HSIAR
Analytics to Action

Health Sector Information, Analysis and Reporting Division
Integrated Analytics: Community and Cross Sector

2018/19 British Columbia Controlled Prescription Drug Atlas

Date: November 2019
British Columbia Ministry of Health

If you have any questions about the information presented in this report, please contact the Ministry at MoHAnalytics@gov.bc.ca

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Section 1: Key Findings[1]

1.1 Opioids

- Between 2013/14 and 2018/19,
    - Opioid patients and dispenses decreased by 12% and 18% respectively.
    - Patients using high dose opioids (>=90 Oral Morphine Equivalent (OME)/day) dropped by 17%.
    - The 50-69 age group continued to have the largest number of opioid users relative to the other age groups.

- In 2018/19,
    - Codeine (40%), hydromorphone (23%) and tramadol (13%) accounted for more than 75% of the overall opioid dispenses (2.6 million). Most of the opioids were prescribed by physicians (93%).
    - Over half (54%) of the opioid patients were female. Patients in all ages, except 0-9, also displayed a higher number of females than males.
    - Among Local Health Areas (LHAs), Trail had the highest rate of opioid consumption, while Howe Sound had the highest rate of patients.
    - Howe Sound had the highest rate of high dose opioid patients while Vancouver – Centre North had the leading rate of patients using even higher dose of opioids (>=200 OME /day) compared to the other LHAs.

1.2 Benzodiazepines

- Between 2013/14 and 2018/19,
    - Benzodiazepine patients and dispenses declined by 13% and 23% respectively.
    - Patients using high dose benzodiazepine (>= 2 Defined Daily Doses (DDDs)) fell by 40%.
    - The 50-69 age group continued to have the largest number of benzodiazepine users among other age groups.

- In 2018/19,
    - Zopiclone (38%), lorazepam (23%) and clonazepam (21%) comprised of more than 80% of the total benzodiazepine dispenses (2.5 million). Most of the benzodiazepines were prescribed by physicians (97%).
    - Almost 64% of the benzodiazepine patients were female. Patients in all ages, except 0-9, also showed a higher number of females than males.
    - Among the LHAs, Cariboo/Chilcotin had highest rate of benzodiazepine consumption, Prince Rupert had the highest rate of patients, and South Surrey/White Rock had the highest rate of elderly patients.
    - Cariboo/Chilcotin had the highest rate of patients using high dose benzodiazepines compared to the other LHAs.

[1] Rates are age and sex standardized per 1,000 population.

Section 2: Introduction

2.1 About the Atlas

The purpose of the 2018/19 British Columbia (B.C.) Controlled Prescription Drug Atlas ("the Atlas") is to provide an overview of controlled prescription medication utilization in British Columbia (B.C.). Medication information used in the Atlas corresponds to dispenses from community pharmacies across B.C[2].

2.2 Atlas Geography

Population data based on the location of pharmacies is not available to calculate age and sex standardization rates. Therefore, the maps in this Atlas are based on the Local Health Area (LHA) of the patient's residence. Patients residing in more than one LHA during the fiscal year are counted once in each LHA. Similarly, patients who filled prescriptions at more than one pharmacy are counted once for each pharmacy.

In 2018, the numbering convention as well as certain names of LHAs were standardized. The new convention is applied in this document. To compare results with the 2017-2018 issue of the Atlas that uses the previous numbering and naming convention, please use the LHA crosswalk table from Appendix B.

2.3 Data Source

PharmaNet is the Province of B.C.'s drug information, claims adjudication and payment system that serves the PharmaCare Program. All dispenses of drugs, devices and substances, and related services, performed in community pharmacies in B.C. are conducted using PharmaNet, thereby creating a single system containing the community medication dispensing history for all B.C. residents regardless of what prescriber created the prescription or what community pharmacy filled it.

Medication utilization data used in the Atlas is obtained from HealthIdeas, the Ministry of Health's principal data warehouse for secondary use. It contains a range of data sets and derived information products that support analysis and research. These include information about health services provided to British Columbians, including hospital and physician services, medication dispenses from community pharmacies, and population and other reference data.

Medication utilization data for a given year may vary between subsequent issues of this Atlas. Differences are related to the ongoing updating of the database caused by, for instance, reversal of dispenses by pharmacists. Also, the drug list used for this Atlas is maintained on an on-going basis and may differ between versions.

[2] Dispenses in this Atlas do not include medication used in hospitals, sample medication from doctors' offices, expensive drugs for rare diseases, the provincial retinal disease treatment program, prescriptions for HIV or cancer treatment or other manual prescriptions paid by third party insurance, patients, PharmaCare and Federal Government. Dispenses are used in this Atlas instead of prescriptions due to data quality issues of prescription information in PharmaNet.

2.4 Atlas Measures

Medication utilization is shown in the Atlas as counts and rates. Rates are direct age and sex standardized at the LHA level using population projection data specific to the region from the Ministry of Health's 2018 Population Extrapolation for Organizational Planning with Less Error (PEOPLE) database. The standard population used in the Atlas is from Statistics Canada's 2011 Census. Stability criteria of at least 20 events at local geographies are applied to each measure to ensure stability of the data for comparison. Patient's maximum age in the fiscal year is used to avoid duplicated records.

2.5 Analytic Drug Class

The two analytic drug classes included in this Atlas are Opioids and Benzodiazepines. Opioids consist of all opioid drugs excluding opioid agonist therapy and compounded drugs for intrathecal injections. Appendix A provides a list of drugs analyzed by this report.

2.6 Opioids

The standardized measure of dosing for opioids is the Oral Morphine Equivalent (OME). The OME for a specific drug dispense is calculated as follows:

Dispense OME = strength x quantity x drug OME[3]

The patient's total OME per day is calculated as follows:

Patient OME/day = sum of the OME for all drug dispenses to patient /days supply[4]

Population utilization of opioids is represented using the following three measures:

Opioid consumption = sum of all (patient OME/day) /1,000 population

Opioid patients = number of patients who received at least one opioid /1,000 population

High dose opioid patients = number of patients who received 90 OME/day or greater /1,000 population

Population rates are direct age and sex standardized to enable comparison between LHAs. The threshold to determine high dose opioid usage is 90 OME/day, as recommended by the Canadian Guideline for Opioids for Chronic Non-Cancer Pain[5] in 2017.

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[3] Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain, National Pain Centre,

Opioid Morphine Equivalent Conversion Factors, Centers for Medicare & Medicaid Services,

Opioid Dose Equivalence, Faculty of Pain Medicine Anzca,

TPP Alberta OME and DDD Conversion Factors, College of Physicians and Surgeons of Alberta

[4] Days supply in the time period analyzed refers to patient's total distinct dispensed days supply for drugs for the time period analyzed, capped at 365 for each fiscal year due to data quality issues in PharmaNet

[5] The 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain, National Pain Centre

2.7 Benzodiazepines

The standardized measure of dosing for Benzodiazepines is the Defined Daily Dose (DDD). As defined by the World Health Organization (WHO), the DDD is the assumed average maintenance dose per day for a drug used for its main indication in adults[6]. Drug DDD values are from the WHO and the number of DDDs are used as the standard measure of dosing across all drugs and routes of administration within the Benzodiazepine analytic drug class. The DDD for a specific drug dispense is calculated as follows:

Dispense DDDs = strength x quantity / drug DDD

A patient's total DDDs is calculated as follows:

Patient DDDs = sum of the DDDs for all drug dispenses to patient / days supply[7]

Population utilization of Benzodiazepine is represented using the following four measures:

Benzodiazepine consumption = sum of all patient DDDs / 1,000 population

Benzodiazepine patients = number of patients who received at least one Benzodiazepine dispense / 1,000 population

High dose Benzodiazepine patients = number of patients who received 2 DDDs or more / 1,000 population

Elderly Benzodiazepine patients = number of patients 65 years or older who received at least one Benzodiazepine dispense / 1,000 elderly population

Population rates are direct age and sex standardized to enable comparisons among LHAs.

[6] "Definition and generation considerations", WHO Collaborating Centre for Drug Statistics Methodology

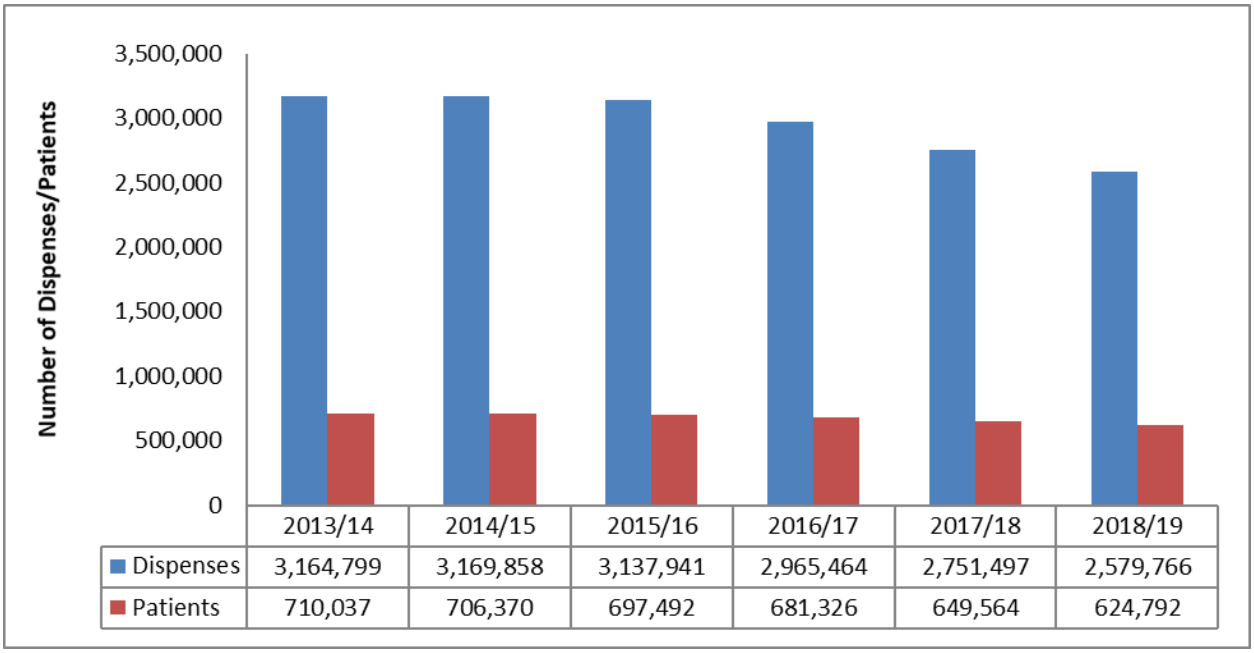
[7] Days supply in the time period analyzed refers to patient's total distinct dispensed days supply for drugs for the time period analyzed, capped at 365 for each fiscal year due to data quality issues in PharmaNet.

Section 3: Medication Use - Opioids

This section provides a breakdown of opioid use in B.C. by number of dispenses, patients, prescribers, pharmacies, main ingredient, dose, client age, sex, and LHA.

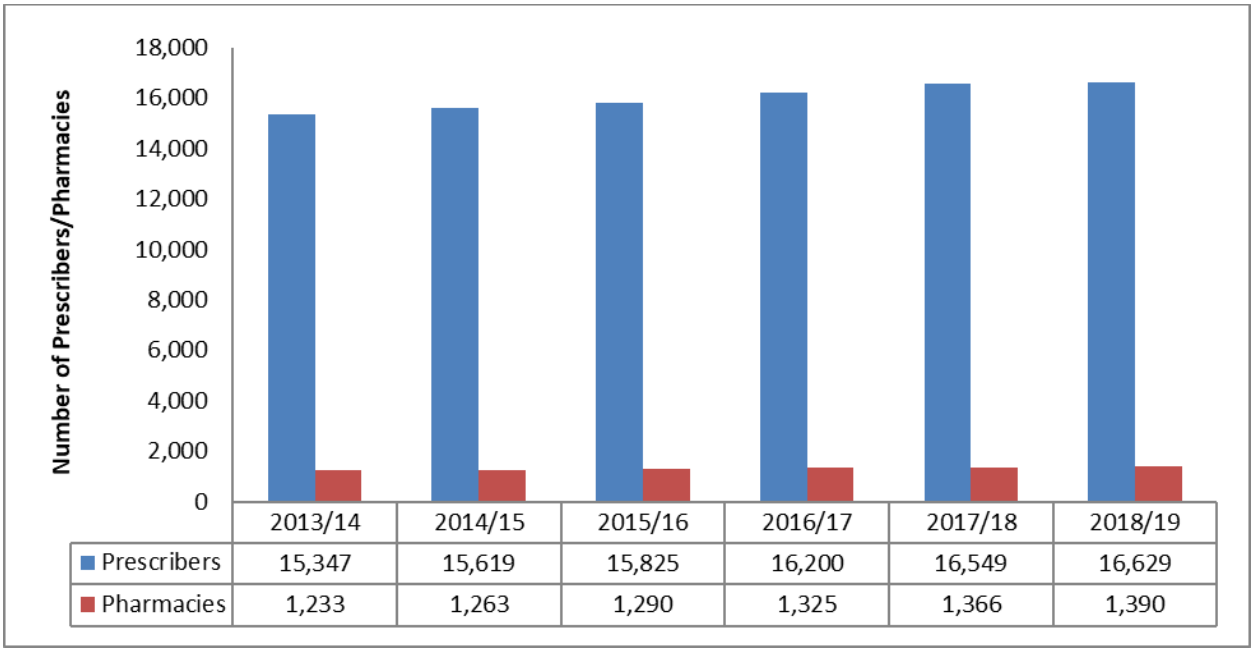
3.1 Opioid Dispenses

Figure 1: Number of Opioid Dispenses and Patients, 2013/14 - 2018/19



	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Dispenses	3,164,799	3,169,858	3,137,941	2,965,464	2,751,497	2,579,766
Patients	710,037	706,370	697,492	681,326	649,564	624,792

Figure 2: Number of Opioid Prescribers and Pharmacies, 2013/14 - 2018/19



	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Prescribers	15,347	15,619	15,825	16,200	16,549	16,629
Pharmacies	1,233	1,263	1,290	1,325	1,366	1,390

Table 1: Number of Dispenses, Patients, Prescribers and Pharmacies by Main Ingredient, 2018/19

Main Ingredient	Dispenses	Patients	Prescribers	Pharmacies
Codeine	1,036,702	425,590	14,614	1,373
Hydromorphone	584,541	80,112	8,482	1,363
Tramadol	333,898	153,934	10,331	1,348
Morphine	251,656	21,720	5,856	1,277
Oxycodone	240,594	34,389	6,622	1,316
Methadone	55,094	3,620	1,178	910
Fentanyl	51,566	4,540	2,956	990
Buprenorphine	12,279	1,965	1,114	677
Meperidine	4,998	858	748	540
Tapentadol	3,277	383	341	287
Sufentanil	2,678	762	415	215
Hydrocodone	1,614	1,042	578	438
Butorphanol	583	41	52	41
Pentazocine	286	46	62	46
Total	**2,579,766**	**624,792**	**16,629**	**1,390**

Figure 3: Number and Percentage of Dispenses by Main Ingredient, 2018/19

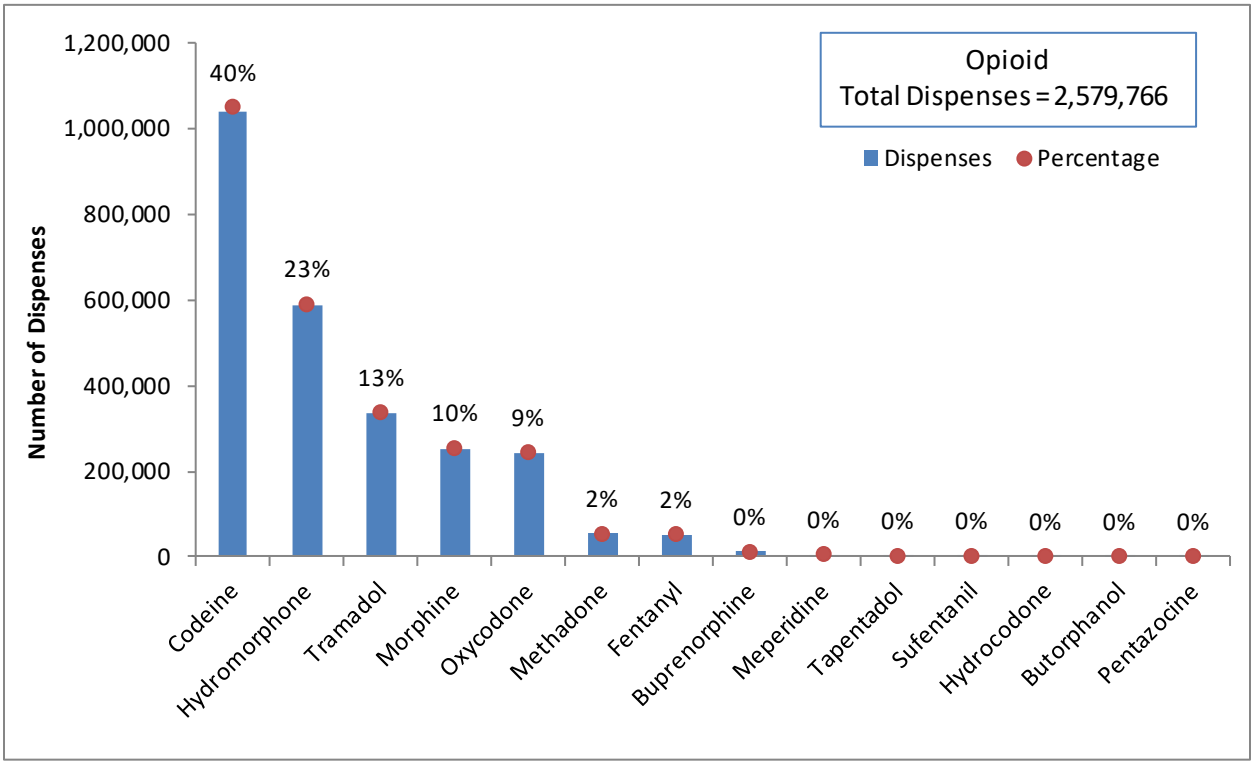
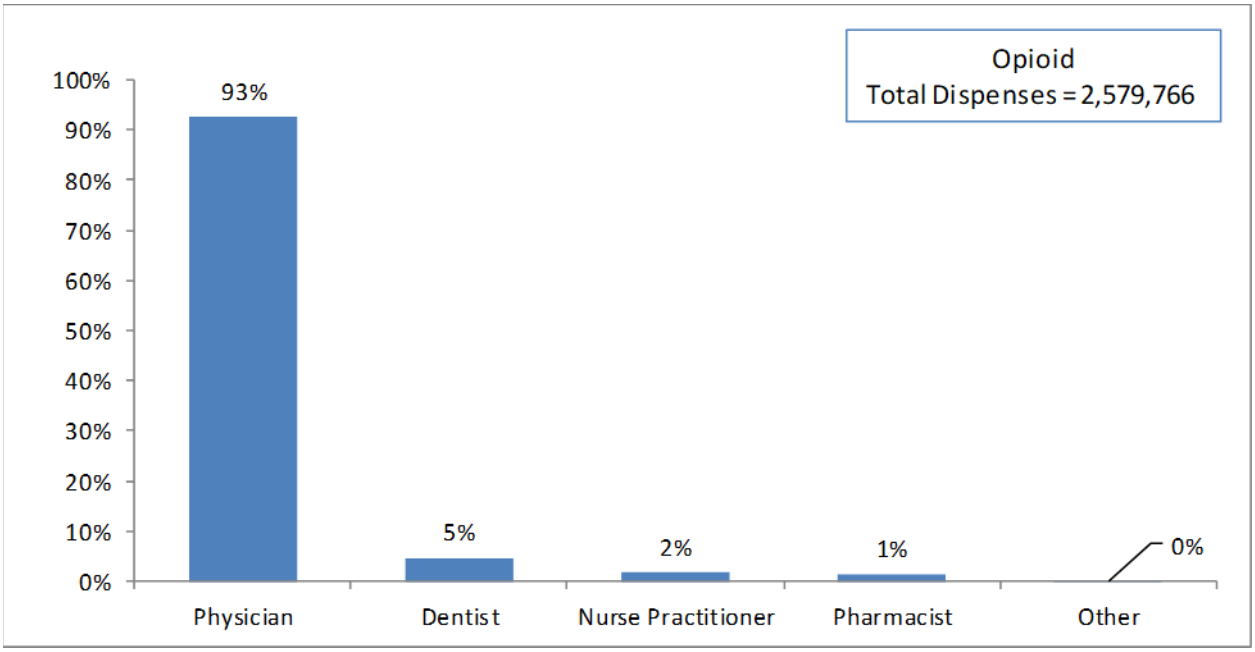


