EMBED: A Pragmatic Trial of User Centered Clinical Decision Support for Emergency Department Initiated Buprenorphine for Opioid Use Disorder

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NIH Collaboratory Steering Committee
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EMBED Trial - Methods

- 18-month pragmatic, parallel, group randomized trial
- 18 ED clusters (21 sites) in 5 healthcare systems randomly allocated in 1:1 ratio to intervention versus usual care arm
- Intervention: CDS to support diagnosis & withdrawal assessment & automate orders, notes, Rx, AVS, referral
- Primary outcome: initiation of BUP in ED at patient level
- Protocol approved by Western IRB (WIRB)

EMBED Trial Protocol. BMJ Open, 2019
EMBED Data Collection: Yale Data Coordinating Center & External Sites

YALE DCC

University of Colorado Anschutz Medical Campus
- Site 1
- Site 2
- Site 3

Yale New Haven Health
- Site 1
- Site 2
- Site 3

UB Health System
- Site 1
- Site 2
- Site 3

Baystate Health
- Site 1
- Site 2
- Site 3

UNC Health Care
- Site 1
- Site 2
- Site 3

NIH PRAGMATIC TRIALS COLLABORATORY
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Data Collection: Challenges

- Clinician demographic data outside of EHR:
  - IRB amendment
  - Mismatch between EHR & human resources data

- Data privacy measures:
  - Visit data as PHI: confusing for start and end date
  - Aggregated clinician age data, patient >85

- Multiple rounds of iteration for finalizing data dictionary
- Secondary outcome referral data not feasible
- EHR race/ethnicity data inconsistent internally and across systems