

Addictions day: Implementing a buprenorphine/naloxone protocol in the emergency department

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Disclosures

- Dr. Josh Fanaeian
- Addictions practice at Metro City Clinic (Edmonton)
 - No ownership stakes, no involvement with pharmaceutical industry
 - Physician Implementation Liaison for North Zone
- Dr. Jan Deol
- Addictions practice at Metro City Clinic (Edmonton)
 - Part owner of Metro City Clinic (Calgary)
 - No involvement with pharmaceutical industry
 - Physician Implementation Liaison for North Zone

Part-time position with the AHS Emergency Strategic Clinical Network™ as a Physician Implementation Liaison funded by a grant from Health Canada Substance Use and Addictions Program (SUAP) in collaboration with the Addictions and Mental Health Strategic Clinical Network™.



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Contents

- Brief overview of opioid data in Alberta and how it relates to emergency departments
- Overview of opioid use disorder and how it relates to emergency departments
- Need identification → conception → design of buprenorphine/naloxone ED pathway
- Challenges, barriers, obstacles
- Pathway evolution
- Results to date

Recent opioid data

- In North America, opioid-related deaths outnumber deaths from motor vehicle crashes

2017 & 2018 to-date:

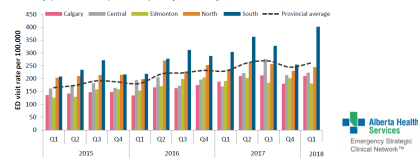
- **687 deaths** from accidental opioid poisoning in AB in 2017 (562 out of 687 fentanyl-related)
- **Nearly 2 individuals die on average every day** in AB from accidental opioid poisoning.
- **78%** of all confirmed alcohol poisoning deaths (accidental and suicide) in 2017 and 2018 directly involved **opioids** (fentanyl or non-fentanyl).



Opioid use and ED visits

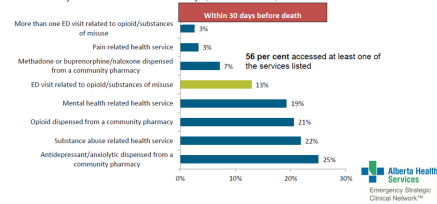
The rate of ED visits related to opioid use and substance misuse increased by **58.4%** from January 1, 2015 to March 31, 2018.

Figure 13: Rate of emergency department (ED) visits related to opioid use and other substances of misuse, by quarter and Zone, per 100,000 person years, January 1, 2015 to March 31, 2018.



ED visits 30 days prior to overdose

Figure 9: Proportion of apparent accidental poisoning deaths related to fentanyl, by medical history within the 30 days before the date of death, January 1, 2018 to March 31, 2018.



What happens when a patient with OUD presents to the ED?

Scenario A	Scenario B	Scenario C
Physician comfortable with OAT, triplicate prescription given to bridge between now and community follow-up (rare)	Patient given non-opioid withdrawal management and discharged home +/- outpatient resources	Patient given further opioids (i.e. "Percocet x 5 to go") +/- withdrawal management and discharged home +/- outpatient resources

- Often unpleasant and unfulfilling encounters for physician, patient and other staff
- Patient at this stage **urgently** at increased risk for overdose and death
- Every healthcare encounter without an intervention is a potential source for loss to follow-up

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Original Investigation

Emergency Department–Initiated Buprenorphine/Naloxone Treatment for Opioid Dependence A Randomized Clinical Trial

Gal D'Onofrio, MD, MS; Patrick G. O'Connor, MD, MPH; Michael V. Pantalon, PhD; Marek C. Chawarski, PhD; Susan H. Busch, PhD; Patricia H. Owens, MS; Steven L. Bernstein, MD; David A. Fiellin, MD

IMPORTANCE Opioid-dependent patients often use the emergency department (ED) for medical care.

OBJECTIVE To test the efficacy of 3 interventions for opioid dependence: (1) screening and referral to treatment (referral), (2) screening, brief intervention, and facilitated referral to community-based treatment services (brief intervention); and (3) screening, brief intervention, ED-initiated treatment with buprenorphine/naloxone, and referral to primary care for 10-week follow-up (buprenorphine).

