINs 2408090 and 2408104) decreased over time until the products were cancelled postmarket in 2019. Among the 2 mg per 0.5 mg dose products, the number of claimants for Suboxone decreased from 2,860 in January 2018 to 888 in December 2022, while the number of claimants for the Pharmascience and Teva generics increased from 886 to 4,047 and from 10 to 1,346, respectively, during this period. Similarly, among the 8 mg per 2 mg dose products, the number of claimants for Suboxone decreased from 4,130 in January 2018 to 1,086 in December 2022, whereas the number of claimants for the Pharmascience and Teva generics increased from 1,249 to 3,987 and from 73 to 1,177, respectively, during this period. Overall, these results

show the shift in market share from branded buprenorphine HCL-naloxone HCL (Suboxone) to the generic versions, and suggest that buprenorphine HCL-naloxone HCL claimants have increased over time.

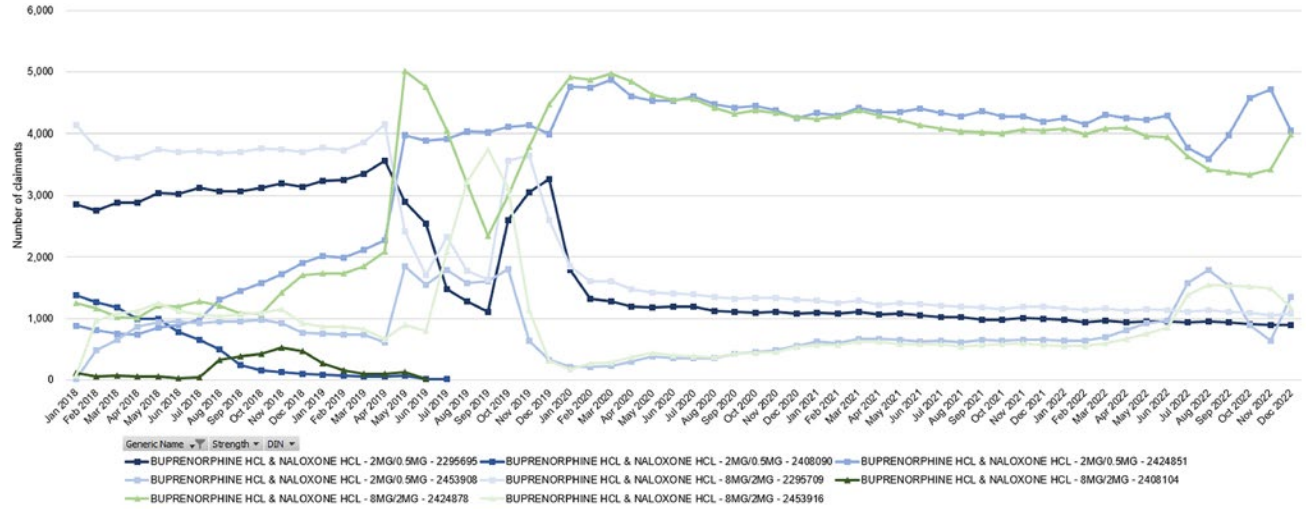
For methadone HCL, though the number of claimants for Methadose products (DINs 2394596 and 2394618) decreased from January 2018 to December 2022, the number of claimants for the Metadol-D (DIN 2244290), JAMP (DIN 2495783), and unflavoured Odan (DIN 2495880) methadone HCL products all increased during this period. More specifically, the number of claimants for the flavoured and unflavoured Methadose products decreased from 200 in January 2018 to 52 in December 2022 and from 24,210 in January 2018 to 13,055 in December 2022, respectively. In this same period, the number of claimants for Metadol-D increased from 6 to 342. Additionally, the number of claimants for the JAMP product increased from 1,503 in September 2022 to 2,173 in December 2022, and the number of claimants for the unflavoured Odan product increased from 23 in August 2022 to 9,513 in December 2022. Overall, these results show the shift in market share from Methadose products to generics, most notably in 2022, and suggest that the number of methadone HCL claimants has remained generally the same throughout the study period.

Figure 3: Monthly Number of Public Claimants in Ontario for Buprenorphine



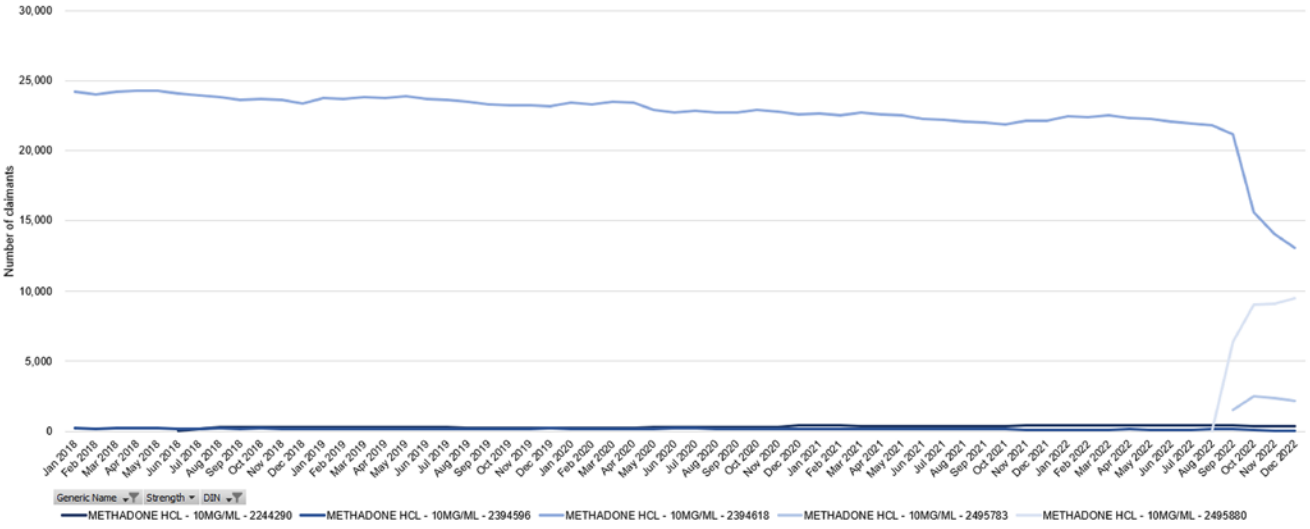
DIN = drug identification number.
Source: IQVIA's PharmaStat.

