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**Alberta Health
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Knowledge Bites Lunch 'n' Learn

February 23, 2023



Critical Opportunities in the Emergency Department for People Who Use Substances



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Objectives

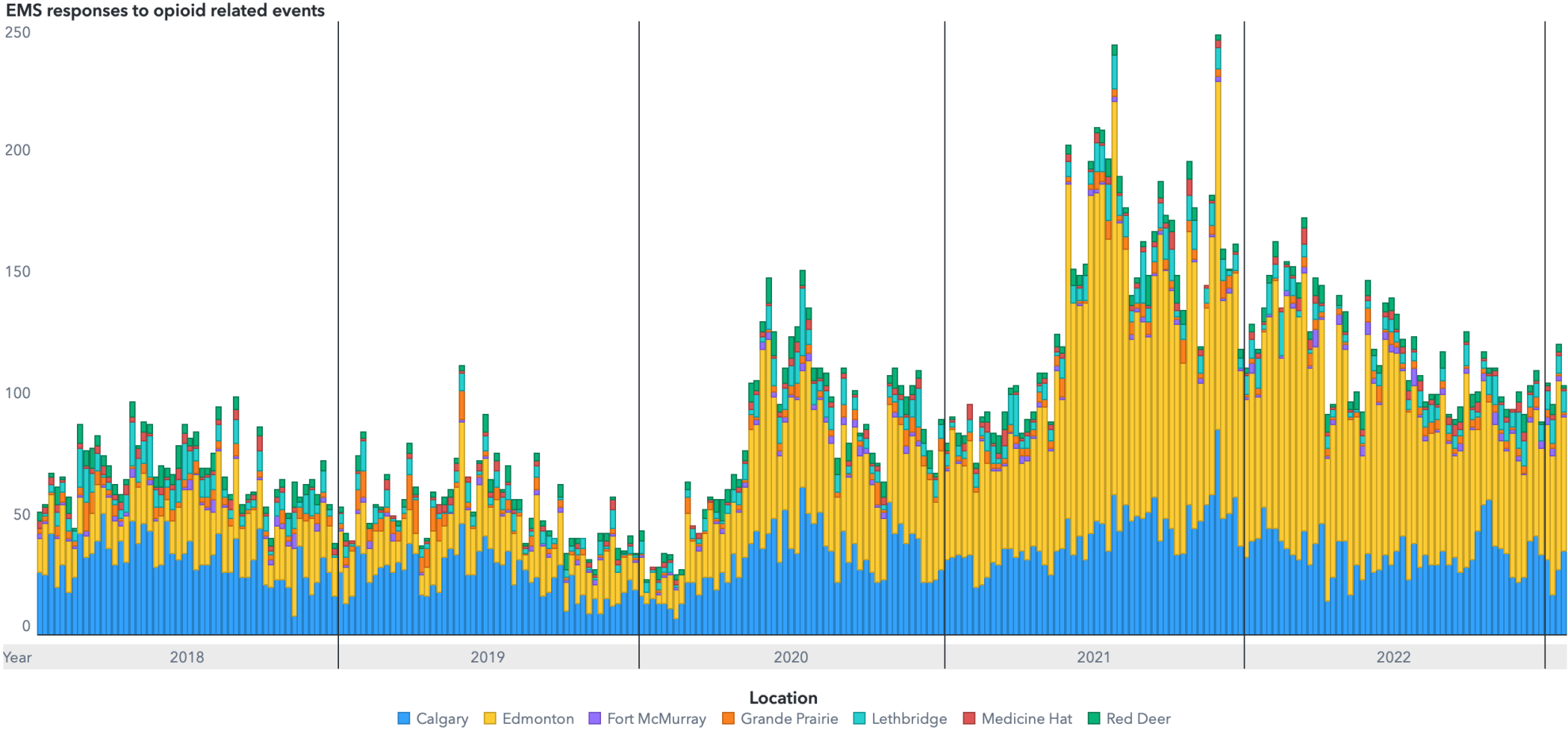
At the end of this presentation, you will be able to reflect on the role of the emergency department in:

1. Identifying patients at risk of negative health outcomes related to substance use
2. Initiating evidence-informed interventions
3. Engaging and partnering with people who have lived or living experience
4. Continuing to improve care for people who use substances

This is our job.

EMS Responses

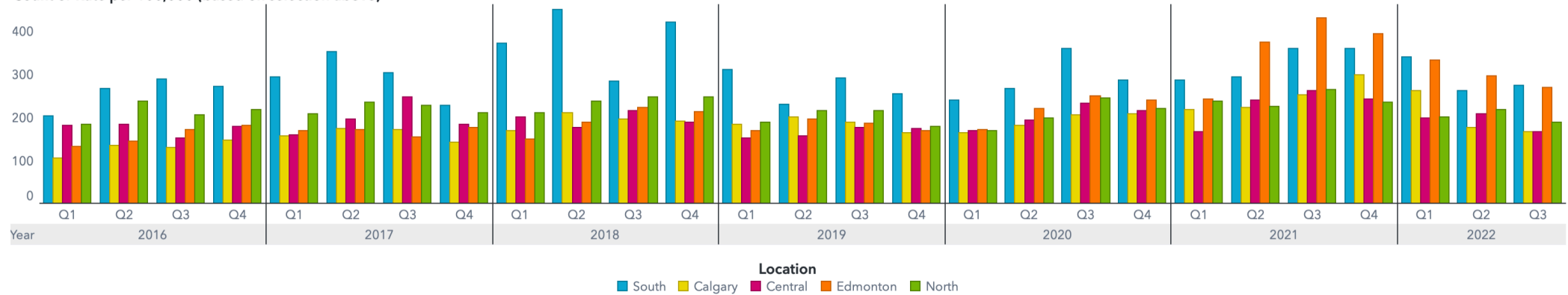
EMS responses to opioid related events by week - January 1, 2018 to January 29, 2023



