# Buprenorphine/Naloxone Initiation in Emergency Departments in Alberta – Final Evaluation Report





# Table of contents

Executive summary	4
Introduction	6
Evaluation plan	7
Data access	7
Data collection  Evaluation of program sustainability	
EDs reporting on the Bup/Nal Initiation in EDs Project	
Trending of bup/nal given in EDs since January 2018 ED KPIs	
Summary statistics	
Demographics breakdown	16
Eligibility of patients given bup/nal in ED for follow up transition	18
Patients continuing on OAT treatment after ED initiation	21
Community clinics KPIs	22
AHS pharmacy utilization report	24
Reporting & learning system for patient safety	25
Conclusion	
Go-live sites	26
Bup/nal initiation in ED	26
ED length of stay	27
Retention in treatment	27
Referrals to OUD treatment clinics	27
Patient safety events	27
Appendix I	28
Appendix II	
Appendix III	30

Appendix IV	33
Appendix V	34

#### June 2021

This report has been prepared by Alberta Health Services, Analytics and the Emergency Strategic Clinical Network™.

© 2021, Alberta Health Services, Emergency Strategic Clinical Network.

This copyright work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivative 4.0 International license. You are free to copy and distribute the work including in other media and formats for noncommercial purposes, as long as you attribute the work to Alberta Health Services, do not adapt the work, and abide by the other licence terms. To view a copy of this licence, see https://creativecommons.org/licenses/by-nc-nd/4.0/. The licence does not apply to AHS trademarks, logos or content for which Alberta Health Services is not the copyright owner.

Disclaimer: This material is intended for general information only and is provided on an "as is", "where is" basis. Although reasonable efforts were made to confirm the accuracy of the information, Alberta Health Services does not make any representation or warranty, express, implied or statutory, as to the accuracy, reliability, completeness, applicability or fitness for a particular purpose of such information. This material is not a substitute for the advice of a qualified health professional. Alberta Health Services expressly disclaims all liability for the use of these materials, and for any claims, actions, demands or suits arising from such use.

#### Contact

For more information, please contact: emergency.scn@ahs.ca

# **Executive summary**

The Emergency Strategic Clinical Network<sup>™</sup> (ESCN) has implemented a province-wide strategy to appropriately screen for opioid use disorder (OUD) and initiate the medication buprenorphine/naloxone (bup/nal) for eligible patients in emergency care. The roll-out of the program began in May 2018 and by Mar 2021, it was live at all 110 EDs, urgent care centres and advanced ambulatory care centres across the province. Hereafter, all of these site types will be referred to using the abbreviation "EDs." Between program start and May 2020, 25 of the sites were able to report evaluation data. Four sites that collected evaluation data manually (Red Deer Regional Hospital Centre, Chinook Regional Hospital, Medicine Hat Regional Hospital, and Pincher Creek Health Centre) were not asked to report data during the final year of the project, to reduce burden on these sites. The remaining 21 sites received 74% of opioid-related presentations provincially during this reporting period. Reporting sites continuing to provide evaluation data since project start are:

- North East Community Health Centre (Pilot)
- Grey Nuns Community Hospital (Pilot)
- Rockyview General Hospital (Pilot)
- Foothills Medical Centre
- South Health Campus
- Sheldon M. Chumir Health Centre
- Sturgeon Community Hospital
- University of Alberta Hospital
- Misericordia Community Hospital
- Strathcona Community Hospital
- Royal Alexandra Hospital
- Peter Lougheed Centre

- Edson Healthcare Centre
- South Calgary Health Centre
- Fort Saskatchewan Community Hospital
- Westview Health Centre Stony Plain
- Leduc Community Hospital
- Devon General Hospital
- East Edmonton Health Centre
- Northern Lights Regional Health Centre
- Queen Elizabeth II Hospital

The care trajectories of patients receiving bup/nal in EDs were evaluated using administrative data. Since program start to the end of March 2021, there were 16,133 opioid-related ED visits to the 21 reporting sites and 2,005 for the four discontinued reporting sites listed above. Bup/nal was given to 2,167 unique individuals in the ED during 3,247 ED visits. Patients who did not receive bup/nal may not have been eligible due to medical comorbidities, may have declined bup/nal, or may not have been offered it.

As ongoing engagement in care is a key outcome for patients who live with OUD, pharmacy data was utilized to identify whether patients continue to fill opioid agonist therapy (OAT). There were 1,963 ED visits where bup/nal was given and the patient was discharged, and therefore eligible for community follow-up (1,448 unique patients). Since program start to the end of March 2021, 1010 out of 1488 (70%) patients continued to fill an OAT prescription 30-days after their index ED visit. There is some decrease in prescription filling for those initiated on OAT in ED over time. 49% continued filling prescriptions at 180 days.

A key component of our program is the establishment of next day referral pathways from the ED to OUD treatment clinics in communities. These pathways are open to patients who receive bup/nal in ED as well as those who do not. From program start 22 partnered OUD treatment clinics were participating in the program. 14 (64%) partnered clinics reported evaluation data. As of May 2020, the Alberta Health Services (AHS) Virtual Opioid Dependency Program (VODP) is the only clinic reporting data for continued evaluation of program sustainability. We therefore report VODP data separately in this report. From program start to the end of March 2021, this clinic has reported receiving 277 referrals from EDs. The other community clinics reported receiving 448 referrals from EDs from program start to May 2020.

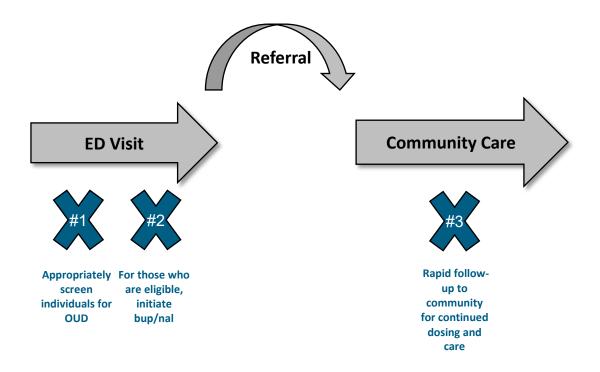
189 of the referrals attended their first community follow-up appointment at VODP and 176 attended their appointments at the other clinics.

#### Introduction

In October 2017, the ESCN received funding from the Alberta Health Minister's Opioid Emergency Response Commission (MOERC) to deliver an ED project in response to the opioid crisis in Alberta.

In March 2018, the Canadian Research Initiative in Substance Misuse (CRISM) released an evidence-based National Guideline for the Clinical Management of OUD. This guideline strongly advises OAT with bup/nal as the preferred first-line treatment for OUD whenever possible. Bup/nal helps reduce cravings and withdrawal symptoms, which results in reduced morbidity and mortality.

Bup/nal has been available in Canada for over ten years and is today prescribed in community clinics for the management of OUD. However, it has not commonly been available in EDs in Alberta even though many patients who live with OUD present to EDs with opioid-related concerns.



<sup>&</sup>lt;sup>1</sup> Wood E, et al. (2018) CRISM national guideline for the clinical management of opioid use disorder. Canadian Research Initiative in Substance Misuse, Retrieved from: <a href="https://crism.ca/projects/opioid-guideline/">https://crism.ca/projects/opioid-guideline/</a>, p. 12.

# **Evaluation plan**

The Bup/nal Initiation in EDs Project is undergoing formative evaluation. A formal exemption from ethics review was received from the University of Alberta Health Research Ethics Board. The AHS Privacy Office was consulted to protect patient and clinician privacy from risks arising from data collection. An ARECCI Ethics Guideline and an Alberta Health Services Internal Privacy Risk Assessment were completed to ensure compliance with the Health Information Act (HIA), the Freedom of Information and Protection of Privacy (FOIP) Act, as well as AHS policy directives. The separate Evaluation Framework document includes a comprehensive list of performance metrics.