Figure 4: Monthly Number of Public Claimants in Ontario for Buprenorphine HCL and Naloxone HCL



DIN = drug identification number; HCL = hydrochloride.
Source: IQVIA's PharmaStat.

Figure 5: Monthly Number of Public Claimants in Ontario for Methadone HCL



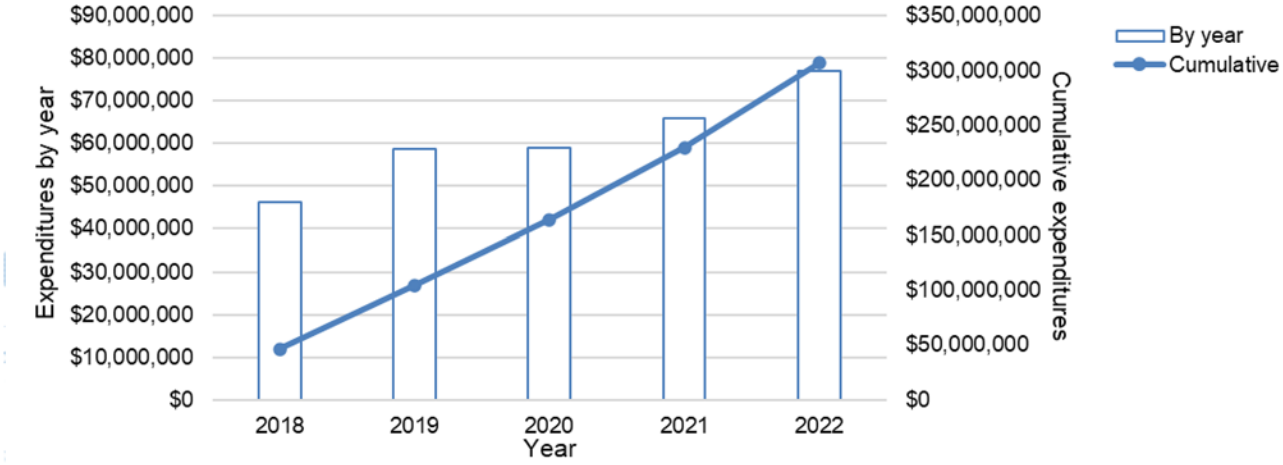
DIN = drug identification number; HCL = hydrochloride.
Source: IQVIA's PharmaStat.

Expenditures on OATs

The national yearly and cumulative expenditures for OAT claims in public drug plans from 2018 to 2022 are presented in Figure 4. Expenditures increased by 67.0% from 2018 ($46,134,459) to 2022 ($77,026,621), with a 5-year total of $306,827,713. The largest year-over-year increase occurred from 2018 to 2019 ($46,134,459

to $58,585,723; difference of $12,451,264; increase of 27.0%) and the smallest increase was from 2019 to 2020 ($58,585,723 to $59,045,407; difference of $459,684; increase of 0.8%).

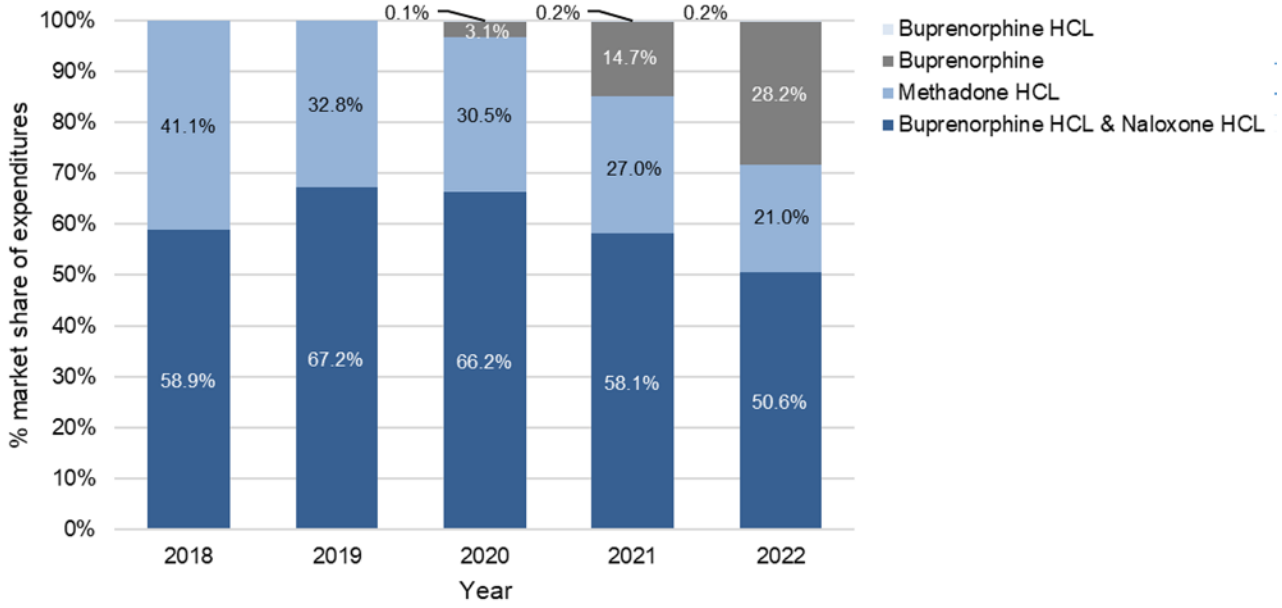
Figure 6: Yearly and Cumulative Public Expenditures for OATs



