EMED Study: A Randomized Controlled Trial Investigating Buprenorphine/Naloxone Microdosing in Emergency Departments

Category: Oral Presentation

Abstract Body

Background: Buprenorphine/naloxone reduces illicit drug use and increases retention in addictions care when provided to patients with opioid use disorder (OUD) in emergency departments (EDs). However, standard dosing inductions often deter patients due to fear of the required withdrawal period. Microdosing eliminates the need for withdrawal.

Objective: To evaluate effectiveness of take-home microdosing versus standard dosing buprenorphine/naloxone kits offered to patients in EDs.

Methods: Our broad screening process identifies patients based on ED presenting complaints and provider referrals. We assess eligibility using a list of exclusion criteria (e.g., age < 18, actively receiving opioid agonist therapy, admitted to hospital, etc.) and standardized questions on opioid use and OUD. Eligible participants are randomized 1:1 to receive either a standard dosing or microdosing take-home package. We will analyze patient retention on buprenorphine/naloxone and other opioid agonist therapies, mortality, and healthcare utilization.

Results: By April 25, 2023, we broadly screened 8,492 patients for initial eligibility (e.g., ED presenting complaints and provider referrals). We approached 2,749 patients to ask about non-medical opioid use, followed by a screen for OUD. Of patients who reported using opioids non-medically, 22% (n=605) screened positive for OUD and met eligibility criteria. Of this subset of eligible patients, 28% (n=169) proceeded with enrollment.

Conclusions: Results show that a significant number of patients visiting the ED have OUD, suggesting that EDs present a prime opportunity to screen for and offer interventions to patients at risk of overdose. Our results will inform the best approach to ED buprenorphine/naloxone inductions that should be made widely available across Canada.

Key Words

- Assessment/screening
- Opiate Agonist Therapy
- Opioids/Opiates
- Prevention/Harm Reduction
- Substance Use Disorder (general)

Learning Objective # 1
Learning Objective #1: scientific rationale for buprenorphine/naloxone microdosing.

Learning Objective # 2
Learning Objective #2: opportunities for emergency department screening to identify individuals at risk of overdose.

Reference # 1
D'Onofrio G, O'Connor PG, Pantalon MV, Chawarski MC, Busch SH, Owens PH, Bernstein SL, Fiellin DA. Emergency department–initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial. Jama. 2015 Apr 28;313(16):1636-44.

Reference # 2
Moe J, Badke K, Pratt M, Cho RY, Azar P, Flemming H, Sutherland KA, Harvey B, Gurney L, Lockington J, Brasher P. Microdosing and standard-dosing take-home buprenorphine from the emergency department: A feasibility study. Journal of the American College of Emergency Physicians Open. 2020 Oct 20;1(6):1712-1722.

Lead Author
Mr. Viseth Long
Research Manager | University of British Columbia

Co-Author
Dr. Jessica Moe
Emergency Physician | University of British Columbia

Co-Author
Ms. Elle Wang
Analytic Project Coordinator | Analytic Project Coordinator