Evaluation results are used to make iterative adjustments to program implementation to better achieve desired outcomes.

#### Data access

Primary data sources for this project currently exist in AHS. Examples are administrative databases such as National Ambulatory Care Reporting System (NACRS), Pharmaceutical Information Network (PIN), and other emergency department information systems (EDIS). Aggregate data is also

Evaluation results are used to make iterative adjustments to program implementation to better achieve desired outcomes.

collected from AHS and non-AHS community clinics around the province.

## Data collection

Data is collected for this project primarily using administrative data sources. For each key performance indicator (KPI), the data source is listed below. For KPIs 1 and 2, demographics (age, gender) and visit characteristics (length of stay, CTAS) are also reported.



# of opioid-related ED visits



# of ED visits where bup/nal tablets are given

Data Source: National Ambulatory Care

Reporting System (NACRS)

Data Collection: Administrative Data

Data Source: PYXIS, Sunrise Clinical Manager

(SCM), ConnectCare

Data Collection: Administrative Data



# of discharged patients continuing to fill OAT prescriptions 30-days post their index ED visit



# of referrals received at community clinics



# of ED patients attending first community follow-up appointment



Provincial pharmacy utilization of bup/nal



# of patient safety events related to bup/nal

Data Source: Pharmaceutical Information

Network (PIN)

Data Collection: Administrative Data

Data Source: Community Clinics

Data Collection: Manual Data, Aggregate

reporting

Data Source: Virtual Opioid Dependency

Program

Data Collection: Aggregate reporting

**Data Source:** Alberta Health Services Pharmacy

Services

Data Collection: Administrative Data

Data Source: Reporting & Learning System for

Patient Safety (RLS)

Data Collection: Administrative Data

## Evaluation of program sustainability

Administrative data sources are not available at all ED sites across the province. Additionally, complex referral pathways exist outside of major urban centers. To ensure collection of data that is as complete and valid as possible, a detailed collection plan has been developed as outlined below. As the program evaluation has shifted to consider program sustainability, a more limited set of data is collected compared to previous reports.

In keeping with our plans to establish low cost evaluation measures after project implementation, manual data collection on bup/nal given in ED at Red Deer Regional Hospital, Chinook Regional Hospital, Medicine Hat Regional Hospital, and Pincher Creek Health Centre was discontinued as of 15<sup>th</sup> of May 2020, after two years of manual data collection. Similarly, data collection on the number of referrals received and the number of patients attending follow-up for all clinics in all zones, except Virtual ODP clinic, were also discontinued after two years from program initiation.

- 1. Data on opioid-related visits to EDs (KPI#1) is available provincially.
- For number of patients given bup/nal in ED (KPI #2):
  - Data is collected in Calgary and Edmonton zone hospitals using available administrative data sources

- Where electronic records are kept, data collection continues at rural sites previously included in our evaluation:
  - Queen Elizabeth II Hospital Grande Prairie
  - Northern Lights Regional Health Centre Fort McMurray
  - Edson Healthcare Centre
- 3. Data on prescription filling (**KPI#3**) is based on the population identified for KPI#2.
- For number of referrals received and the number of patients who attend their first follow-up appointment (KPI #4 and #5) data is collected from participating community clinics
- Data on bup/nal utilization by AHS Pharmacy Services (KPI#6) is available provincially.
- 6. Patient safety events related to bup/nal (KPI#7) is available provincially.

# EDs reporting on the Bup/Nal Initiation in EDs Project

Since program start to the end of March 2021, 110 EDs went "live" with the Bup/Nal Initiation in EDs Project. 21 out of 25 continue to provide evaluation data and these 21 sites received 74% of opioid-related visits provincially during this period. Characteristics for the 25 EDs that initially provided evaluation data are listed below. Please see Appendix V for a list of all live sites ordered by go-live date.

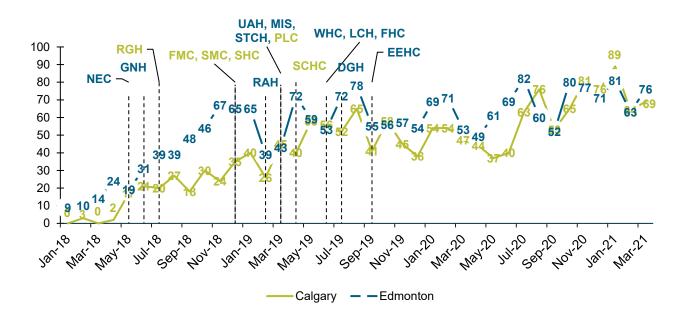
**Table 1. Facility Characteristics.** Note: Fiscal Year 2018/19 (May 15, 2018 – March 31, 2019); Fiscal Year 2019/20 (April 01, 2019 – March 31, 2020); Fiscal Year 2020/21 (April 01, 2020 – March 31, 2021).<sup>2</sup>

Quarter (Fiscal Year) that site went "live"	Emergency Department/Urg ent Care Centre	Go-live date for program implementation	AHS Zone	Number o	f ED visits		Number of opioid-related ED visits			
				2018/19 (fiscal year)	2019/20 (fiscal year)	2020/21 (fiscal year)	2018/19 (fiscal year)	2019/20 (fiscal year)	2020/21 (fiscal year)	
Q1	North East Community Health Centre (Pilot)	May 15, 2018	Edmonton	44,091	49,549	36,938	120	161	321	
(2018/19)	Grey Nuns Community Hospital (Pilot)	June 11, 2018	Edmonton	65,028	73,928	57,209	274	271	352	
Q2 (2018/19)	Rockyview General Hospital (Pilot)	July 5, 2018	Calgary	70,652	82,054	71,236	717	705	706	
	Foothills Medical Centre	December 6, 2018	Calgary	71,920	82,789	70,516	603	503	698	
	South Health Campus	December 6, 2018	Calgary	62,167	71,040	54,992	290	291	330	
Q3	Sheldon M. Chumir Health Centre	December 6, 2018	Calgary	49,696	56,033	40,877	408	586	631	
(2018/19)	Red Deer Regional Hospital Centre	December 12, 2018	Central	49,271	58,214	48,682	328	335	416	
	Sturgeon Community Hospital	December 17, 2018	Edmonton	45,190	51,580	41,253	129	121	152	
	Chinook Regional Hospital	February 21, 2019	South	49,031	58,073	49,992	358	250	346	
	Royal Alexandra Hospital	February 25, 2019	Edmonton	69,481	78,333	63,319	1,510	1,728	2,248	
	University of Alberta Hospital	March 4, 2019	Edmonton	59,112	65,136	57,698	360	331	738	
Q4 (2018/19)	Misericordia Community Hospital	March 5, 2019	Edmonton	42,475	48,451	31,584	244	276	294	
	Strathcona Community Hospital	March 11, 2019	Edmonton	38,434	46,217	34,796	72	100	160	
	Peter Lougheed Centre	March 14, 2019	Calgary	71,822	79,827	66,964	769	846	1043	
	Edson Healthcare Centre	April 01, 2019	North	12,918	14,400	9,292	43	27	31	
	Medicine Hat Regional Hospital	April 17, 2019	South	33,136	38,832	31,133	135	161	191	
	South Calgary Health Centre	April 18, 2019	Calgary	37,451	43,849	31,177	19	19	12	
Q1 (2019/20)	Fort Saskatchewan Community Hospital	June 03, 2019	Edmonton	15,431	18,407	14,477	34	46	44	
	Westview Health Centre – Stony Plain	June 04, 2019	Edmonton	23,316	26,229	22,528	65	73	75	
	Leduc Community Hospital	June 17, 2019	Edmonton	22,316	25,641	20,288	60	56	51	