OAT = opioid agonist therapy.
Source: IQVIA's PharmaStat.

The proportions of public OAT expenditures attributable to buprenorphine, buprenorphine HCL, buprenorphine HCL-naloxone HCL, and methadone HCL in each year included in the analysis are shown in Figure 5 (for additional details, refer to Table 6 in Appendix 4). Although buprenorphine HCL-naloxone HCL only accounted for 19.0% to 25.8% of OAT claims in any given year (Figure 2), it accounted for more than half of OAT expenditures in every year throughout the study period, increasing from 58.9% of expenditures ($27,176,511) in 2018 to 67.2% of expenditures ($39,351,319) in 2019, before decreasing to 50.6% of expenditures ($38,988,291) in 2022. In contrast, the proportion of OAT expenditures attributable to methadone HCL decreased every year, from 41.1% ($18,957,948) in 2018 to 21.0% ($16,206,302) in 2022, despite accounting for 74.2% to 80.6% of OAT claims in any given year (Figure 2) throughout the study period. The proportion of public OAT expenditures for buprenorphine increased in each year starting from 2020 ($1,847,550 [3.1% of expenditures]) to 2022 ($21,710,883 [28.2% of expenditures]), at a higher rate than its percentage of market share for number of claims (Figure 2). Expenditures for buprenorphine HCL also increased over time but remained low ($14,345 [0.02% of expenditures] in 2019 to $121,145 [0.16% of expenditures] in 2022) relative to the other OATs.

Figure 7: Market Share of Public Expenditures for OATs by Molecule and Year



HCL = hydrochloride; OAT = opioid agonist therapy.

Source: IQVIA's PharmaStat.

Discussion

Buprenorphine HCL-naloxone HCL and methadone HCL are the most widely covered OATs across the jurisdictions, with regular or open benefit coverage in almost all plans reviewed, while buprenorphine and buprenorphine HCL, both of which are only available as brand name products (Sublocade and Probuphine, respectively), have more variable coverage across FPT plans. Although buprenorphine is available as an open or regular benefit in many jurisdictions, others list it with restrictions (e.g., limited use coverage or exception drug status). Buprenorphine HCL is not available as an open or regular benefit in any jurisdiction but is available under limited use, special authorization, or exception drugs status in most FPT drug plans. The broader coverage of buprenorphine HCL-naloxone HCL and methadone HCL may be driven by several factors, including their longer time on market and extensive clinical experience with these products, their reduced administration burden as oral therapies, and the availability of generics for these treatment options.

The number of public claims for OATs was similar in 2018 and 2019 before decreasing by 16.5% in 2020, the first year of the COVID-19 pandemic. Although it cannot be stated with certainty that the COVID-19 pandemic was the cause of the drop-off in OAT claims in 2020, there is evidence that the pandemic has exacerbated the crisis by reducing access to evidence-based treatment and increasing the risk for adverse consequences in patients, particularly given the reduced in-person social support services and the isolation associated with shelter-in-place directives.[3,9-11] Nonetheless, the total number of claims remained similar from 2020 to 2022, with a smaller decrease of 5.6% during this period. It is worth noting that the change in number of claims

could also be reflective of a shift toward increased utilization of products that can be dispensed with fewer claims throughout the duration of their use. Since the analysis was not standardized by the different dosing regimens of the various OATs, the decrease in the number of claims does not necessarily mean there was a decrease in OAT use in the population, in terms of the amount of drug use and number of people using OATs. For example, in Ontario, methadone HCL requires daily in-person dosing with 1 claim submitted per dose,[40] which results in an increased number of claims for this OAT compared to others that do not require such frequent claims within a respective time frame. Further, some patients with successful and sustained responses to methadone HCL may transition to buprenorphine HCL-naloxone HCL for the increased flexibility of take-home doses,[12] in which case there would be fewer claims without reduced OAT use on an individual basis. In support of these points, the results of the subanalysis on OAT claimants did not indicate a decrease in individual beneficiaries for these medications, despite the overall decrease in the number of claims.

