

Identifying barriers of access and retention in opioid agonist treatment in British Columbia



BC Centre for Disease Control
An agency of the Provincial Health Services Authority

BOOST June 6th, 2019

Kristi.Papamihali@bccdc.ca

Brittany Graham, Alexis Crabtree,
Mohammad Karamouzian, Margot Kuo,
Sara Young, Jane Buxton

toward
THE heart.com
BCCDC HARM REDUCTION SERVICES

Conflict of Interest

I have no conflicts of interest to declare.

The work presented here was funded in part by Health Canada, BC Ministry of Health, and the BC Center for Disease Control.

Objective

- To provide client-informed insight on barriers to care and retention in care as it pertains to opioid agonist treatment (OAT)

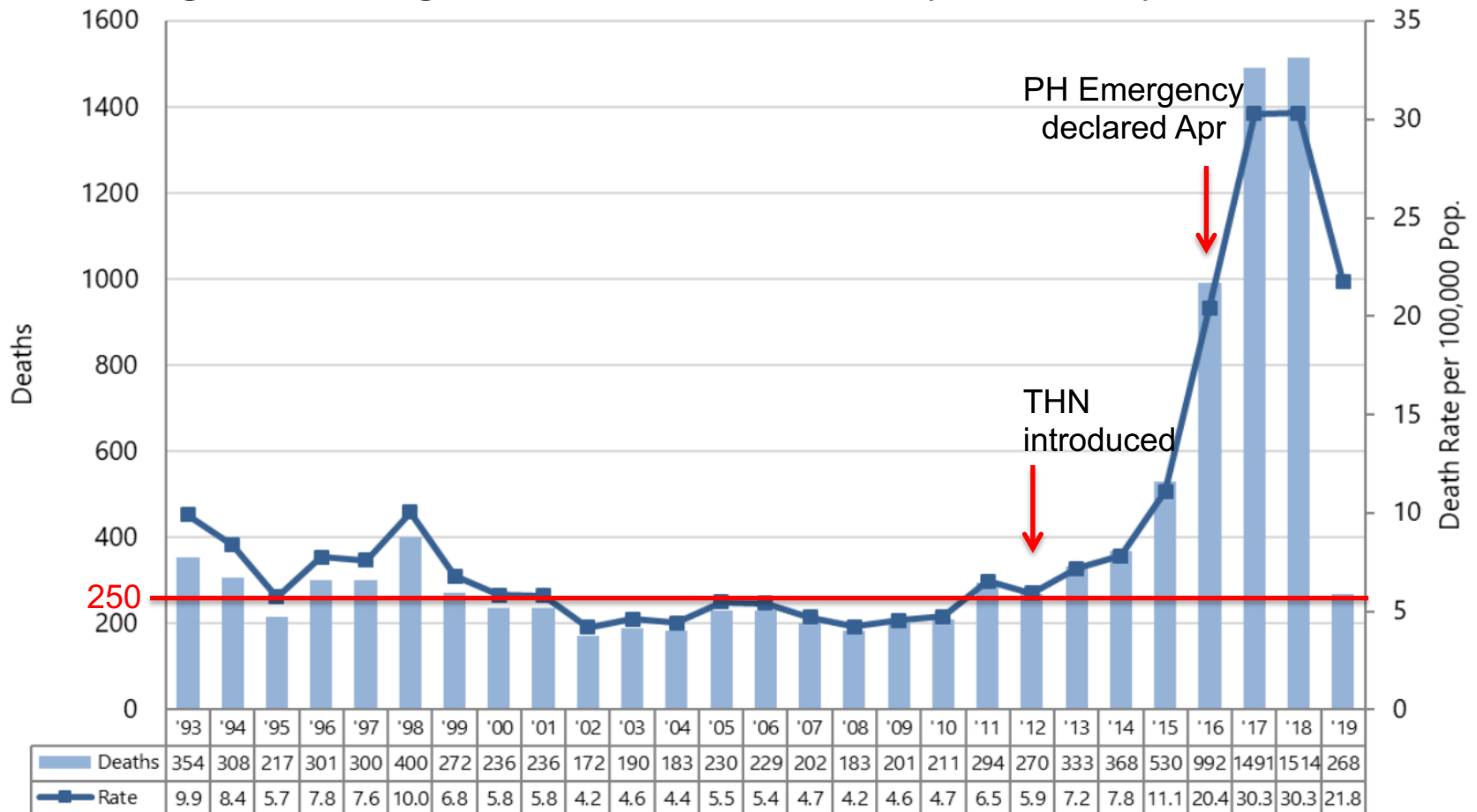
Overview

- Opioid agonist treatment (OAT) in BC now
 - Evidence-based guidelines
 - Training program scale-up
 - Removal of prescribing restrictions
- OAT by the numbers
 - New clients
 - New prescribers
 - Access and retention?
- BC harm reduction distribution site client survey 2018
 - Reported use of OAT
 - Reported barriers to OAT initiation and retention
- Filling in the gaps for OAT provision



BC Unintentional Illicit Drug Overdose Deaths

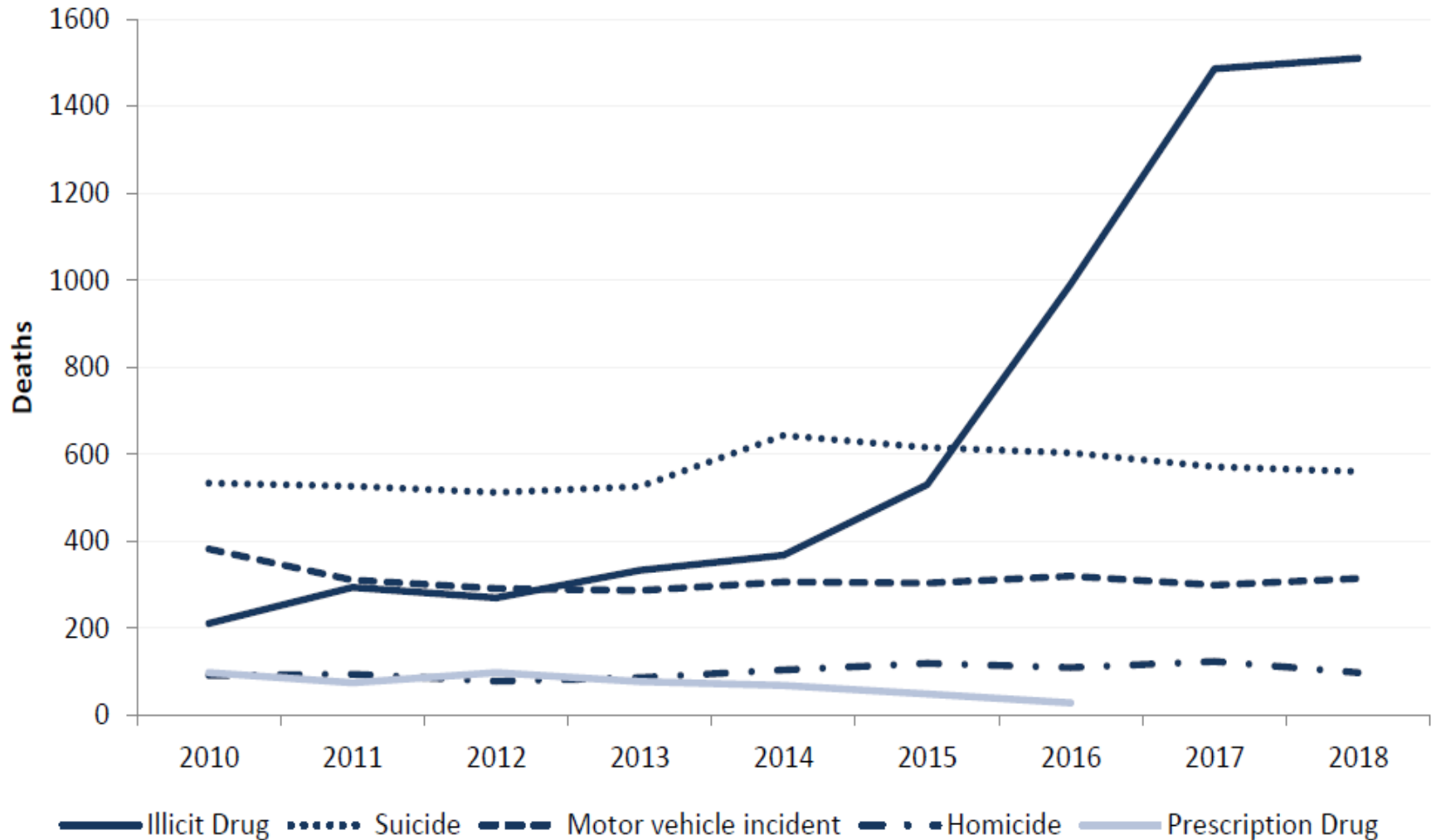
Figure 1: Illicit Drug Overdose Deaths and Death Rate per 100,000 Population [3-6]