Quarter (Fiscal Year) that site went "live"	Emergency Department/Urg ent Care Centre	Go-live date for program implementation	AHS Zone	Number of	f ED visits		Number of opioid-related ED visits				
Q2	Devon General Hospital	July 08, 2019	Edmonton	13,180	15,369	4,697	10	14	3		
(2019/20)	East Edmonton Health Centre	Sept 23, 2019	Edmonton	10,458	13,149	9,860	42	37	15		
Q3 (2019/20)	Pincher Creek Health Centre	October 15, 2019	South	9,782	11,256	8,723	64	92	140		
Q4 (2019/20)	Northern Lights Regional Health Centre	January 6, 2020	North	56,301	63,894	45,398	149	164	153		
Q1 (2020/21)	Queen Elizabeth II Hospital	June 29, 2020	North	50,191	54,839	44,695	315	232	320		
TOTAL							7,118	7,425	9,470		

# Trending of bup/nal given in EDs since January 2018

Figure 1. Number of ED visits where bup/nal tablets were given in Edmonton and Calgary reporting sites, by month



<sup>&</sup>lt;sup>2</sup> The program was first piloted at three EDs to determine the uptake of the initiation and referral pathways, and to examine the impact of the program on ED resources. Outcomes from the pilot phase were used to refine the program before scaling and spreading to other provincial EDs.

Go-live dates for sites are shown by vertical lines. Bup/nal initiation in EDs has increased overall since January 2018 and has begun to stabilize as fewer new sites implement the program.

The number of opioid-related ED visits is extracted from NACRS using ICD-10 codes T40XX and F11XX, including any diagnosis field (1-10). Full descriptions of included and excluded ICD-10 codes are listed in Appendix I. Not all patients given bup/nal during their visit have an opioid-related ICD-10 code in the NACRS database.

### **ED KPIs**

#### Summary statistics

Figure 2. Opioid-related ED visits in participating sites after program initiation, by quarter (KPI #1)

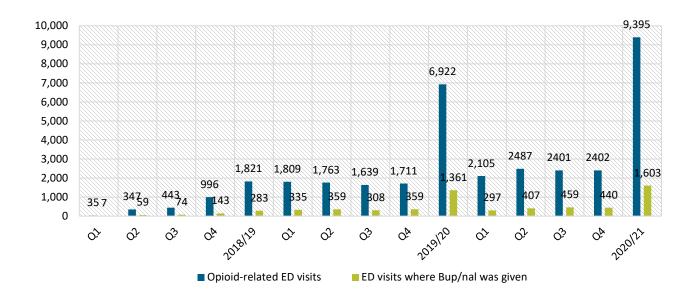


Figure 3. Opioid-related ED visits in participating sites after program initiation, by AHS zone, by quarter (KPI #1)

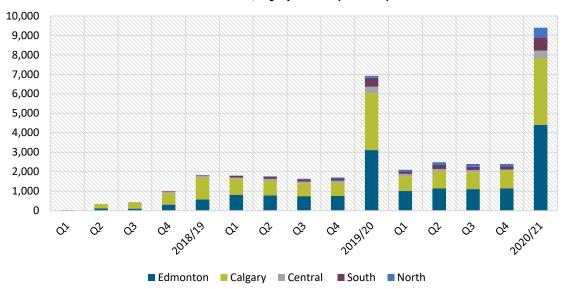


Figure 4. ED visits where bup/nal was given in participating sites after program initiation, by AHS zone, by quarter (KPI #2).

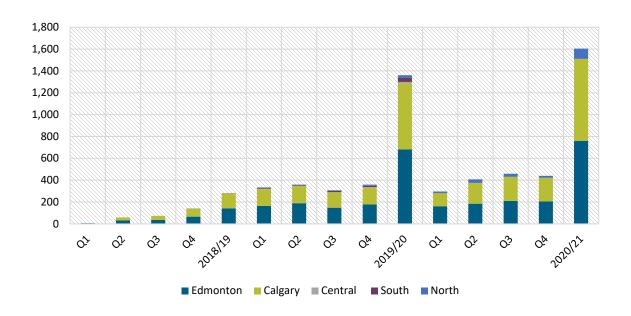


Table 2. Opioid-related ED visits in participating sites after program initiation, by site, by quarter (KPI #1)<sup>3</sup>

			2018/	19				2019/2	20				2020/2	21	
Emergency Department	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
North East Community Health Centre (Pilot)	20	37	31	31	119	31	42	57	32	162	68	108	73	72	321
Grey Nuns Community Hospital (Pilot)	15	87	74	78	254	94	74	53	50	271	71	93	95	93	352
Rockyview General Hospital (Pilot)	0	223	202	164	589	224	186	133	155	698	157	207	168	170	702
Foothills Medical Centre	0	0	46	165	211	156	134	99	113	502	178	154	188	178	698
South Health Campus	0	0	17	82	99	85	86	55	60	286	74	70	109	74	327
Sheldon M. Chumir Health Centre	0	0	53	134	187	153	122	156	149	580	115	158	167	188	628
Red Deer Regional Hospital Centre	0	0	15	69	84	57	76	94	108	335	116	135	106	59	416
Sturgeon Community Hospital	0	0	5	22	27	30	53	17	21	121	32	41	32	47	152
Chinook Regional Hospital	0	0	0	34	34	57	78	61	54	250	75	112	83	76	346
Royal Alexandra Hospital	0	0	0	136	136	466	394	424	444	1728	526	564	588	570	2248
University of Alberta Hospital	0	0	0	16	16	94	81	69	87	331	152	196	169	221	738
Misericordia Community Hospital	0	0	0	24	24	82	78	58	58	276	88	33	86	87	294
Strathcona Community Hospital	0	0	0	2	2	14	26	28	32	100	31	63	33	33	160
Peter Lougheed Centre	0	0	0	39	39	197	234	210	197	838	235	275	236	289	1035
Edson Healthcare Centre	0	0	0	0	0	10	4	6	7	27	8	11	5	7	31
Medicine Hat Regional Hospital	0	0	0	0	0	37	37	37	48	159	39	52	44	56	191
South Calgary Health Centre	0	0	0	0	0	6	5	3	3	17	0	2	5	4	11
Fort Saskatchewan Community Hospital	0	0	0	0	0	5	13	11	10	39	20	11	9	5	45
Westview Health Centre – Stony Plain	0	0	0	0	0	7	21	21	13	62	25	23	17	10	75
Leduc Community Hospital	0	0	0	0	0	4	13	9	10	36	17	18	6	10	51
Devon General Hospital	0	0	0	0	0	0	3	5	0	8	0	0	1	2	3
East Edmonton Health Centre	0	0	0	0	0	0	3	7	5	15	0	1	7	7	15
Pincher Creek Health Centre	0	0	0	0	0	0	0	26	24	50	31	45	38	26	140
Northern Lights Regional Health Centre	0	0	0	0	0	0	0	0	31	31	44	43	42	24	153
Queen Elizabeth II Hospital	0	0	0	0	0	0	0	0	0	0	3	72	94	94	263
TOTAL	35	347	443	996	1821	1809	1763	1639	1711	6922	2105	2487	2401	2402	9395

Table 3. ED visits where bup/nal was given in participating sites after program initiation, by site, by quarter (KPI #2).

