Utilization of Silver Diamine Fluoride by Dentists in Canada: A Review of the Non-Insured Health Benefits Dental Claims Database

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Abstract

Introduction: Dental caries is one of the most frequent chronic conditions in childhood. Silver diamine fluoride (SDF) is a recognized caries arresting agent, but its use is relatively new in Canada. SDF has the potential to arrest early childhood caries in young children and delay treatment until children can be seen in outpatient settings. In August 2020 the Non-Insured Health Benefits (NIHB) program of the Department of Indigenous Services Canada approved the following procedure "Topical application to hard tissue lesion(s) of an antimicrobial or remineralization agent (includes silver diamine fluoride)". The purpose of this study was to investigate the utilization of SDF by Canadian dental providers for First Nations and Inuit Canadians with dental benefits through the NIHB program.

Methods: The NIHB program provided data on all claims paid for the procedure "topical antimicrobials or remineralization agent/SDF" for children < 17 years and any other procedure claimed on the same date for the period from August 1, 2020 to July 31, 2022 in all Canadian provinces and territories with the exception of British Columbia, Newfoundland and Labrador, and Prince Edward Island. Claims made by general dentists, pediatric dentists, prosthodontists, and dental hygienists were included. The claims from August 2020 until July 2022 were arranged into eight,3 months, quarters. Rates of SDF application by province or territory were calculated. Data were analyzed using NCSS 2023 Statistical Software. Statistical analyses included descriptive statistics (frequencies, mean ± standard deviations (SD)).

Results: There were 4,158 claims for SDF between August 1, 2020 and July 31, 2022 for 3,465 children <17 years of age. The mean age was 7.9 ± 4.0 years and 52.9% of those were female. The majority of claims, both for the initial claim (87.1%) and follow up visit claims, were made by general dentists. Most children had another procedure at the initial and follow up visits, with claims being for one or more

assessment, non-restorative, restorative, or sedation procedures. Claims revealed that traditional restorative treatment was also performed on the same day of SDF application for nearly one third of patients. The province with the most initial claims for SDF was Manitoba (19.6%). However, Alberta was the highest province for follow-up claims for SDF. Nunavut and Northwest Territories had the highest rates of SDF claims for children (37.0/1,000) and (20.9/1,000) respectively. Quarter 8 had the highest number of initial claims (539) for SDF submitted. Claims appear to be lower during the period of November to January compared to the rest of the year.

Conclusions: Data suggest that there has been an overall continuous increase in the number of claims submitted for SDF among registered First Nations and Inuit children. Claims for SDF have been submitted by providers in the majority of Canadian provinces and territories from August 2020 until July 2022. Although, Ontario and the Western provinces had the highest number of claims, Nunavut and the Northwest Territories had the highest rates of claims.

Introduction

Dental caries is one of the most frequent chronic conditions in childhood. Left untreated, dental caries can be considered a public health problem as it can exert a negative impact on the quality of life of both the child and the family (1). In Canada, national prevalence data of dental caries for Canadian preschool children is absent. However, individual Canadian studies reported a prevalence ranging from 0-98.9% (2). Dental caries can be managed using a conventional or a biological approach. Silver diamine fluoride (SDF) is one such biologic approach to manage caries non-surgically (3).

SDF is a recognized caries arresting agent, but its use is relatively new in Canada. Advantage Arrest™ was the first SDF product approved by Health Canada in 2017. Recent reports highlight the anti-caries effects of SDF(4-8). One systematic review and meta-analysis reported that 38% SDF is safe and effective in arresting dentin caries in primary teeth resulting in the arrest of 81% of active caries lesions (9). Current clinical guidelines indicate that SDF is the preferred non-restorative caries management product for cavitated lesions on both primary and permanent teeth (10).

SDF has the potential to arrest early childhood caries (ECC) in young children and delay treatment until children can be seen in outpatient settings, thereby reducing the need for rehabilitative dental treatment under general anesthesia. Recognizing the access to care challenges that have been exacerbated by the COVID-19 pandemic, SDF's use as a non-surgical caries product has likely grown.