Table 2: Number of Dispenses, Patients, Prescribers and Pharmacies by Top 4 Prescriber Types, 2018/19

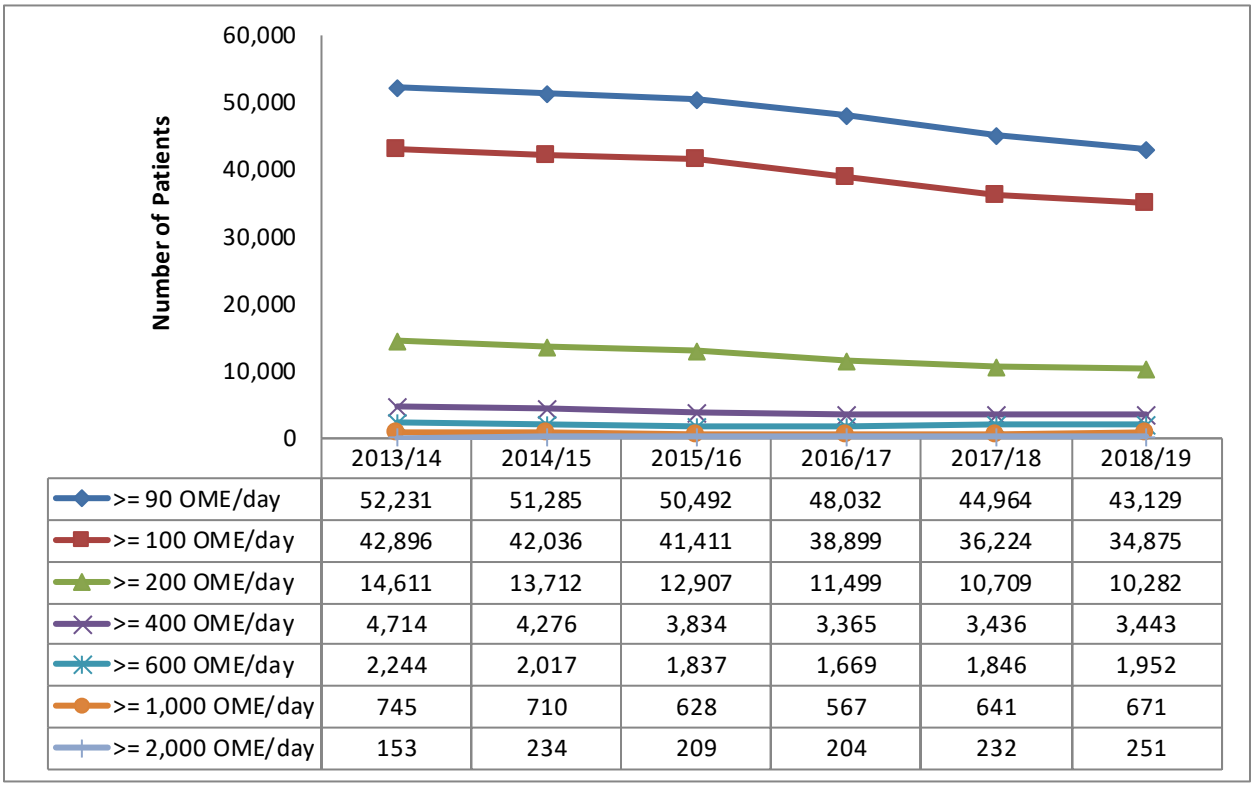
Prescriber Type	Dispenses	Patients	Prescribers	Pharmacies
Physician	2,387,112	528,064	10,977	1,390
Dentist	117,633	100,195	3,015	1,348
Nurse Practitioner	41,988	6,997	378	1,056
Pharmacist	32,060	18,691	2,115	964

Figure 4: Percentage of Dispenses by Prescriber Type, 2018/19



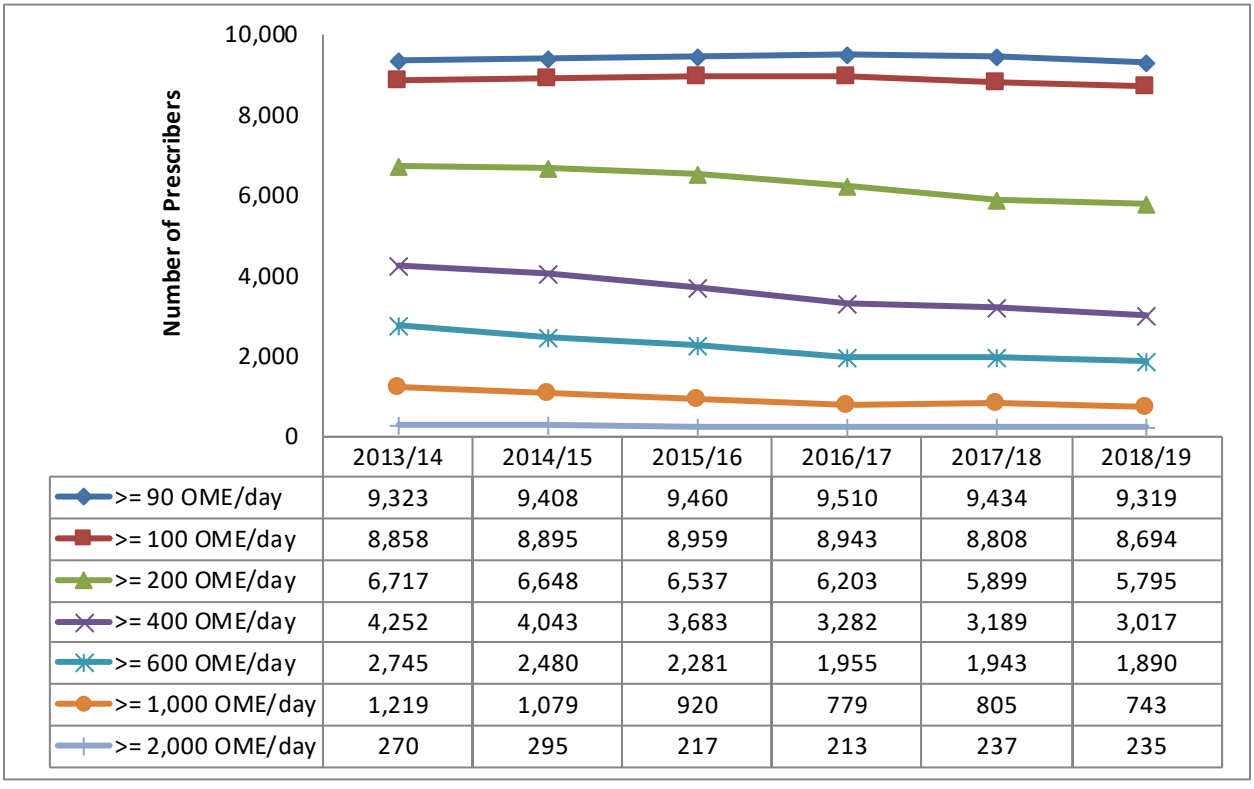
Note: The prescriber type category "other" includes naturopathic physicians, podiatrists, midwives, optometrists, speech pathologists and others.

Figure 5: Number of Patients by High Dose, 2013/14 - 2018/19



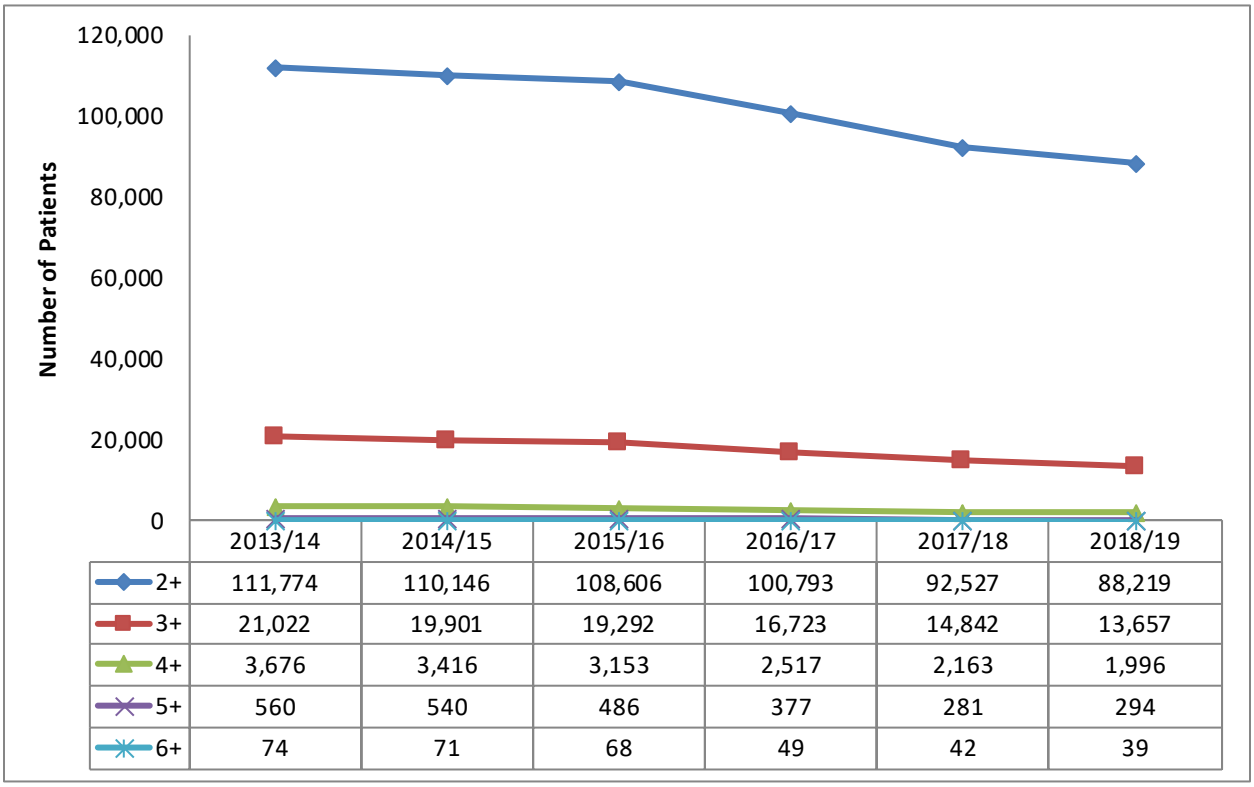
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
>= 90 OME/day	52,231	51,285	50,492	48,032	44,964	43,129
>= 100 OME/day	42,896	42,036	41,411	38,899	36,224	34,875
>= 200 OME/day	14,611	13,712	12,907	11,499	10,709	10,282
>= 400 OME/day	4,714	4,276	3,834	3,365	3,436	3,443
>= 600 OME/day	2,244	2,017	1,837	1,669	1,846	1,952
>= 1,000 OME/day	745	710	628	567	641	671
>= 2,000 OME/day	153	234	209	204	232	251

Figure 6: Number of Prescribers by High Dose, 2013/14 - 2018/19



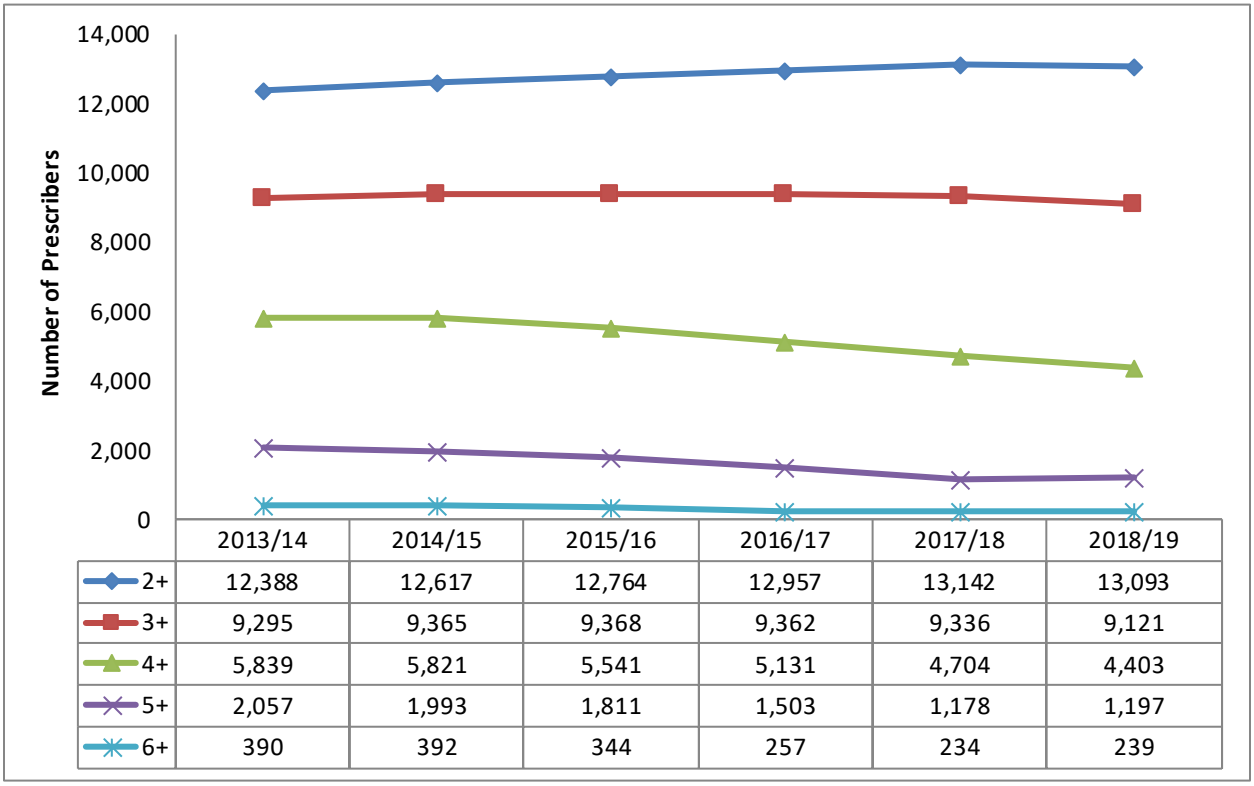
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
>= 90 OME/day	9,323	9,408	9,460	9,510	9,434	9,319
>= 100 OME/day	8,858	8,895	8,959	8,943	8,808	8,694
>= 200 OME/day	6,717	6,648	6,537	6,203	5,899	5,795
>= 400 OME/day	4,252	4,043	3,683	3,282	3,189	3,017
>= 600 OME/day	2,745	2,480	2,281	1,955	1,943	1,890
>= 1,000 OME/day	1,219	1,079	920	779	805	743
>= 2,000 OME/day	270	295	217	213	237	235

Figure 7: Number of Patients by Ingredient Count, 2013/14 - 2018/19



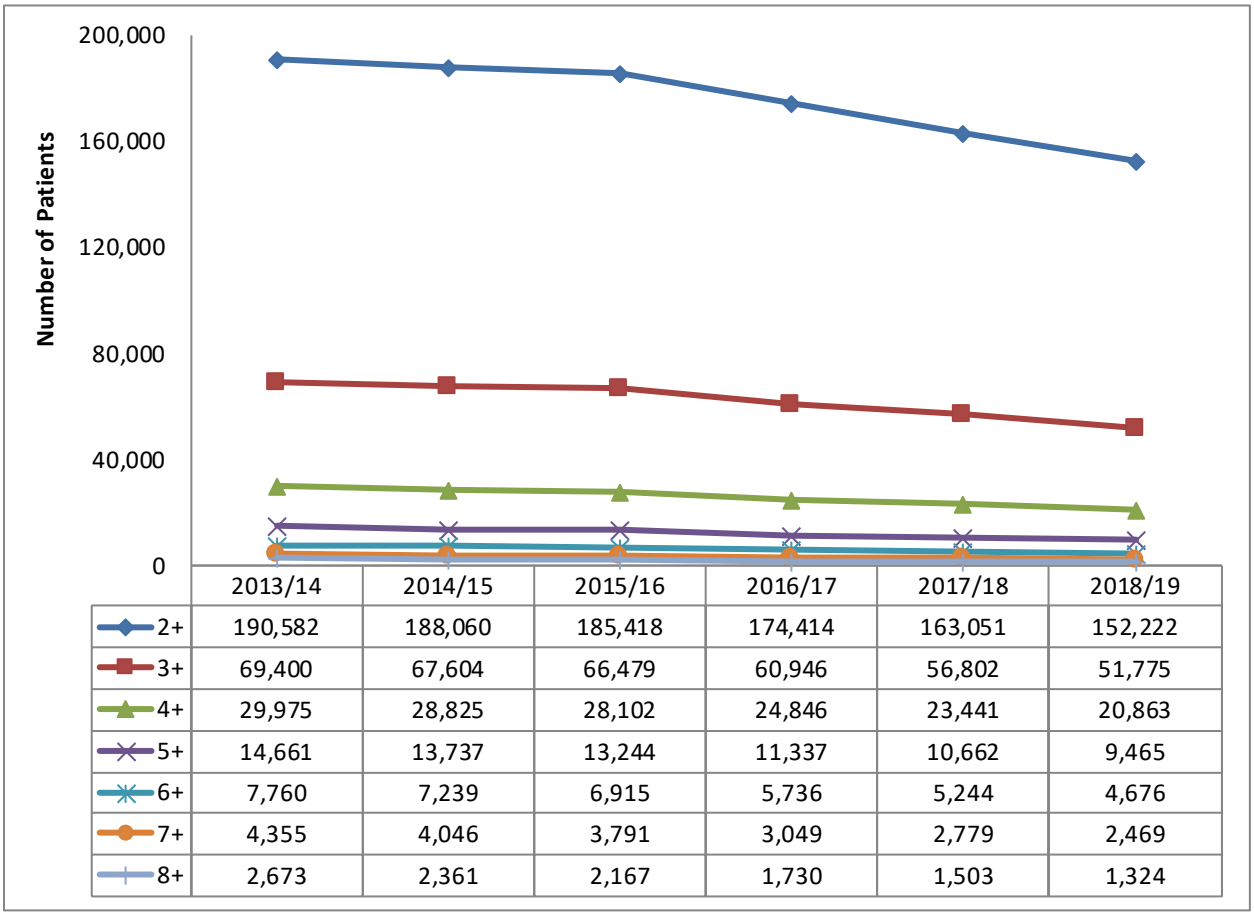
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
2+	111,774	110,146	108,606	100,793	92,527	88,219
3+	21,022	19,901	19,292	16,723	14,842	13,657
4+	3,676	3,416	3,153	2,517	2,163	1,996
5+	560	540	486	377	281	294
6+	74	71	68	49	42	39

Figure 8: Number of Prescribers by Ingredient Count, 2013/14 - 2018/19



	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
2+	12,388	12,617	12,764	12,957	13,142	13,093
3+	9,295	9,365	9,368	9,362	9,336	9,121
4+	5,839	5,821	5,541	5,131	4,704	4,403
5+	2,057	1,993	1,811	1,503	1,178	1,197
6+	390	392	344	257	234	239

Figure 9: Number of Patients by Prescriber Count[8], 2013/14 - 2018/19



	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
2+	190,582	188,060	185,418	174,414	163,051	152,222
3+	69,400	67,604	66,479	60,946	56,802	51,775
4+	29,975	28,825	28,102	24,846	23,441	20,863
5+	14,661	13,737	13,244	11,337	10,662	9,465
6+	7,760	7,239	6,915	5,736	5,244	4,676
7+	4,355	4,046	3,791	3,049	2,779	2,469
8+	2,673	2,361	2,167	1,730	1,503	1,324

[8] Each category represents how many prescribers ordered opioids for the same patient during the fiscal year.