In terms of OAT claims market share, methadone HCL and buprenorphine HCL-naloxone HCL accounted for the vast majority of public OAT claims in the study period. Notably, in May 2018, Health Canada removed the need for practitioners to obtain an exemption before prescribing or administering methadone to their patients with OUD, a regulatory amendment intended to provide patients with easier access to OAT treatment.[41] This policy change may have contributed to the finding that methadone HCL accounted for most of the public OAT claims throughout the study period. In addition, as described previously, more claims may be required for methadone HCL than for other OATs with less frequent dosing requirements.[40] In terms of the increased market share for buprenorphine HCL-naloxone HCL in 2019, the Canadian clinical practice guideline for the management of OUD was published in 2018 and recommended this combination therapy as the preferred first-line treatment where possible, which may have driven an initial increase in its usage.[1] Subsequently, Health Canada approved the first generic versions of methadone HCL starting in 2020,[27,28] which may have resulted in methadone HCL regaining claims market share in 2020, a pattern that was sustained throughout the rest of the study period. Other noteworthy regulatory and reimbursement events that likely precipitated the changes along the timeline of this study include the Health Canada approval of Sublocade (buprenorphine) in November 2018, followed by a positive reimbursement recommendation (with conditions) from CADTH in July 2019.[38,42] The claims market share for Sublocade increased year-over-year since its market entry, to a high of 0.3% in 2022. Notably, results of the subanalysis on claimants showed that 3.1% of claimants had claims for buprenorphine by December 2022, suggesting increasing prevalent use in the population; it is a long-acting formulation and requires infrequent (once-monthly) dosing and, thus, fewer claims than OATs that are administered daily.

Although there was a decrease in the annual number of claims from 2018 to 2022, OAT expenditures increased every year during the analysis period. The largest annual increase was observed from 2018 to 2019 (27.0% increase), despite the number of claims only increasing by 2.3% during this time. The overall increase in expenditures was primarily driven by buprenorphine HCL-naloxone HCL from 2018 to 2019 ($12 million increase) and by buprenorphine (Sublocade) from 2020 to 2022 ($20 million increase); the proportion of expenditures for buprenorphine was considerably higher than its claims market share, likely because the drug is only available as a brand name product and possibly because it is a long-acting formulation that requires less frequent dosing than some of the other OATs. In contrast, methadone HCL accounted for a

decreasing proportion of OAT expenditures in every year-over-year (a $3 million decrease from 2018 to 2022), despite having the greatest claims market share throughout the study period. This finding suggests that the use of lower-cost generics of methadone HCL, which were first introduced in 2020, likely drove the disparity between proportions of claims versus expenditures for this drug. This may have also partially contributed to the increase in claims market share for methadone HCL over time, along with the policy changes allowing easier access to methadone HCL, as described previously. Buprenorphine HCL also accounted for a small proportion of OAT expenditures (maximum of 0.2% in 2021 and 2022), which was nonetheless disproportionately higher than its claims market share; like buprenorphine, this is likely because it is only available as a brand name product (Probuphine) and because it is a long-acting formulation requiring infrequent administration (implanted for 6 months).

Limitations

There are several notable limitations of the current analysis:

- The public drug plan capture for Alberta and Nova Scotia in the IQVIA PharmaStat database is approximately 80% and 82%, respectively. Although public drug plan data were provided by the Government Alberta and substituted for the PharmaStat data for this province in the utilization analysis, the data for Nova Scotia remained partially incomplete. It is unlikely that this impacted the findings, as the results are presented at the national level and the small proportion of uncaptured data in Nova Scotia represents only a very small fraction of the total publicly covered population in Canada. Further, the proportion of data captured is likely consistent across years and OATs included in the analysis, so the trends described herein are unlikely to have been affected.
- Some provinces and territories have implemented special OAT access programs and delivery settings, which may not be captured in the PharmaStat database.
- As with any analysis of prescription claims data, there is uncertainty regarding the actual use of the prescriptions claimed in the current analysis. Therefore, any interpretations of the findings presented herein should be limited to the context of OAT claims as opposed to actual use of these drugs and whether they were taken as prescribed.
- The claims data from the PharmaStat database were not indication-specific. The analysis assumed that all claims for the included OATs were intended for the management of OUD. Further, there are other OATs that are used to treat OUD or other indications, such as pain, which were not included in the analysis because of limited verifiability of the prescribed use. Examples include diacetylmorphine and injectable hydromorphone, which are indicated as supervised injectable OATs for adult patients with severe OUD who use injectable opioids and have failed previous attempts at OAT.[43,44] Similarly, other versions of OATs that do not have an indication for OUD (e.g., Metadol) but could potentially be substituted for a prescribed product would not have been captured in this analysis. Therefore, the results should be interpreted cautiously and considered as overall trends in OAT claims and expenditures in Canada, as opposed to a comprehensive capture of all OATs used for OUD specifically.

- This analysis did not assess the number of claims for different dosage strengths of OATs. Although this was outside the scope of the research questions for this analysis, understanding the market share of different dosage strengths of OATs may be valuable to inform policy decisions and is a worthwhile consideration for future studies.

Conclusions and Implications for Decision- or Policy-Making

Although the number of OAT claims decreased during the study period, public expenditures on OATs continued to increase from 2018 to 2022. The availability of new formulations and generic versions of existing formulations affected the utilization and expenditure patterns of OATs during the study period and will likely continue to impact decision-making, particularly where coverage has recently changed or has yet to change to reflect the evolving landscape. A key trend to monitor based on this analysis is the increased use of injectable buprenorphine (Sublocade); if its uptake continues to increase at the rate observed in this analysis, it will likely drive ongoing increases in overall public OAT expenditures. Notably, Sublocade has several patents, and the earliest patent expiry is not until 2031,[45] indicating that generic versions of this drug will likely not be available for several more years. In addition, as of May 2023, Probuphine is discontinued in Canada because of supply issues and will no longer be marketed.[46] With these considerations, along with the lack of upcoming new branded OATs in the near future, the trends observed in this analysis will likely continue to shape the OAT market. Overall, the findings of this analysis may help inform jurisdictions in OAT funding decisions and identify areas for future research into OATs for the treatment of OUD.