The major limitation of SDF is that it stains the carious lesion black, which can cause an esthetic concern. However, a recent review by Magno et al. showed that staining did not affect parent's acceptability of treatment (11). Furthermore, a Canadian study showed that parents were accepting of treatment with SDF despite staining (12).

While the popularity of SDF is growing, there is still a lack of consensus regarding clinical guidelines for use. Clinical case selection is an important consideration. Some proposed SDF protocols

may not easily translate into dental public health clinical settings or work well in remote Indigenous communities, where access to care is often limited. Their recommendations for frequent reapplication(7, 9, 13) are not practical or realistic in these programs or remote regions where follow-up visits may be several months away and not within a matter of weeks.

In August 2020 the Non-Insured Health Benefits (NIHB) program of the Department of Indigenous Services Canada approved the following procedure "Topical application to hard tissue lesion(s) of an antimicrobial or remineralization agent (includes silver diamine fluoride)". For those 16 years of age and younger, three such treatments in a 12 month period are permitted. Only one treatment in a 12 month period is permitted for those 17 years or older. A qualitative study done in Manitoba revealed that Indigenous parents are open to the idea of SDF, but would require information on the product first before consenting to such treatment (14).

The purpose of this study was to investigate the utilization of SDF by Canadian dental providers for First Nations and Inuit children < 17 years of age with dental benefits through the NIHB program. The objectives were to determine the number of claims submitted to NIHB for SDF for children to determine trends in the number of claims over time, to determine whether there are regional/provincial differences in claims for SDF and to determine whether SDF treatment is also provided in conjunction with traditional restorative treatment on the same day of service.

Methods

Ethical approval was obtained from the University of Manitoba's Health Research Ethics Board prior to commencing this study. The NIHB program at the Department of Indigenous Services Canada provided the data file in Excel (Microsoft Office) format through a secure data transfer portal. Data were provided for all Canadian provinces and territories, except for British Columbia (BC), Newfoundland and Labrador and Prince Edward Island (PEI). No claims were available from BC as the BC First Nations Health

Authority administers health services in that province for First Nations and does not provide data to NIHB. Some Inuit children residing in BC are eligible for NIHB coverage, however the data for them were suppressed as there were 5 or less claims during the study period. Similarly, the Data for Newfoundland and Labrador and PEI were suppressed as these provinces had 5 or less claims during the study period. However, data for these two provinces were included in the Atlantic region population data provided by NIHB, representing Newfoundland and Labrador, PEI, New Brunswick, and Nova Scotia. The claims data included the following:

1. Dental claim level data for all claims paid by NIHB for the procedure "topical antimicrobials or remineralization agent/SDF" for children and adults, with a date of service during the period from August 1, 2020 to July 31, 2022 including claims by general dentists, pediatric dentists, prosthodontists, and dental hygienists.
2. Dental claim level data for all claims paid by NIHB for all dental procedures claimed for the same patient on the same date of service as the procedure "topical antimicrobials or remineralization agent/SDF", for the same period of August 1, 2020 to July 31, 2022.
3. Information on provider province/territory, provider specialty and patient birth year, patient sex were included for all claims. Information on claims were not provided for provider province/territory that had 5 or less patients.
4. Information on the NIHB eligible population by age group and province/territory.

All data on patients and providers were de-identified of all personal information and patients were assigned a unique identifier number. The data were stored on a password protected server at the Children's Hospital Research Institute of Manitoba.

Due to the absence of a specific NIHB code solely for SDF, for the purpose of this study, it was assumed that claims for "topical antimicrobials or remineralization agent/SDF" represented SDF usage by practitioners. Five procedure codes for "topical antimicrobials or remineralization agent/SDF were identified. Three codes were for dentists: 13601 which was used by dentists in all provinces besides Quebec, 22601 which was used by general dentists in Quebec, and 13610 which was used by pediatric dentists in Quebec. Two codes were used by dental hygienists: 00606 and 00607.

Procedure claims were included for the following procedures: complete exams, limited exams, recall exams, consultations, emergency exams, specific exams, intra-oral radiographs, extra-oral radiographs, scaling, prophy, fluoride, caries trauma pain control, amalgam restorations, composite restorations (anterior/posterior), pulpotomies, stainless steel crowns (anterior/posterior), pulpectomies, sealants, extractions, root canal treatments, general anesthesia, nitrous oxide, and oral sedation.