3.2 Opioid Patients by Age and Sex

Figure 10: Number of Patients by Age Group, 2013/14 - 2018/19

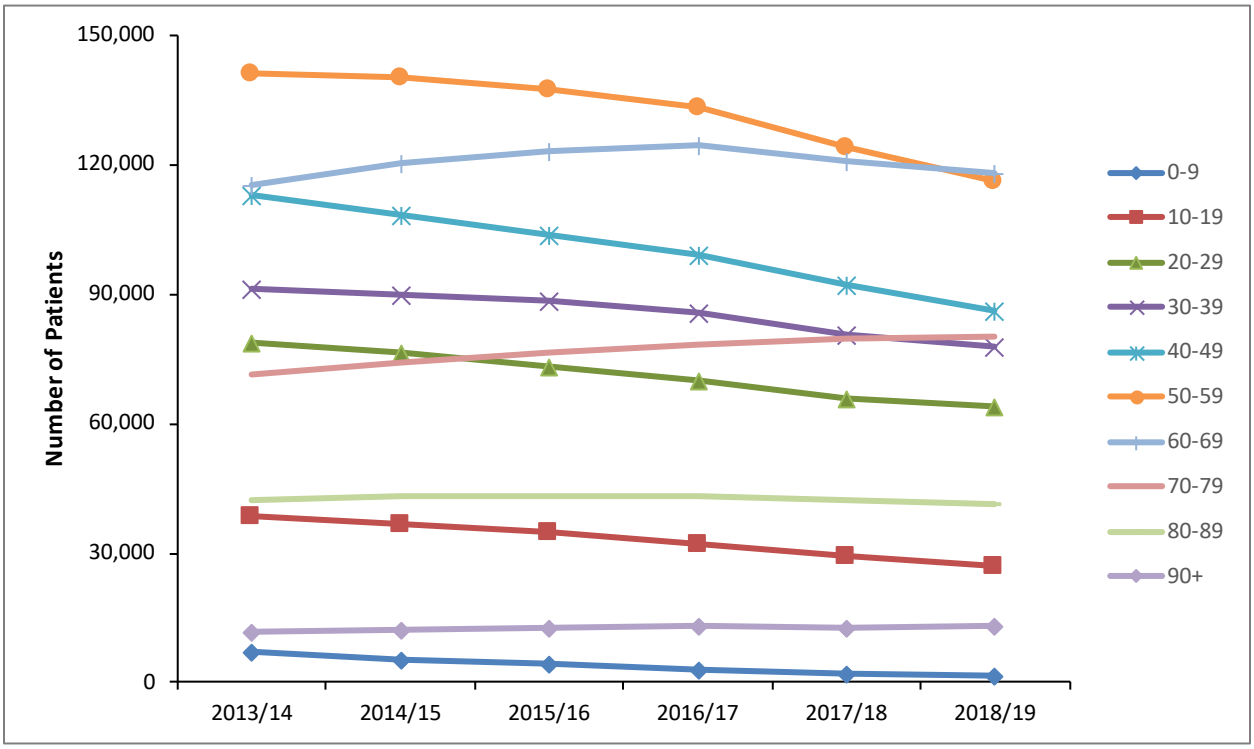
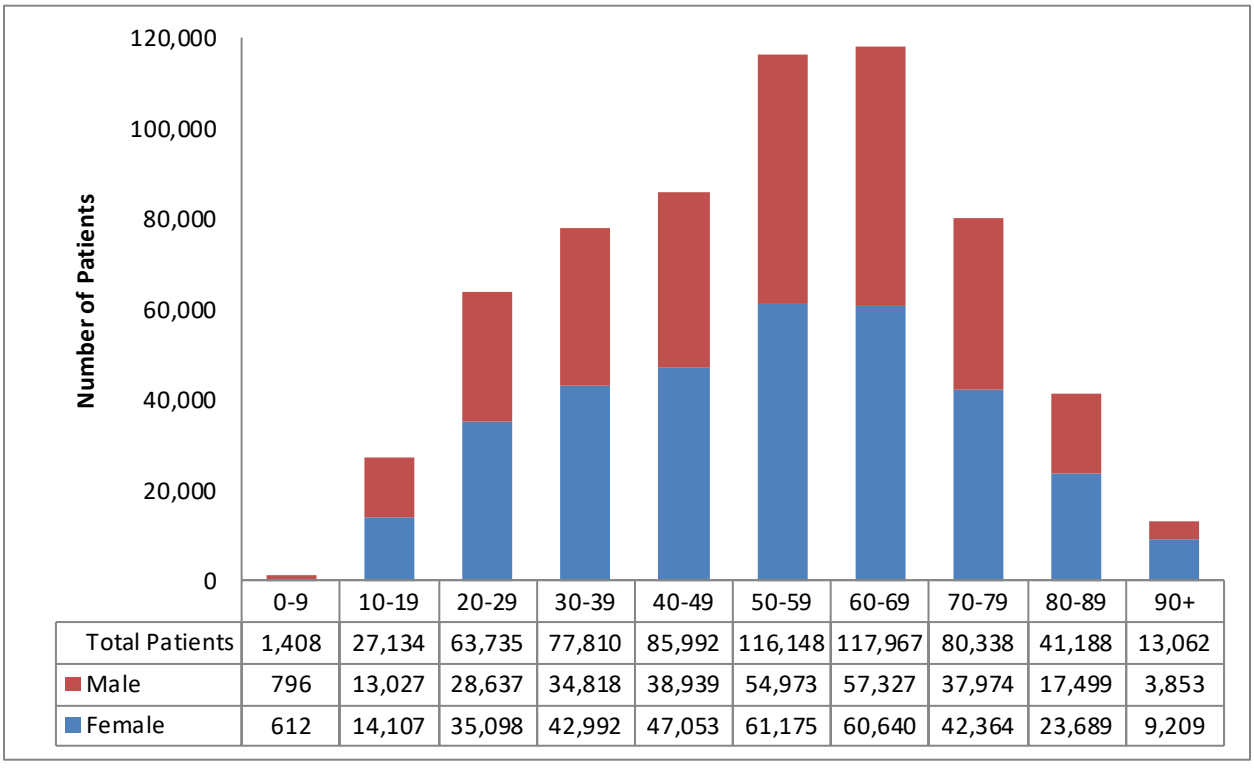
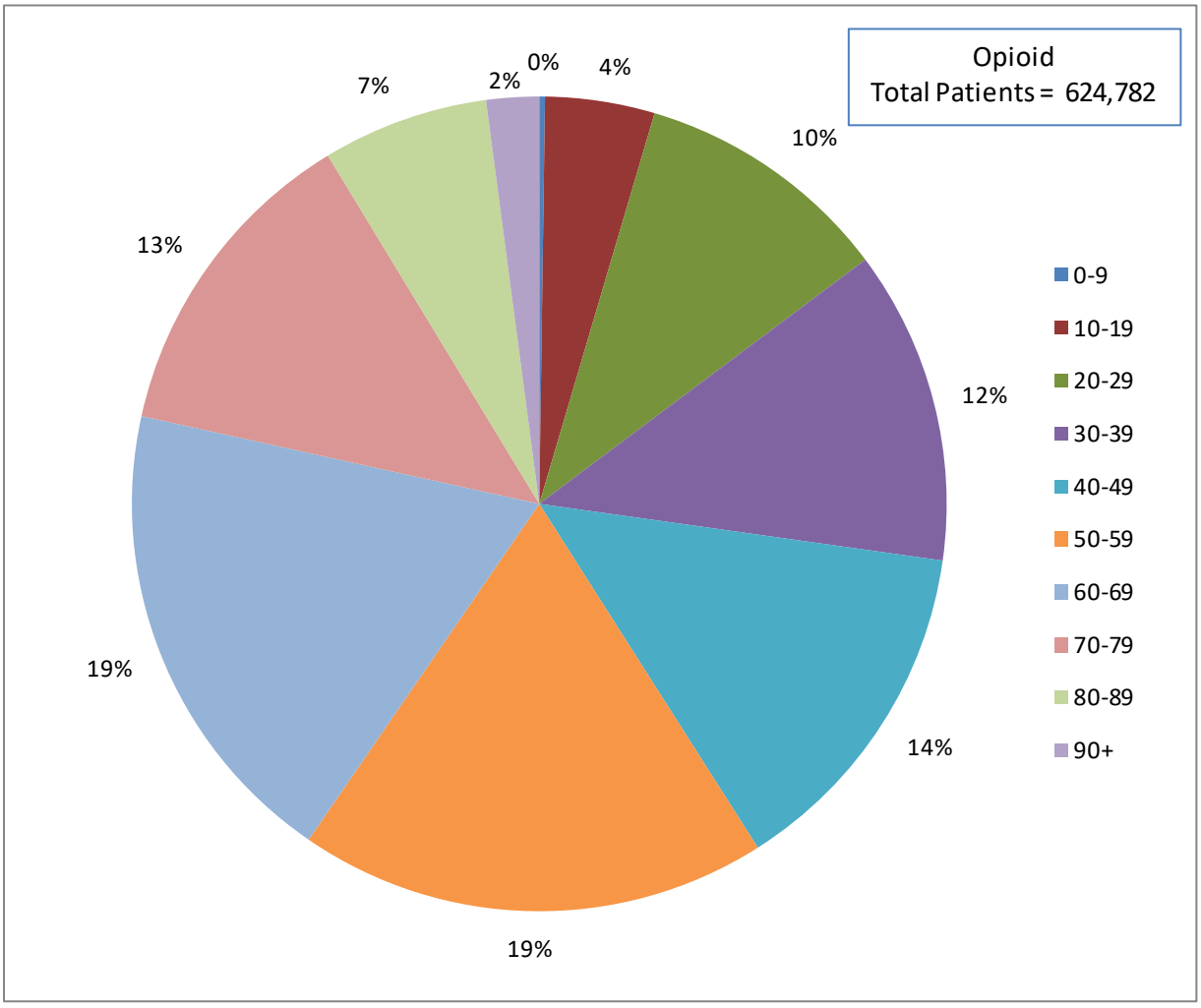


Figure 11: Number of Patients by Age Group and Sex, 2018/19



	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90+
Total Patients	1,408	27,134	63,735	77,810	85,992	116,148	117,967	80,338	41,188	13,062
Male	796	13,027	28,637	34,818	38,939	54,973	57,327	37,974	17,499	3,853
Female	612	14,107	35,098	42,992	47,053	61,175	60,640	42,364	23,689	9,209

Figure 12: Percentage of Patients by Age Group, 2018/19



Note: For 2018/19 age group charts above, opioid patients do not include patients with unknown sex (3), unknown age (3) or unknown age and sex (4).