			2018/		o, by c		,	2019,					202	0/21	
Emergency Department	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
North East Community Health Centre (Pilot)	6	13	11	8	38	16	11	19	13	59	11	21	17	15	64
Grey Nuns Community Hospital (Pilot)	1	19	26	17	63	9	19	18	16	62	17	21	26	16	80
Rockyview General Hospital (Pilot)	0	27	26	19	72	38	33	27	38	136	44	51	48	43	186
Foothills Medical Centre	0	0	3	18	21	18	27	27	28	100	15	31	39	37	122
South Health Campus	0	0	3	16	19	15	17	9	17	58	9	19	26	26	80
Sheldon M. Chumir Health Centre	0	0	5	12	17	26	23	34	37	120	17	40	49	38	144
Red Deer Regional Hospital Centre*	0	0	0	5	5	5	0	2	5	12	1	-	-	-	1
Sturgeon Community Hospital	0	0	0	5	5	10	18	7	4	39	16	9	8	7	40
Chinook Regional Hospital*	0	0	0	0	0	4	6	5	3	18	0	-	-	-	-
Royal Alexandra Hospital	0	0	0	32	32	83	94	58	92	327	56	83	86	99	324
University of Alberta Hospital	0	0	0	4	4	35	30	21	25	111	28	30	33	37	128
Misericordia Community Hospital	0	0	0	0	0	4	6	11	12	33	14	5	24	15	58
Strathcona Community Hospital	0	0	0	0	0	3	5	4	4	16	8	7	7	7	29
Peter Lougheed Centre	0	0	0	7	7	55	55	42	33	185	35	50	59	71	215
Edson Healthcare Centre	0	0	0	0	0	2	0	0	0	2	2	ю	1	0	9
Medicine Hat Regional Hospital*	0	0	0	0	0	3	0	3	6	12	1	-	-	-	1
South Calgary Health Centre	0	0	0	0	0	1	3	1	1	6	0	0	0	2	2
Fort Saskatchewan Community Hospital	0	0	0	0	0	3	5	5	2	15	6	1	4	1	12
Westview Health Centre – Stony Plain	0	0	0	0	0	3	1	7	3	14	6	4	4	5	19
Leduc Community Hospital	0	0	0	0	0	2	6	4	6	18	5	5	4	3	17
Devon General Hospital	0	0	0	0	0	0	0	0	0	0	0	0	0		0
East Edmonton Health Centre	0	0	0	0	0	0	0	0	3	3	0	0	1	1	2
Pincher Creek Health Centre*	0	0	0	0	0	0	0	4	3	7	0	-	-	-	-
Northern Lights Regional Health Centre	0	0	0	0	0	0	0	0	8	8	6	14	19	9	48
Queen Elizabeth II Hospital	0	0	0	0	0	0	0	0	0	0	0	10	4	8	22
TOTAL	7	59	74	143	283	335	359	308	359	1361	297*	407*	459*	440*	1603

<sup>&</sup>lt;sup>3</sup> All data includes the Peter Lougheed Centre the Royal Alexandra Hospital. These hospitals have Addictions Recovery and Community Health (ARCH) programs, which offer buprenorphine/naloxone in the Emergency Department. It is not possible to separate buprenorphine/naloxone initiations and referrals to community clinics by ARCH from those that arise from the ESCN program.

\*Note: The four manual collection sites (Red Deer, Medicine Hat, Chinook, and Pincher Creek) had only data collected up until 15<sup>th</sup> of May 2020, 2 years from program initiation.

### Demographics breakdown

Since program start to end of March 2021, the 21 reporting EDs had 16,133 opioid-related ED visits and the four discontinued reporting sites had 2,005 opioid-related ED visits. Bup/nal was given to 2,167 unique individuals in the ED during 3,247 ED visits.

Table 4. YTD Age group demographics (KPI #1 and #2).

	All op	ioid-related ED	visits	ED visits where bup/nal was given				
Age Group		Frequency (%)		Frequency (%)				
	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21		
<10	1 (0%)	14 (0%)	6 (0%)	0 (0%)	0 (0%)	0 (0%)		
10-19	66 (4%)	218 (3%)	263 (3%)	4 (1%)	29 (2%)	19 (1%)		
20-39	1163 (64%)	4191 (61%)	5995 (64%)	181 (64%)	843 (62%)	986 (62%)		
40-65	536 (29%)	2234 (32%)	2890 (31%)	84 (30%)	436 (32%)	519 (32%)		
>65	55 (3%)	265 (4%)	241 (3%)	14 (5%)	53 (4%)	79 (5%)		
TOTAL	1821	6922	9395	283	1361	1603		

Table 5. YTD Gender demographics (KPI #1 and #2).

	All opi	ioid-related El	D visits	ED visits where bup/nal was given				
Gender		Frequency (%	)	Frequency (%)				
	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21		
Male	1086 (60%)	4164 (60%)	5912 (63%)	147 (52%)	792 (58%)	983 (61%)		
Female	735 (40%)	2757 (40%)	3479 (37%)	136 (48%)	569 (42%)	620 (39%)		
Other	0 (0%)	1 (0%)	4 (0%)	0 (0%)	0 (0%)	0 (0%)		
TOTAL	1821	6922	9395	283	1361	1603		

Table 6. YTD Length of stay quartiles (KPI #1 and #2).

Fiscal Year	Quartiles	All opioid-related ED visits (Length of Stay)	ED visits where bup/nal was given (Length of Stay)
2018/19	25% of visits lasted equal to or under	3 hours 10 minutes	4 hours 15 minutes
	50% of visits lasted equal to or under (median)	5 hours 30 minutes	7 hours 12 minutes
	75% of visits last equal to or under	10 hours 4 minutes	14 hours 51 minutes
2019/20	25% of visits lasted equal to or under	3 hours 20 minutes	4 hours 43 minutes
	50% of visits lasted equal to or under (median)	6 hours 3 minutes	8 hours 35 minutes
	75% of visits last equal to or under	10 hours 56 minutes	17 hours 13 minutes
2020/21	25% of visits lasted equal to or under	3 hours 31 minutes	5 hours 03 minutes
	50% of visits lasted equal to or under (median)	6 hours 18 minutes	8 hours 41 minutes
	75% of visits last equal to or under	10 hours 56 minutes	16 hours 38 minutes

Note: For discharged patients length of stay is the calculated difference between the triage date/time and the disposition date/time. For admitted patients, the length of stay is the calculated difference between the triage date/time and the departure date/time, which includes the time patients spend waiting in the ED for an inpatient bed.

ED visits where bup/nal was given have a longer length of stay than opioid-related ED visits because a higher proportion of these patients are admitted.

Table 7. YTD Canadian Triage Acuity Scale (CTAS) (KPI #1 and #2).

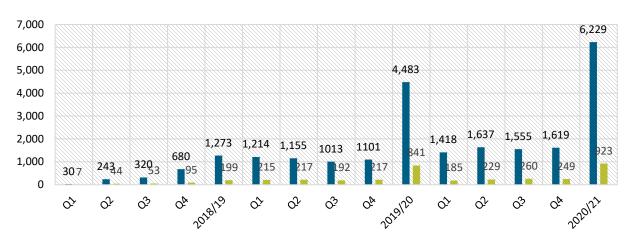
	All op	ioid-related E	D visits	ED visits where bup/nal was given			
CTAS Level	Frequency (%)			Frequency (%)			
	2018/19	2019/20	2020/21	2018/19	2019/20	2020/21	
Level 1 - Resuscitation	92 (5%)	393 (6%)	637 (7%)	3 (1%)	29 (2%)	26 (2%)	
Level 2 - Emergent	842 (46%)	2852 (41%)	4185 (45%)	91 (32%)	434 (32%)	515 (32%)	
Level 3 - Urgent	638 (35%)	2630 (38%)	3433 (37%)	132 (47%)	638 (47%)	798 (50%)	
Level 4 – Less Urgent	211 (11%)	839 (12%)	887 (9%)	47 (17%)	191 (14%)	215 (13%)	
Level 5 – Non-Urgent	37 (2%)	187 (3%)	209 (2%)	10 (4%)	64 (5%)	47 (3%)	
Unknown	1 (0%)	21 (0%)	44 (0%)	0 (0%)	5 (0%)	2 (0%)	
TOTAL	1821	6922	9395	283	1361	1603	

### Eligibility of patients given bup/nal in ED for follow up transition

Within the ESCN program, eligibility for follow up transition is defined as occurring when a patient who presents to the ED is initiated on bup/nal during their emergency visit and discharged from ED. Patients with other dispositions such as admissions, transfers, and left without treatment are excluded from the following analysis because there is no development of an outpatient follow up plan. Of the 3,247 ED visits where bup/nal tablets were given, 1,963 (60%) led to discharge and eligibility for community follow-up.