The data were reviewed and recoded on Microsoft Excel. Each patient with one or more claims for SDF was assigned a row. Procedure claims were coded for each visit where a 0 indicated a procedure was not billed and 1 indicated that a procedure was billed. Initial claims from August 2020 until July 2022 were arranged into eight, three-month, quarters.

Rates of SDF claim per 1,000 children under 17 years of age were calculated for each region, province or territory of Canada, except for BC, PEI, and Newfoundland and Labrador. The denominator used was the number of NIHB clients < 17 years of age registered in each region, province, or territory. The numerator was the number of children that had a claim in each region, province or territory. The Atlantic Provinces (Newfoundland and Labrador, New Brunswick, Nova Scotia, PEI) were grouped under Atlantic region by NIHB as some clients are registered under "General Atlantic" and not a specific province. Thus, the numerator used for the Atlantic region was the sum of children that had a claim in New Brunswick and Nova Scotia whereas the denominator was the total population in the four

provinces. Data were analyzed using NCSS 2023 Statistical Software. Statistical analyses included descriptive statistics (frequencies, mean ± standard deviations (SD)).

Results

There were 4,158 claims for SDF between August 1, 2020 and July 31, 2022 for 3,465 children <17 years of age. The mean age was 7.9 ± 4.0 years and 52.9% were female. The youngest child was one year of age. There were 558 children that had more than one claim for SDF, 436 children had two claims only, 109 children had three claims only, 12 children had four claims, and one child had five claims (Table 1). Claims were submitted by oral health providers in seven provinces and three territories [Table 1]. Claims were submitted by either general dentists, pediatric dentists, or dental hygienists. Most claims both for the initial and follow up visits were submitted by general dentists [Tables 1 and 2]. The province with the most initial claims for SDF was Manitoba (19.6%) followed by Saskatchewan (18.7%) [Table 1]. However, Alberta and Ontario were the highest two provinces for follow up SDF claims [Table 2].

In the first 12 months of the new policy to fund SDF (August 2020 to July 2021) there were 1,542 initial claims while there were 1,923 initial claims in year 2 (August 2021 to July 2022). The number of initial claims for quarter 1 through 8 are as follows: 349, 291, 487, 415, 492, 372, 520, and 539 respectively. Figure 1 provides a detailed breakdown of the number of claims in each province/territory during each quarter.

Rates of SDF applications based on claims submissions were calculated to adjust for the population of eligible NIHB children per province, territory, or region, revealing the highest rates of SDF for registered First Nations and Inuit children in the north. Nunavut (37.0/1,000) and the Northwest Territories (20.9/1,000) had the highest rates of claims for SDF use [Table 3]. Among the provinces,

Alberta (18.6/1,000), followed by Ontario (15.2/1,000), Manitoba (15.1/1,000), and Saskatchewan (14.4/1,000) had the highest rate of claims for SDF use of children < 17 years [Table 3].

Most children with claims for SDF (90.5%) had another type of dental procedure provided at the initial visit, with claims being for one or more forms of assessment, non-restorative, restorative, or sedation procedures [Table 1]. Table 4 reports data on the distribution of other procedures billed on the same date as the SDF claim. For assessments, 1,001 children (31.9%) had a claim for recall exam and 1,669 children (53.3%) had a claim for intraoral radiographs. For non-restorative care, 1,728 children (55.2%) of children had a claim for prophylaxis and 1,539 children (49.1%) had a claim for fluoride varnish. In terms of restorative treatment, 1,099 children (35.1%) had a claim for a restoration on the same visit date of SDF claim. The most frequent restorative claims were for posterior composites, which was claimed for 741 children (23.7%). Only 141 of children (4.5%) had a claim for nitrous oxide, 23 children (3.0%) for oral sedation, and 284 children (9.0%) had a claim for general anesthesia on the same day that SDF was applied.