3.3 Opioid Age and Sex Standardization by LHA

Figure 13: Opioid Consumption, 2018/19

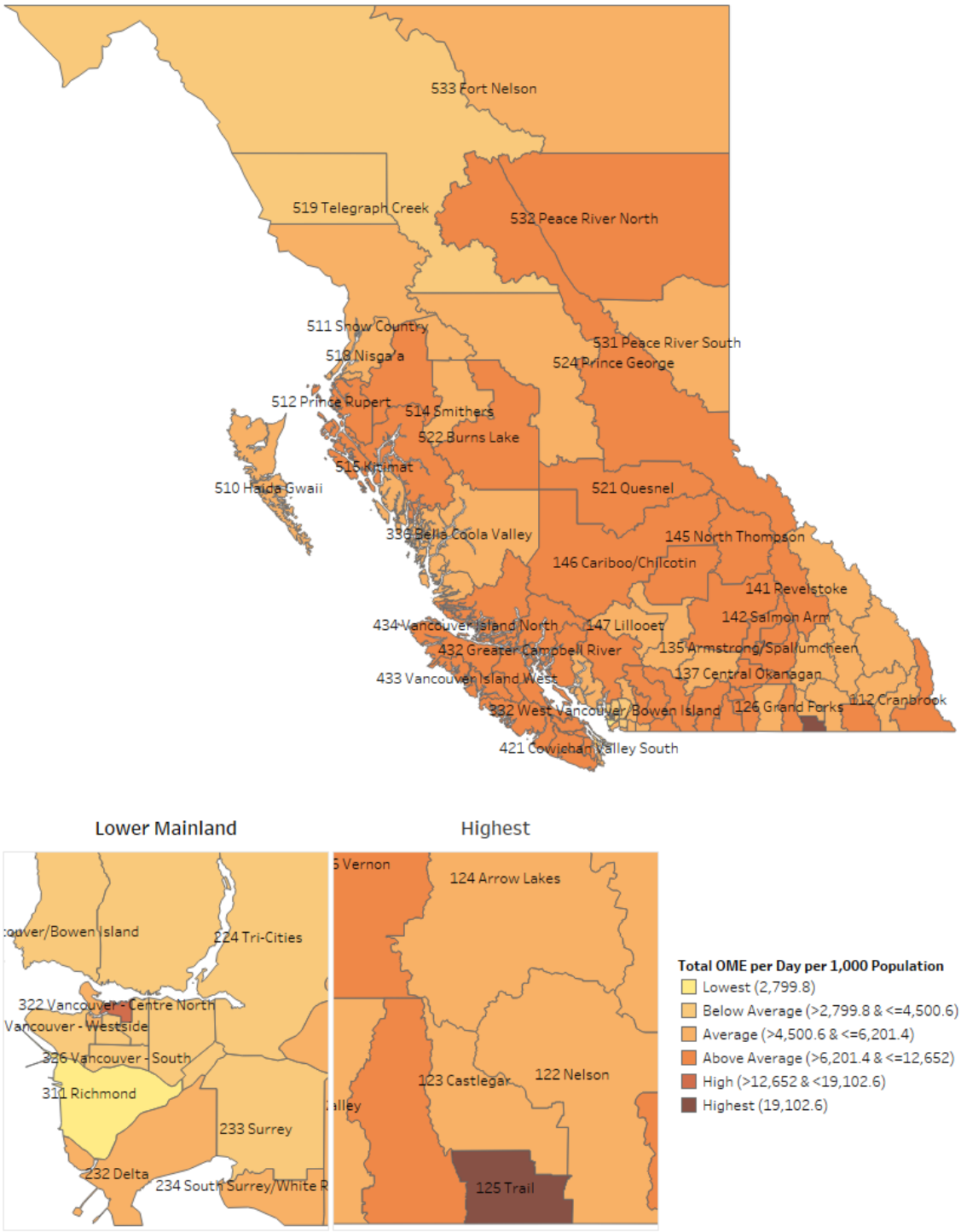


Figure 14: Opioid Consumption, 2018/19

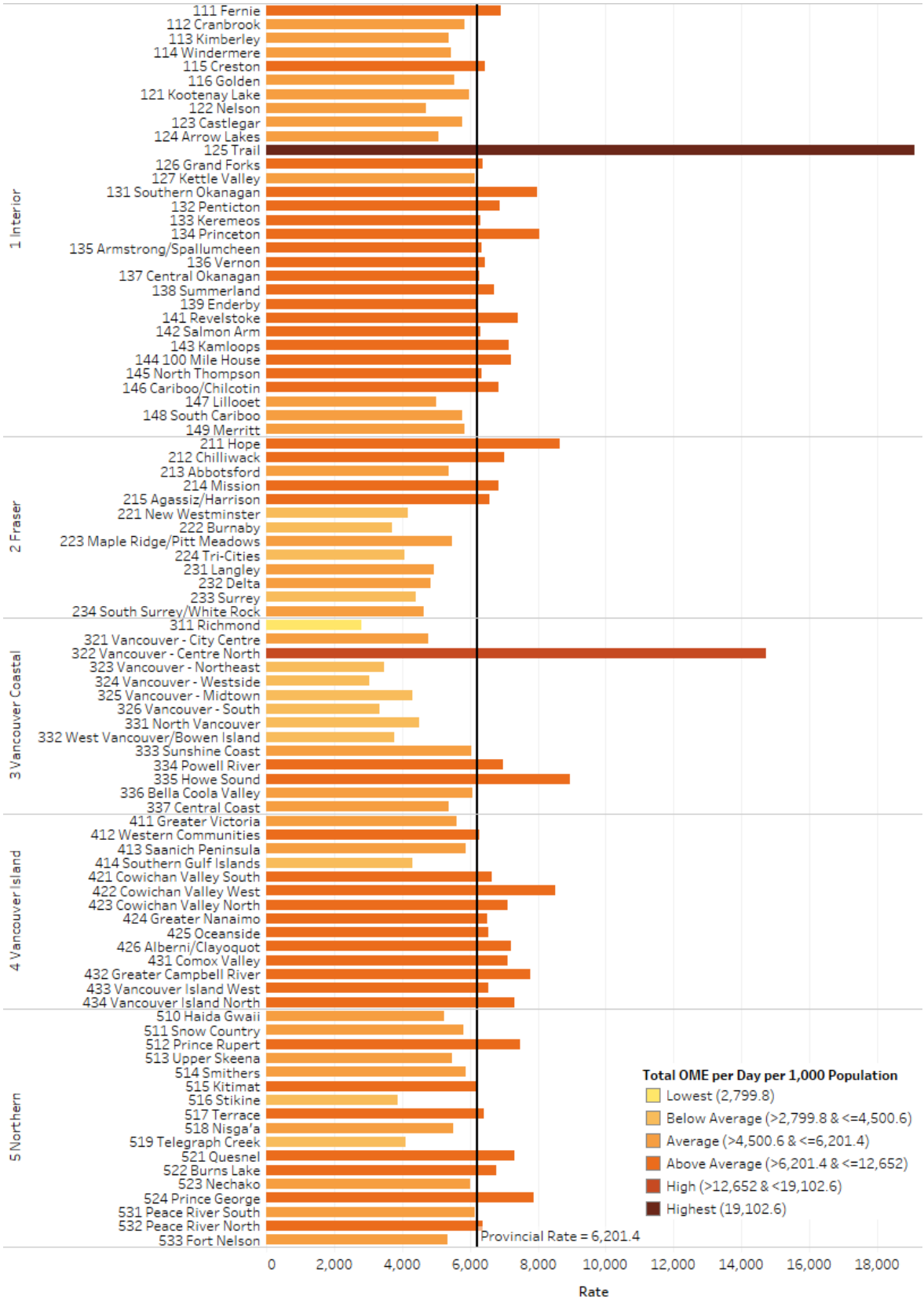


Figure 15: Number of Opioid Patients, 2018/19

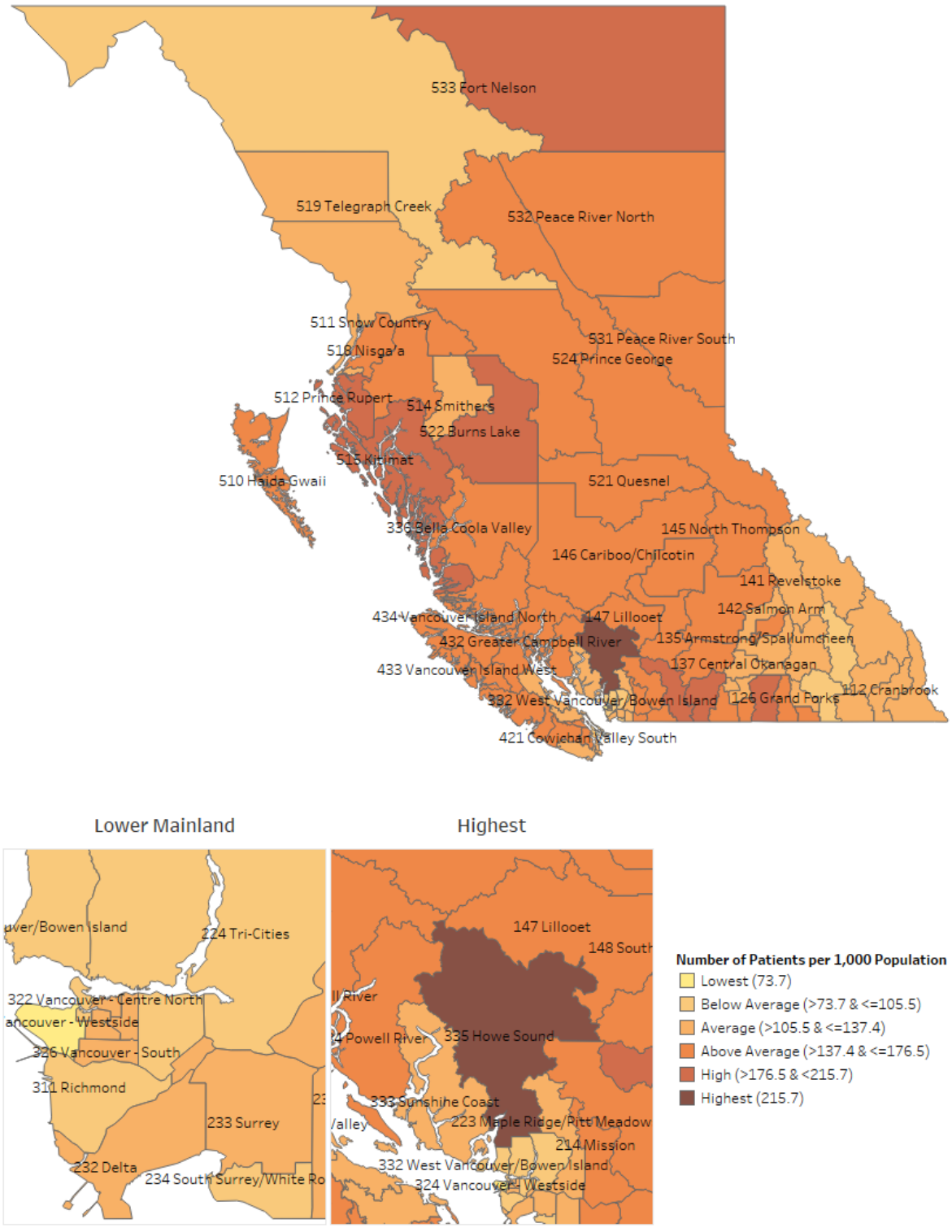


Figure 16: Number of Opioid Patients, 2018/19

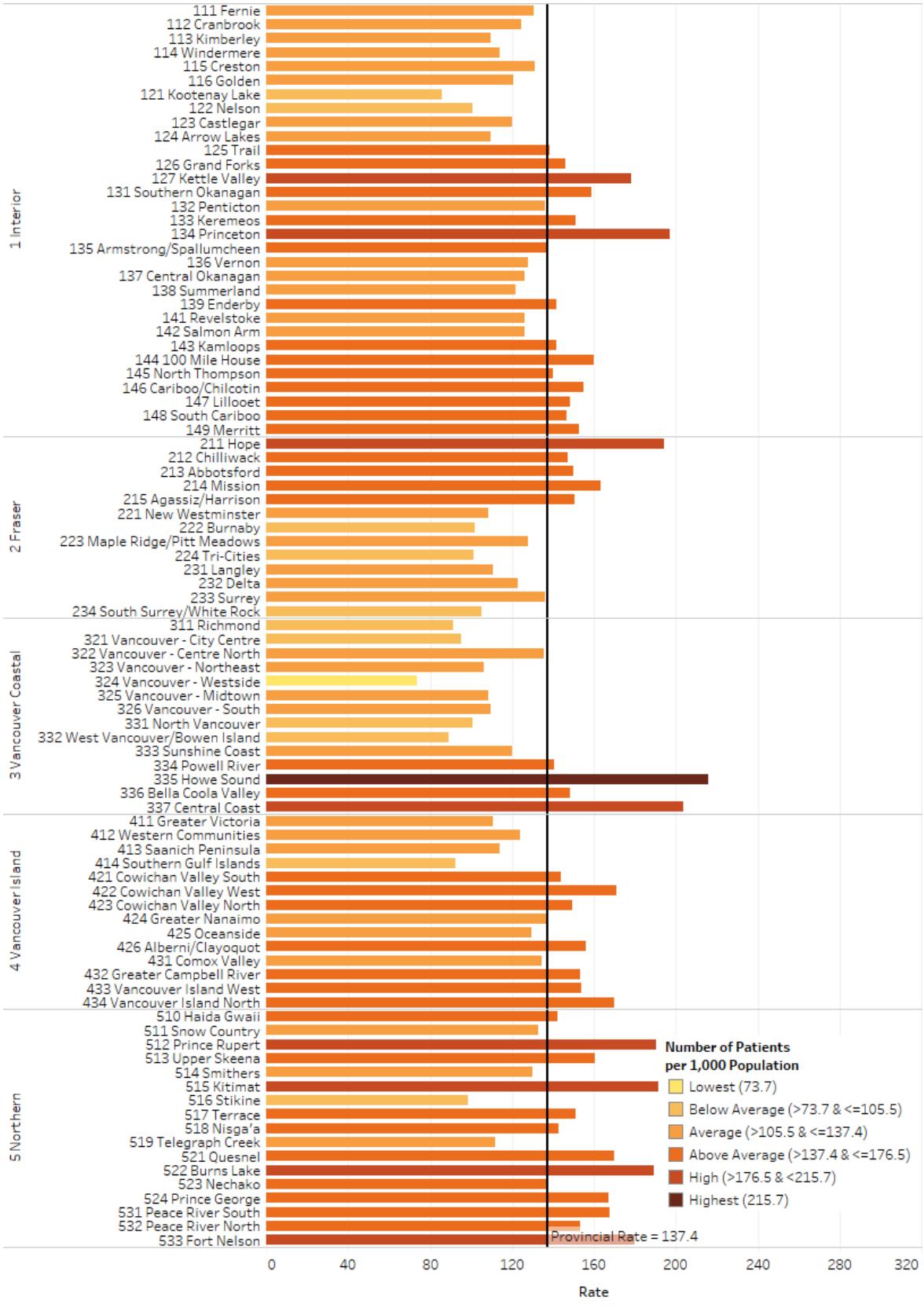


Figure 17: Number of High Dose Opioid Patients (90+ OME), 2018/19

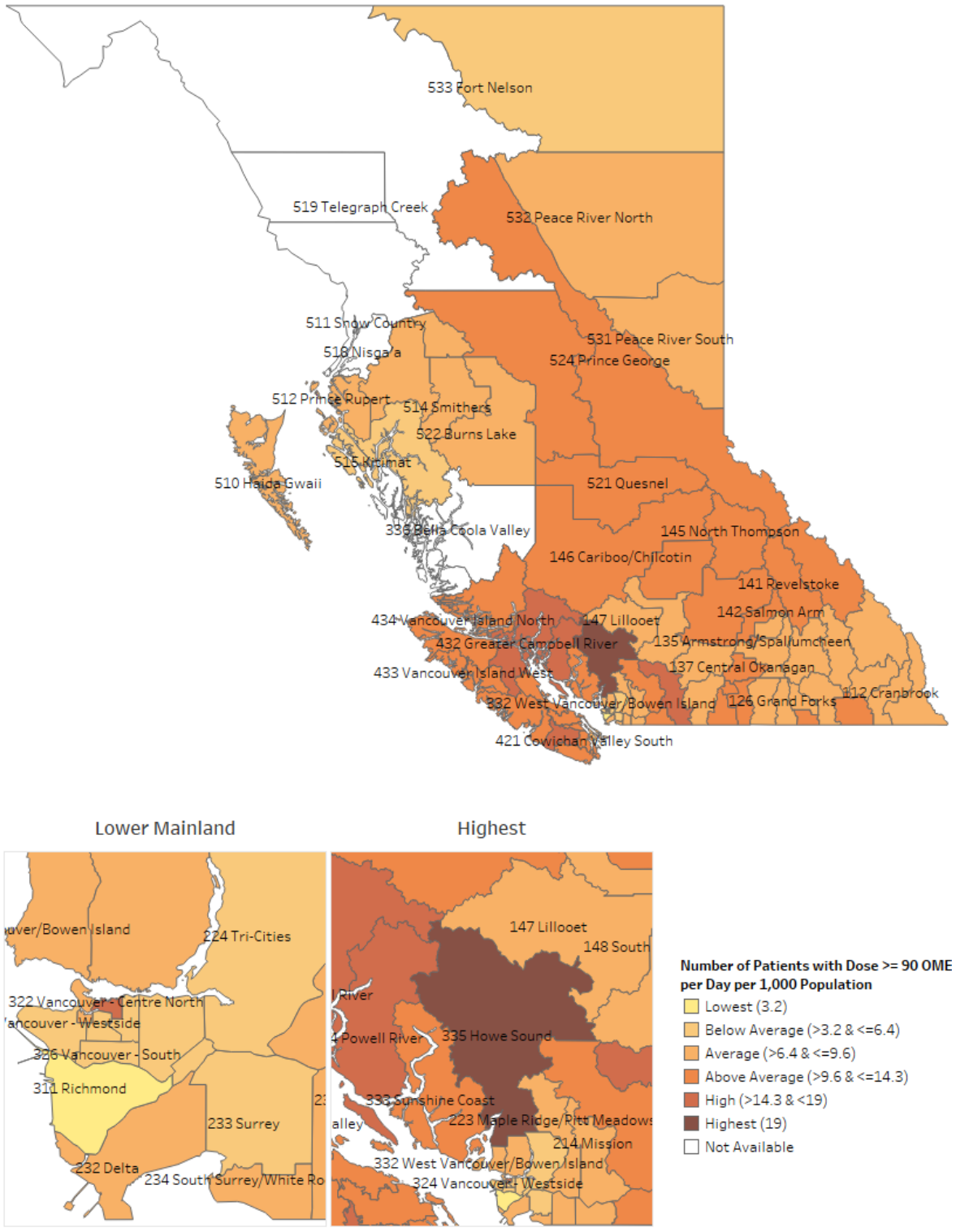


Figure 18: Number of High Dose Opioid Patients (90+ OME), 2018/19

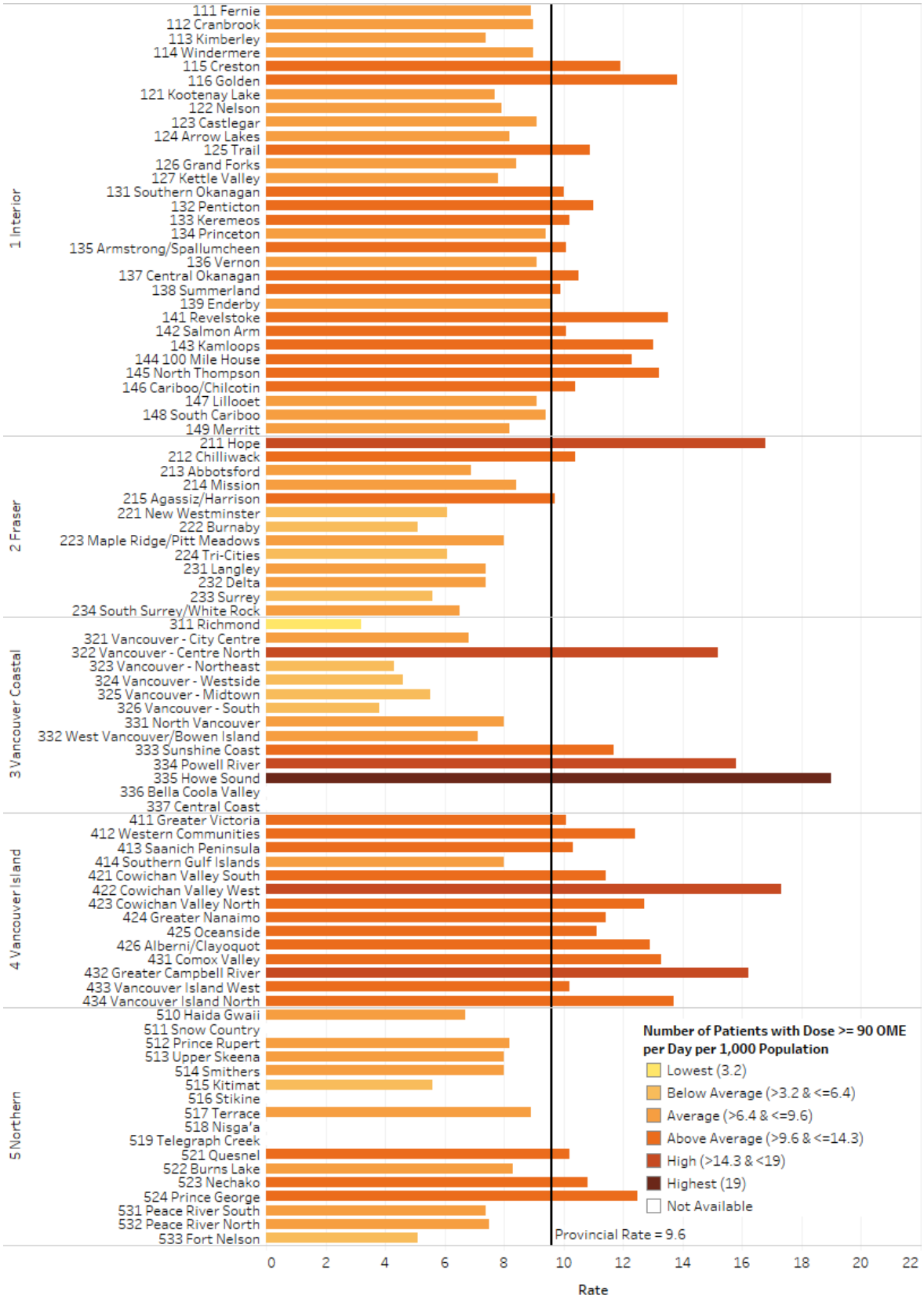


Figure 19: Number of High Dose Opioid Patients (200+ OME), 2018/19

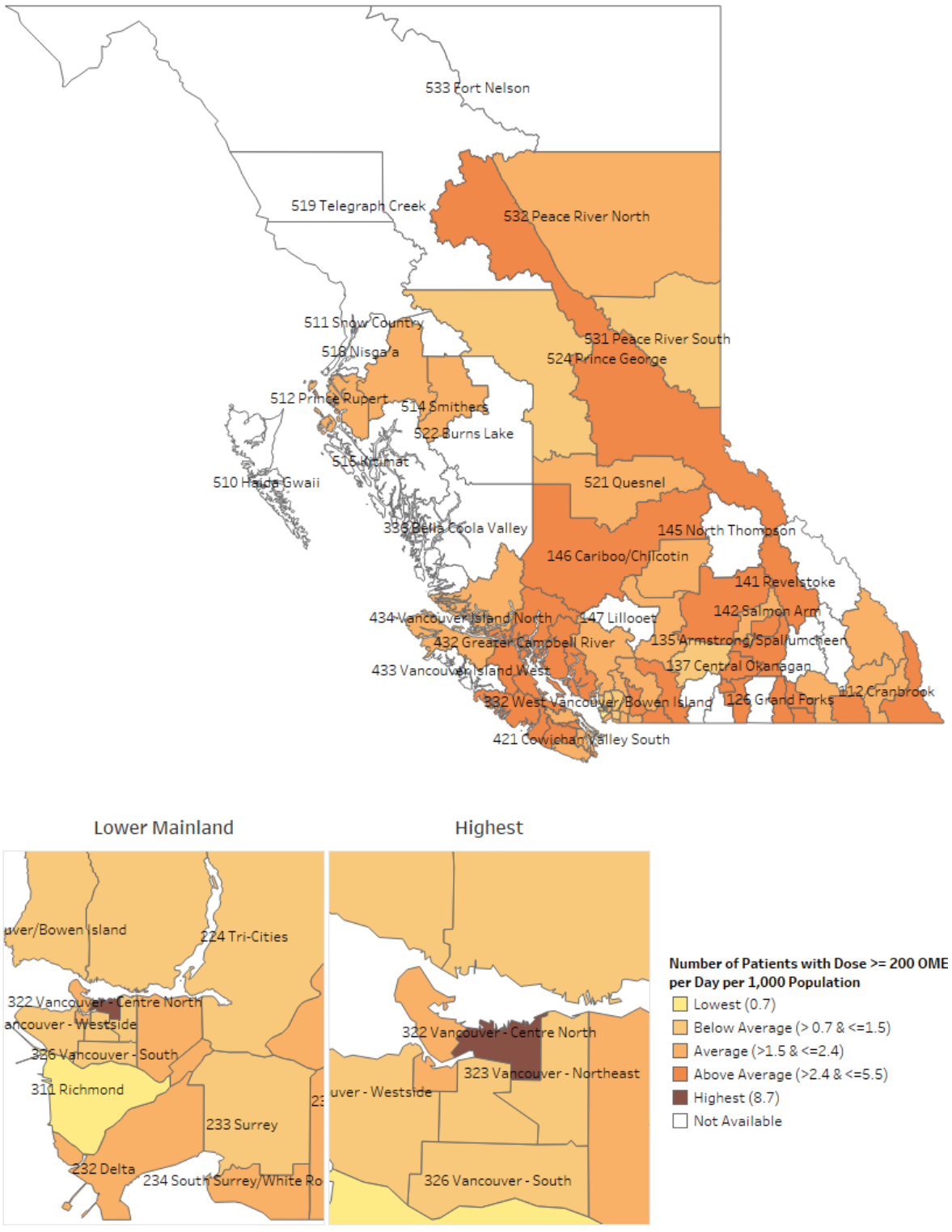
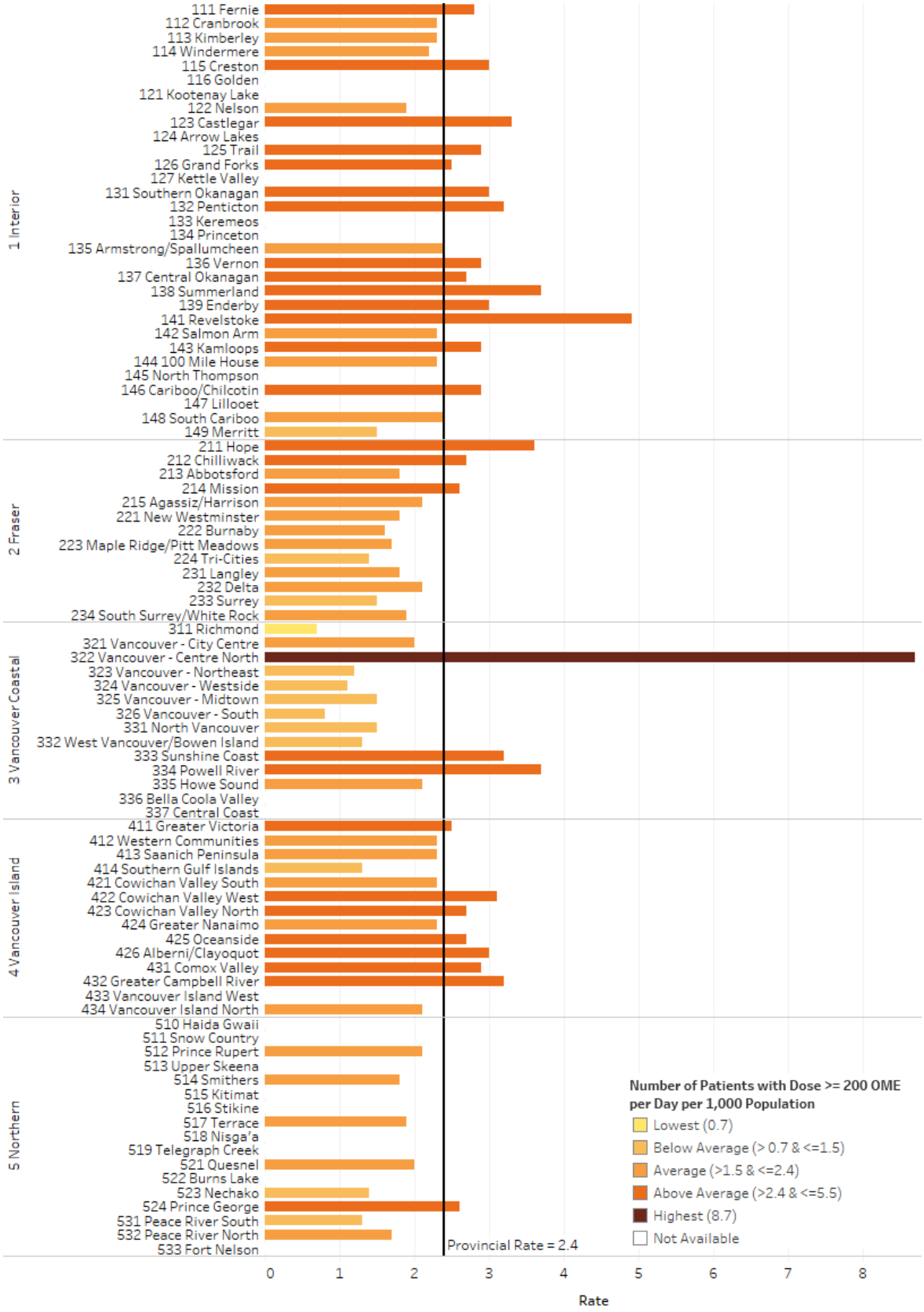