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Appendix 1: List of OATs Included in the Database Search

Note that this appendix has not been copy-edited.

The IQVIA PharmaStat drug claims database was searched for public plans using the Health Canada Drug Product Database (DPD) ATC code N07BC and the specific DINs listed in Table 2.

Table 2: List of OATs Included in the Database Search

Molecule	Brand or product name	DIN
Buprenorphine	Sublocade	02483084, 02483092
Buprenorphine HCL	Probuphine	02474921
Buprenorphine HCL-naloxone HCL	Suboxone	02295695, 02295709, 02468085, 02468093, 02502313, 02502321, 02502348, 02502356
	Mylan-Buprenorphine/Naloxone	02408090, 02408104
	pms-Buprenorphine/Naloxone	02424851, 02424878
	Teva-Buprenorphine/Naloxone	02453908, 02453916
Methadone HCL	Metadol-D	02244290, 02247374
	Methadose	02394596, 02394618
	Odan-Methadone	02495872, 02495880
	JAMP Methadone	02495783
	Sandoz Methadone/Methadone HCL Oral Concentrate USP	02481979

DIN = Drug Identification Number; HCL = hydrochloride; OAT = opioid agonist therapy.

Appendix 2: List of Public Plans and Programs Included in Utilization Analysis

Note that this appendix has not been copy-edited.

Table 3: List of Public Plans and Programs Included in Utilization Analysis

Jurisdiction	Plan or program code and description
Alberta[a]	Government of Alberta (Blue Cross)
British Columbia	Plan A: Seniors 65+ (Fair PharmaCare) Plan B: Long-Term Care Facilities Plan C: Social Services Plan D: Cystic Fibrosis Plan E and I: Universal (Fair PharmaCare) Plan F: Children in the At Home Program (medically dependent children) Plan G: Psychiatric Medication Program Plan P: Palliative Care Drug Program Plan S: Smoking Cessation
Manitoba	FS: Family Services NH: Personal Homecare PC: PharmaCare PA: Palliative Care
New Brunswick	A: Seniors B: Cystic Fibrosis D: Drug Coverage for Uninsured New Brunswick Residents E: Social Assistance F: Human Resources and Development G: Children in Care H: Multiple Sclerosis R: Organ Transplant T: Growth Hormone Deficiencies V: Nursing Homes W: Hospital Service Act
Newfoundland and Labrador[b]	ACP: Access Plan ASP: Assurance Plan FP: Foundation Plan 65P: Seniors (65+) Plan E: Social Services N: Senior Citizens Drug Subsidy Plan L: Low Income Drug Plan
Nova Scotia[c]	Plan S: Seniors PharmaCare Drug Insurance Program PNSFP: Nova Scotia Family PharmaCare

Jurisdiction	Plan or program code and description
Ontario[b]	A, B: Seniors Higher Income C: Family Benefits D, K, L, M, N, Y: Ontario Works (General Welfare) E: Long-term Card F: Trillium Pre-Registration H: Homes for Special Care P: Home Care R: Seniors Lower Income T: Trillium U: Unidentified X: Oral Hypoglycemics Z: Ontario Health Insurance
Quebec	1: Sexually Transmitted Diseases 2: Tuberculoses AD: Universal Plan AL: Long-Term Care Facilities PA: Seniors (65+) PS: Social Assistance
Saskatchewan	Seniors Plan Social Services Universal Plan Nursing Home Long-Term Plan Palliative Care Special Beneficiaries
Non-Insured Health Benefits	Non-Insured Health Benefits Federal Prescription Drug Program

[a]Public plan data for Alberta were provided by the Government of Alberta because IQVIA PharmaStat only capture 80% of public data for this province.

[b]Data for HIV and Retail Oncology plans are also reported for Newfoundland and Labrador and Ontario when available.

[c]Provincial capture for Nova Scotia is 82%.

Appendix 3: Public Funding Criteria for OATs by Jurisdiction

Table 4: Funding Criteria for OATs by Jurisdiction (Current as of May 1, 2023)

Province or plan	Buprenorphine	Buprenorphine HCL	Buprenorphine HCL-naloxone HCL	Methadone HCL
AB[a]	**Regular benefit:** Sublocade 100 mg/0.5 mL and 300 mg/1.5 mL solution for SC injection (prefilled syringe)	Not a benefit	**Regular benefit:** Suboxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; pms-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; Teva-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet	**Regular benefit:** JAMP Methadone 10 mg/mL oral liquid; Methadose 10 mg/mL oral liquid; Odan-Methadone 10 mg/mL oral liquid
BC[b]	**Regular benefit:** Sublocade 100 mg/0.5 mL and 300 mg/1.5 mL solution for SC injection (prefilled syringe)	Not a benefit	**Regular benefit:** Suboxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; pms-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; Teva-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet	**Regular benefit:** Methadose 10 mg/mL oral liquid
MN	**Part 2 benefit:** Sublocade 100 mg/0.5 mL and 300 mg/1.5 mL solution for SC injection (prefilled syringe) For the management of moderate to severe opioid use disorder in adult patients who have been inducted and clinically stabilized on a transmucosal buprenorphine-containing product if the following criteria and conditions are met: Criteria: Patients must be induced	**Part 2 benefit:** Probuphine 80 mg subdermal implant For the management of opioid dependence in patients clinically stabilized on no more than 8 mg of sublingual buprenorphine in combination with counselling and psychosocial support, if the following criteria and conditions are met: Criteria: Stabilized on a dose of no more than 8 mg per day of SL	**Part 1 benefit:** Suboxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; pms-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; Teva-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet	**Part 1 benefit:** JAMP Methadone 10 mg/mL oral liquid; Odan-Methadone 10 mg/mL oral liquid **Part 2 benefit:** Methadose 10 mg/mL oral liquid For the treatment of patients who (a) are being treated with Methadose, or (b) have previously been treated with 2 or more methadone products listed under Part 1. Metadol-D 10 mg/mL oral liquid