Descriptions of the disposition codes counted as discharged are listed in Appendix II.

Figure 5. Opioid-related ED visits discharged, by quarter.



- Opioid-related ED visits discharged without bup/nal
- ED visits where bup/nal was given and the patient was discharged

Table 8. Dispositions of ED visits where bup/nal tablets were given, by quarter.

Fiscal Year	Patient Disposition	Q1	Q2	Q3	Q4	Total (%)
2018/19	Discharged	7	44	53	95	199 (70%)
	Other	0	15	21	48	84 (30%)
	TOTAL	7	59	74	143	283
2019/20	Discharged	215	217	192	217	841 (62%)
	Other	120	142	116	142	520 (38%)
	Total	335	359	308	359	1361
2020/21	Discharged	185	229	260	249	923 (58%)
	Other	112	178	199	191	680 (42%)
	Total	297	407	459	440	1603

Table 9. YTD Length of stay of discharged ED visits.

Fiscal Year	Quartiles	Opioid-related ED visits discharged without bup/nal (Length of Stay)	ED visits where bup/nal was given and the patient was discharged (Length of Stay)
2018/19	25% of visits lasted equal to or under	3 hours 7 minutes	3 hours 33 minutes
	50% of visits lasted equal to or under (median)	5 hours 4 minutes	5 hours 52 minutes
	75% of visits last equal to or under	8 hours 6 minutes	8 hours 53 minutes
2019/20	25% of visits lasted equal to or under	3 hours 18 minutes	3 hours 31 minutes
	50% of visits lasted equal to or under (median)	5 hours 32 minutes	5 hours 44 minutes
	75% of visits last equal to or under	8 hours 55 minutes	9 hours 40 minutes
2020/21	25% of visits lasted equal to or under	3 hours 33 minutes	3 hours 50 minutes
	50% of visits lasted equal to or under (median)	5 hours 51 minutes	6 hours 14 minutes
	75% of visits last equal to or under	9 hours 22 minutes	10 hours 10 minutes

## Initiation vs. maintenance of bup/nal in ED

The Provincial Expert Working Group for bup/nal initiation in EDs defined a "new initiation" of bup/nal in ED as a patient who did not have a previous bup/nal prescription for seven days prior to their ED visit. If a patient did have a bup/nal prescription less than seven days prior to their ED visit, then that patient is considered to have been given bup/nal in ED as "maintenance," rather than a new initiation.

Table 10. New-initiations vs. maintenance for ED visits with a discharged disposition

Fiscal Year	Bup/nal Type	Q1	Q2	Q3	Q4	Total	YTD %
2018/19	New initiation	5	33	40	71	149	75%
	Maintenance	2	11	13	24	50	25%
	TOTAL	7	44	53	95	199	100%
2019/20	New initiation	166	152	136	161	615	73%
	Maintenance	49	65	56	56	226	27%
	TOTAL	215	217	192	217	841	100%
2020/21	New initiation	122	173	204	194	693	75%
	Maintenance	63	56	56	55	230	25%
	TOTAL	185	229	260	249	923	100%

### Patients continuing on OAT treatment after ED initiation

A proxy measure of whether patients were continuing to fill bup/nal prescriptions after their ED visit was used to identify retention in treatment. Since bup/nal is not the only OAT available for patients, patients who are on or switch to methadone, slow release oral morphine, or hydromorphone are also considered as retained in treatment.

For this patient level analysis, the first ED visit where bup/nal is given is counted as the index visit. For patients not given bup/nal in ED, the first ED visit for an opioid-related reason is counted as the index visit.

Table 11. Percentage of patients continuing to fill bup/nal prescriptions after their index ED visit (KPI #3).

	% of patients continuing to fill bup/nal prescriptions				
	30-days post 60-days post 90-days post 120-days post			180-days post	
	index ED visit	index ED visit	index ED visit	index ED visit	index ED visit
Patients given	886/1448 =	797/1392 =	729/1349 =	676/1288 =	574/1169 =
bup/nal in ED	61%	57%	54%	52%	49%
Patients NOT given bup/nal in ED	1779/6903 = 26%	1664/6669 = 25%	1566/6423 = 24%	1467/6159 = 24%	1281/5657 = 23%

Table 12. Percentage of patients continuing to fill any OAT prescriptions after their index ED visit (KPI #3).

	% of patients continuing to fill any OAT prescriptions				
	30-days post 60-days post 90-days post 120-days post index ED visit index ED visit index ED visit				180-days post index ED visit
Patients given	1016/1488 =	939/1392 =	879/1349 =	817/1288 =	712/1169 =
bup/nal in ED	70%	67%	65%	63%	61%
Patients NOT given bup/nal in ED	2585/6903 = 37%	2446/6669 = 37%	2326/6423 = 36%	2200/6159 = 36%	1963/5657 = 35%

Notes: Follow-up data is calculated using the index ED visit date. Patients initiated on bup/nal in recent months will have less follow-up data. Cut-offs for follow-up rates are listed below:

- follow-up 30-days post index ED visit is calculated using data until March 2021
- follow-up 60-days post index ED visit is calculated using data until February 2021
- follow-up 90-days post index ED visit is calculated using data until January 2021
- follow-up 120-days post index ED visit is calculated using data until December 2020
- follow-up 180-days post index ED visit is calculated using data until October 2020

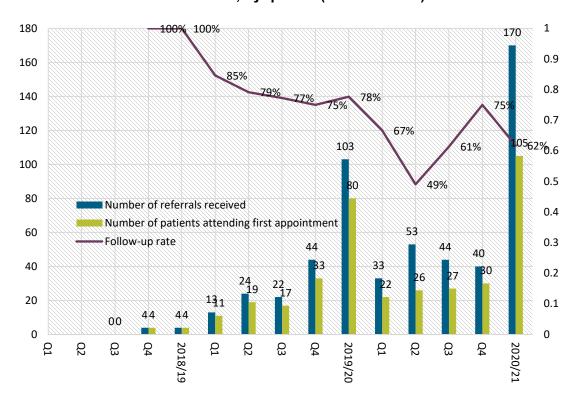
Since program start to the end of March 2021, 61% of discharged patients given bup/nal in the ED continued to fill bup/nal prescriptions 30-days post their index ED visit. 70% of patients were continuing to fill any OAT prescription 30-days post their index ED visit.

For comparison, 26% of discharged patients not given bup/nal in the ED were filling bup/nal prescriptions 30-days post their index ED visit, and 37% were filling any OAT prescription.

There is some decrease in prescription filling for those initiated on OAT in ED over time. This may reflect the complexity of the patients reached by the OAT in EDs program, or a lack of access to other quality health services for patients initiated in ED. Any length of time when patients are in treatment is time when their risk of morbidity and mortality is reduced.

# Community clinics KPIs

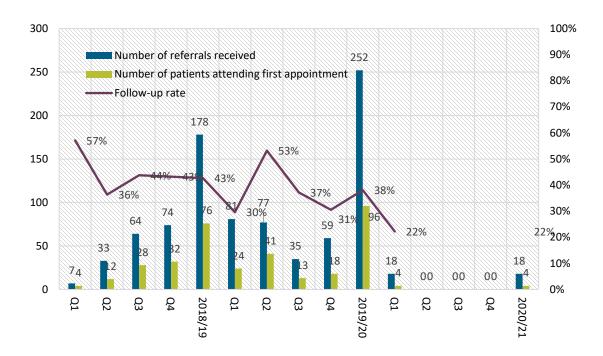
Figure 6. Number of referrals and patients attending community clinics at Virtual ODP site, by quarter (KPI #4 and #5).