JAMA Report Video and Author Video Interview at jama.com

CME Quiz at jamanetworkcme.com and CME Questions page 1670

So how do we link the two?



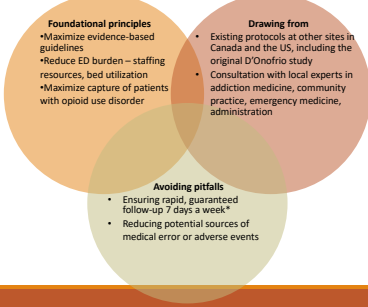
GUIDELINE VULNERABLE POPULATIONS
Management of opioid use disorders: a national clinical practice guideline

John R. Burke MD PhD, Mark Shestak MD, Nancy Fox Eagan MD PhD, Christy Poole MD, Peter Salyer MD MS, Jennifer Fricker PhD, T. Cameron Miller PhD, Evan Wood MD PhD, on behalf of the OUD Guideline Research Institute's Stakeholder Alliance

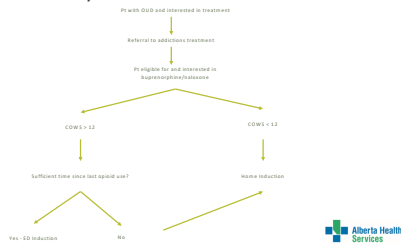
We know:

- Opioid agonist therapy started as soon as possible improves retention
- Opioid agonist therapy has been shown to reduce use, morbidity and mortality
- Withdrawal management alone has been shown to be harmful

Creation of a protocol



Clinical pathway



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Patient selection

- **Including:** any patient 18 years old or older with a history of opioid use disorder that is interested in buprenorphine/naloxone
- **Excluding:**
 - Pregnant → expert consultation advised
 - Allergy
 - Hospital Admission
 - Intoxication
 - Severe liver dysfunction



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ED induction (COWS 12 or greater)

Patient receives buprenorphine/naloxone **2 mg test dose** → Reassess in 45-60 minutes → If feels same or better, give buprenorphine/naloxone **4 mg dose** → Discharge with three carry doses (2 mg x 3) when stable and follow-up in 24hrs



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Home induction (COWS less than 12)

- Home buprenorphine/naloxone induction
- Patient receives buprenorphine/naloxone 2 mg/0.5 mg x 6 doses to go
- Patient counselled on appropriate induction
- Outpatient appointment arranged
- Take home naloxone kit and harm reduction counselling



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Discharge teaching for all patients

- Medical
 - Home dosing instructions and administration
 - Avoiding precipitated withdrawal
- Logistics
 - Follow-up instructions
- Harm reduction practices that all patients should know
 - **Naloxone kit**
 - Supervised consumption sites
 - Using clean needles and supplies



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How it differs from other existing ED protocols

- Ability to intervene on patients with opioid use disorder **not** in acute moderate to severe withdrawal
- Ensured next day dosing continued or intake appointment
- Flexibility in which outpatient clinic patient can have follow-up
- New (no result data from it yet): Day 1 up to 12 mg

Early timeline: 2017-2018

- First draft of protocol created in consultation with local experts in Edmonton
- Presented to Edmonton Zone Emergency Medicine meeting for pilot approval
- Collaboration with Emergency Strategic Clinical Network within Alberta Health Services to assist with pilot project roll out in two Edmonton sites and one in Calgary
- Education sessions for medical staff in pilot project emergency departments

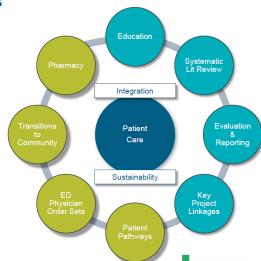
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Project deliverables

Goal: Develop and implement a province-wide ED program to:

- 1) Appropriately screen patients for opioid use disorder
- 2) For those who are eligible, initiate
- 3) Provide rapid follow-up to community for continued dosing and care

- Patient Care
- Knowledge & Evidence



Early barriers and limitations

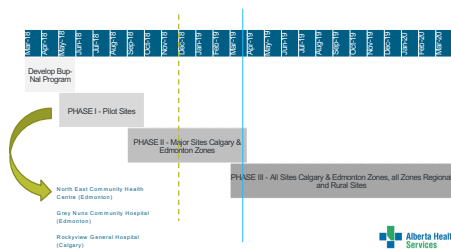
- Unfamiliarity with opioid agonist therapy among physicians and nursing staff
 - Individual education sessions by Drs. Deol, Fanaeian and Olmstead to both physician and nursing staff about OUD, OAT, the protocol
 - Later presentations carried out by local educators, champions, ESCN

Early barriers and limitations

- Unfamiliarity with opioid agonist therapy among physicians and nursing staff
 - Individual education sessions by Drs. Deol, Fanaeian and Olmstead to both physician and nursing staff about OUD, OAT, the protocol
 - Later presentations carried out by local educators, champions, ESCN
- Pharmacy and nursing regulations limiting what can be dispensed
 - Approval from Pharmacy leadership and College and Association of Registered Nurses of Alberta
- Multiple versions adjusting protocol formatting and wording to streamline, facilitate ease of use, clarify discharge instructions, reduce chance of medical error

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Project schedule

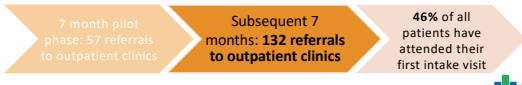


Special situations

- Connecting rural and remote communities with Rural (Virtual) Opioid Dependency Program
- Integration with pre-existing addictions infrastructure
 - Grande Prairie - ACT Medical Clinic
 - Royal Alexandra Hospital – collaboration with ARCH

Most recent data

Buprenorphine/naloxone induction protocol now active in 28 emergency departments and urgent care centres



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Program (Process) Evaluation

How effective are the implementation processes for "Initiation of Bup-Nal in EDs"?

- Number of opioid-related ED visits
- Number of ED visits where bup-nal tablets were given
- Number of bup-nal tablets given in EDs as new-initiation vs. maintenance
- Number of referrals received at community clinics
- Number (%) of ED patients who attend first follow-up appointment
- Length of stay of opioid-related visits

Are there enough resources for "Initiation of Bup-Nal in EDs"?

- Number of bup-nal tablets provided by provincial pharmacy to EDs or reclaimed from EDs
- Average wait to referral
- Survey responses from clinician leaders

What are clinician leader perspectives on "Initiation of Bup-Nal in EDs"?

- Survey responses from clinician leaders



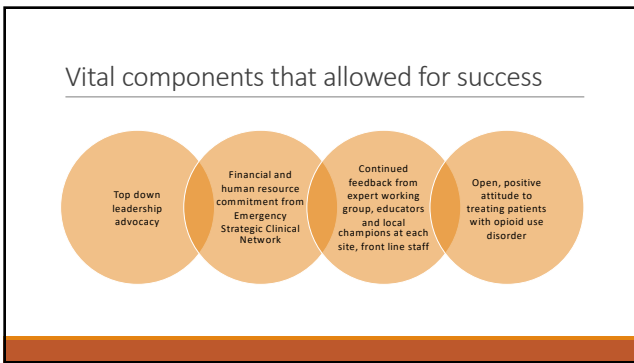
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Outcome Evaluation

To what extent are patients who live with opioid use disorder benefiting from the "Initiation of Bup-Nal in EDs?"

- Number (%) of ED patients filling bup-nal prescriptions at 30, 60, 90, 120 days post-index ED visit
- Mean number of days taking bup-nal post-index ED visit
- ED visits in x time after index ED visit
- Number of hospitalizations in x time after index ED visit

Alberta Health Services
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Feedback from the ED Opioid Use Disorder Expert Working Group