Province or plan	Buprenorphine	Buprenorphine HCL	Buprenorphine HCL-naloxone HCL	Methadone HCL
	and stabilized on an equivalent of 8 mg to 24 mg per day of transmucosal buprenorphine for a minimum of 7 days. Conditions: Patients are under the care of a health care provider with experience in the diagnosis and management of opioid use disorder and who has been trained to administer the buprenorphine extended-release injection. Buprenorphine extended-release injection should be used as part of a complete treatment plan that includes counselling and psychosocial support. Buprenorphine extended-release injection must be administered subcutaneously in the abdominal region by a health care provider.	buprenorphine for the preceding 90 days. Conditions: Patient under the care of a health care provider with experience in the diagnosis and management of opioid use disorder and who has been trained to insert and remove the buprenorphine subdermal implant.		For the treatment of patients who (a) are being treated with Metadol-D; or (b) have previously been treated with 2 or more methadone products listed under Part 1.
NB	**Open benefit:** Sublocade 100 mg/0.5 mL and 300 mg/1.5 mL solution for SC injection (prefilled syringe)	**Special authorization:** Probuphine 80 mg subdermal implant For the treatment of patients with opioid use disorder who have been stabilized on a dose of no more than 8 mg of sublingual buprenorphine for the preceding 90 days. Clinical notes: 1. Implants are inserted subdermally for up to 6 months for 4 cycles. Dosing beyond 4 cycles (fifth implantation) is not	**Open benefit:** Suboxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; pms-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; ACT Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet	**Open benefit:** JAMP Methadone 10 mg/mL oral liquid; Odan-Methadone 10 mg/mL oral liquid; Metadol-D 10 mg/mL oral liquid

Province or plan	Buprenorphine	Buprenorphine HCL	Buprenorphine HCL-naloxone HCL	Methadone HCL
		recommended at this time. 2. Insertion of the subdermal implants should be performed by a health care provider who has completed the training program. Claim notes: Approvals will be for 4 implant kits. Requests for additional implants will not be considered. Approval period: 2 years.		
NL	**Open benefit:** Sublocade 100 mg/0.5 mL and 300 mg/1.5 mL solution for SC injection (prefilled syringe)	**Special authorization:** Probuphine 80 mg subdermal implant For the treatment of patients with opioid use disorder who have been stabilized on a dose of no more than 8 mg of sublingual buprenorphine for the preceding 90 days. Clinical note: The patient is under the care of a health care provider with experience in the diagnosis and management of opioid use disorder. Insertion of the subdermal implants should be performed by a health care provider who has completed the training program. Claim note: Approval period: 2 years.	**Open benefit:** Suboxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; pms-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; ACT Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; Suboxone 2 mg/0.5 mg, 4 mg/1 mg, 8 mg/2 mg, and 12 mg/3 mg film	**Open benefit:** JAMP Methadone 10 mg/mL oral liquid; Methadose 10 mg/mL oral liquid; Odan-Methadone 10 mg/mL oral liquid; Metadol-D 10 mg/mL oral liquid

Province or plan	Buprenorphine	Buprenorphine HCL	Buprenorphine HCL-naloxone HCL	Methadone HCL
NS	**Open benefit:** Sublocade 100 mg/0.5 mL and 300 mg/1.5 mL solution for SC injection (prefilled syringe)	**Exception status:** Probuphine 80 mg subdermal implant For the treatment of patients with opioid use disorder who have been stabilized on a daily dose of no more than 8 mg of sublingual buprenorphine for the preceding 90 days.	**Open benefit:** Suboxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; pms-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; ACT Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; Suboxone 2 mg/0.5 mg, 4 mg/1 mg, 8 mg/2 mg, and 12 mg/3 mg film	**Open benefit:** JAMP Methadone 10 mg/mL oral liquid; Methadose 10 mg/mL oral liquid; Odan-Methadone 10 mg/mL oral liquid
ON	**Limited use:** Sublocade 100 mg/0.5 mL and 300 mg/1.5 mL solution for SC injection (prefilled syringe) For the management of moderate to severe opioid use disorder as a part of a complete treatment plan that includes counselling and psychosocial support in adult patients who meet the following criteria: • The patient has been induced and is stabilized on an equivalent of 8 mg to 24 mg per day of transmucosal buprenorphine for a minimum of 7 days; and • The patient is under the care of a health care provider with experience in the diagnosis and management of opioid use disorder; and • Each dose is administered subcutaneously in the abdominal	**Limited use:** Probuphine 80 mg subdermal implant For the management of opioid use disorder in combination with counselling and psychosocial support in adult patients who meet the following criteria: • The patient is stabilized on a dose of no more than 8 mg per day of sublingual buprenorphine for the preceding 90 days; and • The patient is under the care of a health care provider with experience in the diagnosis and management of opioid use disorder and has been trained to implant and remove the buprenorphine subdermal implant. Recommended dose: Four 80 mg implants inserted subdermally in the inner side of the upper arm for up to 6 months.	**Open benefit:** Suboxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; pms-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; ACT Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet	**Open benefit:** JAMP Methadone 10 mg/mL oral liquid; Methadose 10 mg/mL oral liquid; Odan-Methadone 10 mg/mL oral liquid; Metadol-D 10 mg/mL oral liquid