BCCS May 15, 2019 (data to Mar. 31, 2019) provisional 5

<https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/statistical/illicit-drug.pdf>

Major causes of unnatural deaths



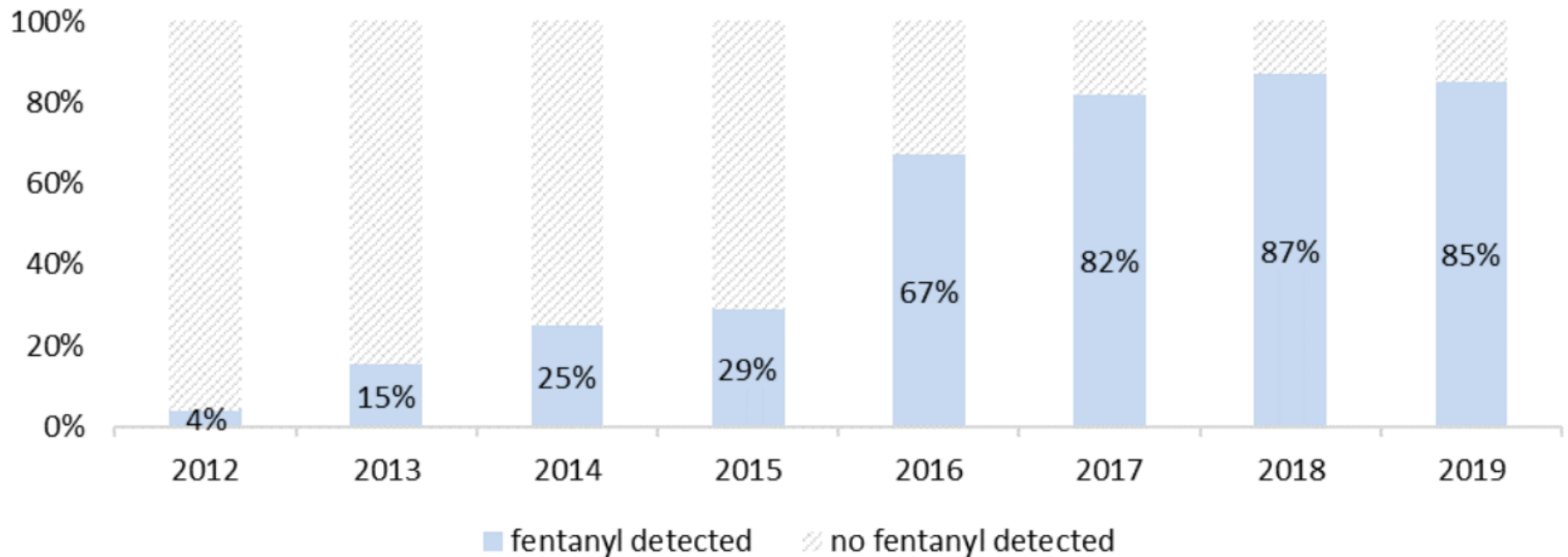
BCCS May 15, 2019

<https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/statistical/illicit-drug.pdf>



% of illicit drug OD deaths where fentanyl detected in BC

Figure 1: Percent of Illicit Drug Deaths with Fentanyl Detected



Health

 PRINT

Provincial health officer declares public health emergency

Share



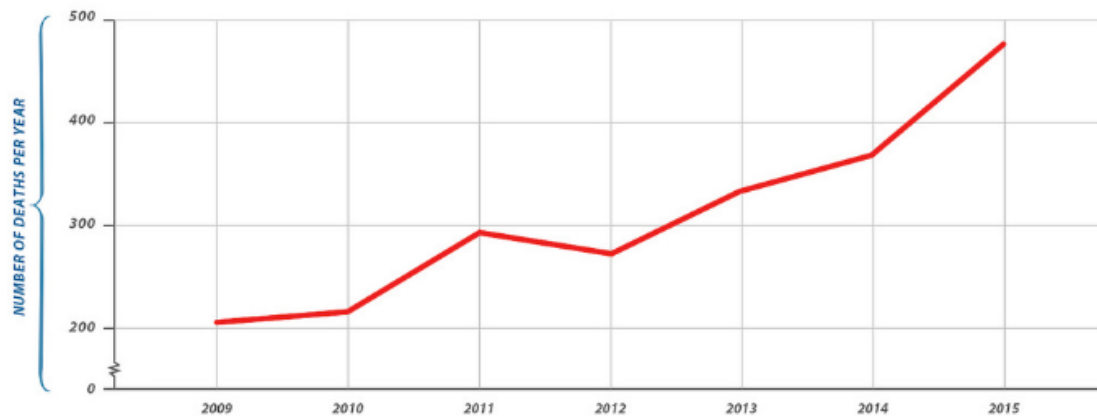
News Release

Victoria
Thursday, April 14, 2016 11:00 AM

Media Contacts

Kristy Anderson
Media Relations Manager
Ministry of Health
250 952-1887 (media line)

ILLICIT DRUG OVERDOSE DEATHS IN BRITISH COLUMBIA



There were 474 apparent illicit drug overdose deaths in 2015, which is a 30% increase in deaths from 2014 (365 deaths). There were 76 deaths in Jan. 2016, which is the largest number of deaths in a single month for the examined period (Jan. 1, 2007 to Feb. 29, 2016).

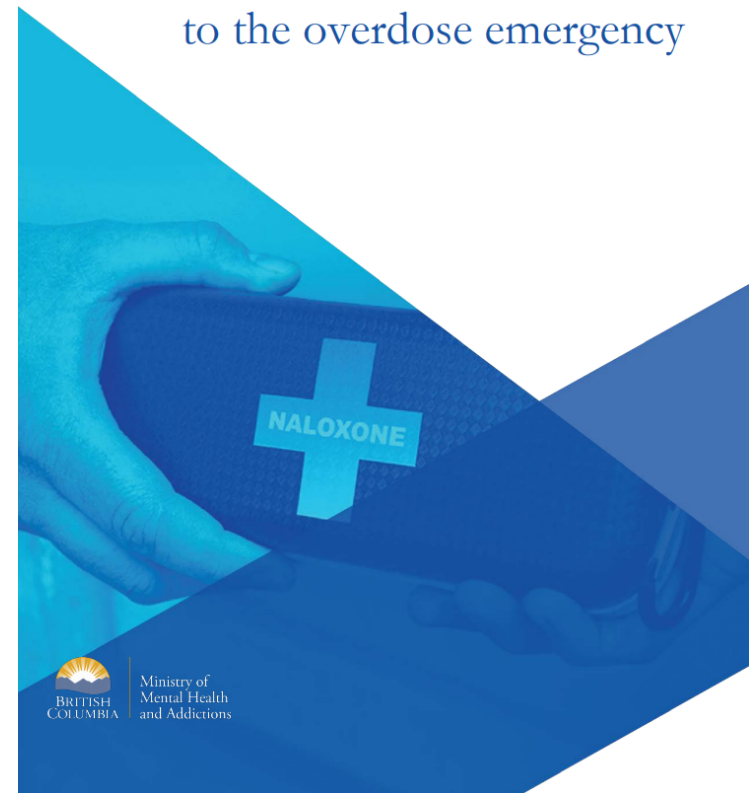
(flickr.com)