Similarly, most children had another procedure performed at the same visit for the second, third and fourth follow up claims for SDF application [Table 2]. Table 4 includes the complete breakdown for each visit. For the second SDF visit (N=402), the most frequent assessment claim was for recall examination, which was billed for 214 children (53.2%). For non-restorative care, prophy was claimed for 220 children (54.7%) and fluoride varnish for 208 children (51.7%). A total of 107 children (26.6%) had a restorative claim with posterior composite restorations being the most frequent procedure billed for 81 children (20.25%). Overall, 25 children (6.2%) had a claim for nitrous oxide, 1 child (0.3%) had a claim for oral sedation, and six children (1.5%) had a claim for general anesthesia on the same day as SDF applied.

Data from the third SDF visit (N= 81), the most frequent assessment claim was for recall examination (48.2%) while 49.4% had a claim for prophy and 60.5% had a claim for fluoride varnish.

25.9% had a restorative claim with posterior composites being the most common 22.2%. Overall, 8.6% had a claim for nitrous oxide, 1.2% had a claim for oral sedation, and 1.2% had a claim for general anesthesia. Data from the fourth SDF visit (N= 11) revealed that 63.6% had a claim for recall examination and prophy, 45.6% had a claim for fluoride varnish, and 36.4% had a claim for restorative treatment. Similar to previous visits, the most frequent restorative claim was for posterior composite 27.3%. Overall, 18.2% had a claim for nitrous oxide and there were no claims for oral sedation or general anesthesia. There were no other claims during the same visit for the one child that had a fifth claim for SDF.

Discussion:

This is the only study to investigate the uptake and trends in SDF usage by dental practitioners in Canada for registered First Nations and Inuit children insured by the NIHB program. The federal NIHB program is the first national insurance plans in Canada to approve a code for the use of SDF as no private insurance plans have included it as an insured service. While there appears to be a slow uptake for the inclusion of SDF into many dental insurance schemes, it is exciting that the new Canadian Dental Care Plan (CDCP) has included "Topical application to hard tissue lesion(s) of an antimicrobial or remineralization agent (includes silver diamine fluoride)" as part of its covered procedures (15). Unlike NIHB which covers three treatments in 12 months, the CDCP covers two treatments in a 12-month period.

The youngest child to have received SDF in the NIHB claims database was one year of age. SDF can be used safely and effectively in children. It's uses include caries prevention, detection, arrest and as a desensitizing agent (16). The advantages of SDF include its non-aerosol generating ease of application, low cost and multiple teeth can be treated at once. AAPD Guidelines recommend application of the product for about 1 minute per lesion of interest (17). This makes it suitable for children who may not

be able to tolerate longer traditional restorative work. The main disadvantage of SDF is the black discoloration on carious tooth substance, taste, and the need for follow ups and reapplication.

The prevalence of ECC in First Nations and Inuit children is very high with reports suggesting 85% of children have ECC (18). Access to care is a problem in Indigenous communities (19) as there is a shortage of dentists and oral health services in many rural and remote Indigenous communities. The 2014 Oral Health Survey reported that the ratio of dentists per person was 1:2800 for Indigenous communities in the US which is almost half the US average of 1:1500 (18). The use of SDF can increase access to care for children. Conventional treatment in children is not only expensive but can be difficult especially for non-pediatric dentists who may not have access to advanced behavior guidance resources. Our results show that the majority of claims were made by general dentists. The ease of application and atraumatic nature of SDF treatment can facilitate treatment by general dentists and hygienists in Indigenous remote and rural communities.

ECC often requires rehabilitative dental treatment under general anesthesia (20, 21). In Canada, children from communities with a high proportion of Indigenous peoples are over seven times more likely to receive dental treatment under general anesthesia compared to children from communities with lower Indigenous populations (20). Furthermore, in remote Indigenous communities, every one in five children younger than 5-years old required dental treatment under general anesthesia (20). As a result, wait times for surgery may be long and thus the severity of dental disease may worsen. Pain and infection can cause significant morbidity to children. It has been suggested to place SDF before surgery to arrest/slow down the caries process until the patient can be seen under general anesthesia. The aim of this would be to prevent disease progression that can complicate treatment. A study in Florida showed that children on the waitlist for treatment under general anesthesia or sedation who had SDF applied on the teeth were less likely to need dental emergency than those children that did not have

SDF applied (22). Our results showed that a similar approach was taken by some dentists as some patients had SDF placed prior to treatment under general anesthesia.