Since May 2020, only Virtual ODP clinic data has been collected. The number of referrals received from ED and the number of patients who attend their first follow-up appointment is reported.

From program start to end of March 2021, the Virtual ODP clinic received 277 referrals from ED, and 189 of those referrals resulted in the patient attending their first follow-up appointment, for an overall follow-up rate of 68%.

Figure 7. Number of referrals and patients attending all community clinics, with exception of Virtual ODP, by quarter (KPI #4 and #5).



From program start to end of March 2021, all the community clinics other than VODP received 448 referrals from ED, and 176 of those referrals resulted in the patient attending their first follow-up appointment, for an overall follow-up rate of 39%. Data was not collected from these clinics following May 2020.

# AHS pharmacy utilization report

A bup/nal utilization report is provided by Alberta Health Services Pharmacy Services and is based on pharmacy set-up and restocking at ED sites across the province. A comprehensive list of sites for this report is included in Appendix III.

Figure 8. ED bup/nal utilization, provincial total (KPI #6)

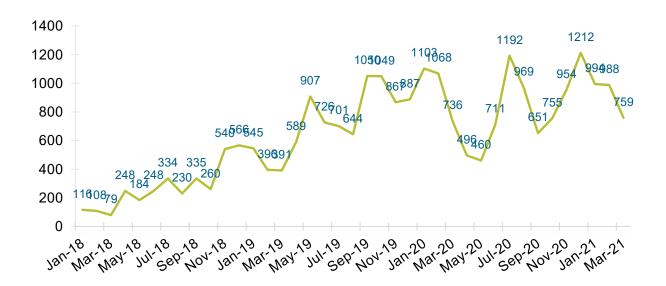
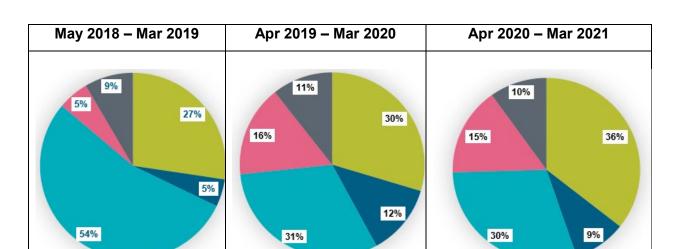


Figure 9. ED bup/nal utilization, provincial total, by zone, (KPI #6)

Calgary Central Edmonton North South



Bup/nal utilization has increased overall since January 2018. Calgary zone has the highest proportion of utilization at 36% of all ED bup/nal utilization in the province during 2020/21 Q4 reporting period.

# Reporting & learning system for patient safety

The Reporting & Learning System for Patient Safety (RLS) is an AHS system for internal reporting. It is focused on a system approach where patient safety is advanced by learning from clinical adverse events, close calls, and hazards for the purpose of improving health care. RLS use is voluntary, and therefore, the numbers do not necessarily reflect all events.

Table 13. Patient safety events related to bup/nal initiation in ED (KPI #7)

Fiscal Year	Quarter	Report Date	Description
2018/19	Q2	Aug 2	Medication given in wrong amount – Minimal harm
	Q3	Nov 19	Medication given in wrong amount – No apparent harm
	Q4	Jan 04	Medication given at wrong time – Minimal harm
	Q4	Feb 11	Medication given in wrong amount – No apparent harm
2019/20	Q1	Apr 10	Medication given in wrong amount – No apparent harm
	Q1	April 29	Medication not supplied when requested – Minimal harm
	Q3	Oct 29	Medication given wrong amount – No apparent harm
	Q3	Dec 24	Medication given wrong amount – No apparent harm
	Q4	Feb 5	Medication administered to wrong patient – Minimal harm
	Q4	Feb 13	Medication given wrong amount – No apparent harm
2020/21	Q1	May 16	Medication given in wrong amount – No apparent harm
	Q2	Sep 6	Medication given in wrong amount – Minimal harm
	Q3	Dec 17	Medication given in wrong amount – No apparent harm
	Q4	Jan 01	Medication given in wrong amount - Hazard
		YTD (Total)	14

Since program start to end of March 2021, there were 14 reported adverse events related to initiating bup/nal in the ED. All events resulted in no apparent harm or minimal harm to the patient.

#### Conclusion

#### Go-live sites

Since program start to end of March 2021, there were a total of 110 EDs participating in the program, and 22 partnered OUD treatment clinics receiving ED referrals. 25 EDs initially reported data and these 25 EDs received 84% of opioid-related visits provincially since program launch. After May 2020, 21 EDs continued to report evaluation data and comprised of 74% of opioid-related visits provincially since program launch. 14 (64%) of participating clinics reported data at program start, however, after May 2020 only the Virtual ODP clinic reported data.

# Bup/nal initiation in ED

Bup/nal was initiated during 3,247 ED visits that occurred after go-live dates. Patients who had opioid-related ED visits and did not receive bup/nal may not have been eligible due to medical comorbidities, because they may have declined bup/nal, or they may not have been offered it.

#### ED length of stay

For Q4 of fiscal year 2020/21 fiscal year, length of stay for ED visits given bup/nal and discharged home was 6 hours and 14 minutes, compared to 5 hours and 51 minutes for opioid-related ED visits not given bup/nal and discharged home.

#### Retention in treatment

A proxy measure of whether patients were continuing to fill bup/nal prescriptions after their ED visit was used to identify retention in treatment. Since bup/nal is not the only OAT available for patients, patients who are on or switch to methadone, morphine, or hydromorphone are also considered as retained in treatment. From program start to end of March 2021, 70% (1010 out of 1488) of patients given bup/nal in ED and discharged continued to fill an OAT prescription 30 days after their index ED visit compared to 37% (2561 out of 6903) of patients not given bup/nal in ED and discharged. This suggests the program is having an impact in initiating patients who would not otherwise be in care on OAT.

#### Referrals to OUD treatment clinics

Since program start until March 2021, the Virtual ODP had received 277 referrals from ED, and 189 of those patients attended their first follow-up appointment, for a follow-up rate of 68%. Referral pathways are open to patients who receive bup/nal in ED as well as those who do not.

# Patient safety events

Adverse events were tracked as a balancing measure to monitor for unintended negative consequences of the program. Since program start, there were a total of 14 patient safety events reported with all reporting no apparent harm or minimal harm to the patient.

# Appendix I

## Opioid-related ED visits

ICD 10 codes T40XX and F11XX, for any diagnosis field (1-10):

T40 (Po	isoning by narcotics and psychodysleptics [hallucinogens]
T400	Poisoning by opium
T401	Poisoning by heroin
T402	Poisoning by other opioids
T403	Poisoning by methadone
T404	Poisoning by other synthetic narcotics
T406	Poisoning by other and unspecified narcotics
F11 (Me	ental and behavioral disorders due to use of opioids)
F110	Mental and behavioural disorders due to use of opioids, acute intoxication
F111	Mental and behavioural disorders due to use of opioids, harmful use
F112	Mental and behavioural disorders due to use of opioids, dependence syndrome
F113	Mental and behavioural disorders due to use of opioids, withdrawal state
F114	Mental and behavioural disorders due to use of opioids, withdrawal state with delirium
F115	Mental and behavioural disorders due to use of opioids, psychotic disorder
F116	Mental and behavioural disorders due to use of opioids, amnesic syndrome
F117	Mental and behavioural disorders due to use of opioids, residual and late-onset psychotic
1 117	disorders
F118	Mental and behavioural disorders due to use of opioids, other mental and behavioural
1 110	disorders
F119	Mental and behavioural disorders due to use of opioids, unspecified mental and behavioural
1 113	disorders

#### The following codes are excluded:

T405 – Poisoning by cocaine

T407 – Poisoning by cannabis derivatives

T408 – Poisoning by lysergide [LSD]

T409 – Poisoning by other and unspecified psychodysleptics [hallucinogens]

# Appendix II

# NACRS codes for ED dispositions – Discharge

CODE	Short Description	Long Description
1	Home without support	Discharged Home (private dwelling, not an institution; no support services)
15	Home with support	Discharged to place of residence (incl. Nursing or Retirement Home, Private Dwelling with Home Care, Jail)
17	Private Home	Discharge to private home, condominium, or apartment without supports from the community at home or referred to services, does not include discharge to group/supportive housing.
40	Group/Supportive Living	Transfer to assisted living/supportive housing, including shelters; these settings do not have 24-hour nursing care.