Overdose emergency response in BC

- Ramp up of naloxone (THN) distribution and training
- Overdose Prevention Services (OPS)/ Supervised Consumption Sites (SCS)
- Public awareness campaigns
- Expansion of opioid agonist treatment (OAT)
- Drug checking services
- Key partnerships

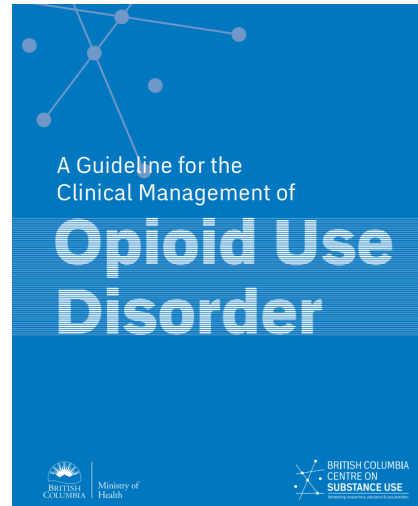
Escalating BC's response to the overdose emergency



Ministry of
Mental Health
and Addictions

OAT scale up since 2016 in BC

- Evidence-based guidelines for treatment of opioid use disorder
 - Buprenorphine/naloxone as 1st line treatment
 - Injectable OAT
- ↑ primary care/pharmacist training programs
- Removal of prescribing restrictions




Accredited by UBC CPO
CONTINUING PROFESSIONAL DEVELOPMENT
FACULTY OF MEDICINE

BRITISH COLUMBIA
CENTRE ON
SUBSTANCE USE

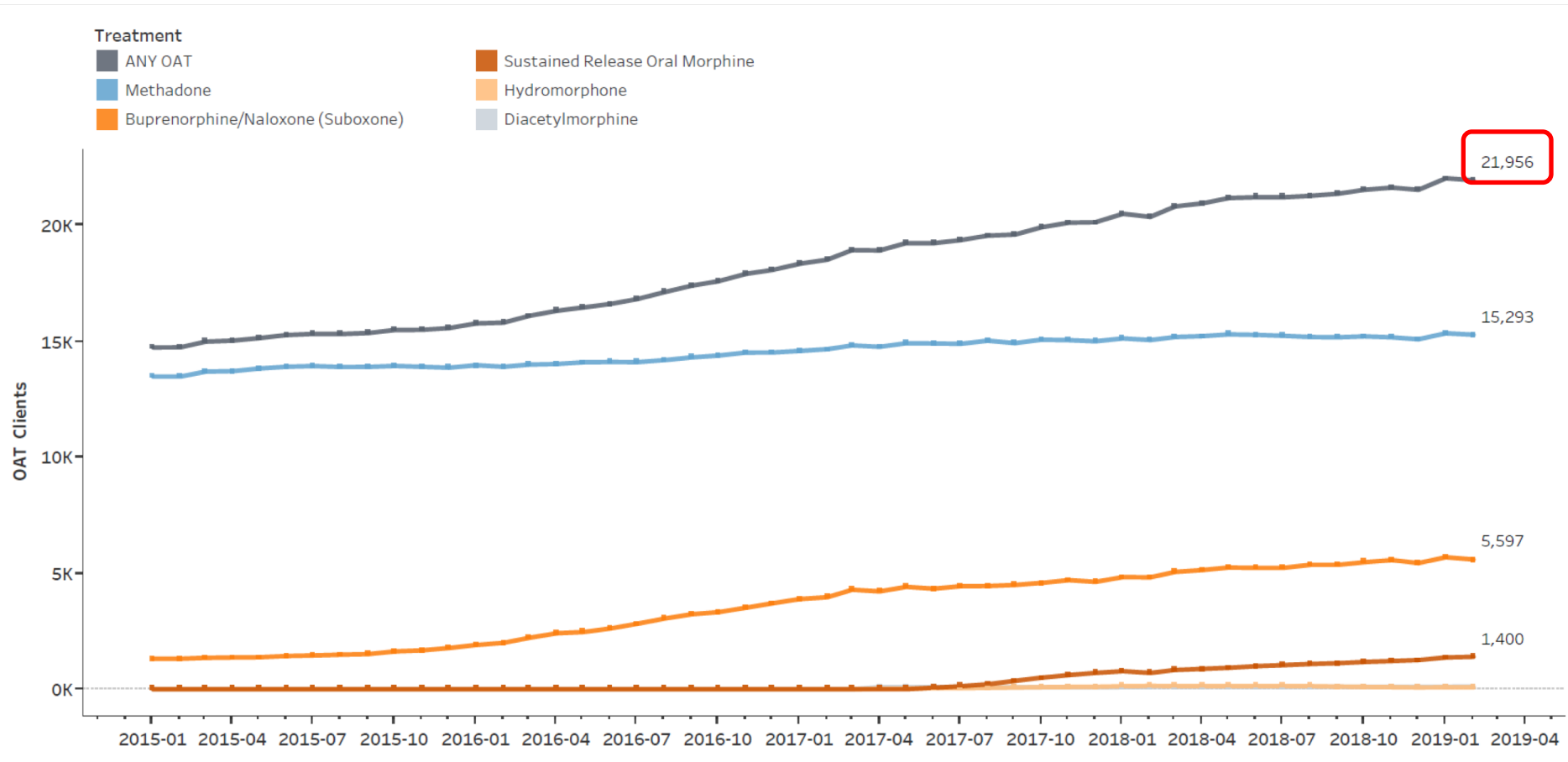
Treating Substance Use Disorders in BC
Clinical Education on the Provincial Guidelines for Opioid Use Disorder