ED visits and hospitalizations (Rate)

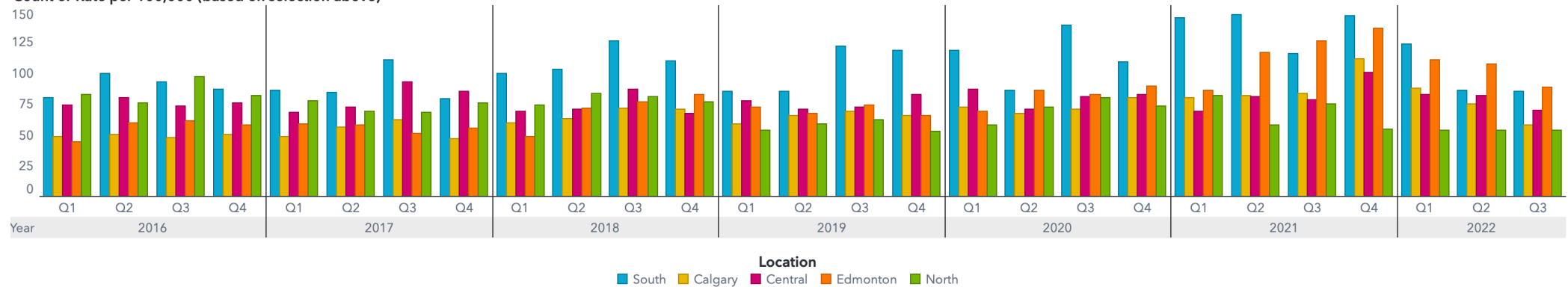
Emergency Department visits related to substance use

Count or Rate per 100,000 (based on selection above)



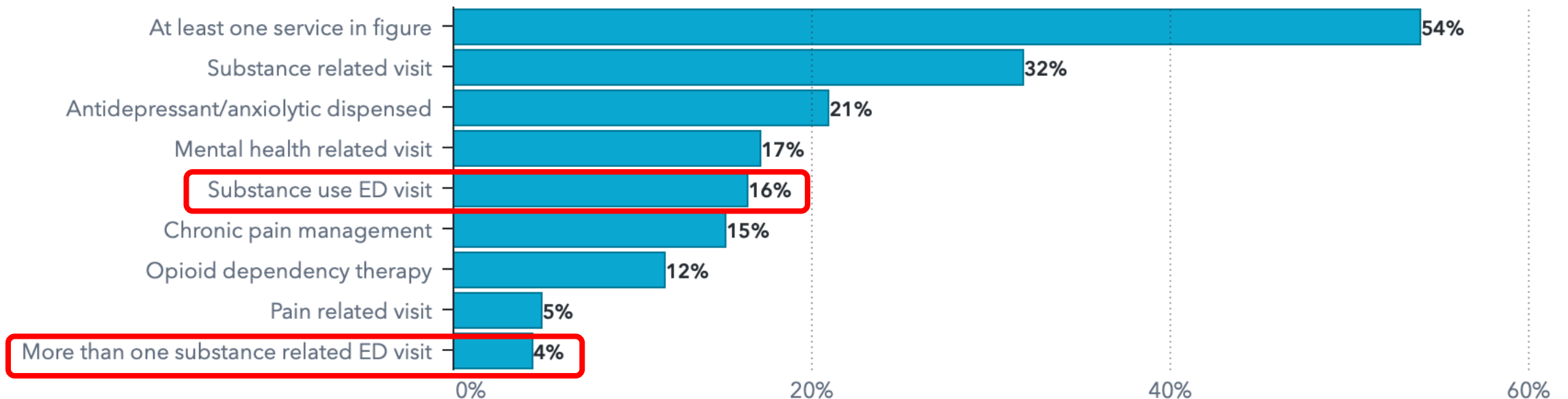
Hospitalizations related to substance use

Count or Rate per 100,000 (based on selection above)



Health Service Utilization Prior to Death

Health service utilization within 30 days of death - Non-pharmaceutical opioid deaths



Death after ED visits for opioid overdose

- 12-month mortality compared between persons with ED visits related to opioid overdose and those with non-overdose-related visits
- BC, between 2015-2017
- 12-month crude mortality rate was 5.4% for those with an overdose-related visit (vs. 1.7%)
- Mortality hazard was 3.5 times higher for those with an overdose-related visit; for those that left AMA, the mortality hazard was 7.1 times higher

Death after emergency department visits for opioid overdose in British Columbia: a retrospective cohort analysis

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Abstract

Background: Visits to the emergency department are critical opportunities to engage individuals after an overdose. We sought to estimate and compare the 12-month mortality between persons with visits to the emergency department related to opioid overdose and those with non-overdose-related visits.

Methods: We conducted a retrospective cohort study using the Provincial Overdose Cohort, which contains data for patients in British Columbia who had an opioid-related overdose between 2015 and 2017, along with a 20% random sample of BC residents for comparison. We examined all nonfatal visits to the emergency department between Jan. 1, 2015, and Dec. 31, 2016, among persons aged 14 to 74 years and compared the 12-month mortality between those with overdose-related visits and those with non-overdose-related visits. We estimated the hazard ratio for death, with adjustment for age, sex, comorbidity and disposition (discharged or left against medical advice).

Results: We included 3593 persons with overdose-related visits and 216453 with non-overdose-related visits to the emergency department. Those with overdose-related visits were younger, were predominantly male and had more mental health conditions. The 12-month crude mortality probability was 5.4% (95% confidence interval [CI] 4.7%–6.2%) in this group and 1.7% (95% CI 1.6%–1.8%) among those with non-overdose-related visits. After adjustment, for persons who were discharged, the 12-month mortality hazard was 3.5 (95% CI 3.0–4.2) times higher among those with overdose-related visits than those with non-overdose-related visits. For persons who left against medical advice, the mortality hazard was 7.1 (95% CI 4.0–12.5) times higher among those with opioid overdose.

