Implementing Opioid Use Disorder Screening, Medication Assisted Treatment and Referral in the Emergency Department: An Evidence Based Quality Improvement Initiative

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Project Implementation

Ethics/Human Subjects Protection: IRB exempted by Mount Sinai Hospital and Loyola University Chicago

Project type: Quality Improvement initiative to implement ED MAT educational module, screening, initiation and referral. To evaluate for adherence to EHR MAT protocol and documentation

Setting: Mount Sinai ED – level 1 Adult Trauma center, non-profit safety net hospital in SW Chicago, treats 50,000+ underserved patients yearly, consisting significant OUD/overdose patients. 288 acute care beds, teaching hospital training 700+ healthcare professionals yearly

Practice Gap Analysis: No existing OUD screening or treatment protocol

Key Stakeholder & Resources: ED/Nursing directors, IT, pharmacists, educators etc.

Participants/Sample: Convenience sample: ED providers (MDs, APPs, RNs) working at MSF ED (includes Holy Cross providers) and ED patients 18yr+ screened as OUD patients (risk for overdose/withdrawal), clinically indicated for MAT

Project Objectives:
1) Revise the Electronic Health Record (EHR) system to include:
   - NIDA quick Screen; COWS tool utilization
   - OUD MAT Protocol (Buprenorphine initiation, Naloxone kit distribution, MAT referral)
2) Develop and implement an OUD educational module and link to DEA X-waiver training for ED APPs if needed (X waiver no longer required for MDs as of Jan 2021 by HHS)
3) Evaluate learning outcomes via pretest/posttest and program end evaluation
4) Evaluate EHR documentation:
   - NIDA & COWS screening documentation for staff completeness and accuracy
   - Early initiation and administration of buprenorphine when clinically indicated
   - Naloxone kit distribution and education with discharge instruction
   - MAT clinic

Sources of Data:
- Triage NIDA screening tool, positive screens
- 10 questions pre/post educational module questions reviewed by experts for content validity
- 5 questions Likert scale survey rating achievement of objectives
- EHR documentation:
  - Number of naloxone kit distributions and MAT referrals by ED nurses
  - Number of ED Buprenorphine initiation/administrations by providers and Nurses

Budget: Patient Naloxone kit education pamphlets (Free), online modules (Free)

Project 2021 Proposed Timeline:
- Feb: Discharge Naloxone distribution; March/April: EHR Revision, Education, limited MAT initiation, MAT referral; April/May: Full MAT initiation in ED, Full MAT referral; June: Data collection/evaluation, June/July: Results Dissemination

Implications for Research and Practice

- ED providers are currently on the front line of the opioid crisis
- ED is the initial access for opioid dependent patients seeking medical care
- OUD universal screening, education, treatment and management identify and treat those who may otherwise be undetected until withdrawal/overdose/death are more evident
- ED providers (MDs and APPs) and nurses play a pivotal role in early recognition of OUD patients, early initiation of MAT to relieve withdrawal symptoms and decrease craving to reduce repeat abuse and referral to ongoing MAT treatment anticipating for an ultimate recovery

Conclusion

- EDs will continue to serve as front line access for patients with OUD/overdose
- U.S. declares the opioid overdose as an epidemic and as a public health emergency calling for an urgent need for early treatment and active commitment from the emergency medicine community
- This project will enable emergency providers and nurses to manage OUD with the evidence based approach and efficiently transition care to long term referral services aiming for an ultimate recovery
- This project will help turn the tide against this opioid epidemic and improve quality of life for all