Our Reach Across BC

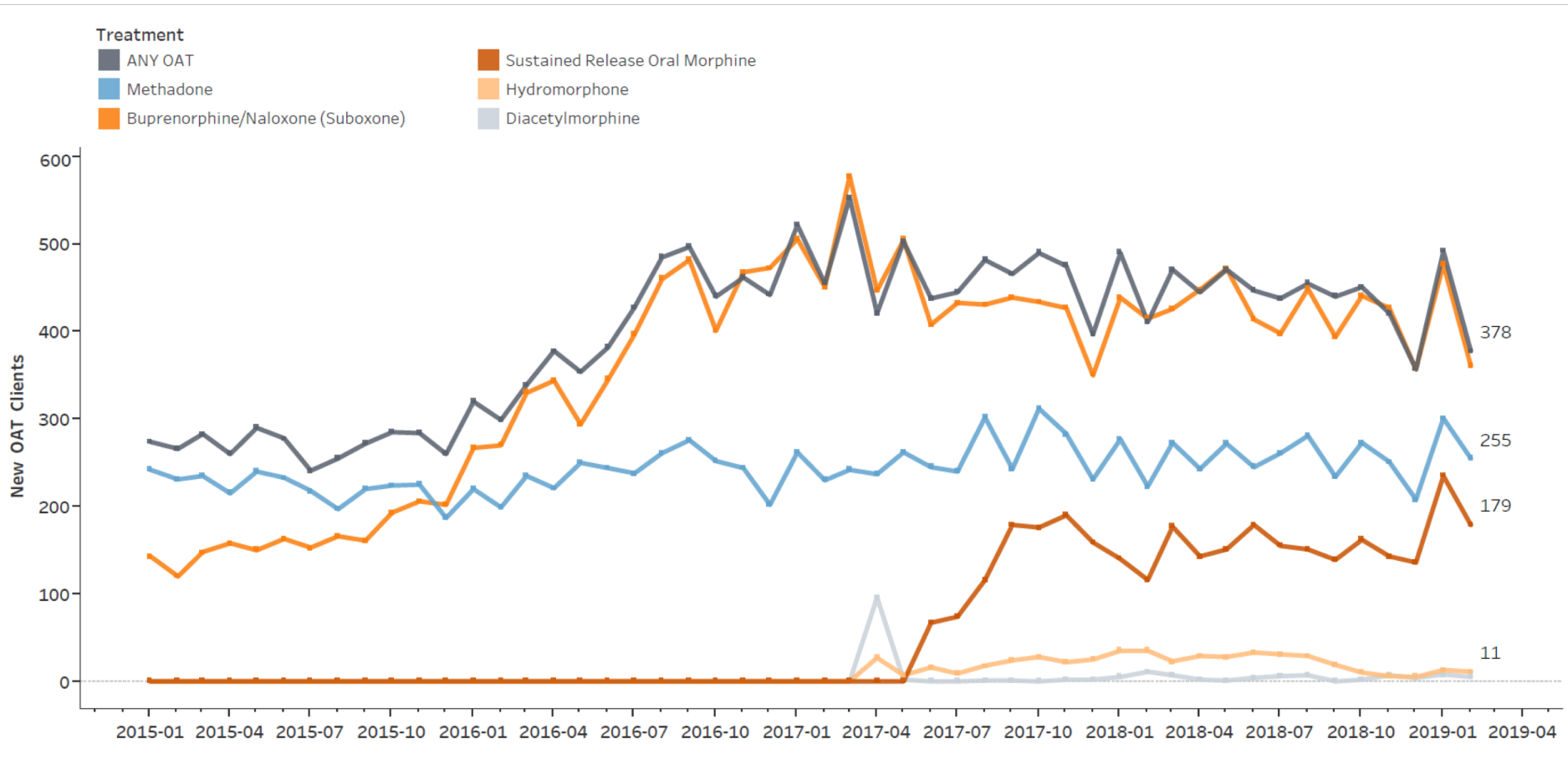
 2555 clinicians	 69 seminars	 47 locations
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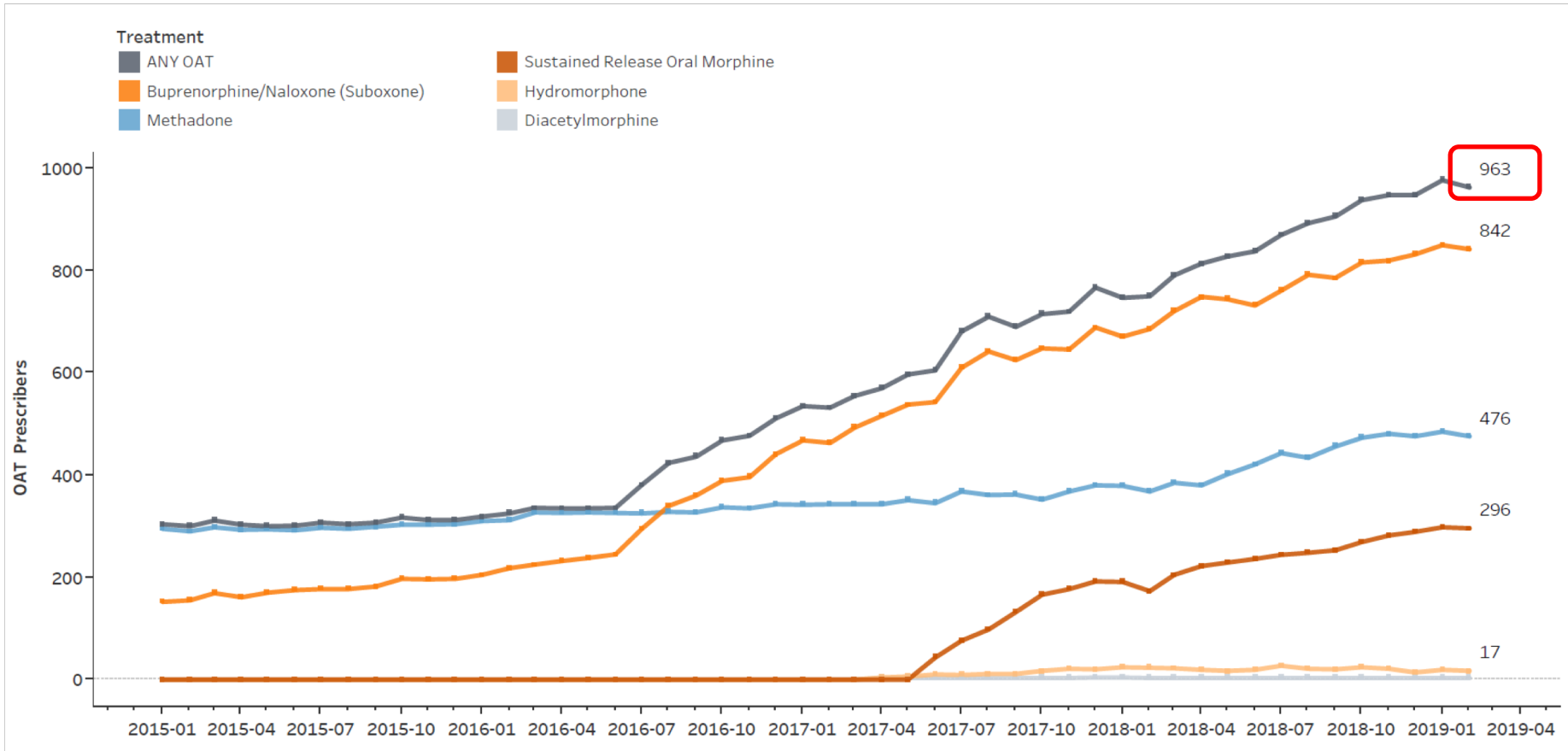
Clients dispensed OAT in BC