As well as being a treatment on its own. SDF can be used as part of the restorative process where a restoration is placed on the SDF treated tooth (23). Suggested restorative materials include glass ionomers, composite and stainless steel crowns (16, 23). In addition to this, SDF has been proposed to be used as an indirect pulp capping material with promising results (24). In our study, it was noted that the most frequent restorative treatment provided in conjunction with SDF was posterior composites. However, based on the data received it is uncertain whether the restoration was applied on the same tooth or not.

Based on our analysis of NIHB claims data, most children had only received application of SDF, which might suggest that many dentists are unfamiliar with existing clinical guidelines for its use. The American Academy of Pediatric Dentistry guidelines suggest multiple applications of SDF to increase its efficacy (17). Published studies show that the success of lesion arrest increases with a second application of SDF(25-27). Access to care has been reported as a barrier in Indigenous communities and may be a reason as to why multiple applications were less frequent(19). Additionally, some patients may have had traditional surgical treatment at a follow up visit.

As per reports from the Statistics Canada 2021 Census, the largest numbers of First Nations and Inuit Peoples live in Ontario, followed by BC, Alberta, Manitoba, Saskatchewan, and Quebec, respectively(28). The result of our study shows that the highest number of initial claims were in these provinces apart from BC. We had no claims from BC because the majority First Nations population are covered by the BC First Nations Health Authority and are therefore not captured under the NIHB claims data. In addition to this, there were fewer than five claims during the study period for the remaining NIHB eligible population in BC. Similarly, there were fewer than five claims for from PEI and Newfoundland and Labrador and thus were excluded from the database. This may be because SDF

may not be a preferred treatment modality in these provinces. Nunavut had a high number of initial claims. This may be due to patients coming in from different areas to Nunavut for treatment. For follow up claims, Alberta and Ontario were consistently higher than other Provinces. A reason for this might be that patients in Alberta and Ontario have more access to care.

It was no surprise that Nunavut and Northwest Territories had the highest rates of claims for SDF. These territories are in the most remote regions of Canada where access to oral health care, community water fluoridation, and nutritious foods are limited. Dental providers in these regions may be doing what they can to manage dental caries by relying on SDF, but the higher rates of claims for SDF is most likely the high prevalence of untreated caries in these regions of Canada(29) (30).

The Atlantic region and Quebec had the lowest rates of claims for SDF. This might be because dental providers in these provinces prefer to utilize other treatment modalities. Quebec, Newfoundland and Labrador and Nova Scotia have universal provincial plans for children up to adolescent years and thus dental providers may be accustomed to tailoring treatment in accordance with the covered procedures under those plans. In addition to this, providers may not be inclined to register with NIHB to submit claims as there is a lot of overlap between the procedures covered by NIHB and the universal provincial plans. This might also mean that many providers in these provinces may not be aware of the updated coverage from NIHB.

The greatest number of initial SDF claims were from the last two quarters of the second year of data (quarter 7 and 8, from February 2022 until April 2022 and May 2022 until July 2022). This might be because more dentists became aware that the service is covered by NIHB. In addition to this, it might be that more dentists are incorporating the use of SDF into their treatment philosophy. The lowest number of claims were made during the first half of the first year of data (quarters 1,2) and quarter 6 (from August 2020 until October 2020, November 2020 until January 2021, and November 2021 until January 2022). Quarter 1 marked the start of the NIHB approving the claim and thus providers may not have

been aware of the ability to utilize the claim. Quarters 2 and 6 encompassed the winter months and holiday periods which could mean that dentist's availability was limited and patients might also be less likely to seek care during that period. Fluctuations in COVID-19 cases may have also accounted for the differences in the number of claims between each period. Rise in COVID-19 cases not only limits patient availability but health care worker availability as well which may affect the number of claims.