Province or plan	Buprenorphine	Buprenorphine HCL	Buprenorphine HCL-naloxone HCL	Methadone HCL
	region by a certified health care provider who has received instruction and training. Recommended dose: 300 mg per month for 2 months, followed by a maintenance dose of 100 mg per month. Maintenance dose may be increased to 300 mg per month only if patient does not demonstrate satisfactory clinical response. NOTE: In clinical trials, the 300 mg per month maintenance dose did not provide additional efficacy as compared to the 100 mg per month dose and was associated with a higher incidence of adverse events and study discontinuations. A minimum of 26 days is required between consecutive doses. LU authorization period: 1 year.	The maximum quantity that can be claimed per patient is 4 implant cycles (i.e., 2 years of therapy). NOTE: The product monograph indicates that dosing beyond 2 years cannot be recommended at this time. Probuphine subdermal implants are intended to be in place for 6 months of treatment. Probuphine implants are removed at the end of the 6-month period. If continued treatment is desired, the implants should be replaced by new implants (implanted in the opposite arm) at the time of removal. LU authorization period: 2 years.		
PEI	**Open benefit:** Sublocade 100 mg/0.5 mL and 300 mg/1.5 mL solution for SC injection (prefilled syringe)	**Special authorization:** Probuphine 80 mg subdermal implant For the treatment of patients with opioid use disorder who have been stabilized on a daily dose of no more than 8 mg of sublingual buprenorphine for the preceding 90 days. Clinical note: Insertion of the subdermal implants should be performed by a health care provider who has completed the	**Open benefit:** Suboxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; pms-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; ACT Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet	**Open benefit:** Odan-Methadone 10 mg/mL oral liquid; Metadol-D 10 mg/mL oral liquid

Province or plan	Buprenorphine	Buprenorphine HCL	Buprenorphine HCL-naloxone HCL	Methadone HCL
		training program. Claim Note: Approval period of every 6 months up to 2 years.		
SK	**Exception drug status:** Sublocade 100 mg/0.5 mL and 300 mg/1.5 mL solution for SC injection (prefilled syringe) For the management of moderate to severe opioid use disorder in adult patients who have been induced and clinically stabilized on an equivalent of 8 mg to 24 mg per day of transmucosal buprenorphine for a minimum of 7 days. Patients should be under the care of a prescriber with expertise in the management of opioid use disorder who has received any required training specified in the product monograph. Buprenorphine extended-release injection should be used as part of a complete treatment plan that includes counselling and psychosocial support. Buprenorphine extended-release injection must be injected subcutaneously in the abdominal region by a health care provider trained in the administration of this product as per the product monograph.	**Exception drug status:** Probuphine 80 mg subdermal implant For the management of opioid dependence in patients clinically stabilized on no more than 8 mg of sublingual buprenorphine for the preceding 90 days. Patients should be under the care of a prescriber with expertise in the management of opioid use disorder. Probuphine implants are inserted subdermally in the upper arm by trained health care professionals for a 6-month duration. Each implantation procedure will be for 1 set of implants (i.e., four 80 mg implants providing a total of 320 mg of buprenorphine). The product monograph indicates that dosing beyond 24 months cannot be recommended at this time. As a result, the maximum lifetime quantity that can be claimed through the Drug Plan is 4 implant cycles per patient (i.e., 2 years of the drug product) at this time.	**Open benefit:** Suboxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; pms-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; ACT Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet	**Open benefit:** Methadose 10 mg/mL oral liquid; Metadol-D 10 mg/mL oral liquid

Province or plan	Buprenorphine	Buprenorphine HCL	Buprenorphine HCL-naloxone HCL	Methadone HCL
YT	Not a benefit	Not a benefit	**Open benefit:** Suboxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; pms-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; Teva-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet	**Exception drug status:** For palliative patients in some plans on advice of palliative care physician.
CAF	**Open benefit:** Sublocade 100 mg/0.5 mL and 300 mg/1.5 mL solution for SC injection (prefilled syringe)	**Special authorization:** Probuphine 80 mg subdermal implant Requests for special authorization are considered for the management of opioid dependence in patients clinically stabilized on no more than 8 mg of SL buprenorphine for the preceding 90 days in combination with counselling and psychosocial support. The patient should be under the care of a health care provider with experience in the diagnosis and management of opioid use disorder and has been trained to implant the buprenorphine subdermal implant. NOTE: The product monograph indicates that dosing beyond 24 months cannot be recommended. As a result, the maximum lifetime quantity that can be claimed through the Drug Plan is 4 implant cycles per patient (i.e., 2 years of the drug product) at this time.	**Open benefit:** Suboxone 2 mg/0.5 mg, 8 mg/2 mg, 12 mg/3 mg, and 16 mg/4 mg sublingual tablet; pms-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; ACT Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; Mylan-Buprenorphine/Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet	**Open benefit:** Methadose 10 mg/mL oral liquid; Metadol-D 10 mg/mL oral liquid