Interpretation: Among persons with overdose-related visits to the emergency department, 12-month mortality was higher than among those with non-overdose-related visits. Overdose-related visits should prompt urgent evidence-based interventions (e.g., take-home naloxone kits, buprenorphine–naloxone induction) to prevent future deaths.

Death after ED visits for opioid overdose

- Retrospective observational study of patients from three linked statewide Massachusetts data sets
- Between July 1, 2011 and September 30, 2015
- 5.5% of patients died within the first year
- 20.5% of deaths occurred within 1 month and 4.6% within 2 days

One-Year Mortality of Patients After Emergency Department Treatment for Nonfatal Opioid Overdose

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Study objective: Despite the increased availability of naloxone, death rates from opioid overdose continue to increase. The goal of this study is to determine the 1-year mortality of patients who were treated for a nonfatal opioid overdose in Massachusetts emergency departments (EDs).

Methods: This was a retrospective observational study of patients from 3 linked statewide Massachusetts data sets: a master demographics list, an acute care hospital case-mix database, and death records. Patients discharged from the ED with a final diagnosis of opioid overdose were included. The primary outcome measure was death from any cause within 1 year of overdose treatment.

Results: During the study period, 17,241 patients were treated for opioid overdose. Of the 11,557 patients who met study criteria, 635 (5.5%) died within 1 year, 130 (1.1%) died within 1 month, and 29 (0.25%) died within 2 days. Of the 635 deaths at 1 year, 130 (20.5%) occurred within 1 month and 29 (4.6%) occurred within 2 days.

Conclusion: The short-term and 1-year mortality of patients treated in the ED for nonfatal opioid overdose is high. The first month, and particularly the first 2 days after overdose, is the highest-risk period. Patients who survive opioid overdose should be considered high risk and receive interventions such as being offered buprenorphine, counseling, and referral to treatment before ED discharge. [Ann Emerg Med. 2020;75:13-17.]

Please see page 14 for the Editor's Capsule Summary of this article.

Health Service Utilization Prior to Death (ON)



Emergency Departments — A 24/7/365 Option for Combating the Opioid Crisis

Gail D'Onofrio, M.D., Ryan P. McCormack, M.D., and Kathryn Hawk, M.D., M.H.S.

Emergency departments (EDs) administer lifesaving interventions all day every day and all night every night. In addition to rapidly resuscitating and stabilizing patients with

injury, emergency departments are charged with providing appropriate care within the ED, from intake to discharge. For patients who present with opioid overdose, an ED visit represents a critical, time-sensitive point at which initiating lifesaving treatment is possible. Furthermore, EDs are the only venues that are federally mandated, under the Emergency Medical Treatment and Active Labor Act (EMTALA),

either buprenorphine or methadone is essential to addressing the opioid epidemic. For patients who present with opioid overdose, an ED visit represents a critical, time-sensitive point at which initiating lifesaving treatment is possible. Furthermore, EDs are the only venues that are federally mandated, under the Emergency Medical Treatment and Active Labor Act (EMTALA),

to care for all patients regardless of their insurance status and ability to pay. Therefore, they serve a segment of the population that is disproportionately vulnerable and disenfranchised, including people who might not be able to receive treatment elsewhere. We believe that striving to consistently and effectively deliver evidence-based treatment for OUD — by thinking of the ED as

an integral part of the response to the opioid crisis and the health care system as a whole — could help change the trajectory of the epidemic.

Disclosure forms provided by the authors are available at NEJM.org.

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Initiating evidence-informed
interventions in ED

Take home naloxone

- First Canadian program started in Edmonton in 2005
- 50 clients trained in overdose identification, naloxone administration (optional CPR training if desired)
- Naloxone was administered 9 times over the 20 month follow up period
- EMS called only once, despite easy access to a phone in 8/9 cases where naloxone was administered

Community-based Naloxone: A Canadian Pilot Program

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a clean needle and syringe were used in all cases; EMS was activated in only one case. No adverse reactions and no deaths after naloxone use were reported.

Conclusions: Community-based naloxone programs can be implemented in a Canadian setting and have the potential to reduce the morbidity and mortality associated with opioid overdose. Significant barriers to activating EMS still exist in this setting.

Introduction


The morbidity and mortality associated with illicit drug misuse is high and appears to be increasing in Canada (1, 2). In addition to the health consequences, illicit drug use also incurs health care system costs including emergency medical services (EMS) activation, emergency department (ED) visits, and hospitalization. The financial costs associated with illicit drug misuse were estimated at \$262 (Can) per capita in 2002 (2). There are over 80,000 regular illegal opioid users in Canada (3) and in 2002 the number of opioid related overdose deaths in Canada was estimated to be 950. The province of Alberta



ED Take Home Naloxone

- Retrospective chart review of ED visits April 2016 - May 2017 with a primary diagnosis of opioid overdose
- THN was offered in 49% of cases
- Patients less likely to be offered kits if they were on a prescribed opioid, admitted to hospital, or unexpectedly left the ED

Patient characteristics associated with being offered take home naloxone in a busy, urban emergency department: a retrospective chart review

Daniel C. O'Brien¹, Daniel Dabbs², Kathryn Dong³, Paul J. Veugelers⁴ and Elaine Hyshka^{1*} 

Abstract

Background: Overdose deaths can be prevented by distributing take home naloxone (THN) kits. The emergency department (ED) is an opportune setting for overdose prevention, as people who use opioids frequently present for emergency care, and those who have overdosed are at high risk for future overdose death. We evaluated the implementation of an ED-based THN program by measuring the extent to which THN was offered to patients presenting with opioid overdose. We analyzed whether some patients were less likely to be offered THN than others, to identify areas for program improvement.