This study is not without limitations. There may be an over-estimation on the use of SDF as we considered all claims for topical antimicrobials or remineralization agent/SDF to be SDF. Other agents that may be claimed include chlorhexidine, silver nitrate and casein phosphopeptide amorphous calcium phosphate (CPP-ACP). Not every claim for SDF included the tooth code, which is why we were unable to determine if restorative treatment was done on the same tooth or not. This also did not allow us to investigate the type, number and location of teeth that received SDF treatment so we are unsure of how many teeth had SDF applied to caries lesions. When calculating the number of children per 1,000 of population that received a claim for SDF, it was assumed that clients resided in the province/territory were treatment was provided as we were unable to obtain information on the clients area of residence. This may result in those values being an inaccurate representation as children may reside or seek treatment in a different province/territory in which they are registered. Since the data only relate to claims, we are unable to comment on whether caries lesions were successfully arrested following SDF treatment.

Conclusion:

Based on the findings of our study, the following conclusions have been made:

1. SDF has been utilized in the majority of Canadian provinces and territories from August 2020 until July 2022 and data reveal an increase in claims over time.

2. Although, Ontario and the Western provinces had the highest number of claims, Nunavut and the Northwest Territories had the highest rates of claims.
3. SDF claim is utilized the most by general dentists compared to dental hygienists and pediatric dentists.
4. Claims data suggest that few children received follow-up SDF applications, which may limit the arrest potential in treated children.
5. The authors suggest it may be beneficial for NIHB to have a specific code just for SDF application.

Tables and Figures:

Table 1: Characteristics of SDF claims for children <17 years of age

Patients (N=3465)	N (%)
Sex of Child	
Female	1,833 (52.9%)
Male	1,632 (47.1%)
Mean Age (years)	7.9 ± 4.0
Number of Claims for SDF	
One	2,907 (83.9%)
Two	436 (12.6%)
Three	109 (3.2%)
Four	12 (0.4%)
Five	1 (0.03%)
Type of Dental Provider	
General Dentist	2,831 (87.1%)
Pediatric Dentist	570 (16.5%)
Dental Hygienists	64 (1.9%)
Province/Territory	
Alberta (AB)	640 (18.5%)
Saskatchewan (SK)	648 (18.7%)
Manitoba (MB)	680 (19.6%)
Ontario (ON)	605 (17.5%)
Quebec (PQ)	150 (4.3%)
New Brunswick (NB)	112 (3.2%)
Nova Scotia (NS)	11 (0.3%)
Yukon (YT)	21 (0.6%)
Northwest Territories (NT)	113 (3.3%)
Nunavut (NU)	485 (14.0%)
Other Dental Claims During SDF Visit	
Yes	3,134 (90.5%)
No	331 (9.5%)
Year of SDF Claim	
2020	539 (15.6%)
2021	1,757 (50.7%)
2022	1,169 (33.7%)
Data Year of SDF Claim	

2020/21	1,542 (44.5%)
2021/22	1,923 (55.5%)

Table 2: Characteristics of SDF follow up claims for children <17 years of age

	2nd claims	3rd claims	4th claims	5th claims
Type of Dental Provider				
General Dentist	406 (72.9%)	86 (70.5%)	9 (69.2%)	1 (100%)
Pediatric Dentist	140 (25.1%)	36 (29.5%)	4 (30.8%)	0 (0%)
Dental Hygienist	11 (2.0%)	0 (0%)	0 (0%)	0 (0%)
Province/Territory				
Alberta (AB)	159 (28.6%)	36 (29.5%)	3 (23.1%)	1 (100%)
Saskatchewan (SK)	70 (12.6%)	13 (10.7%)	0 (0%)	0 (0%)
Manitoba (MB)	38 (6.8%)	5 (4.1%)	0 (0%)	0 (0%)
Ontario (ON)	154 (27.7%)	38 (31.2%)	8 (61.5%)	0 (0%)
Quebec (PQ)	38 (6.8%)	15 (12.3%)	0 (0%)	0 (0%)
New Brunswick (NB)	37 (6.6%)	7 (5.7%)	1 (7.7%)	0 (0%)
Nova Scotia (NS)	2 (0.4%)	1 (0.8%)	0 (0%)	0 (0%)
Yukon (YT)	4 (0.7%)	0 (0%)	0 (0%)	0 (0%)
Northwest Territories (NT)	11 (2.0%)	2 (1.6%)	1 (7.7%)	0 (0%)
Nunavut (NU)	44 (7.9%)	5 (4.1%)	0 (0%)	0 (0%)
Other claim same visit				
Yes	402 (72.2%)	81 (66.4%)	11 (84.6%)	0 (0%)
No	155 (27.8%)	41 (33.6%)	2 (15.4%)	1 (100%)