Figure 20: Number of High Dose Opioid Patients (200+ OME), 2018/19

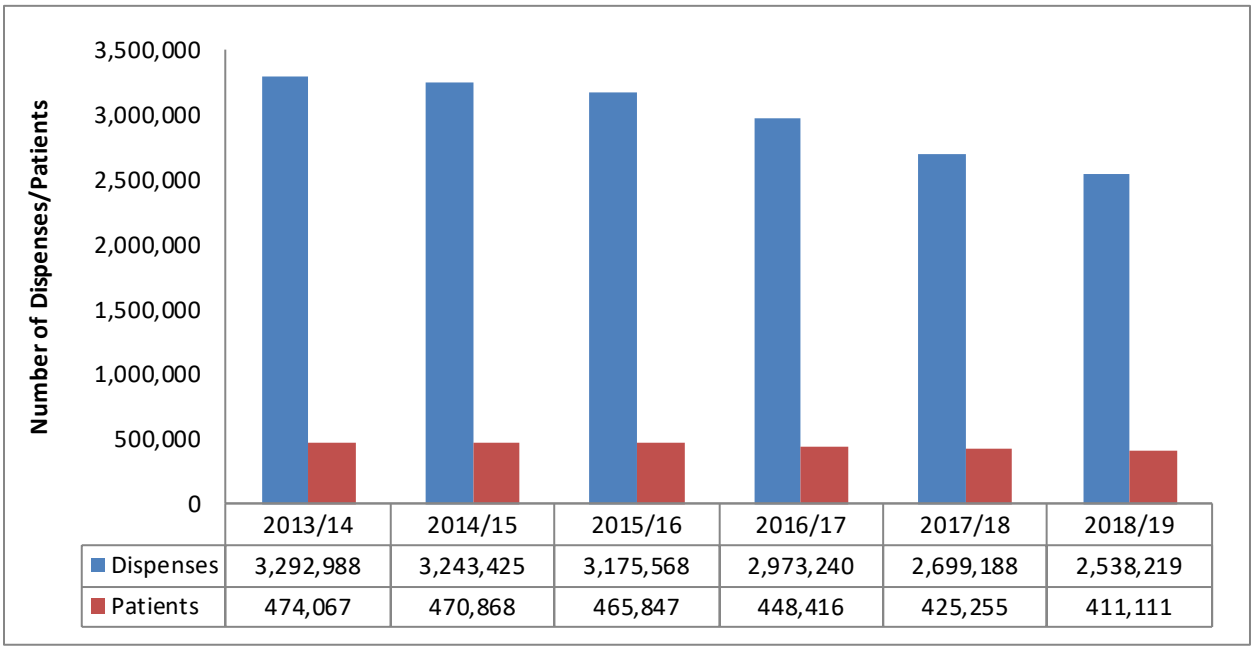


Section 4: Medication Use – Benzodiazepines

This section provides a breakdown of benzodiazepine use in B.C. by number of dispenses, patients, prescribers, pharmacies, main ingredient, dose, client age, sex, and LHA.

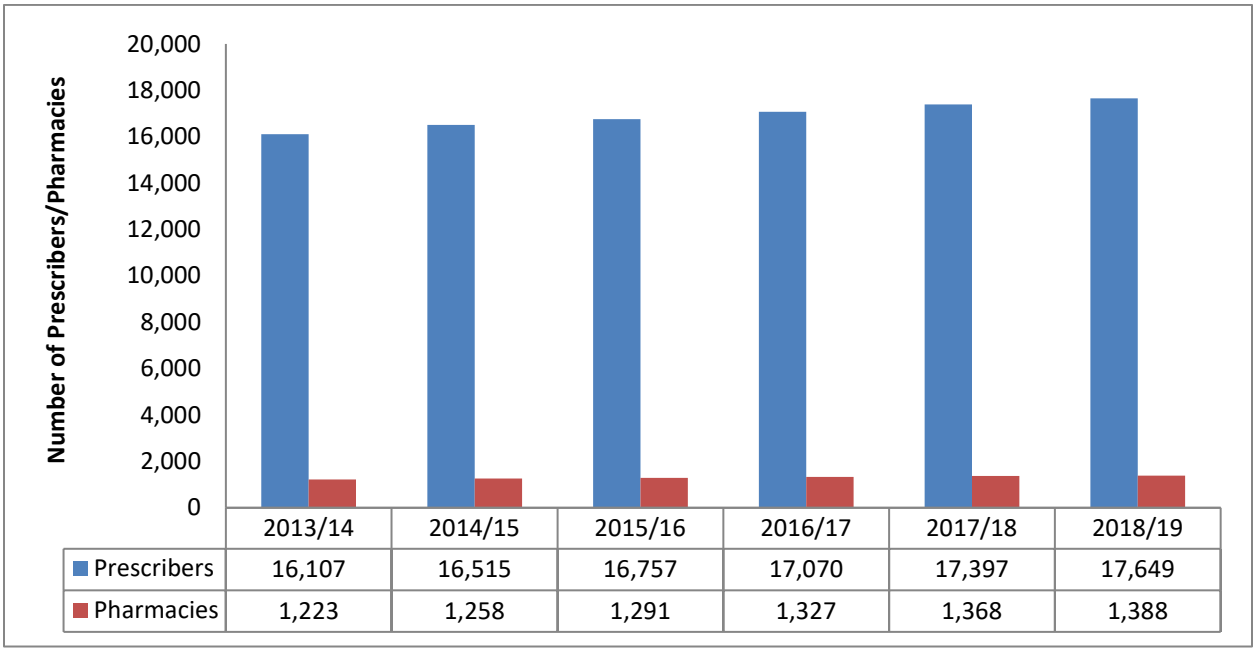
4.1 Benzodiazepine Dispenses

Figure 21: Number of Benzodiazepine Dispenses and Patients, 2013/14 - 2018/19



	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Dispenses	3,292,988	3,243,425	3,175,568	2,973,240	2,699,188	2,538,219
Patients	474,067	470,868	465,847	448,416	425,255	411,111

Figure 22: Number of Benzodiazepine Prescribers and Pharmacies, 2013/14 - 2018/19



	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Prescribers	16,107	16,515	16,757	17,070	17,397	17,649
Pharmacies	1,223	1,258	1,291	1,327	1,368	1,388

Table 3: Number of Dispenses, Patients, Prescribers, Pharmacies by Main Ingredient, 2018/19

Main Ingredient	Dispenses	Patients	Prescribers	Pharmacies
Zopiclone	963,542	167,548	13,105	1,373
Lorazepam	593,582	192,706	13,712	1,373
Clonazepam	538,568	47,970	9,649	1,368
Diazepam	116,563	14,155	5,939	1,304
Oxazepam	103,268	12,875	5,023	1,229
Temazepam	63,738	8,516	4,131	1,194
Alprazolam	50,695	9,290	4,435	1,260
Clobazam	39,231	3,456	3,223	1,056
Zolpidem	38,211	9,859	3,779	1,155
Triazolam	10,164	6,003	1,449	974
Bromazepam	5,611	894	809	507
Midazolam	5,359	3,266	973	545
Nitrazepam	4,056	536	529	370
Clidinium And Psycholeptics	2,249	944	416	382
Chlordiazepoxide	1,610	493	360	307
Flurazepam	1,137	221	259	194
Clorazepate Dipotassium	633	96	132	99
Zaleplon	2	2	1	1
Total	**2,538,219**	**411,111**	**17,649**	**1,388**

Figure 23: Number and Percentage of Dispenses by Main Ingredient, 2018/19

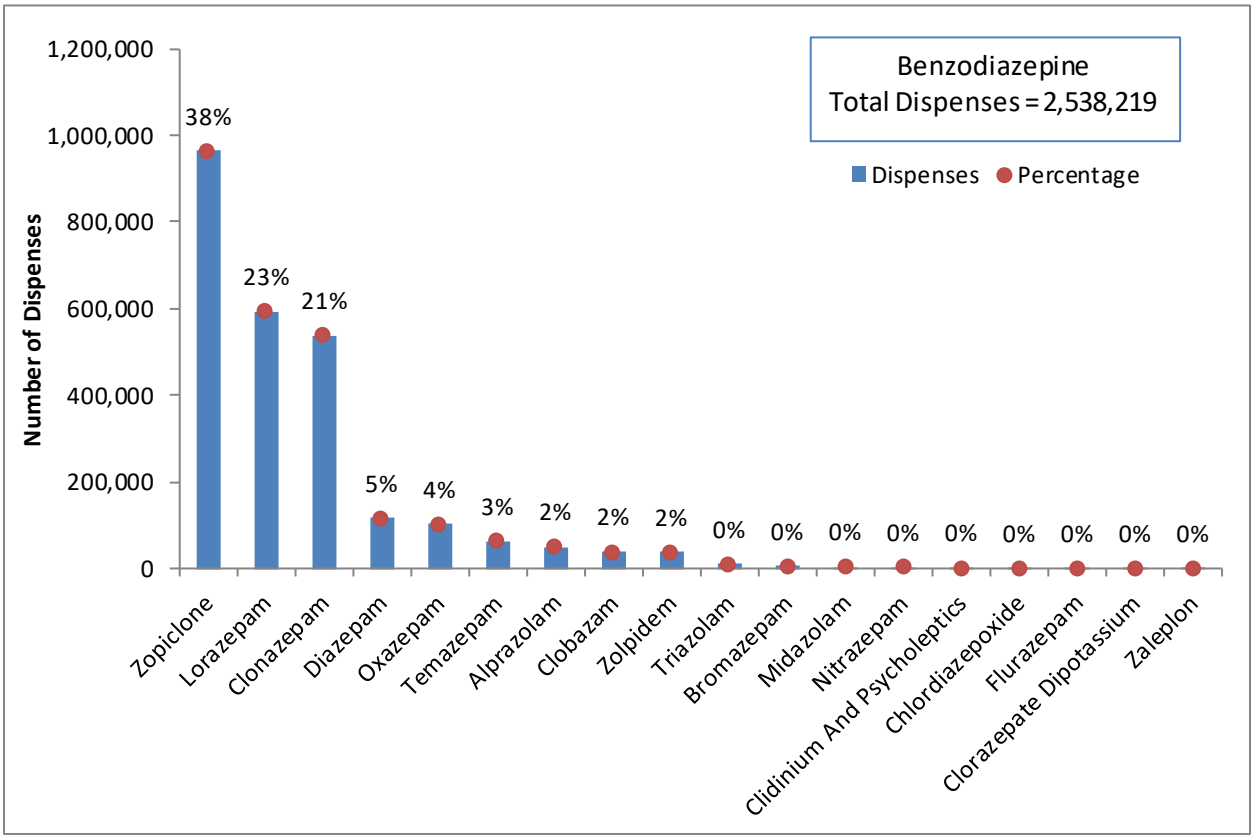
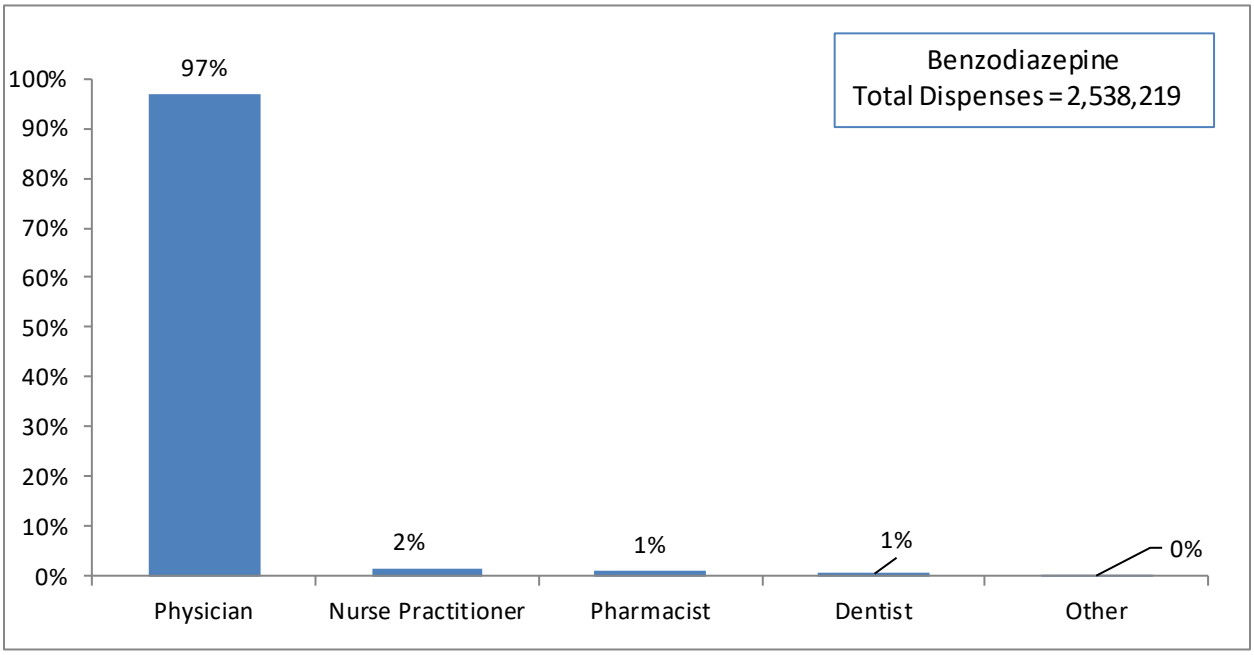


Table 4: Number of Dispenses, Patients, Prescribers and Pharmacies by Top 4 Prescriber Types, 2018/19

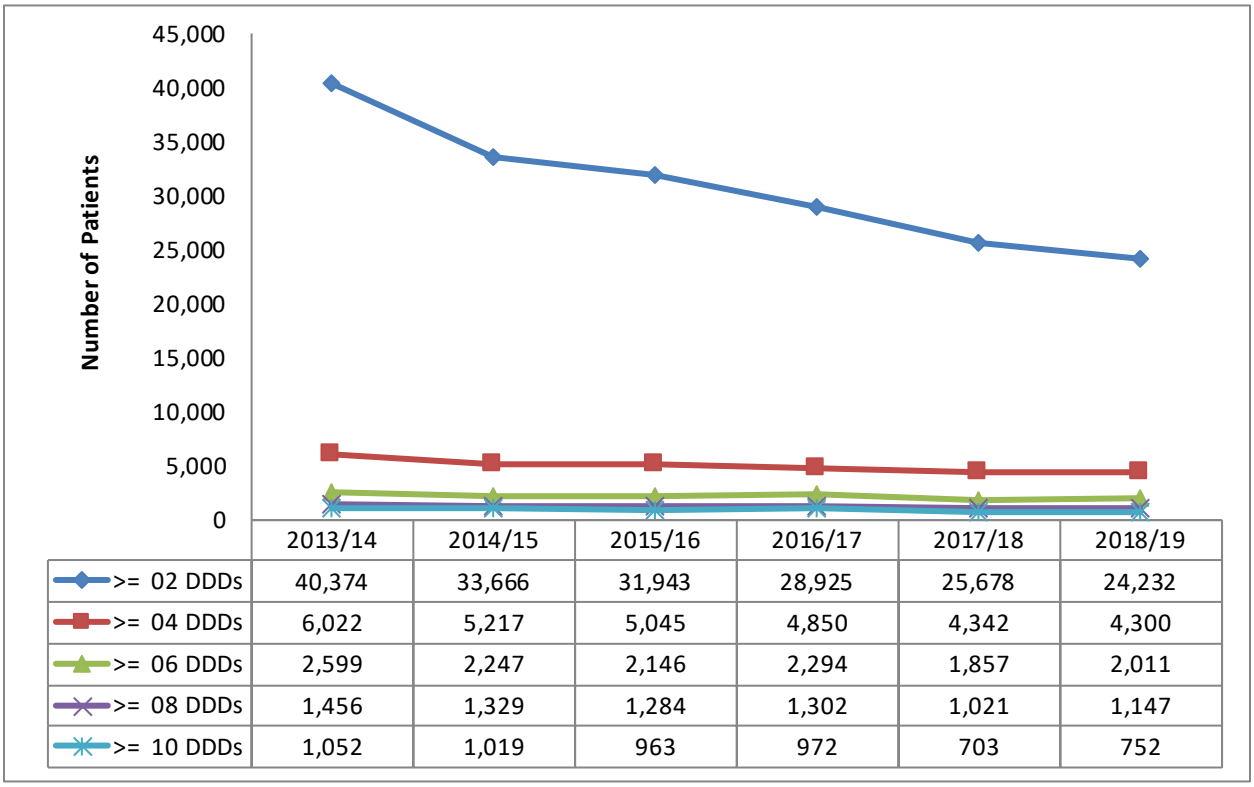
Prescriber Type	Dispenses	Patients	Prescribers	Pharmacies
Physician	2,453,967	396,657	11,691	1,388
Nurse Practitioner	39,413	5,878	414	978
Pharmacist	27,054	15,693	3,356	1,242
Dentist	15,956	13,112	1,919	1,169

Figure 24: Percentage of Dispenses by Prescriber Type, 2018/19



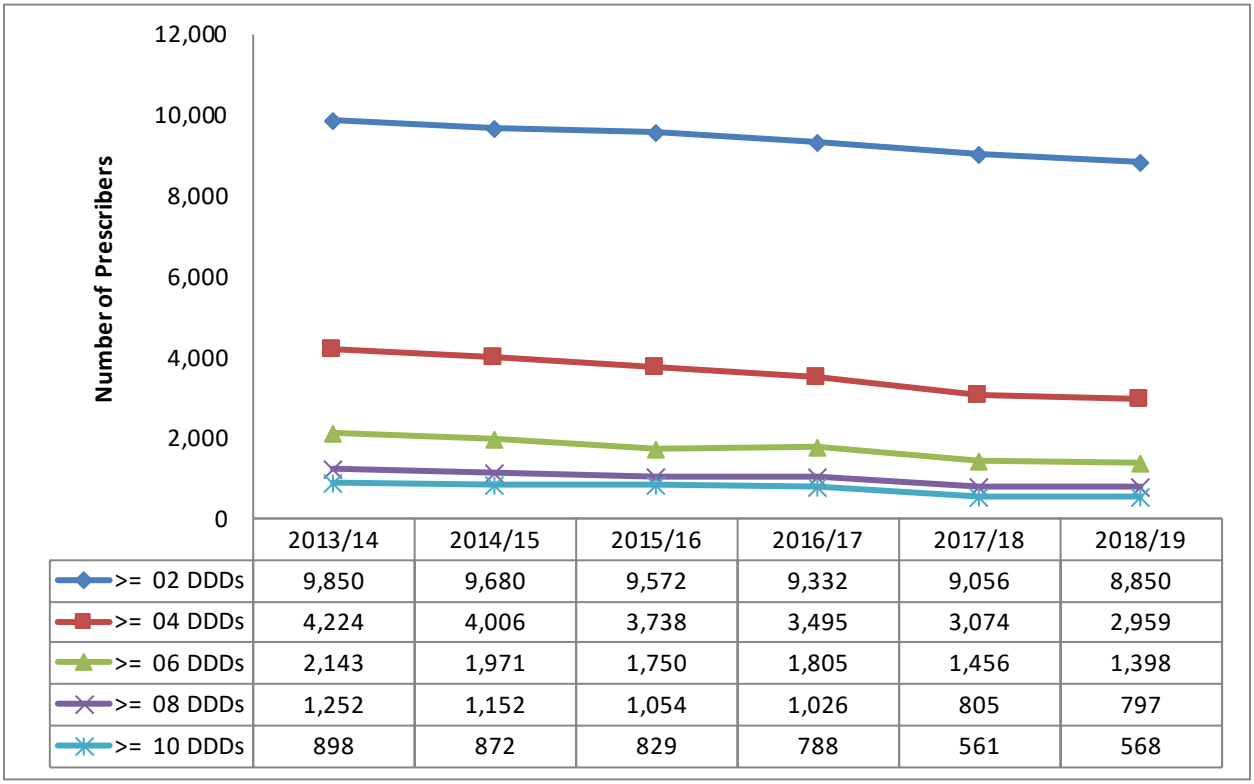
Note: The prescriber type category "other" includes naturopathic physicians, podiatrists, midwives, optometrists, speech pathologists and others.