Methods: We retrospectively reviewed medical records from all ED visits between April 2016 and May 2017 with a primary diagnosis of opioid overdose at a large, urban tertiary hospital located in Alberta, Canada. A wide array of patient data was collected, including demographics, opioid intoxicants, prescription history, overdose severity, and whether a naloxone kit was offered and accepted. Multivariable analyses were used to identify patient characteristics and situational variables associated with being offered THN.

Results: Among the 342 ED visits for opioid overdose, THN was offered in 49% ($n = 168$) of cases. Patients were more likely to be offered THN if they had been found unconscious (Adjusted Odds Ratio 3.70; 95% Confidence Interval [1.63, 8.37]), or if they had smoked or injected an illegal opioid (AOR 6.05 [2.15,17.0] and AOR 3.78 [1.32,10.9], respectively). In contrast, patients were less likely to be offered THN if they had a current prescription for opioids (AOR 0.41 [0.19, 0.88]), if they were admitted to the hospital (AOR 0.46 [0.22,0.97]), or if they unexpectedly left the ED without treatment or before completing treatment (AOR 0.16 [0.22, 0.97]).







Conclusions: In this real-world evaluation of an ED-based THN program, we observed that only half of patients with opioid overdose were offered THN. ED staff readily identify patients who use illegal opioids or experience a severe overdose as potentially benefitting from THN, but may miss others at high risk for future overdose. We recommend that hospital EDs provide additional guidance to staff to ensure that all eligible patients at risk of overdose have access to THN.

Keywords: Take home naloxone, Emergency department, Opioids, Overdose

ED-initiated Interventions for OUD

- 12 studies met the inclusion criteria (two of high quality)
- ED-initiated OAT is the single ED-based intervention for which there is the highest quality data
- Further research is needed

Emergency Department–initiated Interventions for Patients With Opioid Use Disorder: A Systematic Review

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ABSTRACT

Objectives: The opioid crisis has risen dramatically in North America in the new millennium, due to both illegal and prescription opioid use. While emergency departments (EDs) represent a potentially strategic setting for interventions to reduce harm from opioid use disorder (OUD), the absence of a recent synthesis of literature limits implementation and scalability. To fill this gap, we conducted a systematic review of the literature on interventions targeting OUDs initiated in EDs.

Methods: Using an explicit search strategy (PROSPERO), the MEDLINE, CINAHL Complete, EMBASE, and EBM reviews databases were searched from 1980 to October 4, 2019. The gray literature was explored using Google Scholar. Study characteristics were abstracted independently. The methodologic quality and risk of bias were assessed.


Results: Twelve of 2,270 studies met the inclusion criteria (two of high quality). In addition to the heterogeneity of the outcome measures used (retention in treatment, opioid consumption, and overdose), brief intervention and buprenorphine initiation (six of 12 studies) were the most documented with mixed effects for the former and positive short-term and confined to single ED sites effects for the latter.

Conclusion: Emergency departments can be an appropriate setting for initiating opioid agonist treatment, but to be sustained, it likely needs to be coupled with community-based follow-up and support to ensure longer-term retention. The scarcity of high-quality evidence on OUD interventions initiated in emergency settings highlights the need for future research.

Referral from the ED

- Prospectively enrolled cohort study between June – August 2018
- Primary outcome was whether ED health care team would have referred the patient to an on-site rapid-access addiction clinic, if one were available
- 4 patients per day were identified as potentially benefitting from referral to rapid access addiction services

Identification of emergency department patients for referral to rapid-access addiction services

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CLINICIAN'S CAPSULE

What is known about the topic?

Substance-related emergency department (ED) visits are rapidly increasing, yet many EDs do not have referral protocols for rapid-access addiction services.

What did this study ask?

This study characterized substance-related ED presentations and assessed need for a rapid-access addiction clinic for direct referral from the ED.

What did this study find?

There is a need for a rapid-access addiction clinic, given that four ED patients would have been referred per day.

Why does this study matter to clinicians?

Creating a rapid-access addiction clinic could benefit an underserved patient population and directly connect patients to addiction follow-up care from the ED.

of included patients were male. Alcohol was the most commonly reported substance of problematic or high-risk use (60%). Previous ED visits within 7 days of the index visit were made by 28% of patients. The ED health care team indicated “Yes” for rapid-access addiction clinic referral from the ED for 66% of patients, with a mean of 4.3 patients referred per day during the study period.

Conclusions: At least four patients per day would have been referred to an on-site rapid-access addiction clinic from the ED, had one been available. This indicates a gap in care and collaborating with other sites that have successfully implemented this clinic model is an important next step.


RÉSUMÉ

Objectifs: Le nombre de consultations au service des urgences (SU) pour des troubles liés à l'utilisation de drogues connaît une augmentation rapide. Toutefois, bon nombre de SU ne disposent pas de service d'aide aux toxicomanes. sur place.

Bup/nlx initiation in the ED

- ESCN created an expert working group with the goal of increasing buprenorphine/naloxone prescribing in the ED and access to next-day walk-in referrals to opioid use disorder treatment clinics
- 3 intervention sites increased their prescribing of buprenorphine/naloxone during the intervention period (May to September 2018)
- 72.3% of patients were continuing to fill opioid agonist treatment prescriptions 90 days after their ED visit

Multi-site intervention to improve emergency department care for patients who live with opioid use disorder: A quantitative evaluation

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Clinician's Capsule

What is known about the topic?

The emergency department is a key contact and intervention site for persons at risk of opioid death.

What did this study ask?

This quality improvement study evaluated the impacts of a multi-site program to initiate opioid use disorder treatment in emergency departments.

What did this study find?