Table 3: Number of children per 1000 population in each region that had an SDF claim

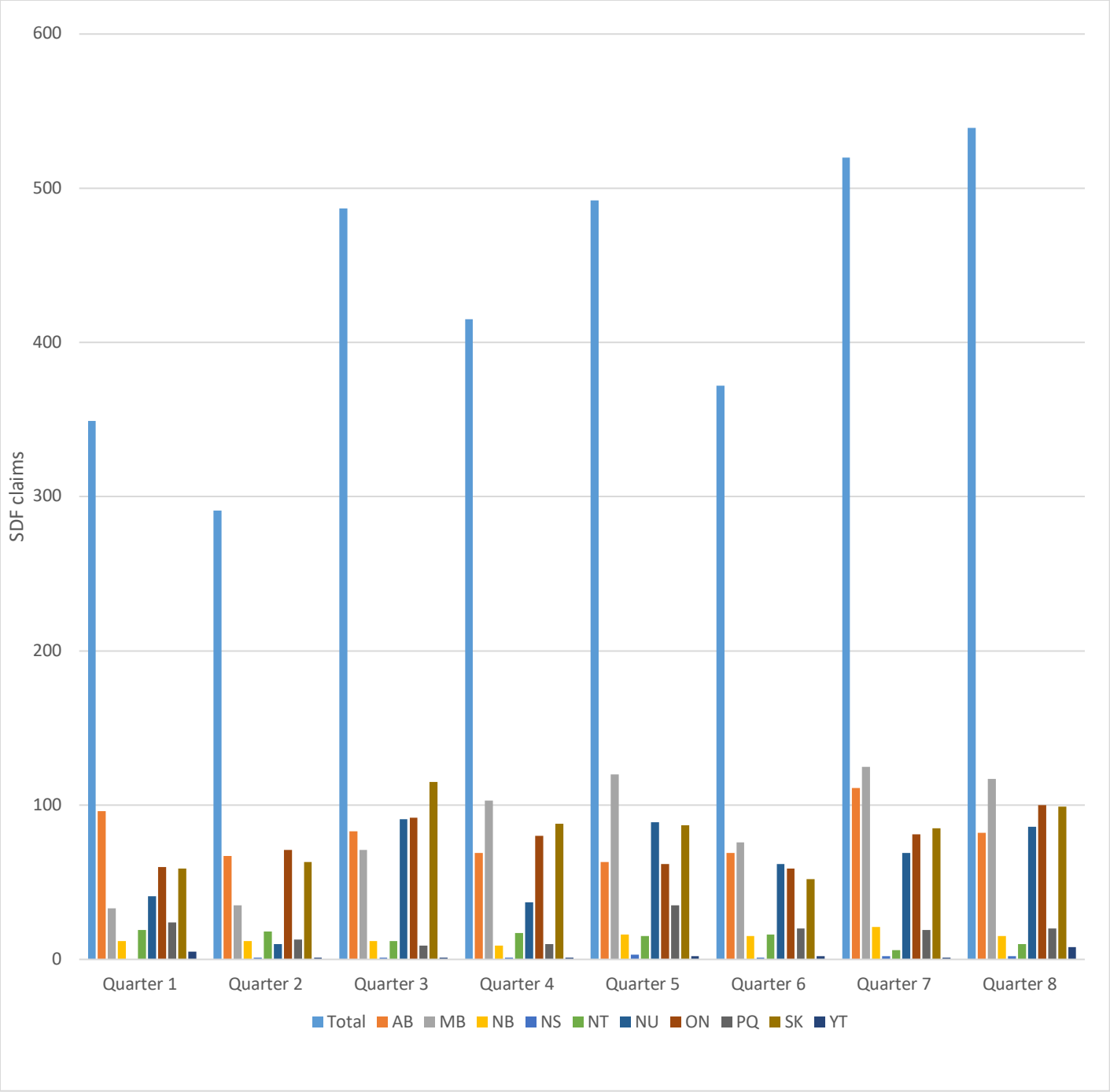
Region	Eligible client < 17 years of age	Number of children that had an SDF claim	Children per 1,000 that had an SDF claim
Alberta	34,372	640	18.6
Atlantic Region (New Brunswick, Newfoundland and Labrador, Nova Scotia, PEI)	13,207	123	9.3
Manitoba	44,961	680	15.1
Northwest Territories	5,420	113	20.9
Nunavut	13,115	485	37.0
Ontario	39,723	605	15.2
Quebec	16,032	150	9.4
Saskatchewan	45,083	648	14.4
Yukon	1,292	21	16.3