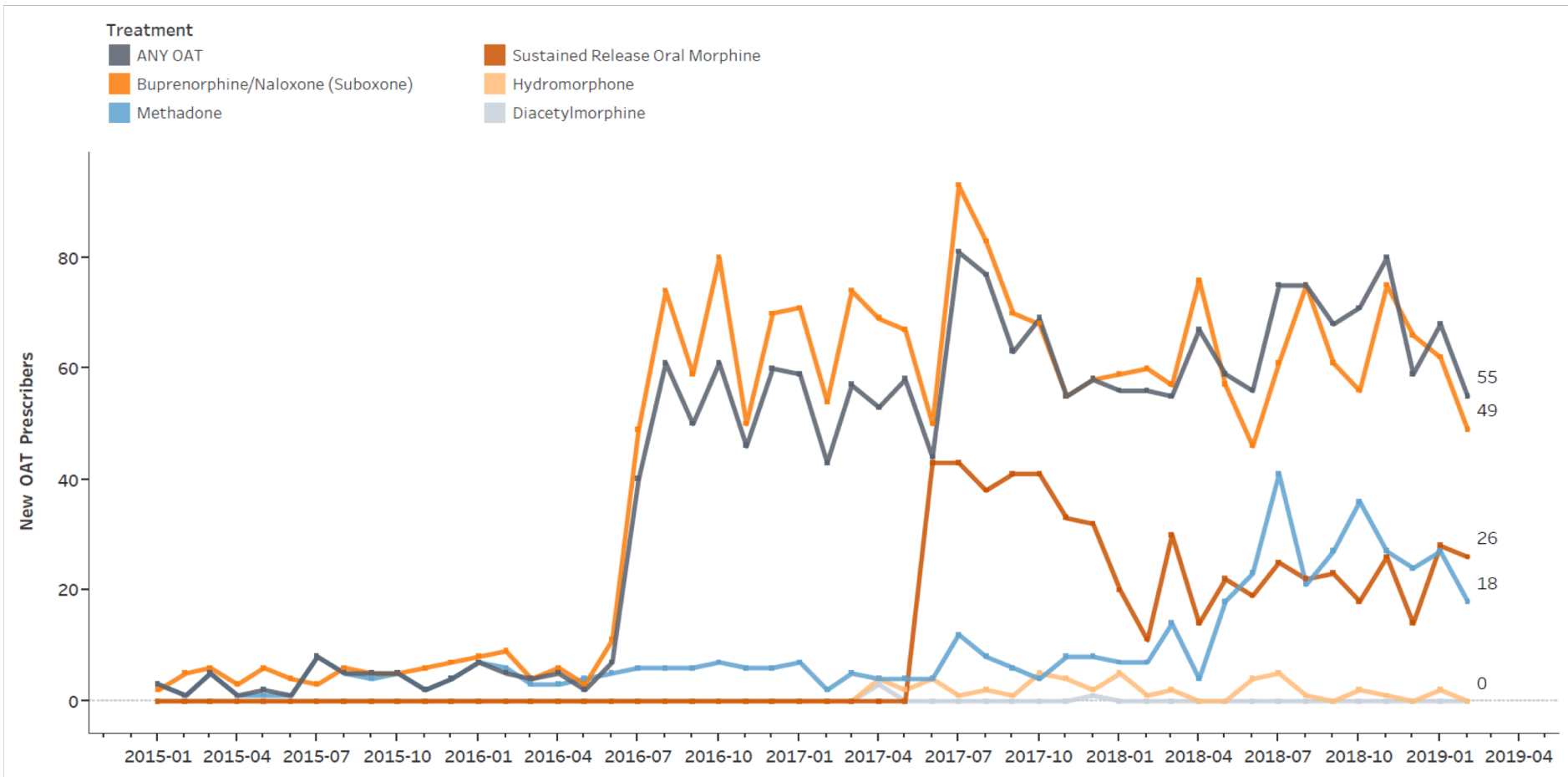
Clients dispensed OAT for 1st time in BC



OAT prescribers in BC



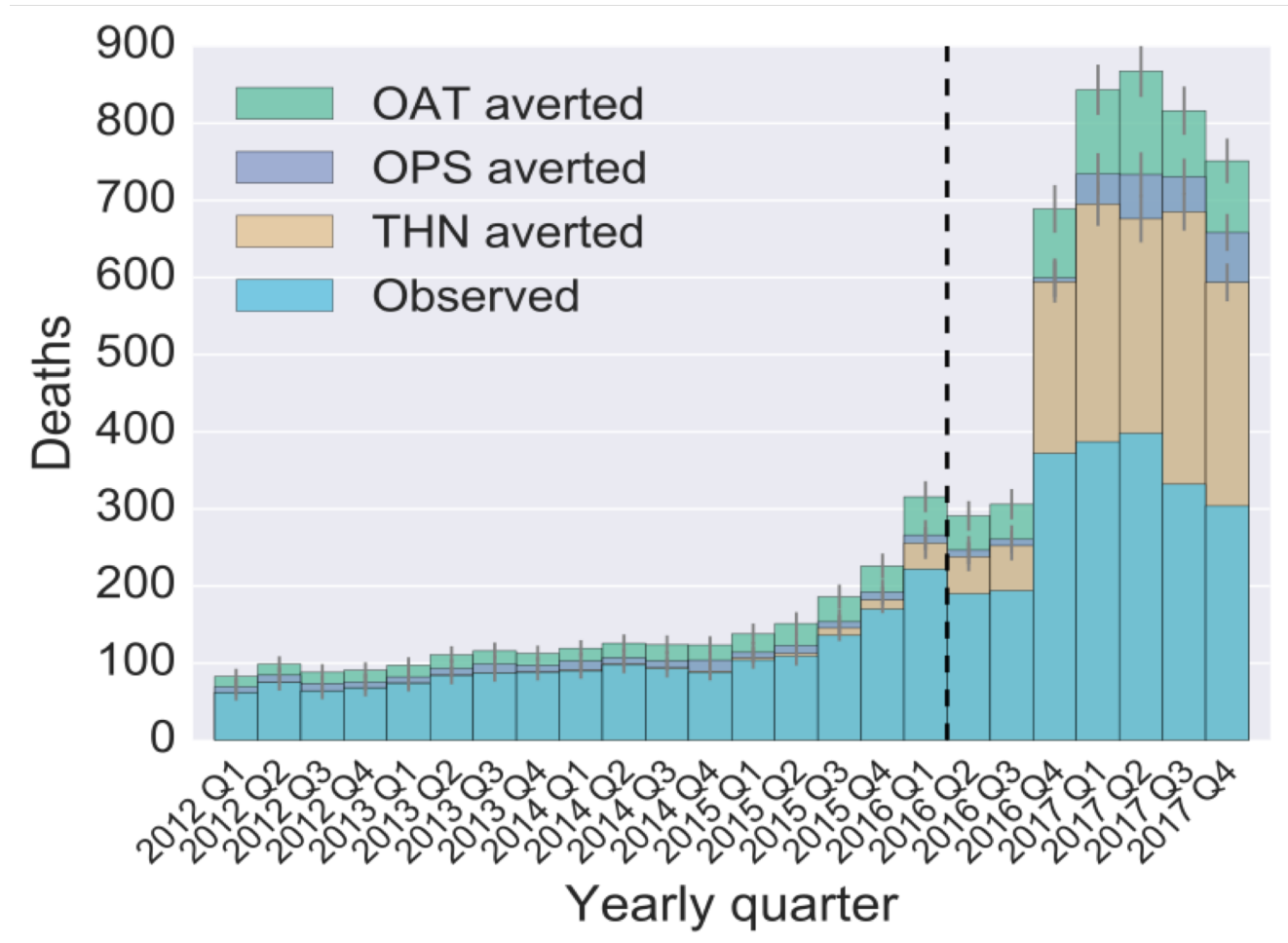
New OAT prescribers in BC



Drug overdose deaths averted, 2012-2017

Mathematical modelling that assessed impact of combined interventions of THN, OPS, and OAT on the number of opioid and fentanyl-related deaths averted in B.C.

- **590 deaths averted due to OAT, Apr. 2016-Dec. 2017**



Mike Irvine et al.
(2019)

OAT retention?



Contents lists available at ScienceDirect

Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugalcdep



Only 1/3 of participants retained in OAT in 2016

Full length article

Trends in engagement in the cascade of care for opioid use disorder, Vancouver, Canada, 2006–2016

M. Eugenia Socías^{a,b}, Evan Wood^{a,b}, Thomas Kerr^{a,b}, Seonaid Nolan^{a,b}, Kanna Hayashi^{a,c}, Ekaterina Nosova^a, Julio Montaner^{b,d}, M.-J. Milloy^{a,b,*}

^a British Columbia Centre on Substance Use, 400-1045 Howe Street, Vancouver, BC, V6Z 2A9, Canada

^b Department of Medicine, University of British Columbia, 608-1081 Burrard Street, Vancouver, BC, V6Z 1Y6, Canada

^c Faculty of Health Sciences, Simon Fraser University, Blusson Hall, 8888 University Drive, Burnaby, BC, V5A 1S6, Canada

^d British Columbia Centre for Excellence in HIV/AIDS, St. Paul's Hospital, 608-1081 Burrard Street, Vancouver, BC, V6Z 1Y6, Canada

ARTICLE INFO

Keywords:

Cascade of care
Opioid use disorder
Opioid agonist therapy
Quality indicators
Addiction
Methadone
Buprenorphine/naloxone
Performance metrics

ABSTRACT

Background: A cascade of care framework has been proposed to identify and address implementation gaps in addiction medicine. Using this framework, we characterized temporal trends in engagement in care for opioid use disorder (OUD) in Vancouver, Canada.