Forty-seven discharged patients were given buprenorphine/naloxone and 35 continued to fill prescriptions for opioid agonist treatment 30 and 60 days after.

Why does this study matter to clinicians?

A multi-site approach to opioid use disorder in emergency departments can be effective and support standardized evidence-based care across sites.

clinics worked together to trial the intervention. We used administrative data to track the number of ED visits where patients were given buprenorphine/naloxone. Monthly ED prescribing rates before and after the intervention were considered and compared with eight nonintervention sites. We considered whether patients continued to fill opioid agonist treatment prescriptions at 30, 60, and 90 days after their index ED visit to measure continuity in treatment.

Results: The intervention sites increased their prescribing of buprenorphine/naloxone during the intervention period and prescribed more buprenorphine/naloxone than the controls. Thirty-five of 47 patients (74.4%) discharged from the ED with buprenorphine/naloxone continued to fill opioid agonist treatment prescriptions 30 days and 60 days after their index ED visit. Thirty-four patients (72.3%) filled prescriptions at 90 days.

Conclusions: Emergency clinicians can effectively initiate patients on buprenorphine/naloxone when supports for this

Emergency physician perspectives on bup/nlx in the ED

- Cross-sectional, emergency physician survey of physicians representing 22 groups in 6 provinces between December 2018 and November 2019
- 68.9% were willing to administer buprenorphine/naloxone
- 64.2% felt it was a major responsibility
- Lack of time and training were identified as important barriers
- Wide variation between physician groups

A cross-sectional survey on buprenorphine–naloxone practice and attitudes in 22 Canadian emergency physician groups: a cross-sectional survey

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Abstract

Background: Buprenorphine–naloxone (BUP) initiation in emergency departments improves follow-up and survival among patients with opioid use disorder. We aimed to assess self-reported BUP-related practices and attitudes among emergency physicians.

Methods: We designed a cross-sectional physician survey by adapting a validated questionnaire on opioid harm reduction practices, attitudes and barriers. We recruited physician leads from 6 Canadian provinces to administer surveys to the staff physicians in their emergency department groups between December 2018 and November 2019. We included academic and community non-locum emergency department staff physicians. We excluded responses from emergency department groups with response rates less than 50% to minimize nonresponse bias. Primary (BUP prescribing practices) and secondary (willingness and attitudes) outcomes were analyzed using descriptive statistics.

Results: After excluding 1 group for low response (9/26 physicians), 652 of 798 (81.7%) physicians responded from 22 groups serving 34 emergency departments. Among respondents, 64.1% (95% confidence interval [CI] 60.4%–67.8%, emergency department group range 7.1%–100.0%) had prescribed BUP at least once in their career, 38.4% had prescribed it for home initiation and 24.8% prescribed it at least once a month. Overall, 68.9% (95% CI 65.3%–72.4%, emergency department group range 24.1%–97.6%) were willing to administer BUP, 64.2% felt it was a major responsibility and 37.1% felt they understood people who use drugs. Respondents most frequently rated lack of adequate training (58.2%) and lack of time (55.2%) as very important barriers to BUP initiation.

Interpretation: Two-thirds of the emergency physicians surveyed prescribed BUP, although only one-quarter did so regularly and one-third prescribed it for home initiation; wide variation between emergency department groups existed. Strategies to increase BUP initiation must address physicians' lack of time and training for BUP initiation and improve their understanding of people who use drugs.

Emergency physician perspectives on bup/nlx in the ED

- Semi-structured qualitative interviews with ED physicians across Canada
- 32 physicians participated
 - Median of 10 years of experience
 - Most worked in urban settings
- Incentivized training, treatment protocols, dedicated human resources, stream-lined access to follow up care were identified as critical facilitators

Emergency physician perspectives on initiating buprenorphine/naloxone in the emergency department: A qualitative study

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Abstract

Objectives: The objective of this study was to examine the perspectives of Canadian emergency physicians on the care of patients with opioid use disorders in the emergency department (ED), in particular the real-world facilitators to prescribing buprenorphine/naloxone (BUP) in the ED.

Methods: We conducted semistructured qualitative interviews using a multi-site-focused ethnographic design. Purposive sampling via an existing national research network was used to recruit ED physicians. Interviews were conducted by phone using an interview guide and continued until theoretical data saturation was reached. Interviews were transcribed and analyzed using latent content analysis. Interviews took place between June 21, 2019, and February 11, 2020.

Results: A total of 32 physicians were included in the analysis. Participants had a median of 10 years of experience, and most (29/32) worked in urban settings. Clinical care of patients with opioid use disorder was found to be variable and physician dependent. Although some physicians reported routinely prescribing BUP, others felt that this was outside the clinical scope of emergency medicine. Access to clinical pathways,

“I don’t think that what I’m doing should be done out of the emergency department...It’s not a place to be providing chronic care.” (Participant 19)

“I think it [prescribing BUP for home initiation] would be great ‘cause then they could do it on their own terms. They can wait out their withdrawal in a bit more of a comfortable environment, potentially. And they can wait till a time when they’re ready. ‘Cause the day that I see them, they may not be quite ready.” (Participant 8)

“I don’t even trust them to fill and use an antibiotic correctly, right? Because you know, these are patients with a history of overdose, history of criminality, history of diversion, you know they’re not stable patients who you can give a prescription to and expect them to use it in any kind of responsible way.”

(Participant 17)

Non-medical opioid use after short-term exposure

- Systematic review of the risks of nonmedical opioid use after therapeutic exposure in children
- 21 observational studies
- Some studies suggest an association between lifetime therapeutic opioid use and nonmedical use
- Given lack of clear evidence, carefully evaluate pain management options, educate patients and caregivers about safe and appropriate use, and signs of misuse

Nonmedical Opioid Use After Short-term Therapeutic Exposure in Children: A Systematic Review

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abstract

CONTEXT: Opioid-related harms continue to rise for children and youth. Analgesic prescribing decisions are challenging because the risk for future nonmedical opioid use or disorder is unclear.