Province or plan	Buprenorphine	Buprenorphine HCL	Buprenorphine HCL-naloxone HCL	Methadone HCL
CSC	**Open benefit:** Sublocade (concentrations unclear)	Not a benefit	**Open benefit:** Suboxone (concentrations and formulations unclear)	**Open benefit:** Methadone (formulations, concentrations, and generic/brand types unclear)
NIHB	**Limited use:** Sublocade 100 mg/0.5 mL and 300 mg/1.5 mL solution for SC injection (prefilled syringe) For the treatment of opioid use disorder (no prior approval required). Clients undergoing treatment for opioid use disorder are enrolled in the NIHB-CSP. For more information, refer to the NIHB guide for pharmacy benefits.	**Limited use:** Probuphine 80 mg subdermal implant For the management of patients with opioid use disorder, in combination with psychosocial support: • Patient is stabilized on a dose of no more than 8 mg per day of sublingual buprenorphine-naloxone for the preceding 90 days; and • Patient is under the care of a health care provider with experience in the diagnosis and management of opioid use disorder; and • The prescriber has been trained to implant the buprenorphine subdermal implant. Approval is for a maximum of 4 lifetime doses. One package of 4 implants is approved at every 6 months (e.g., 4 times X packages of 4 implants).	**Limited use:** Suboxone 2 mg/0.5 mg, 8 mg/2 mg, 12 mg/3 mg, and 16 mg/4 mg sublingual tablet; pms-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; Teva-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; Suboxone 2 mg/0.5 mg, 4 mg/1 mg, 8 mg/2 mg, and 12 mg/3 mg film For the treatment of opioid use disorder (no prior approval required). Clients undergoing treatment for opioid use disorder are enrolled in the NIHB-CSP. For more information, refer to the NIHB guide for pharmacy benefits.	**Limited use:** Jamp Methadone 10 mg/mL oral liquid; Methadose 10 mg/mL oral liquid; Odan-methadone 10 mg/mL oral liquid; Metadol-D 10 mg/mL oral liquid For the treatment of opioid use disorder (no prior approval required). Clients undergoing treatment for opioid use disorder are enrolled in the NIHB-client safety program (csp). For more information, refer to the NIHB guide for pharmacy benefits.
VAC	**Standard benefit:** Sublocade 100 mg/0.5 mL and 300 mg/1.5 mL solution for SC injection (prefilled syringe)	**Special authorization:** Probuphine 80 mg subdermal implant Details of special authorization not available.	**Standard benefit:** Suboxone 2 mg/0.5 mg, 8 mg/2 mg, 12 mg/3 mg, and 16 mg/4 mg sublingual tablet; pms-Buprenorphine-Naloxone 2 mg/0.5	**Standard benefit:** JAMP Methadone 10 mg/mL oral liquid; Methadose 10 mg/mL oral liquid (special authorization required in BC); Odan-Methadone 10 mg/mL

Province or plan	Buprenorphine	Buprenorphine HCL	Buprenorphine HCL-naloxone HCL	Methadone HCL
			mg, 8 mg/2 mg sublingual tablet; Teva-Buprenorphine-Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; Mylan-Buprenorphine/ Naloxone 2 mg/0.5 mg, 8 mg/2 mg sublingual tablet; Suboxone 2 mg/0.5 mg, 4 mg/1 mg, 8 mg/2 mg, and 12 mg/3 mg film	oral liquid; Metadol-D 10 mg/mL oral liquid

AB = Alberta; BC = British Columbia; CAF = Canadian Armed Forces; CSC = Correctional Service of Canada; CSP = Client Safety Program; HCL = hydrochloride; MN = Manitoba; NB = New Brunswick; NIHB = Non-Insured Health Benefits; NL = Newfoundland and Labrador; NS = Nova Scotia; OAT = opioid agonist therapy; ON = Ontario; OUD = opioid use disorder; PEI = Prince Edward Island; SC = subcutaneous; SK = Saskatchewan; SL = sublingual; VAC = Veterans Affairs Canada; YT = Yukon.

Note: Data in the table specifically refer to formulations indicated for the treatment of OUD and reflect information in publicly available formulary lists and databases.

[a]The Alberta OAT Gap Coverage Program covers OAT medications for 120 days at no cost for individuals without health benefits coverage.

[b]Brand name drugs require special authorization for full coverage if a generic version is available. High-dose buprenorphine-naloxone requires special authorization.

Note that this appendix has not been copy-edited.

Appendix 4: Number of Claims and Expenditures for OATs by Molecule and Year

Note that this appendix has not been copy-edited.

Table 5: Claims for OATs by Molecule and Year

Year	Buprenorphine	Buprenorphine HCL	Buprenorphine HCL-naloxone HCL	Methadone HCL
2018	0	0	3,194,989	10,776,355
2019	0	9	3,691,734	10,595,625
2020	3,157	49	2,421,497	9,501,178
2021	16,578	67	2,360,628	9,208,568
2022	36,812	77	2,141,586	9,073,753
5-year total	**56,547**	**202**	**13,810,434**	**49,155,479**

HCL = hydrochloride; OAT = opioid agonist therapy.
Source: IQVIA's PharmaStat.

Table 6: Expenditures for OATs by Molecule and Year

Year	Buprenorphine	Buprenorphine HCL	Buprenorphine HCL-naloxone HCL	Methadone HCL
2018	$0	$0	$27,176,511	$18,957,948
2019	$0	$14,345	$39,351,319	$19,220,060
2020	$1,847,550	$78,408	$39,085,752	$18,033,697
2021	$9,722,635	$106,004	$38,386,660	$17,820,204
2022	$21,710,883	$121,145	$38,988,291	$16,206,302
5-year total	**$33,281,068**	**$319,902**	**$182,988,532**	**$90,238,211**

HCL = hydrochloride; OAT = opioid agonist therapy.
Source: IQVIA's PharmaStat.

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