# Appendix III

## Emergency department sites included in AHS Pharmacy Utilization Report<sup>4</sup>

Zone	Site
Calgary	Airdrie Urgent Care Centre
Calgary	Alberta Childrens Hospital
Calgary	Banff Mineral Springs Hospital
Calgary	Canmore General Hospital
Calgary	Cochrane Urgent Care Centre
Calgary	Didsbury District Health Services
Calgary	Foothills Medical Centre
Calgary	High River General Hospital
Calgary	Oilfields General Hospital
Calgary	Okotoks Health and Wellness Centre
Calgary	Peter Lougheed Centre
Calgary	Rockyview General Hospital
Calgary	Sheldon M.Chumir Health Centre
Calgary	South Calgary Urgent Care Centre
Calgary	South Health Campus
Calgary	Strathmore District Health Services
Central	Consort Hospital & Care Centre
Central	Coronation Community Health Centre
Central	Daysland Health Centre
Central	Drayton Valley Healthcare Centre
Central	Drumheller Health Centre
Central	Hanna Health Centre
Central	Innisfail Health Centre
Central	Killam General Hosptial
Central	Lacombe Healthcare Centre
Central	Lamont Health Care Centre
Central	Olds Hospital and Care Centre
Central	Ponoka Healthcare Centre
Central	Provost Health Centre
Central	Red Deer Regional Hospital Centre

<sup>&</sup>lt;sup>4</sup> The AHS Pharmacy Utilization Report suggests that there is bup/nal prescribing in EDs that have not officially implemented the program. This could be due to local physician practices or local programs that are established at certain sites.

Central	Rimbey Hospital and Care Centre
Central	Rocky Mountain House Health Centre
Central	St Joseph's General Hospital
Central	St Mary's Hospital
Central	Stettler Hospital & Care Centre
Central	Three Hills Health Centre
Central	Tofield Health Centre
Central	Two Hills Health Centre
Central	Vermilion Health Centre
Central	Wetaskiwin Hospital and Care Centre
South	Brooks Health Centre
South	Cardston Health Centre
South	Chinook Regional Hospital
South	Coaldale Health Centre
South	Crowsnest Pass Health Centre
South	Fort Macleod Health Centre
South	Medicine Hat Regional Hospital
South	Milk River Health Centre
South	Pincher Creek Community Health Centre
South	Raymond Health Centre
South	Taber Health Centre
Edmonton	Devon General Hospital
Edmonton	East Edmonton Health Centre
Edmonton	Fort Saskatchewan Community Hospital
Edmonton	Grey Nuns Community Hospital
Edmonton	Leduc Community Hospital
Edmonton	Misericordia Community Hospital
Edmonton	Northeast Community Health Centre
Edmonton	Royal Alexandra Hospital
Edmonton	Strathcona Community Hospital
Edmonton	Sturgeon Community Hospital
Edmonton	University of Alberta Hospital
Edmonton	Westview Health Centre
North	Athabasca Healthcare Centre
North	Barrhead Healthcare Centre
North	Bonnyville Healthcare Centre
North	Central Peace Health Complex
North	Cold Lake Healthcare Centre
North	Edson Healthcare Centre

Elk Point Healthcare Centre
Fairview Health Complex
George McDougall-Smoky Lake Healthcare Centre
Grande Cache Community Health Complex
Grimshaw/Berwyn and District Community Health Centre
High Prairie Health Complex
Hinton Healthcare Centre
Manning
Mayerthorpe Healthcare Centre
Northern Lights Hospital
Peace River Community Health Centre
Queen Elizabeth II Hospital
Redwater Health Centre
Sacred Heart Community Health Centre
Seton-Jasper Healthcare Centre
St Therese-St Paul Healthcare Centre
Wainwright Health Centre
Westlock Healthcare Centre
Whitecourt Healthcare Centre
William J. Cadow - Lac La Biche Healthcare Centre

# Appendix IV

# DIN codes for OAT prescriptions

DIN	COMPANY	PRODUCT	STRENGTH
02453908	ACTAVIS PHARMA COMPANY	ACT BUPRENORPHINE/NALOXONE	2 MG
02453916	ACTAVIS PHARMA COMPANY	ACT BUPRENORPHINE/NALOXONE	8 MG
02408090	MYLAN PHARMACEUTICALS ULC	MYLAN- BUPRENORPHINE/NALOXONE	2 MG
02408104	MYLAN PHARMACEUTICALS ULC	MYLAN- BUPRENORPHINE/NALOXONE	8 MG
02424851	PHARMASCIENCE INC	PMS-BUPRENORPHINE-NALOXONE	2 MG
02424878	PHARMASCIENCE INC	PMS-BUPRENORPHINE-NALOXONE	8 MG
02295695	INDIVIOR UK LIMITED	SUBOXONE	2 MG
02295709	INDIVIOR UK LIMITED	SUBOXONE	8 MG
02468085	INDIVIOR UK LIMITED	SUBOXONE	12 MG
02468093	INDIVIOR UK LIMITED	SUBOXONE	16 MG
02241377	PALADIN LABS INC	METADOL	10 MG / ML
02247694	PALADIN LABS INC	METADOL	1 MG / ML
02244290	PALADIN LABS INC	METADOL-D	10 MG / ML
02247374	PALADIN LABS INC	METADOL-D	1 MG / ML
02394596	MALLINCKRODT CANADA ULC	METHADOSE	10 MG / ML
02394618	MALLINCKRODT CANADA ULC	METHADOSE	10 MG / ML
02184435	BGP PHARMA ULC	KADIAN	20 MG
02184443	BGP PHARMA ULC	KADIAN	50 MG
02184451	BGP PHARMA ULC	KADIAN	100 MG
02242163	BGP PHARMA ULC	KADIAN	10 MG
02146126	SANDOZ CANADA INCORPORATED	HYDROMORPHONE HP 50	50 MG / ML