OBJECTIVE: To synthesize research examining the association between short-term therapeutic opioid exposure and future nonmedical opioid use or opioid use disorder and associated risk factors.

DATA SOURCES: We searched 11 electronic databases.

STUDY SELECTION: Two reviewers screened studies. Studies were included if: they were published in English or French, participants had short-term (≤ 14 days) or an unknown duration of therapeutic exposure to opioids before 18 years, and reported opioid use disorder or misuse.

DATA EXTRACTION: Data were extracted, and methodologic quality was assessed by 2 reviewers. Data were summarized narratively.

RESULTS: We included 21 observational studies (49 944 602 participants). One study demonstrated that short-term therapeutic exposure may be associated with opioid abuse; 4 showed an association between medical and nonmedical opioid use without specifying duration of exposure. Other studies reported on prevalence or incidence of nonmedical use after medical exposure to opioids. Risk factors were contradictory and remain unclear.

LIMITATIONS: Most studies did not specify duration of exposure and were of low methodologic quality, and participants might not have been opioid naïve.

CONCLUSIONS: Some studies suggest an association between lifetime therapeutic opioid use and nonmedical opioid use. Given the lack of clear evidence regarding short-term therapeutic exposure, health care providers should carefully evaluate pain management options and educate patients and caregivers about safe, judicious, and appropriate use of opioids and potential signs of misuse.

Patient perspectives on a harm reduction-oriented addiction medicine consultation team implemented in a large acute care hospital



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ABSTRACT

Background: Addiction medicine consultation teams [AMCTs] are a promising strategy for improving hospital care for patients with substance use disorders. Yet very little research has examined AMCT implementation in acute care settings. To address this gap, we conducted a process evaluation of a novel harm reduction-oriented AMCT. Our specific aims included examining patients' perspectives on factors that facilitated or hindered AMCT delivery, and its impact on their hospital care and outcomes.

Methods: The AMCT provided integrated addiction medicine, harm reduction services, and wraparound health and social supports for patients of a large, urban acute care hospital in Western Canada. We adopted a focused ethnographic design and recruited 21 patients into semi-structured interviews eliciting their views on the care they received from the team.

Results: Participants highlighted the AMCT's harm reduction approach; reputation amongst peers; and specialized training as especially important intervention facilitators. Key barriers that constrained the impact of the team included unmet expectations; difficulty accessing follow-up care; and residual conflicts between the AMCT's harm reduction approach and the abstinence-only orientation of some hospital staff. For a few participants these conflicts led to negative experiences. Despite this, participants reported that the AMCT had positive impacts overall, including declines in substance use, enhanced mental and emotional wellbeing, and improved socio-economic circumstances.

Conclusions: A novel harm reduction-oriented AMCT led to better hospital experiences and perceived outcomes for patients. However, further efforts are needed to ensure adequate post-discharge follow-up, and a consistent approach to substance use disorder care amongst all hospital staff.

They've just been real nice to me, man, you know, they're like my parents. I lived bitter for a while, outside I looked bitter and just hating everything. And that's not me, man, I love everything and these guys helped me replenish that. -'Todd'

They helped me to understand my addiction more, and they actually gave me the courage to try to want to quit - 'Natasha'

alcohol in my life was always just a bandage. It was always just covering up the problems underneath. It never was the problem itself. So once I started taking care of the problems themselves, the need for alcohol kind of diminished. So, yeah, in a holistic way they took care of the alcohol as well. So nowadays, knock on wood, I don't have an urge to drink anymore.

getting me set up with the methadone as quick as [AMCT member] did, that was a bonus 'cause...I was struggling and I wanted to go use and boom within a day she had me in there and within that day I was on methadone.

Engaging and Partnering with
People who have Lived
Experience

“Nothing
about
us,
without
us.”






Changing Practice

Attitudinal Assessment Tools

- Development of a 24-item tool to assess health care learners' attitudes towards caring for inner city populations



Development of the Inner City attitudinal assessment tool (ICAAT) for learners across Health care professions

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Abstract

Background: Many health professions learners report feeling uncomfortable and underprepared for professional interactions with inner city populations. These learners may hold preconceptions which affect therapeutic relationships and provision of care. Few tools exist to measure learner attitudes towards these populations. This article describes the development and validity evidence behind a new tool measuring health professions learner attitudes toward inner city populations.

Methods: Tool development consisted of four phases: 1) Item identification and generation informed by a scoping review of the literature; 2) Item refinement involving a two stage modified Delphi process with a national multidisciplinary team ($n = 8$), followed by evaluation of readability and response process validity with a focus group of medical and nursing students ($n = 13$); 3) Pilot testing with a cohort of medical and nursing students; and 4) Analysis of psychometric properties through factor analysis and reliability.

Results: A 36-item online version of the Inner City Attitudinal Assessment Tool (ICAAT) was completed by 214 of 1452 undergraduate students (67.7% from medicine; 32.3% from nursing; response rate 15%). The resulting tool consists of 24 items within a three-factor model – affective, behavioural, and cognitive. Reliability (internal consistency) values using Cronbach alpha were 0.87, 0.82, and 0.82 respectively. The reliability of the whole 24-item ICAAT was 0.90.

Conclusions: The Inner City Attitudinal Assessment Tool (ICAAT) is a novel tool with evidence to support its use in assessing health care learners' attitudes towards caring for inner city populations. This tool has potential to help guide curricula in inner city health.