Figure 25: Number of Patients by High Dose, 2013/14 - 2018/19



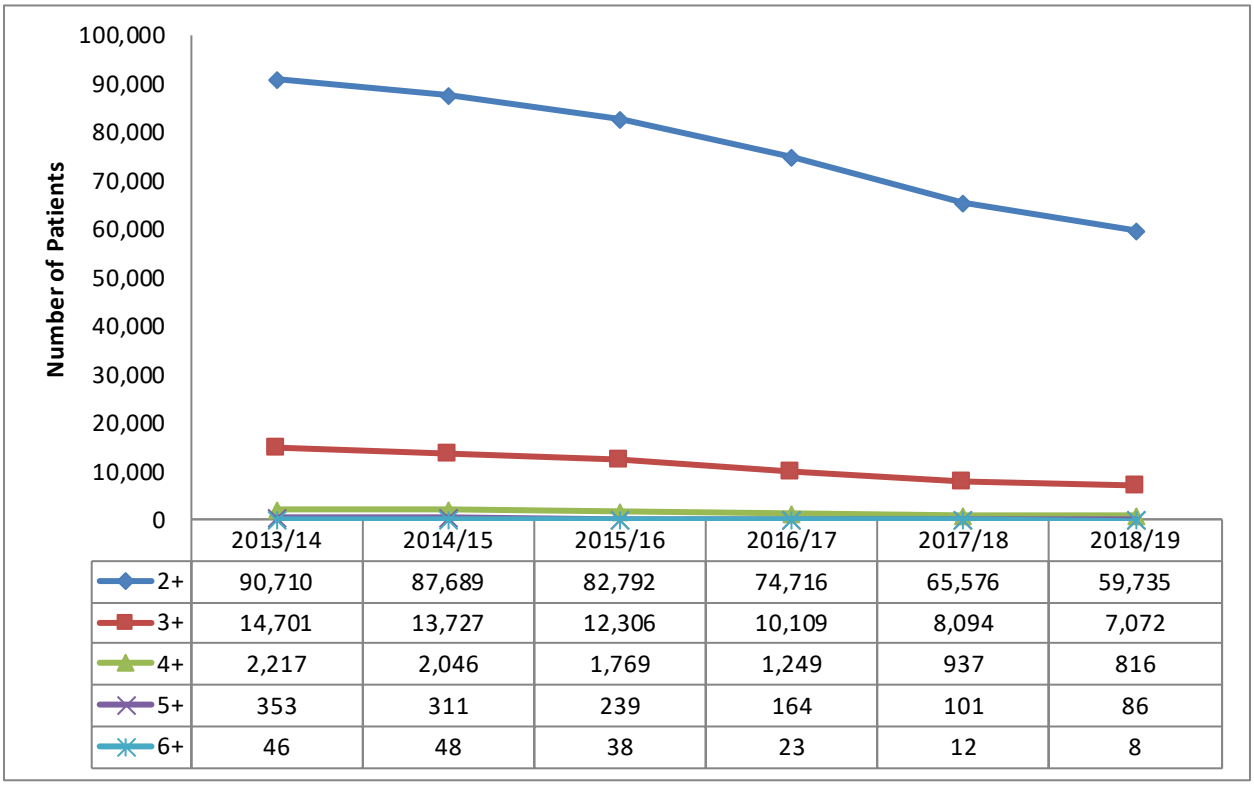
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
>= 02 DDDs	40,374	33,666	31,943	28,925	25,678	24,232
>= 04 DDDs	6,022	5,217	5,045	4,850	4,342	4,300
>= 06 DDDs	2,599	2,247	2,146	2,294	1,857	2,011
>= 08 DDDs	1,456	1,329	1,284	1,302	1,021	1,147
>= 10 DDDs	1,052	1,019	963	972	703	752

Figure 26: Number of Prescribers by High Dose, 2013/14 - 2018/19



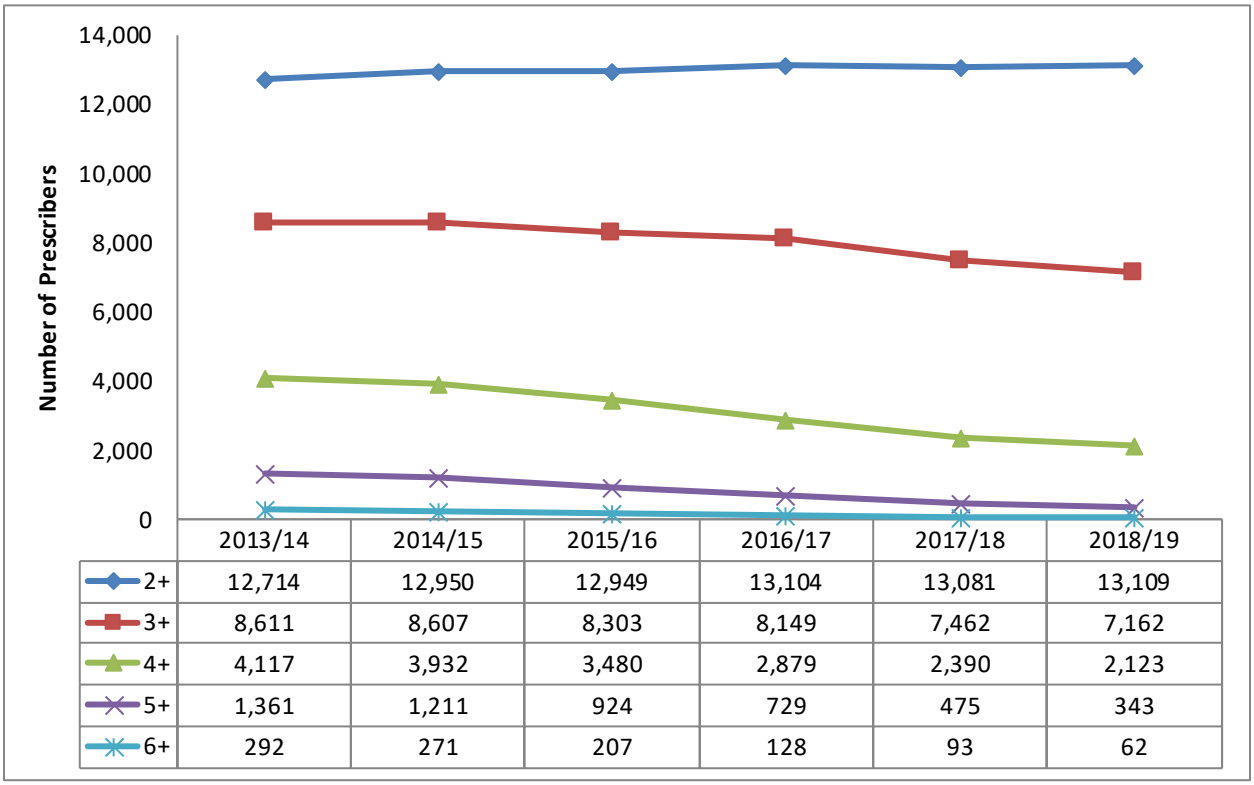
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
>= 02 DDDs	9,850	9,680	9,572	9,332	9,056	8,850
>= 04 DDDs	4,224	4,006	3,738	3,495	3,074	2,959
>= 06 DDDs	2,143	1,971	1,750	1,805	1,456	1,398
>= 08 DDDs	1,252	1,152	1,054	1,026	805	797
>= 10 DDDs	898	872	829	788	561	568

Figure 27: Number of Patients by Ingredient Count, 2013/14 - 2018/19



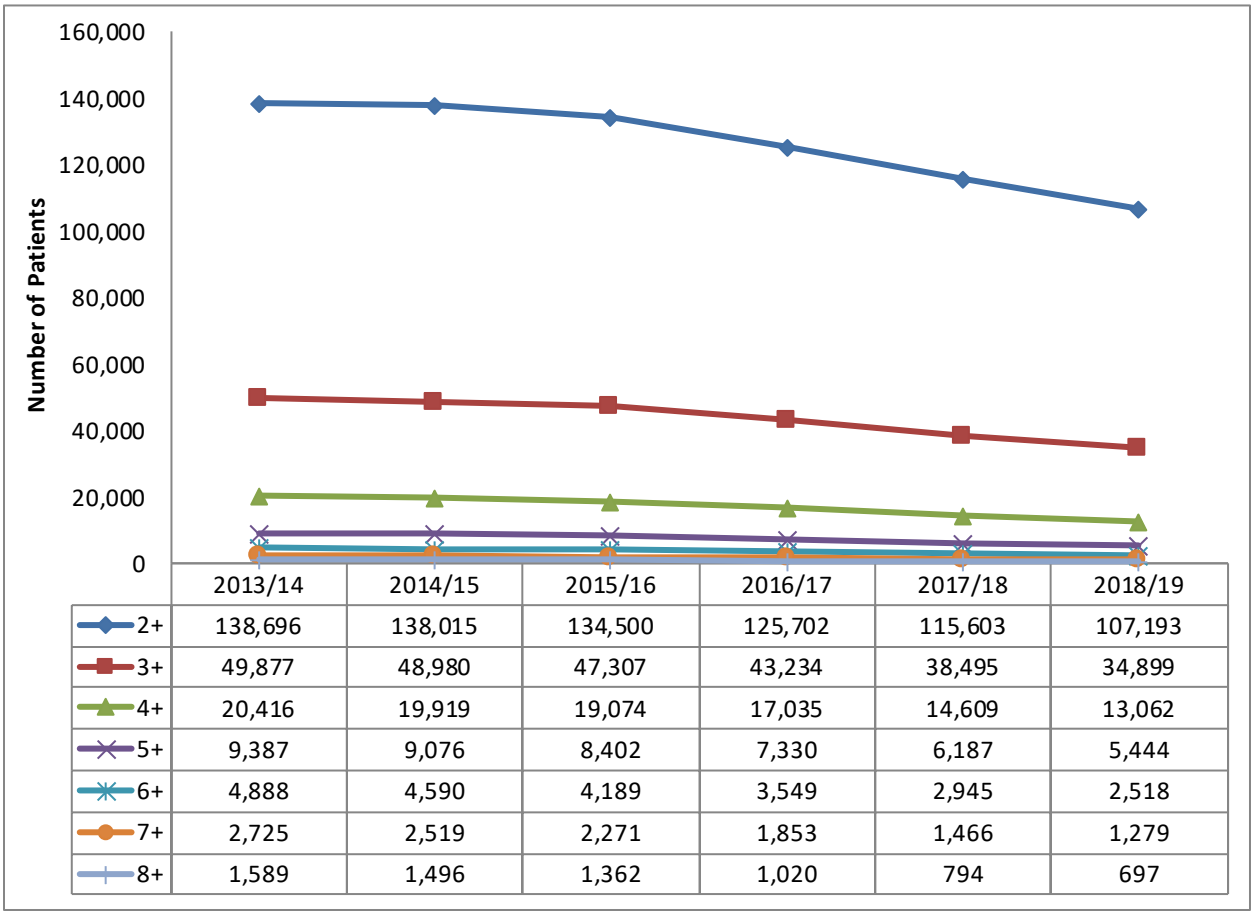
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
2+	90,710	87,689	82,792	74,716	65,576	59,735
3+	14,701	13,727	12,306	10,109	8,094	7,072
4+	2,217	2,046	1,769	1,249	937	816
5+	353	311	239	164	101	86
6+	46	48	38	23	12	8

Figure 28: Number of Prescribers by Ingredient Count, 2013/14 - 2018/19



	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
2+	12,714	12,950	12,949	13,104	13,081	13,109
3+	8,611	8,607	8,303	8,149	7,462	7,162
4+	4,117	3,932	3,480	2,879	2,390	2,123
5+	1,361	1,211	924	729	475	343
6+	292	271	207	128	93	62

Figure 29: Number of Patients by Prescriber Count, 2013/14 - 2018/19[9]



	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
2+	138,696	138,015	134,500	125,702	115,603	107,193
3+	49,877	48,980	47,307	43,234	38,495	34,899
4+	20,416	19,919	19,074	17,035	14,609	13,062
5+	9,387	9,076	8,402	7,330	6,187	5,444
6+	4,888	4,590	4,189	3,549	2,945	2,518
7+	2,725	2,519	2,271	1,853	1,466	1,279
8+	1,589	1,496	1,362	1,020	794	697

[9] Each category represents how many prescribers ordered benzodiazepines for the same patient during the fiscal year.

4.2 Benzodiazepine Patients by Age and Sex

Figure 30: Number of Patients by Age Group, 2013/14 - 2018/19

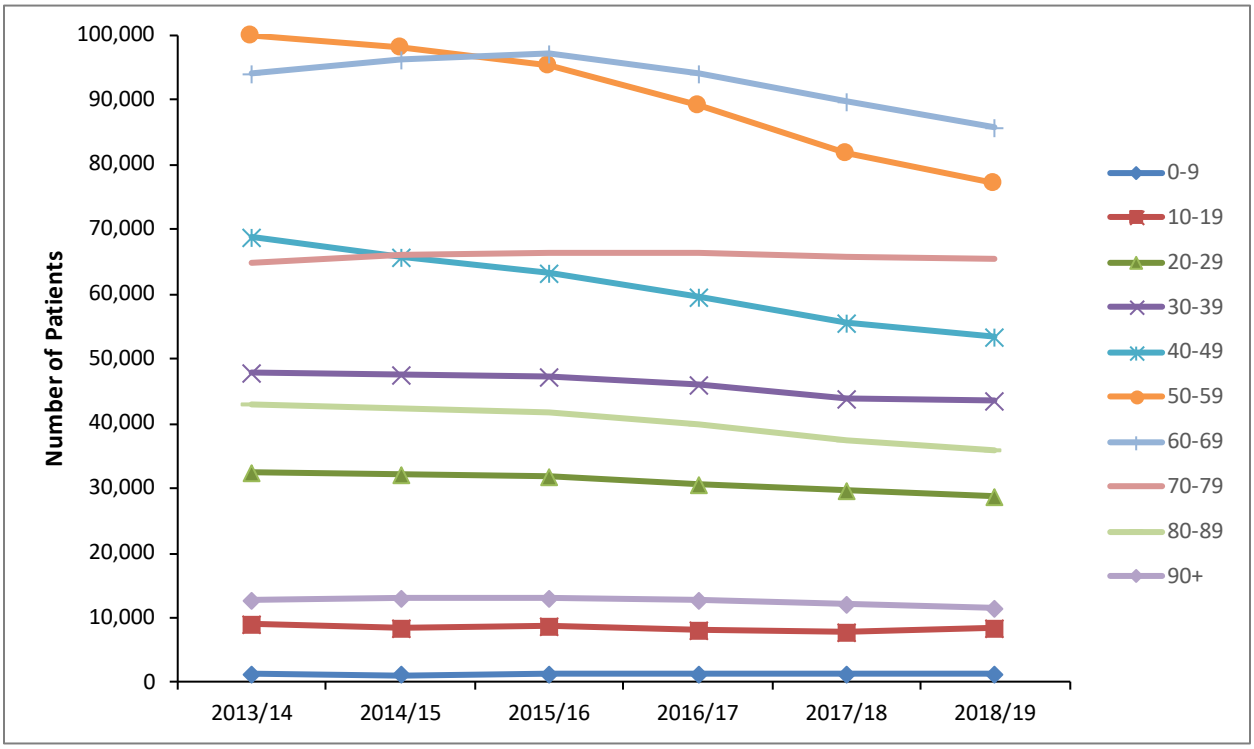
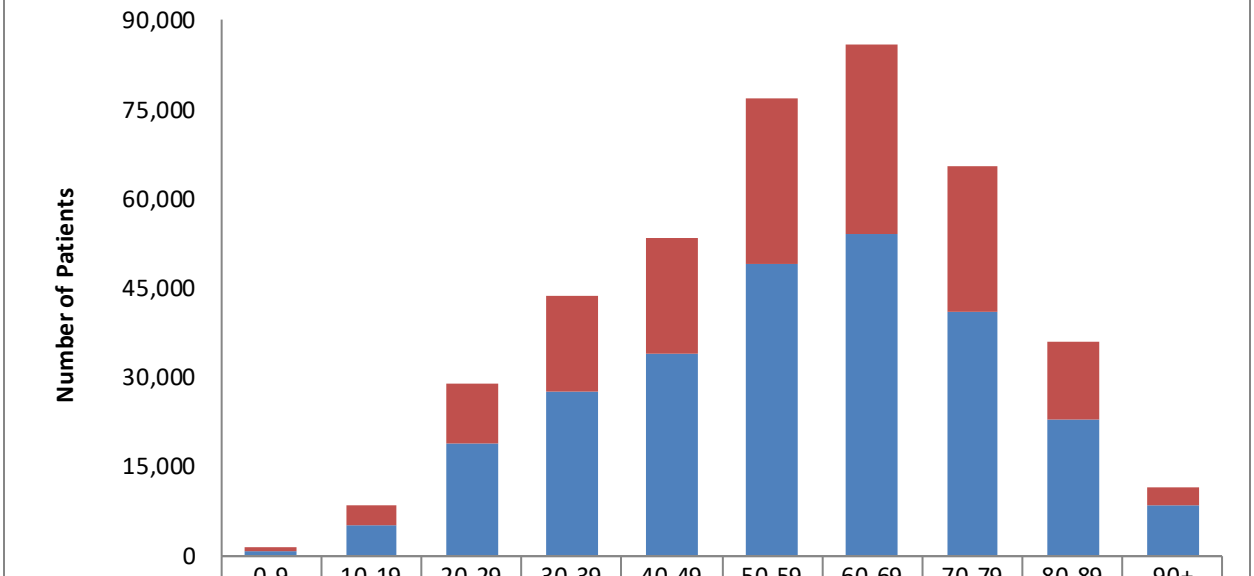
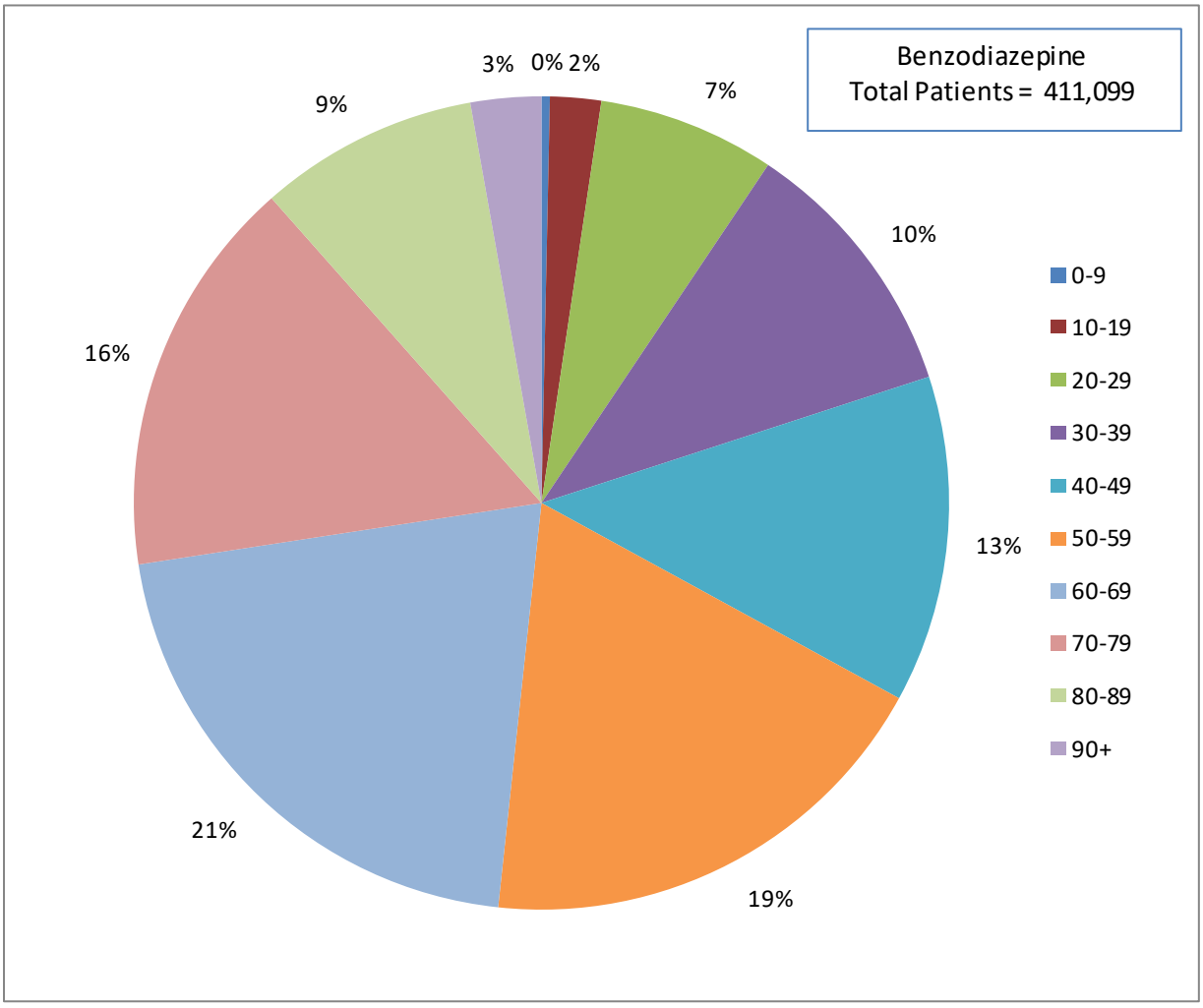


Figure 31: Number of Patients by Age Group and Sex, 2018/19



	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90+
Total Patients	1,362	8,310	28,907	43,549	53,422	76,964	85,870	65,370	35,848	11,497
Male	743	3,137	10,148	15,878	19,551	27,981	31,721	24,498	12,952	3,196
Female	619	5,173	18,759	27,671	33,871	48,983	54,149	40,872	22,896	8,301

Figure 32: Percentage of Patients by Age Group, 2018/19



Note: For 2018/19 age group charts above, benzodiazepine patients do not include patients with unknown sex (4), unknown age (3) and unknown age and sex (5).