Methods: Using data from two cohorts of people who use drugs, we assessed the yearly proportion of daily opioid users achieving four sequential stages of the OUD cascade of care [linkage to addiction care; linkage to opioid agonist treatment (OAT); retention in OAT; and stability] between 2006 and 2016. We evaluated temporal trends of cascade indicators, adjusting for socio-demographic characteristics, HIV/HCV status, substance use patterns, and social-structural exposures.

Results: We included 1615 daily opioid users. Between 2006 and 2016, we observed improvements in linkage to care (from 73.2% to 78.9%, $p = < 0.001$), linkage to (from 69.2% to 70.6%, $p = 0.011$) and retention in OAT (from 29.1% to 35.5%, $p = < 0.001$), and stability (from 10.4% to 17.1%, $p = < 0.001$). In adjusted analyses, later calendar year of observation was associated with increased odds of linkage to care (Adjusted Odds Ratio [AOR] = 1.02, 95% Confidence Interval [CI]: 1.01–1.04), retention in OAT (AOR 1.02, 95% CI: 1.01–1.04) and stability (AOR = 1.03, 95% CI: 1.01–1.05), but not with linkage to OAT (AOR 1.00, 95% CI: 0.98–1.01).

Conclusions: Temporal improvements in OUD cascade of care indicators were observed. However, only a third of participants were retained in OAT in 2016. These findings suggest the need for novel approaches to improve engagement in care for OUD to address the escalating opioid-related overdose crisis.

OAT access and retention

- What are barriers to access for OAT?
- Why do people discontinue OAT?

Harm Reduction Client Survey in BC

As part of a Substance Use and Addiction Program Grant for monitoring of illicit drug content

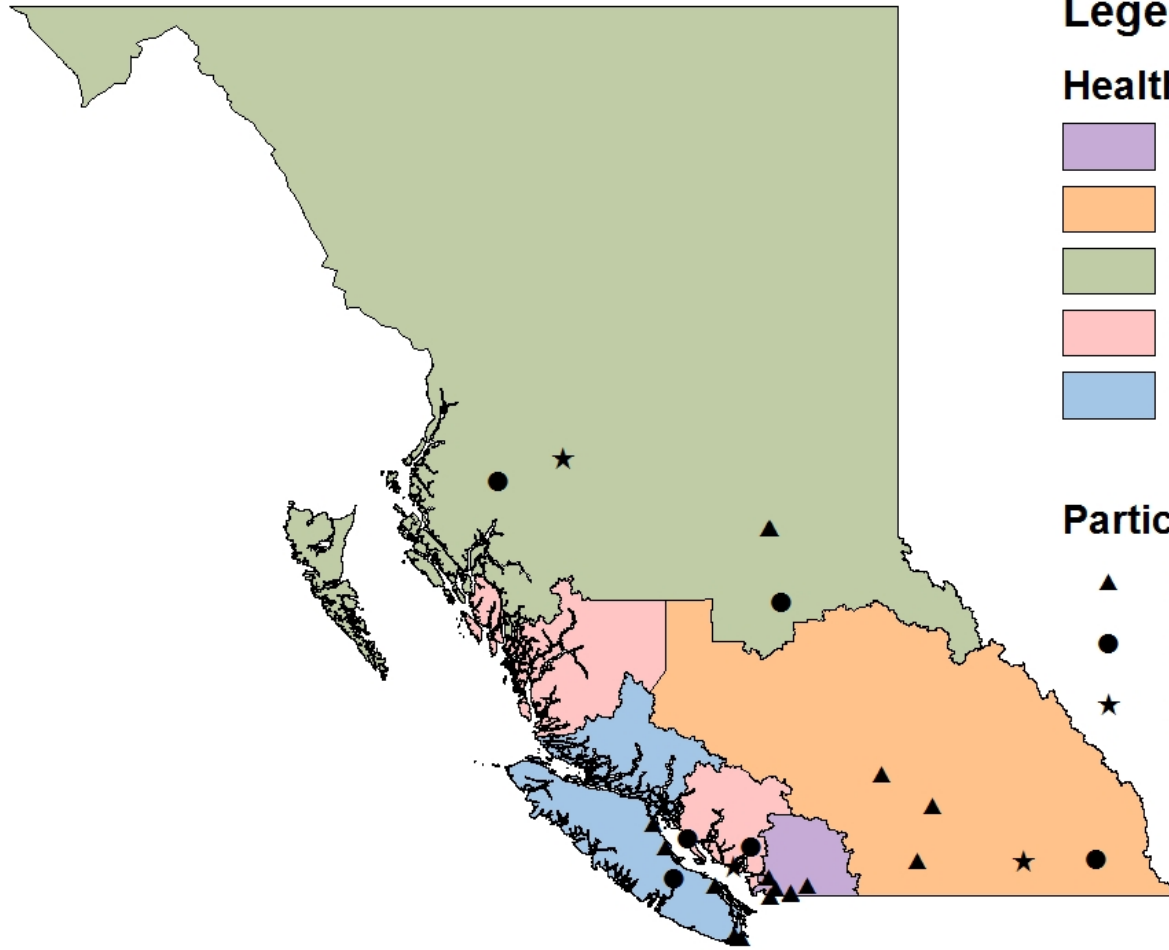
Pilot survey & urinalysis project

- Building on BC annual survey 2012-15
- Partners: Montreal P. Leclerc; Edmonton E. Hyshka

BC in 2018 (May-Aug)

- 27 sites across the province \$5/participant
- Participants >18 years; used illicit drug in past 6 months
- Survey \$5; urine \$5
- Vancouver purposefully under-surveyed

Harm Reduction Client Survey in BC



Legend

Health Authority (HA)

- Fraser Health Authority
- Interior Health Authority
- Northern Health Authority
- Vancouver Coastal Health Authority
- Island Health Authority