Table 4: Other procedures claimed during same visit of SDF procedure

Procedure claimed	1st visit (N=3134)	2nd visit (N=402)	3rd visit (N= 81)	4th visit (N=11)
Complete Exam	545 (17.4%)	14 (3.5%)	0 (0%)	0 (0%)
Limited Exam	402 (12.8%)	9 (2.2%)	1 (1.2%)	0 (0%)
Recall Exam	1001 (31.9%)	214 (53.2%)	39 (48.2%)	7 (63.6%)
Consult	1 (0.0%)	0 (0%)	0 (0%)	0 (0%)
Emergency Exam	87 (2.8%)	6 (1.5%)	2 (2.5%)	0 (0%)
Spec Exam	302 (9.6%)	29 (7.2%)	7 (8.6%)	1 (9.1%)
Intra Oral radiographs	1669 (53.3%)	152 (37.8%)	33 (40.7%)	7 (63.6%)
Extra Oral radiographs	411 (13.1%)	11 (2.7%)	0 (0%)	0 (0%)
Scaling	1465 (46.8%)	187 (46.5%)	43 (53.1%)	5 (45.5%)
Prophy	1728 (55.2%)	220 (54.7%)	40 (49.4%)	7 (63.6%)
Fluoride	1539 (49.1%)	208 (51.7%)	49 (60.5%)	5 (45.5%)
Sealant	173 (5.5%)	19 (4.7%)	6 (7.4%)	0 (0%)
Caries Trauma Pain Control	119 (3.8%)	13 (3.2%)	2 (2.5%)	1 (9.2%)
Amalgam Posterior	43 (1.4%)	8 (2.0%)	1 (1.2%)	0 (0%)
Composite Posterior	741 (23.7%)	81 (20.2%)	18 (22.2%)	3 (27.3%)
Composite Anterior	266 (8.5%)	16 (4.0%)	2 (2.5%)	0 (0%)
SSC Posterior	321 (10.3%)	17 (4.2%)	4 (4.9%)	1 (9.1%)
SSC Anterior	41 (1.3%)	0 (0%)	1 (1.2%)	0 (0%)
Pulpotomy	163 (5.2%)	6 (1.5%)	0 (0%)	2 (18.2%)
Pulpectomy	18 (0.6%)	0 (0%)	1 (1.2%)	0 (0%)
Root Canal	35 (1.1%)	3 (0.8%)	3 (3.7%)	0 (0%)
Extraction	420 (13.4%)	26 (6.5%)	5 (6.3%)	0 (0%)
Nitrous	141 (4.5%)	25 (6.2%)	7 (8.6%)	2 (18.2%)
Oral Sedation	23 (3.1%)	1 (0.3%)	1 (1.2%)	0 (0%)
General	284 (9.1%)	6 (1.5%)	1 (1.2%)	0 (0%)

Anesthesia				

Figure 1: The number of SDF claims in each province/region during each quarter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300
200
100
0
SDF claims
Quarter 1
Quarter 2
Quarter 3
Quarter 4
Quarter 5
Quarter 6
Quarter 7
Quarter 8
Total
AB
MB
NB
NS
NT
NU
ON
PQ
SK
YT

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