4.3 Benzodiazepine Age and Sex Standardization by LHA

Figure 33: Benzodiazepine Consumption, 2018/19

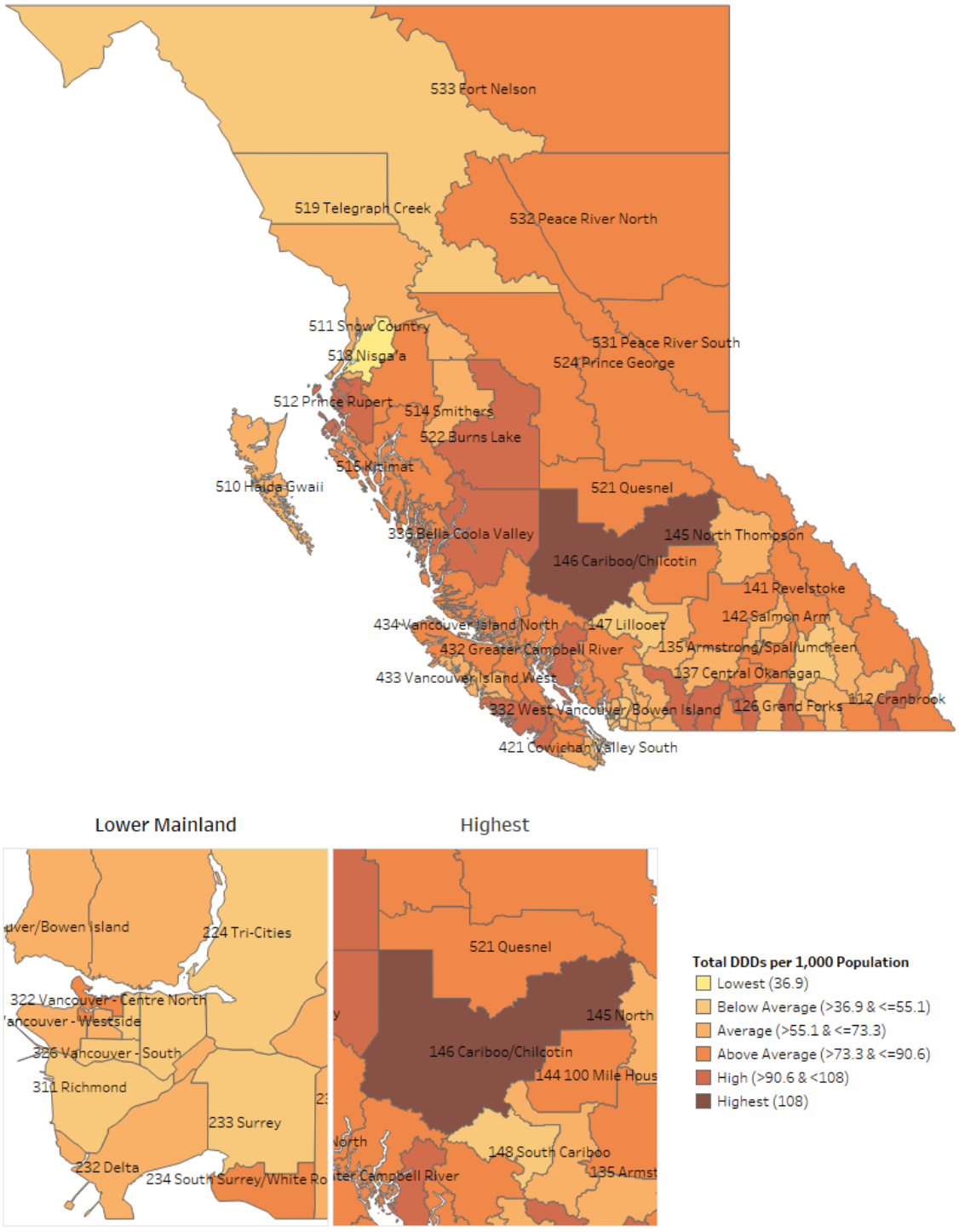


Figure 34: Benzodiazepine Consumption, 2018/19

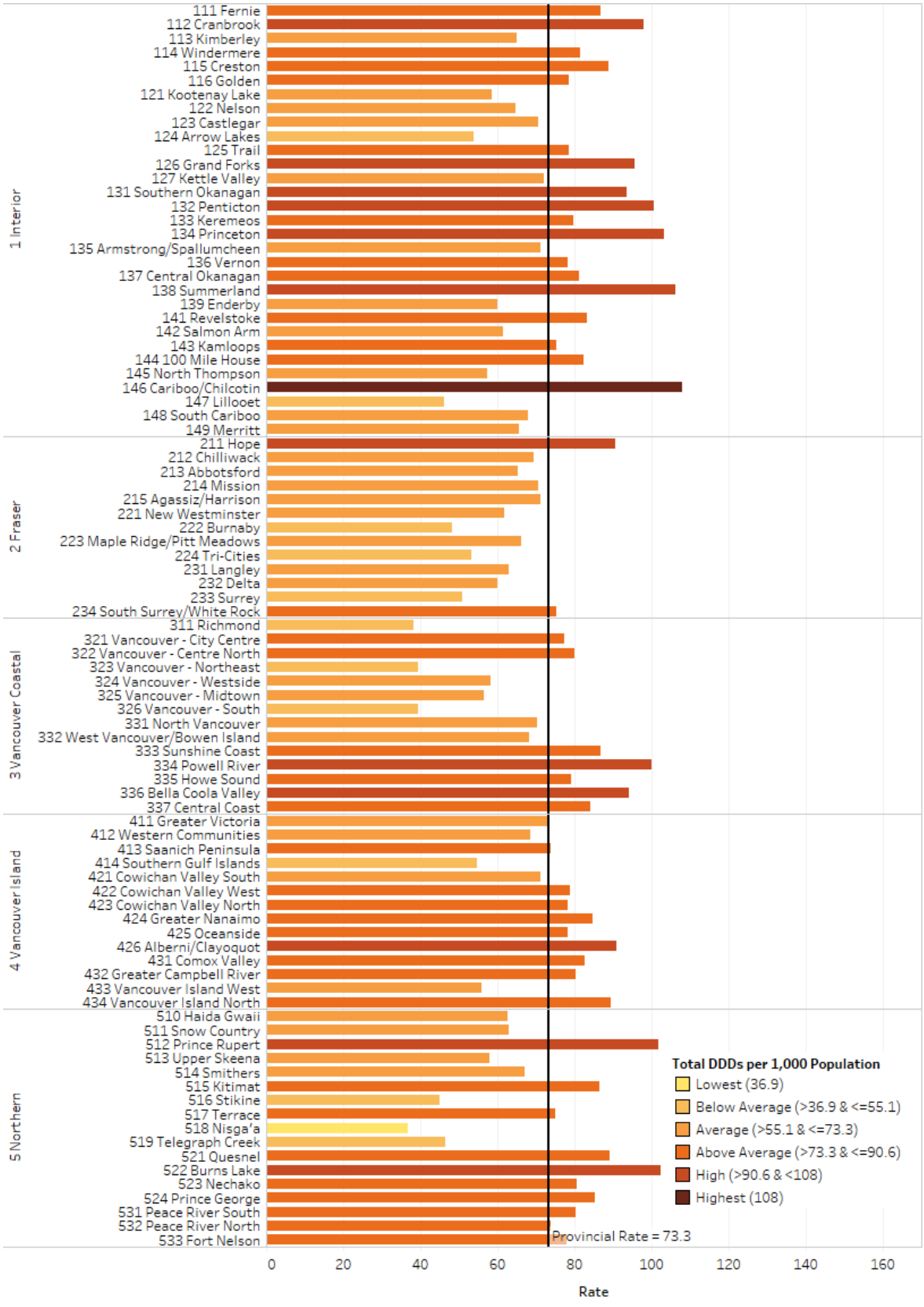


Figure 35: Number of Benzodiazepine Patients, 2018/19

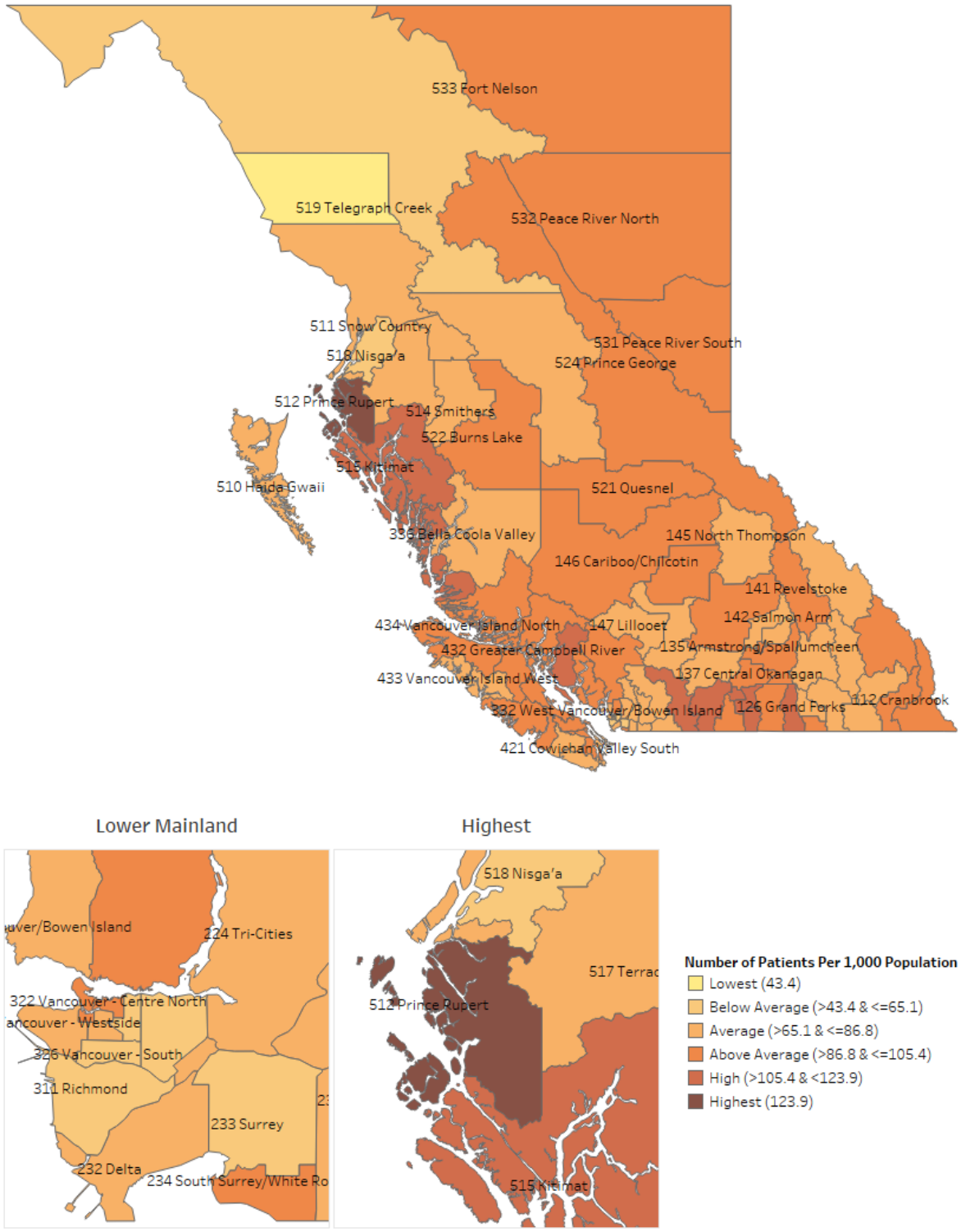


Figure 36: Number of Benzodiazepine Patients, 2018/19

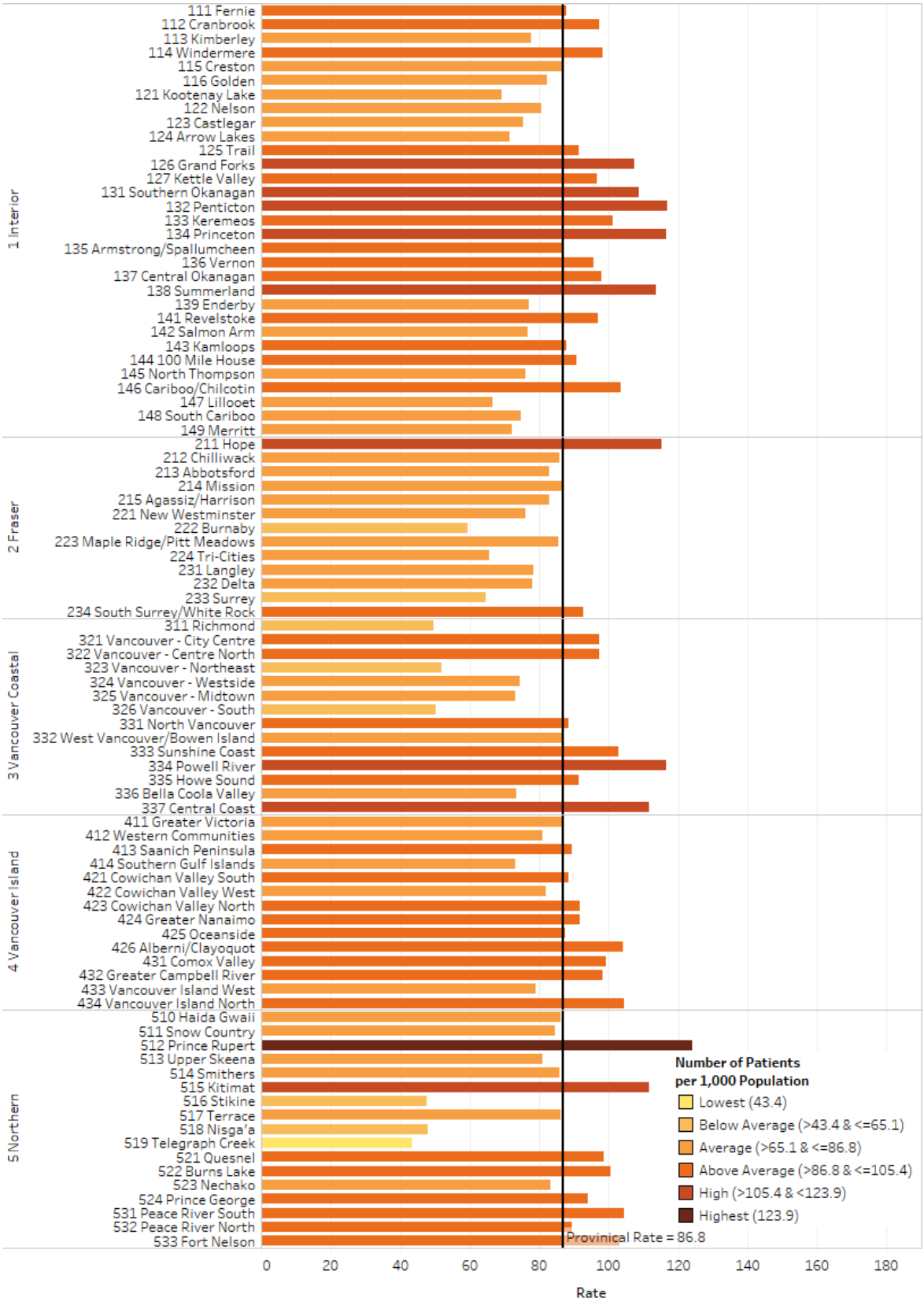


Figure 37: Number of High Dose Benzodiazepine Patients, 2018/19

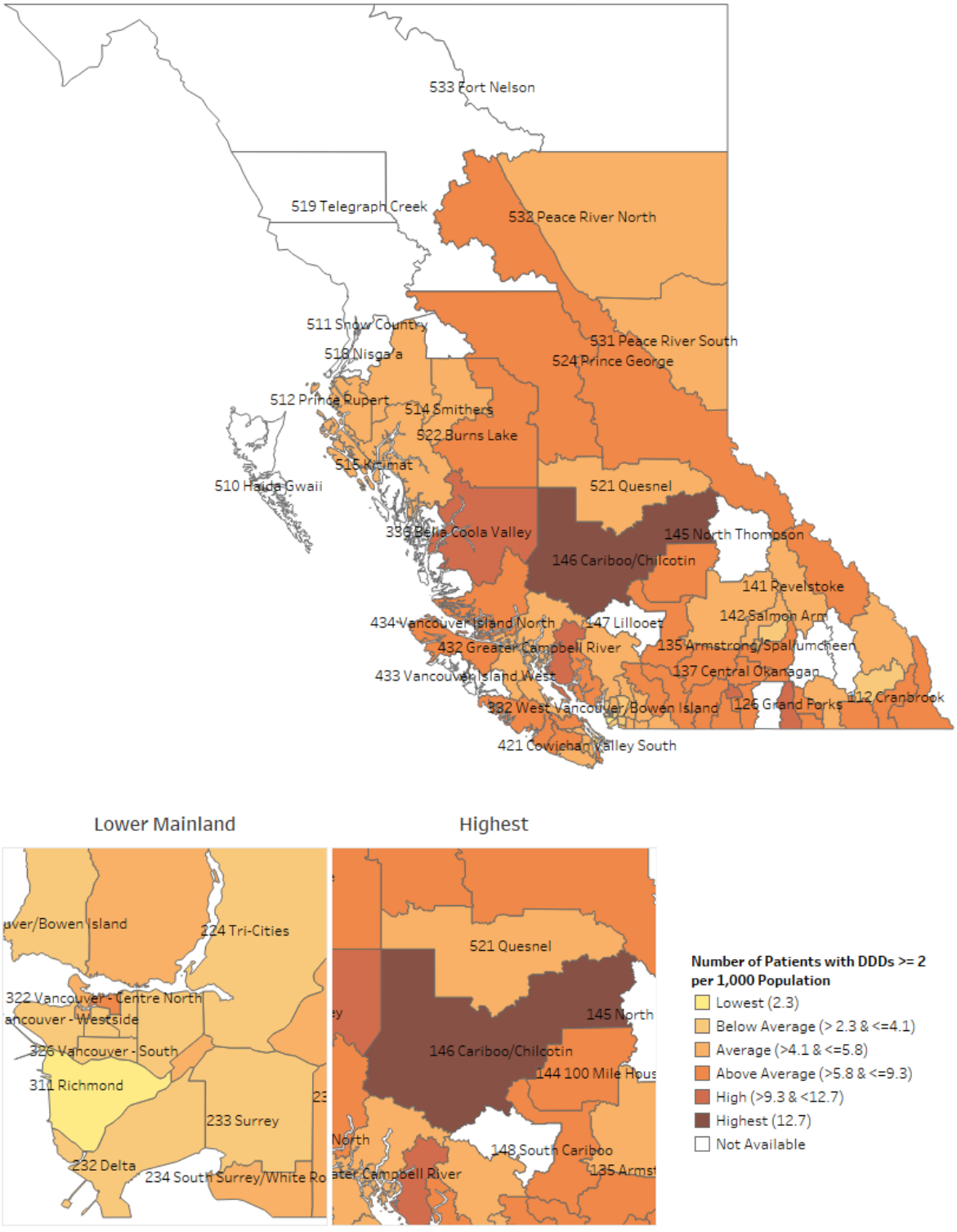


Figure 38: Number of High Dose Benzodiazepine Patients, 2018/19

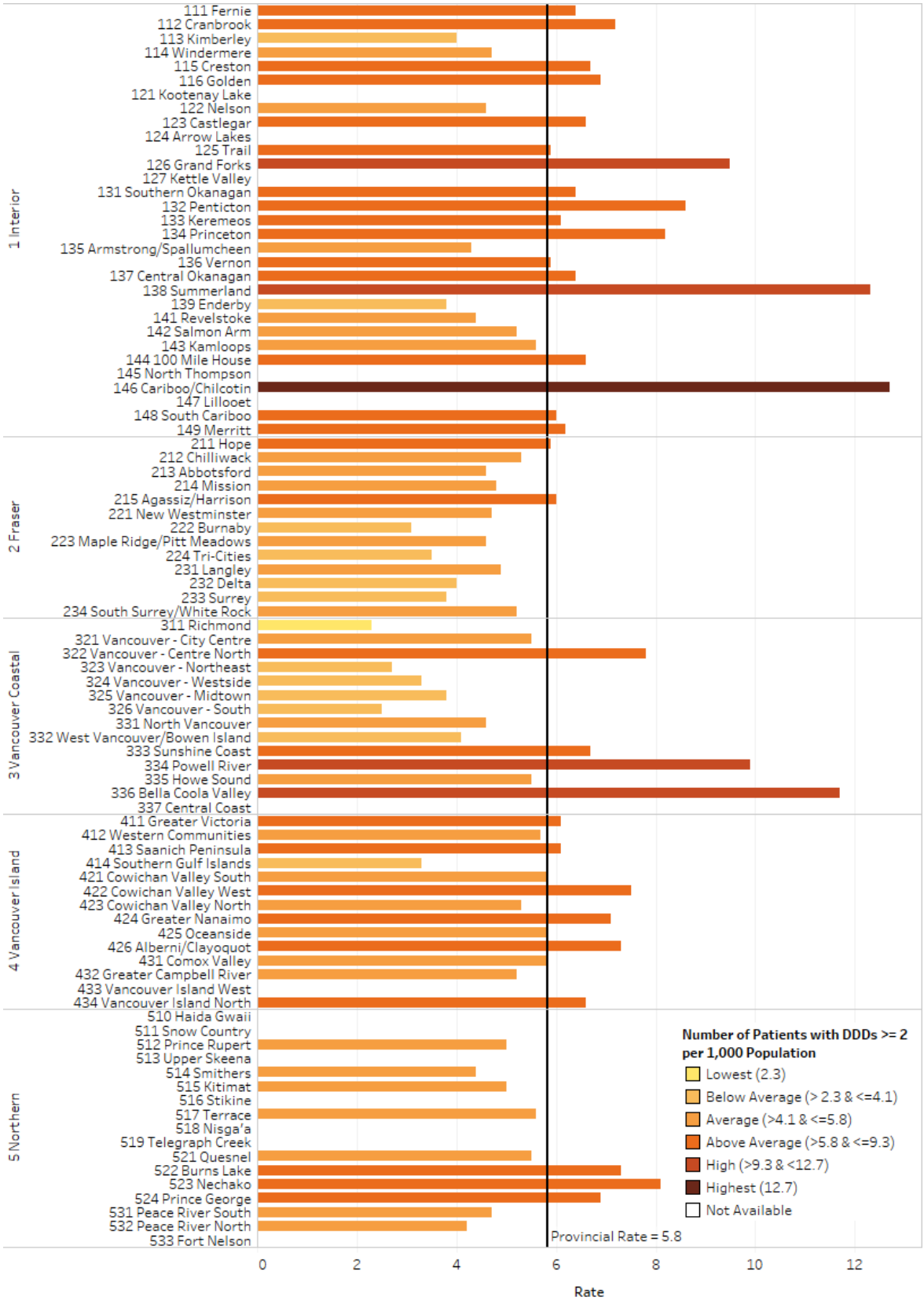


Figure 39: Number of Elderly Benzodiazepine Patients, 2018/19

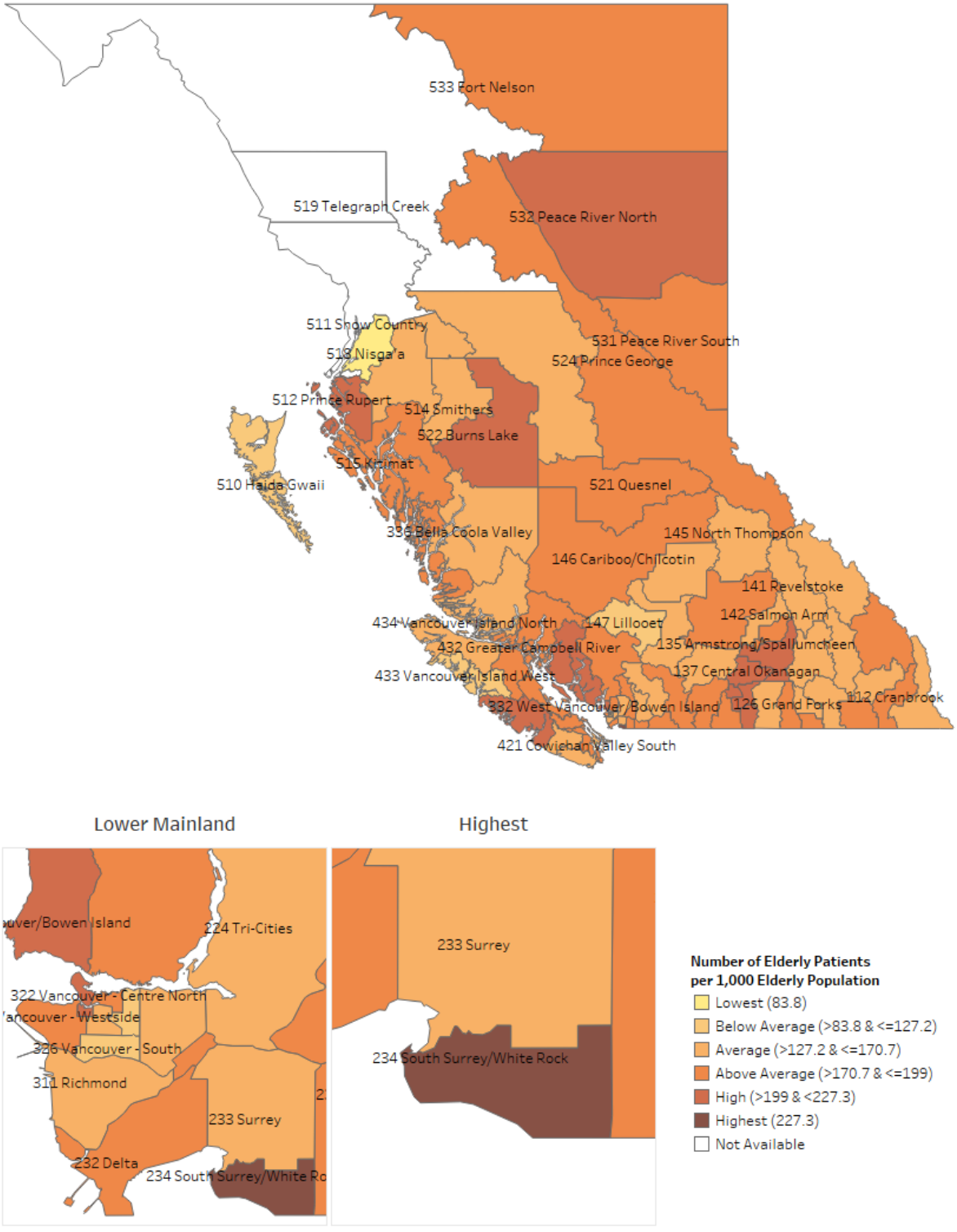
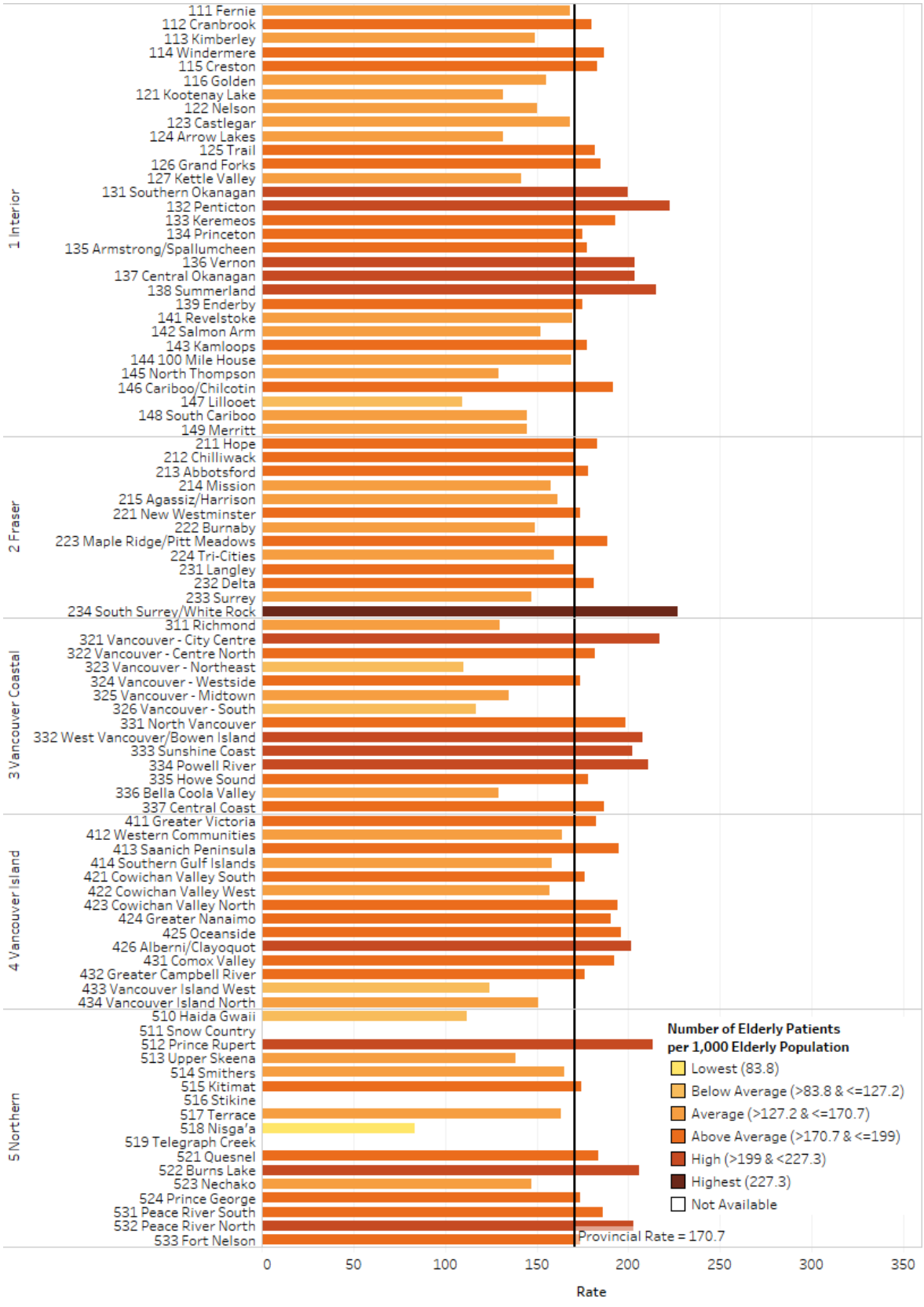


Figure 40: Number of Elderly Benzodiazepine Patients, 2018/19



Appendix

Appendix A: Drug List by Main Ingredient

Table 5: Opioids Utilization by Main Ingredient, 2018/19

Main Ingredient	Route	Dispenses	Patients	Prescribers	Pharmacies
Buprenorphine	Buccal	95	39	31	33
Buprenorphine	Transdermal	12,184	1,935	1,102	674
Butorphanol	Nasal	583	41	52	41
Codeine	Oral	1,036,702	425,590	14,614	1,373
Fentanyl	Buccal	66	3	3	3
Fentanyl	Injection	643	230	110	64
Fentanyl	Transdermal	50,843	4,384	2,936	986
Fentanyl	Unknown	14	12	11	11
Hydrocodone	Oral	1,614	1,042	578	438
Hydromorphone	Injection	59,845	10,736	2,570	613
Hydromorphone	Oral	524,689	75,593	8,425	1,353
Hydromorphone	Rectal	5	1	1	1
Hydromorphone	Unknown	2	2	2	2
Meperidine	Injection	781	90	107	76
Meperidine	Oral	4,217	779	675	510
Methadone	Oral	54,656	3,580	1,158	908
Methadone	Unknown	438	49	45	31
Morphine	Epidural	12	2	2	2
Morphine	Injection	4,745	1,684	931	273
Morphine	Oral	246,124	20,575	5,760	1,272
Morphine	Rectal	361	52	60	39
Morphine	Unknown	414	156	133	39
Oxycodone	Oral	240,388	34,383	6,620	1,316
Oxycodone	Rectal	206	12	19	13
Pentazocine	Oral	286	46	62	46
Sufentanil	Intravenous	2,678	762	415	215
Tapentadol	Oral	3,277	383	341	287
Tramadol	Oral	333,898	153,934	10,331	1,348

Table 6: Benzodiazepines Utilization by Main Ingredient, 2018/19

Main Ingredient	Route	Dispenses	Patients	Prescribers	Pharmacies
Alprazolam	Oral	50,695	9,290	4,435	1,260
Bromazepam	Oral	5,611	894	809	507
Chlordiazepoxide	Oral	1,610	493	360	307
Clidinium And Psycholeptics	Oral	2,249	944	416	382
Clobazam	Oral	39,231	3,456	3,223	1,056
Clonazepam	Oral	538,568	47,970	9,649	1,368
Clorazepate Dipotassium	Oral	633	96	132	99
Diazepam	Injection	102	51	54	35
Diazepam	Oral	116,422	14,081	5,916	1,304
Diazepam	Rectal	39	29	29	28
Flurazepam	Oral	1,137	221	259	194
Lorazepam	Injection	5,279	4,052	1,211	187
Lorazepam	Oral	184,891	49,638	9,447	1,341
Lorazepam	Sublingual	403,412	152,270	12,219	1,368
Midazolam	Injection	5,359	3,266	973	545
Nitrazepam	Oral	4,056	536	529	370
Oxazepam	Oral	103,268	12,875	5,023	1,229
Temazepam	Oral	63,738	8,516	4,131	1,194
Triazolam	Oral	10,164	6,003	1,449	974
Zaleplon	Oral	2	2	1	1
Zolpidem	Sublingual	38,211	9,859	3,779	1,155
Zopiclone	Oral	963,542	167,548	13,105	1,373

Appendix B: Local Health Area Crosswalk Table

Table 7: LHA 1997 to 2018 Geography Crosswalk Table[10]

LHA Code 1997	LHA Name 1997	LHA Code 2018	LHA Name 2018
001	Fernie	111	Fernie
002	Cranbrook	112	Cranbrook
003	Kimberley	113	Kimberley
004	Windermere	114	Windermere
005	Creston	115	Creston
018	Golden	116	Golden