Participating Harm Reduction (HR) Sites

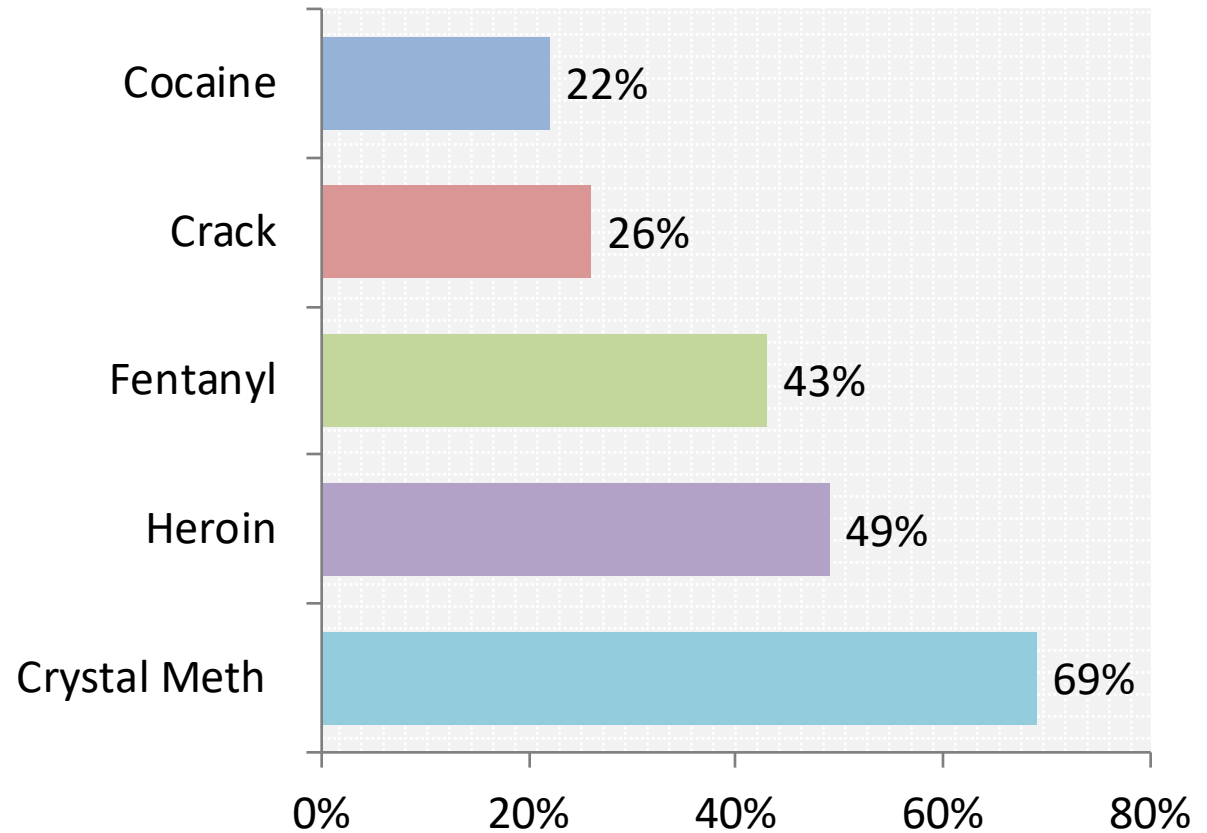
- ▲ Med/Large Urban
- Small Urban
- ★ Rural