Keywords: Vulnerable Populations, Underserved Populations, Marginalized Populations, Social Marginalization, Attitude of Health Personnel, Undergraduate Medical Education, Nursing Education

Emergency Medicine Training

1. Screen for opioid and other substance use disorders.
2. Initiate first-line opioid agonist treatment
3. Provide overdose prevention education, take-home naloxone, and other harm reduction interventions.
4. Ensure transition of care and social stabilization
5. Reduce opioid-related harm

Addressing the opioid crisis in the era of competency-based medical education: recommendations for emergency department interventions

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INTRODUCTION

In Canada, opioid-related deaths continue to rise at an alarming rate. In 2017, there were 3,996 apparent opioid-related deaths (33% increase from 2016), significantly greater in magnitude as compared with deaths caused by previous public health crises, e.g., H1N1 in 2009 (428 deaths).^{1,2} Opioid-related emergency department (ED) visits have also increased. From 2012 to 2017, the age-adjusted rate of ED visits because of opioid poisoning increased by 136% in Alberta (from 37.6 to 88.6 per 100,000 population) and 47% in Ontario (from 23.5 to 34.6 per 100,000 population).³

Because of stigma and social instability, the ED is often the main source of healthcare for patients with substance use disorders.⁴ An ED visit may be the only, or last, point of contact with the health care system prior to an individual experiencing a fatal overdose. Patients with opioid use disorders have a life-threatening medical condition, and emergency medicine (EM) physicians and residents play a critical role in preventing future morbidity and mortality.

The transition to competency-based medical education offers opportunities for residents to apply public health interventions within the scope of EM training,⁴ identify patients with opioid use disorders effectively

OPIOID USE DISORDER AND COMPETENCE BY DESIGN

Competency-based medical education focuses on outcomes that are organized within a framework of predefined abilities or *competencies*.⁵ The Royal College's model of Competence by Design was designed to address evolving societal health needs and patient outcomes.⁶ It incorporates the CanMEDS Framework to ensure that residents have the knowledge, skills, attitudes, and willingness to meet societal needs (such as social determinants of health) in a responsible and accountable manner.⁶



Entrustable professional activities are specialty-specific tasks that require demonstrated competence by a resident prior to training completion.⁵ There are three entrustable professional activities that directly relate to the management of opioid use disorders⁷: 3.8) "Managing patients with acute toxic ingestion or exposure"; 3.9) "Managing patients with emergency mental health conditions or emergencies"; and 3.10) "Managing and supporting patients in situational crisis to access health care and community resources."

Notably, they represent 3 of 15 entrustable professional activities listed in the *Core of Discipline* stage of training, which focuses on more advanced competencies.⁵

CAEP Position Statement

1. Use case-finding strategies to identify opioid and other substance use disorders.
2. Initiate first-line opioid agonist treatment in patients with opioid use disorder.
3. Provide overdose education, naloxone distribution and other harm reduction interventions.
4. Reduce harm from opioids prescribed in the ED.
5. Improve transitions of care and social stabilization.

CAEP Position Statement: Emergency department management of people with opioid use disorder

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INTRODUCTION

Deaths due to opioid overdose have reached unprecedented levels in Canada; over 12,800 opioid-related deaths occurred between January 2016 and March 2019, and overdose death rates increased by approximately 50% from 2016 to 2018.¹ In 2016, Health Canada declared the opioid epidemic a national public health crisis,² and life expectancy increases have halted in Canada for the first time in decades.³ Children are not exempt from this crisis, and the Chief Public Health Officer of Canada has recently prioritized the prevention of problematic substance use among Canadian youth.⁴

In 2014, the overall health care costs of substance use in Canada were estimated to be \$11.1 billion, of which 2.8% (\$0.3 billion) were attributed to opioids.⁵ Since then, health care use resulting from opioid use has increased dramatically. Opioid-related hospitalizations increased by 27% between 2013 and 2017.⁶ From 2016 to 2017, emergency department (ED) visits due to opioids increased by 73% in Ontario, and 23% in Alberta.⁶ Furthermore, youth aged 15 to 24 years have the highest and fastest-growing rates of ED visits related to opioids, tripling over the past 5 years.⁶

EDs are often the main source of health care for patients with substance use disorders.⁷ ED visits are crucial opportunities to identify and address the complex needs of patients who are socially and medically marginalized.⁸ Those who visit the ED frequently are at significant risk of subsequent overdose.⁹ People who overdose are more likely to have visited an ED in the preceding year, and are more likely than the average patient to have left without being seen or against medical advice.¹⁰

In the context of a national opioid crisis, there is a professional imperative for emergency providers to take evidence-based steps to prevent future morbidity and mortality resulting from opioid use and from common presentations of opioid-related illness in ED settings. Nonfatal opioid overdose, rapid opioid tapering, and opioid withdrawal are significant risk factors for subsequent death due to opioid overdose.^{11,12} In Canada, ED-based interventions for opioid use disorder have been shown to be effective and acceptable to patients.¹³⁻¹⁶

CAEP supports a broad and multi-faceted public health approach to addressing this complex health crisis and embraces an evidence-based harm reduction approach to substance use, which aims to reduce

Opioid & Substance Use Disorders

Words matter when talking about substance use.

What you say can reduce stigma and remove barriers to effective treatment. Focus on the person and their strengths and skills.

Use these terms when talking about opioid and substance use with your patients.