# Appendix V

# All ED sites live by Mar 31, 2021

Zone	City / Town	Site	Go-Live Date
Edmonton	Edmonton	North East Community Health Centre	15-May-18
Edmonton	Edmonton	Grey Nuns Community Hospital	11-Jun-18
Calgary	Calgary	Rockyview General Hospital	05-Jul-18
Calgary	Calgary	Foothills Medical Centre	06-Dec-18
Calgary	Calgary	Sheldon M. Chumir Urgent Care Centre	06-Dec-18
Calgary	Calgary	South Health Campus	06-Dec-18
Central	Red Deer	Red Deer Regional Hospital	12-Dec-18
Edmonton	St. Albert	Sturgeon Community Hospital	17-Dec-18
South	Lethbridge	Chinook Regional Hospital	21-Feb-19
Edmonton	Edmonton	Royal Alexandra Hospital	25-Feb-19
Edmonton	Edmonton	University of Alberta Hospital	04-Mar-19
Edmonton	Edmonton	Misericordia Community Hospital	05-Mar-19
Edmonton	Sherwood Park	Strathcona Community Hospital	11-Mar-19
Calgary	Calgary	Peter Lougheed Centre	14-Mar-19
North	Edson	Edson Healthcare Centre	01-Apr-19
South	Cardston	Cardston Health Centre	15-Apr-19
Central	Sundre	Sundre Hospital & Care Centre	15-Apr-19
South	Medicine Hat	Medicine Hat Regional Hospital	17-Apr-19
Calgary	Calgary	South Calgary Health Centre Urgent Care Centre	18-Apr-19
Central	Camrose	St. Mary's Hospital	10-May-19
Calgary	Airdrie	Airdrie Community Health Centre Urgent Care Centre	17-May-19
Central	Wetaskiwin	Wetaskiwin Hospital & Care Centre	21-May-19
Central	Rocky Mountain House	Rocky Mountain House Health Centre	23-May-19
Edmonton	Fort Saskatchewan	Fort Saskatchewan Community Hospital	03-Jun-19
Calgary	High River	High River General Hospital	03-Jun-19
Calgary	Black Diamond	Oilfields General Hospital	03-Jun-19
Edmonton	Stony Plain	Stony Plain Westview Health Centre	04-Jun-19
Calgary	Banff	Banff Mineral Springs Hospital	05-Jun-19

Edmonton	Leduc	Leduc Community Hospital	17-Jun-19
Central	Rimbey	Rimbey Hospital & Care Centre	20-Jun-19
North	Cold Lake	Cold Lake Healthcare Centre	01-Jul-19
Central	Ponoka	Ponoka Hospital &Care Centre	02-Jul-19
		Devon General Hospital	
Edmonton	Devon	(TEMPORARY CLOSURE)	08-Jul-19
Central	Drayton Valley	Drayton Valley Hospital & Care Centre	09-Jul-19
	<u> </u>	Redwater Health Centre	09-Jul-19
North North	Redwater		18-Jul-19
	Bonnyville	Bonnyville Healthcare Centre	
Calgary	Claresholm	Claresholm General Hospital	29-Jul-19
Central	Lacombe	Lacombe Hospital & Care Centre	30-Jul-19
South	Oyen	Big Country Hospital	19-Aug-19
South	Bassano	Bassano Health Centre	29-Aug-19
South	Brooks	Brooks Health Centre	03-Sep-19
North	Grimshaw	Grimshaw/Berwyn & District Community Health Centre	03-Sep-19
NOITH	Gillisiaw	Okotoks Health and Wellness	03-3ер-19
Calgary	Okotoks	Centre Urgent Care Services	03-Sep-19
		Peace River Community Health	•
North	Peace River	Centre	03-Sep-19
NI4l-	Ot David	St. Therese - St. Paul Healthcare	00.0 40
North	St. Paul	Centre	03-Sep-19
Calgary	Didsbury	Didsbury District Health Services	11-Sep-19
Calgary	Canmore	Canmore General Hospital	18-Sep-19
Edmonton	Edmonton	East Edmonton Health Centre	23-Sep-19
Central	Wainright	Wainwright Health Centre	25-Sep-19
Calgary	Cochrane	Cochrane Community Health Centre Urgent Care Centre	02-Oct-19
Calgary	Strathmore	Strathmore District Health Services	03-Oct-19
Calgary	Vulcan	Vulcan Community Health Centre	09-Oct-19
South	Crowsnest Pass	Crowsnest Pass Health Centre	15-Oct-19
North	Hinton	Hinton Healthcare Centre	15-Oct-19
South	Pincher Creek	Pincher Creek Health Centre	15-Oct-19
		Hardisty Health Centre	
Central	Hardisty	(TEMPORARY CLOSURE)	17-Oct-19
Central	Vermilion	Vermilion Health Centre	17-Oct-19
Central	Olds	Olds Hospital & Care Centre	24-Oct-19
South	Raymond	Raymond Health Centre	28-Oct-19
		William J. Cadzow - Lac La Biche	
North	Lac La Biche	Healthcare Centre	29-Oct-19
North	Elk Point	Elk Point Healthcare Centre	04-Nov-19
North	Slave Lake	Slave Lake Health Centre	04-Nov-19
Central	Vegreville	St. Joseph's General Hospital	04-Nov-19
Central	Two Hills	Two Hills Health Centre	04-Nov-19

Central	Innisfail	Innisfail Health Centre	12-Nov-19
Central	Tofield	Tofield Health Centre	12-Nov-19
Central	Viking	Viking Health Centre	12-Nov-19
North	High Prairie	High Prairie Health Complex	14-Nov-19
South	Bow Island	Bow Island Health Centre	18-Nov-19
North	Jasper	Seton - Jasper Healthcare Centre	18-Nov-19
North	Westlock	Westlock Healthcare Centre	21-Nov-19
Central	Daysland	Daysland Health Centre	25-Nov-19
South	Fort Macleod	Fort Macleod Health Centre	25-Nov-19
Central	Killam	Killam Health Centre	25-Nov-19
Central	Coronation	Coronation Hospital & Care Centre	09-Dec-19
Central	Provost	Provost Health Centre	09-Dec-19
Central	Stettler	Stettler Hospital & Care Centre	09-Dec-19
South	Milk River	Milk River Health Centre	10-Dec-19
North	La Crete	La Crete Community Health Centre	16-Dec-19
North	High Level	Northwest Health Centre	16-Dec-19
North	Fort Vermilion	St. Theresa General Hospital	16-Dec-19
		Wabasca - Desmarais Healthcare	
North	Wabasca/Desmarais	Centre	16-Dec-19
North	Fairview	Fairview Health Complex	17-Dec-19
North	Whitecourt	Whitecourt Healthcare Centre	23-Dec-19
North	Fort McMurray	Northern Lights Regional Health Centre	06-Jan-20
Central	Hanna	Hanna Health Centre	13-Jan-20
Central	Three Hills	Three Hills Health Centre	13-Jan-20
North	McLennan	Sacred Heart Community Health Centre	14-Jan-20
North	Beaverlodge	Beaverlodge Municipal Hospital	20-Jan-20
Central	Castor	Our Lady of the Rosary Hospital	20-Jan-20
North	Athabasca	Athabasca Healthcare Centre	03-Feb-20
North	Barrhead	Barrhead Healthcare Centre	03-Feb-20
North	Boyle	Boyle Healthcare Centre	03-Feb-20
North	Smoky Lake	George McDougall - Smoky Lake Healthcare Centre	03-Feb-20
Central	Lamont	Lamont Health Care Centre	03-Feb-20
North	Swan Hills	Swan Hills Healthcare Centre	03-Feb-20
South	Taber	Taber Health Centre	03-Feb-20
North	Spirit River	Central Peace Health Complex	10-Feb-20
South	Coaldale	Coaldale Health Centre	10-Feb-20
Central	Drumheller	Drumheller Health Centre	10-Feb-20
North	Mayerthorpe	Mayerthorpe Healthcare Centre	10-Feb-20
North	Grande Cache	Grande Cache Community Health Complex	18-Feb-20

North	Manning	Manning Community Health Centre	18-Feb-20
North	Fox Creek	Fox Creek Healthcare Centre	23-Mar-20
North	Valleyview	Valleyview Health Centre	23-Mar-20
Central	Consort	Consort Hospital & Care Centre (TEMPORARY CLOSURE)	30-Mar-20
		Sylvan Lake Community Health	
Central	Sylvan Lake	Centre	30-Mar-20
North	Grande Prairie	Queen Elizabeth II Hospital	29-Jun-20
Calgary	Calgary	Alberta Children Hospital	04-Aug-20
Edmonton	Edmonton	Stollery Children's Hospital	20-Sep-20