006	Kootenay Lake	121	Kootenay Lake
007	Nelson	122	Nelson
009	Castlegar	123	Castlegar
010	Arrow Lakes	124	Arrow Lakes
011	Trail	125	Trail
012	Grand Forks	126	Grand Forks
013	Kettle Valley	127	Kettle Valley
014	Southern Okanagan	131	Southern Okanagan
015	Penticton	132	Penticton
016	Keremeos	133	Keremeos
017	Princeton	134	Princeton
021	Armstrong - Spallumcheen	135	Armstrong/Spallumcheen
022	Vernon	136	Vernon
023	Central Okanagan	137	Central Okanagan
077	Summerland	138	Summerland
078	Enderby	139	Enderby
019	Revelstoke	141	Revelstoke
020	Salmon Arm	142	Salmon Arm
024	Kamloops	143	Kamloops
025	100 Mile House	144	100 Mile House
026	North Thompson	145	North Thompson

[10] Table 5 was prepared based on the source crosswalk table made by Methodologies and Cross Sector Analysis Team.

For a more detailed table that additionally contains HA, HSDA and CHSA, please refer to https://catalogue.data.gov.bc.ca/dataset/community-health-service-areas-chsa/resource/ff7ea5dd-d489-4f74-a97e-3c57661ce830

For a map representation of CHSA, LHA, HSDA and HA please refer to https://arcg.is/1bbX9y

027	Cariboo - Chilcotin	146	Cariboo/Chilcotin
029	Lillooet	147	Lillooet
030	South Cariboo	148	South Cariboo
031	Merritt	149	Merritt
032	Hope	211	Hope
033	Chilliwack	212	Chilliwack
034	Abbotsford	213	Abbotsford
075	Mission	214	Mission
076	Agassiz - Harrison	215	Agassiz/Harrison
040	New Westminster	221	New Westminster
041	Burnaby	222	Burnaby
042	Maple Ridge	223	Maple Ridge/Pitt Meadows
043	Coquitlam	224	Tri-Cities
035	Langley	231	Langley
037	Delta	232	Delta
201	Surrey	233	Surrey
202	South Surrey/White Rock	234	South Surrey/White Rock
038	Richmond	311	Richmond
161	Vancouver - City Centre	321	Vancouver - City Centre
162	Vancouver - Downtown Eastside	322	Vancouver - Centre North
163	Vancouver - North East	323	Vancouver - Northeast
164	Vancouver - Westside	324	Vancouver - Westside
165	Vancouver - Midtown	325	Vancouver - Midtown
166	Vancouver - South	326	Vancouver - South
044	North Vancouver	331	North Vancouver
045	West Vancouver-Bowen Island	332	West Vancouver/Bowen Island
046	Sunshine Coast	333	Sunshine Coast
047	Powell River	334	Powell River
048	Howe Sound	335	Howe Sound
049	Bella Coola Valley	336	Bella Coola Valley
083	Central Coast	337	Central Coast
061	Greater Victoria	411	Greater Victoria
062	Sooke	412	Western Communities
063	Saanich	413	Saanich Peninsula
064	Gulf Islands	414	Southern Gulf Islands

065	Cowichan	421	Cowichan Valley South
066	Lake Cowichan	422	Cowichan Valley West
067	Ladysmith	423	Cowichan Valley North
068	Nanaimo	424	Greater Nanaimo
069	Qualicum	425	Oceanside
070	Alberni	426	Alberni/Clayoquot
071	Courtenay	431	Comox Valley
072	Campbell River	432	Greater Campbell River
084	Vancouver Island West	433	Vancouver Island West
085	Vancouver Island North	434	Vancouver Island North
050	Queen Charlotte	510	Haida Gwaii
051	Snow Country	511	Snow Country
052	Prince Rupert	512	Prince Rupert
053	Upper Skeena	513	Upper Skeena
054	Smithers	514	Smithers
080	Kitimat	515	Kitimat
087	Stikine	516	Stikine
088	Terrace	517	Terrace
092	Nisga'a	518	Nisga'a
094	Telegraph Creek	519	Telegraph Creek
028	Quesnel	521	Quesnel
055	Burns Lake	522	Burns Lake
056	Nechako	523	Nechako
057	Prince George	524	Prince George
059	Peace River South	531	Peace River South
060	Peace River North	532	Peace River North
081	Fort Nelson	533	Fort Nelson