People with lived experience of substance use

Opioid agonist treatment

Illegally produced drugs or opioids

Recurrence of use

Negative or positive urine toxicology or drug test

Opioid use disorder

Treatment attempt

Experienced barriers to treatment

Patient-initiated discharge



Next steps

Supervised Consumption Services for ED Patients

Nina Lam

Jake Hayward

Jaspreet Khangura

Rebecca Rosenblum

Klaudia Dmitrienko

Lisa Ying

Lindsay Grant-Nunn

Kathryn Dong



Photo credit: Ken Dalton

Comparing Microdosing and Standard Dosing buprenorphine/naloxone for ED patients at Risk of Overdose

Jessica Moe

Kathryn Dong

Rob Wittmeier

Jaspreet Khangura



Day	Total dose
1	0.25 mg
2	0.5 mg
3	1 mg
4	2 mg
5	4 mg
6	8 mg
7	12 mg

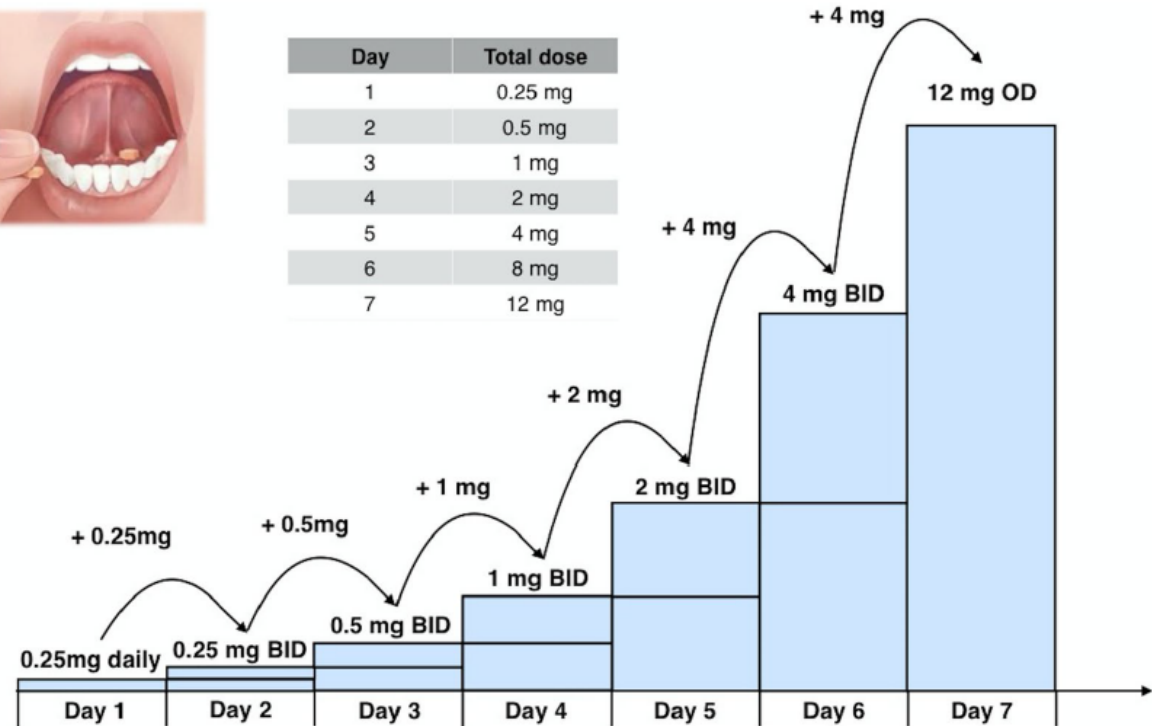


Fig. 1 Buprenorphine/naloxone microdosing regimen (daily witness ingestion). The team partnered with a local pharmacy who were able to split that tablets for microdosing. The tablet splitting may not have been 100% accurate, however it was effective for this patient, given that the technique is to start low and gradually increase and best practice for dosing has yet to be established

Advancing patient-centered emergency care for people who use opioids during COVID-19

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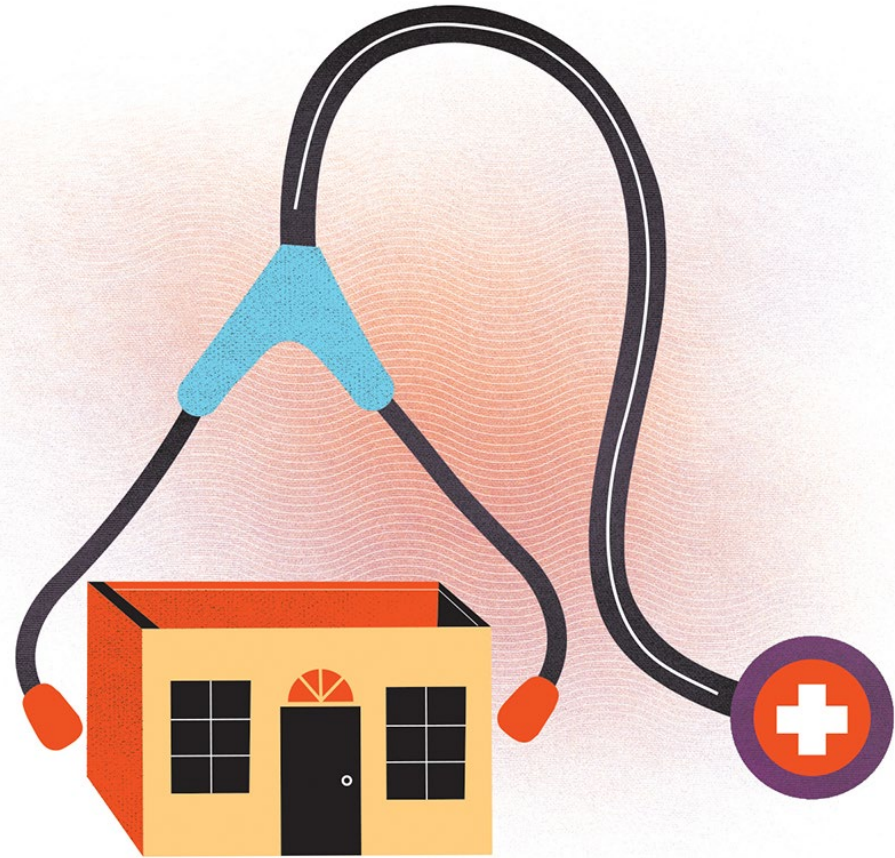
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Thank you!



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