Harm Reduction Client Survey in BC

486 Participants:

- 62% male
- 36% female
- 2% other genders

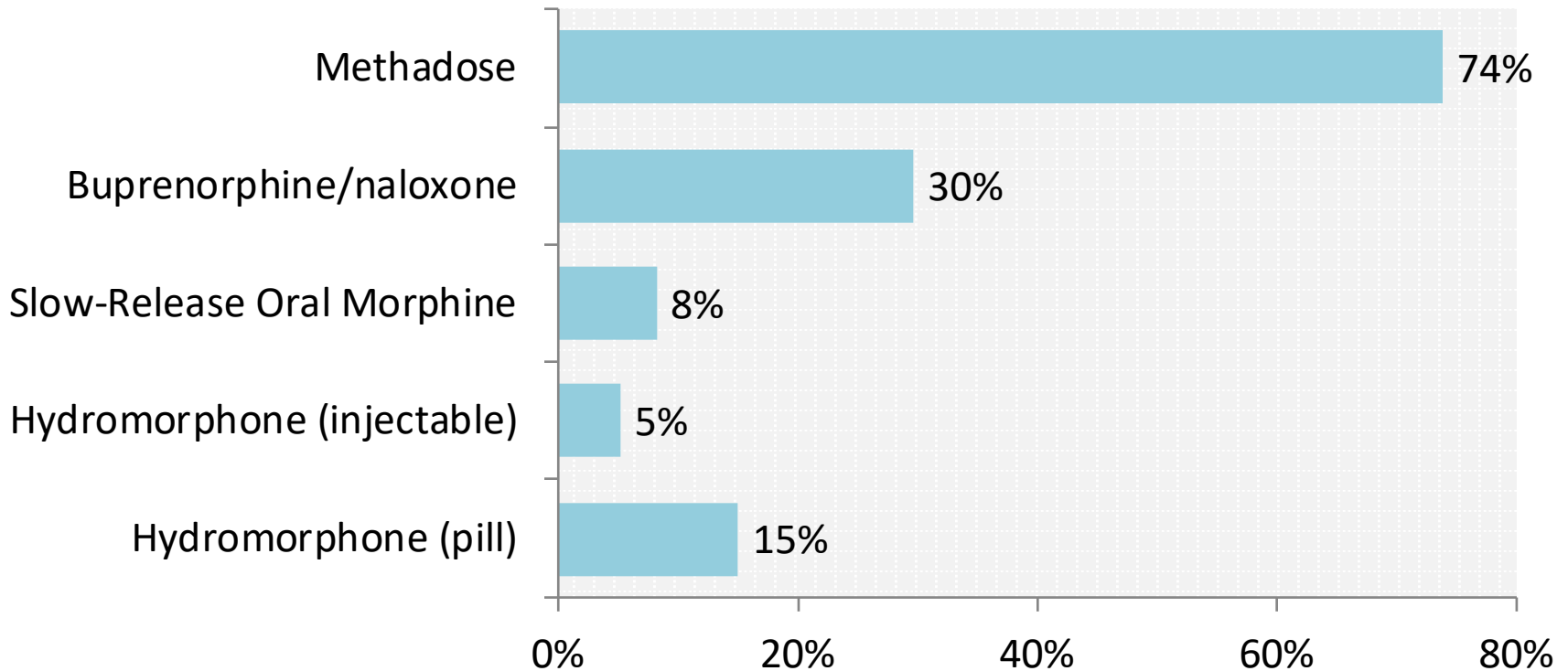
Drugs reported used, past week



Health
Canada

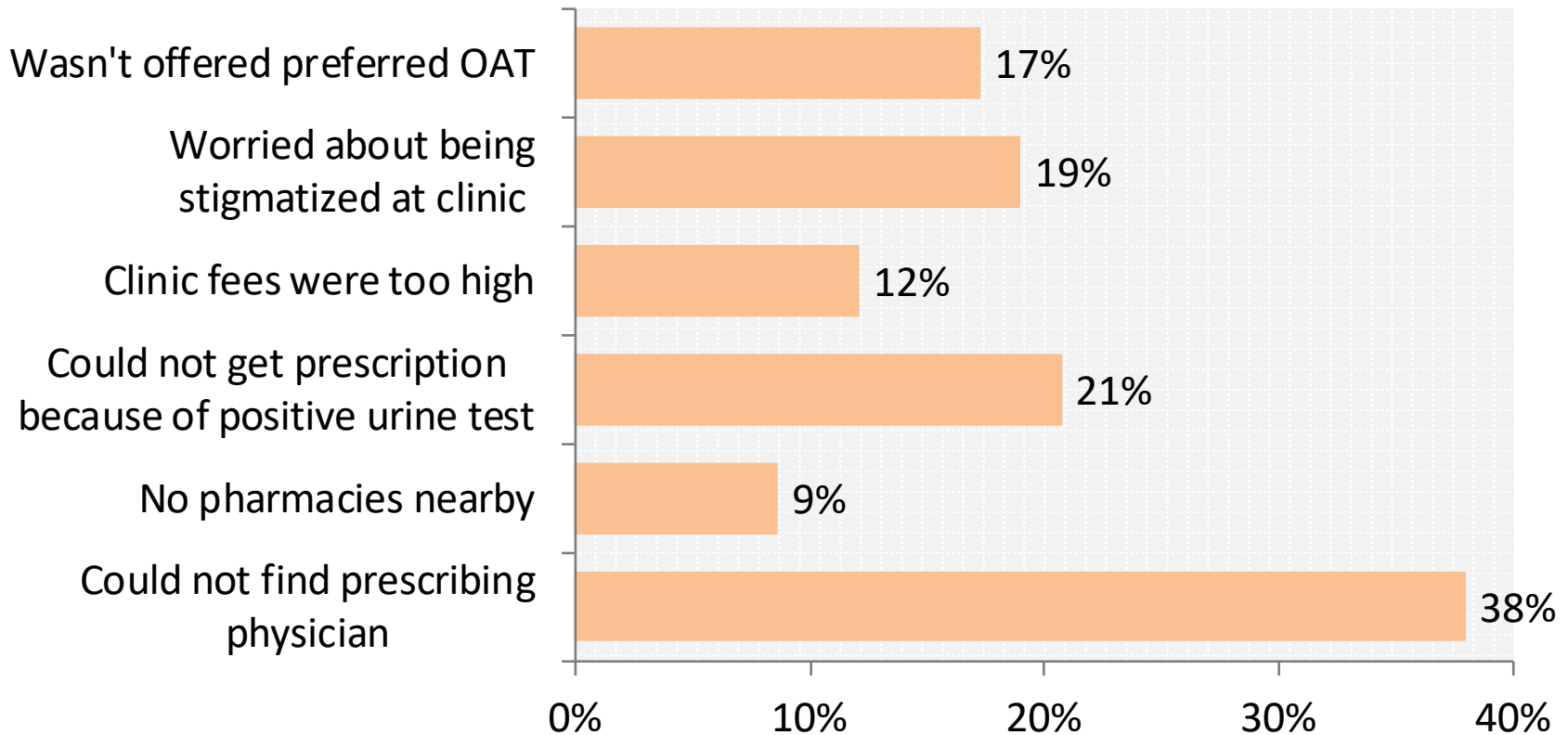
Harm Reduction Client Survey in BC

233 of 486 participants (48%) reported taking any OAT in the past 6 months



Harm Reduction Client Survey in BC

Access to OAT: 59 of 245 participants (24%) had experienced difficulties accessing OAT in past 6 months



Harm Reduction Client Survey in BC

Access to OAT:

Additional reasons reported included:

- Limited clinic/pharmacy hours
- Difficulties with transportation/travel
- Long waiting times
- Missed appointments

Harm Reduction Client Survey in BC

Discontinuation of OAT: Overall, 96 participants reported discontinuing OAT in past 6 months.

OAT used in past 6 months	Discontinued (N=85)	Did not discontinue (N=129)	Total (N=214)	p-value
Methadone	58 (36%)	103 (64%)	161	0.08
Buprenorphine/naloxone	37 (58%)	27 (42%)	64	<0.001
Slow-Release Oral Morphine	10 (59%)	7 (41%)	17	0.16
Hydromorphone (injectable)	6 (55%)	5 (45%)	11	0.47
Hydromorphone (pill)	19 (63%)	11 (37%)	30	0.008

**Row percentages shown*

Harm Reduction Client Survey in BC

Illicit opioid use higher among those that discontinued OAT compared to those that continued.

Drug use in past week	Discontinued (N=85)	Did not discontinue (N=129)	Total (N=214)	p-value
Heroin	68 (80%)	76 (59%)	144 (67%)	0.002
Fentanyl	63 (74%)	73 (57%)	136 (64%)	0.014
Crystal Meth	67 (79%)	91 (71%)	158 (74%)	0.23
Cocaine	21 (25%)	28 (22%)	49 (23%)	0.73
Crack	20 (24%)	41 (32%)	61(29%)	0.25

*Column percentages shown

Harm Reduction Client Survey in BC

“Why did you discontinue OAT?”

- Free text thematic analysis
- 79 responses

Harm Reduction Client Survey in BC

“Why did you discontinue OAT?”

1. Challenges meeting program requirements
 - a. Missed doses, leading to dose reductions
 - b. Missed appointments/pick up times
 - c. Cut off by prescriber/failed urine test
 - d. Time/energy consuming

Harm Reduction Client Survey in BC

Challenges meeting program requirements

*“if I missed even 1 day, I got cut off which **left me sick**”*

*“missed pharmacy hours which did not suit my lifestyle which led to a **drastically reduced dosage that was not effective** at all and ended up using a lot anyway”*

*“got kicked off methadose **because of dirty urine** on it for over a year, they said I show no clean time, not making an effort”*

Harm Reduction Client Survey in BC

“Why did you discontinue OAT?”

2. Treatment concerns

- a. Pain not controlled/dose too low/ineffective
- b. Felt sicker
- c. Stopped after medication was changed

Harm Reduction Client Survey in BC

Treatment concerns

*“does not agree with system. **makes me sicker**”*

*“It wasn’t **enough**”*

*“because it didn’t help my pain I was only getting methadose and **it doesn’t work on my pain**. I need my pills back so I don’t die- please”*

Harm Reduction Client Survey in BC

“Why did you discontinue OAT?”

3. Access

- a. Non-continuity of care (out of prison/jail)
- b. Simpler to use street drugs
- c. Transportation difficulties
- d. Cost
- e. Unable to find provider

Harm Reduction Client Survey in BC

Access

*“**Not by choice**, released from prison unable to access physician to prescribe”*

*“I was **arrested the same day my prescription ended** trying to get back on [Suboxone]”*

*“I could not get to the doctor due to **transportation and new community**”*

*“moved towns was getting suboxone on street. **too difficult to get at the time**”*

*“started using again (**easier to use than go to a clinic**)”*

Filling in the gaps for OAT provision

1. Structural barriers and stigma towards people who use substances continue to limit OAT initiation and retention
 - The primary reason identified as a barrier to accessing OAT was **difficulty with finding a prescribing physician**
 - A major theme that was identified among reasons for discontinuing OAT was **inconvenience and challenges meeting strict program requirements**
2. Client-informed, low-barrier, accessible options for treatment are necessary to meet people where they are at in their journey

1. BC Coroners Report – Illicit Drug Overdose Deaths in BC (2009-2019) (<https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/statistical/illicit-drug.pdf>)
2. BC Coroners Report – Fentanyl Detected Illicit Drug Overdose Deaths (2012-2019) (<https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/statistical/fentanyl-detected-overdose.pdf>)
3. BC Ministry of Mental Health and Addictions. Escalating BC's Response to the Overdose Emergency (https://www2.gov.bc.ca/assets/gov/overdose-awareness/mmha_escalating_bcs_response_report_final_26feb.pdf)
4. BC Center for Substance Use. A Guideline for the Clinical Management of Opioid Use Disorder (http://www.bccsu.ca/wp-content/uploads/2017/06/BC-OUD-Guidelines_June2017.pdf)
5. BC Center for Substance Use. Guidance for Injectable Opioid Agonist Treatment (http://www.bccsu.ca/wp-content/uploads/2019/03/BC_iOAT_Guideline.pdf)
6. BC Center for Substance Use. Clinical Education Programs Quarterly Report – February 2019 (<http://www.bccsu.ca/wp-content/uploads/2019/03/Clinical-Education-Programs-Quarterly-Report-February-2019.pdf>)
7. Ministry of Mental Health and Addictions Announcement - Reducing stigma, improving patient treatment focus of new pharmacists' training (2018) (<https://www.bcpharmacy.ca/news/new-opioid-agonist-treatment-oat-training-program-bcs-community-pharmacists>)
8. BC Overdose Response Indicators (<http://www.bccdc.ca/health-professionals/data-reports/overdose-response-indicators>)
9. Irvine, M.A, Kuo, M., Buxton, J.A, Balshaw, R., Otterstatter, M., Macdougall, L., Milloy, M.J., Bharmal, A., Henry, B., Tyndall, M., Coombs, D., Gilbert, M. Modelling the combined impact of interventions in averting deaths during the synthetic-opioid overdose epidemic. *Addiction*. 2019. *In press* .
10. Socías ME, Wood E, Kerr T, Nolan S, Hayashi K, Nosova E, Montaner J, Milloy MJ. Trends in engagement in the cascade of care for opioid use disorder, Vancouver, Canada, 2006–2016. *Drug and alcohol dependence*. 2018 Aug 1;189:90-5.