Medication Assisted Treatment - The End in Mind

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Introduction

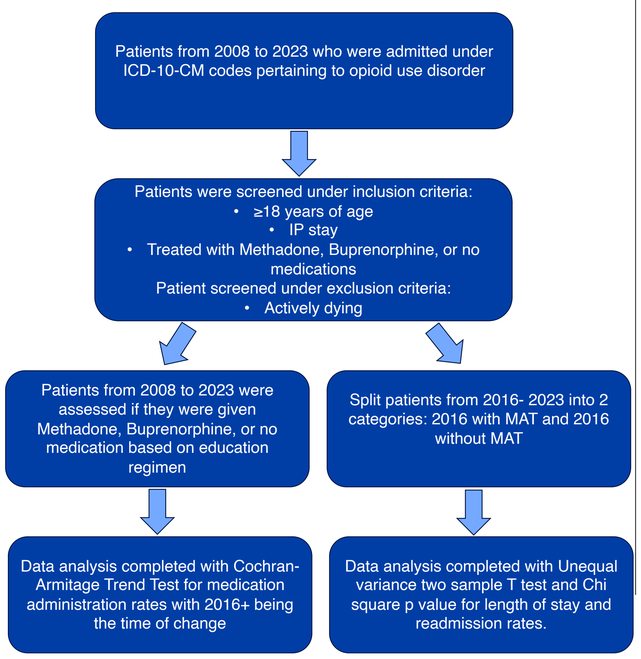
- **Opioid Use Disorder (OUD)** is defined as a problematic pattern of substance use causing significant impairment or distress, and it is a **leading cause injury deaths**[1] in the U.S.
- **Medication-Assisted Treatment (MAT)**, using **methadone** (full agonist) and **buprenorphine** (partial agonist/antagonist), is the gold standard for OUD[2], stabilizing patients by alleviating withdrawal symptoms and cravings.
- Stigma and skepticism about MAT's effectiveness hinder its adoption in acute care settings[3].
- More research is needed to overcome misconceptions and enhance the efficacy of MAT in hospitals since it is the first point of contact for patients.
- This project aims to educate patients on their treatment options investigate how initiating patients on MAT in the acute hospital setting for opioid abuse leads to better retention rates long term.

Aims and Objectives

1. Examine how the standardized education regimen by an addiction medicine team implementation impacted prescription rates of MAT total and individually buprenorphine, and methadone in the acute care setting.

2. Examine associations between treatment modalities (buprenorphine, methadone, or no medication), with lengths of stay and readmission rates.

Methods



Results

Table 1: Patient Demographic Data

Age	
Mean # of Years	51.9
Sex	
Female	4262
Male	3172
Race	
Black/African American	2080
White/Caucasian	5136
Other	205
Unknown	13
Ethnicity	
Arab or Middle Eastern Descen	109
Hispanic/Latino	77
Non Hispanic/Latino	6988
Other	199
Unknown	61

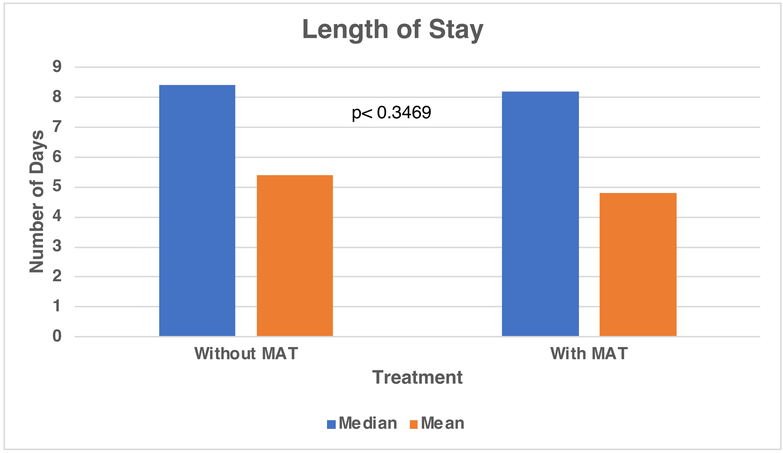


Figure 1: Comparison of patient length of stay with or without initiation of MAT in the acute care setting

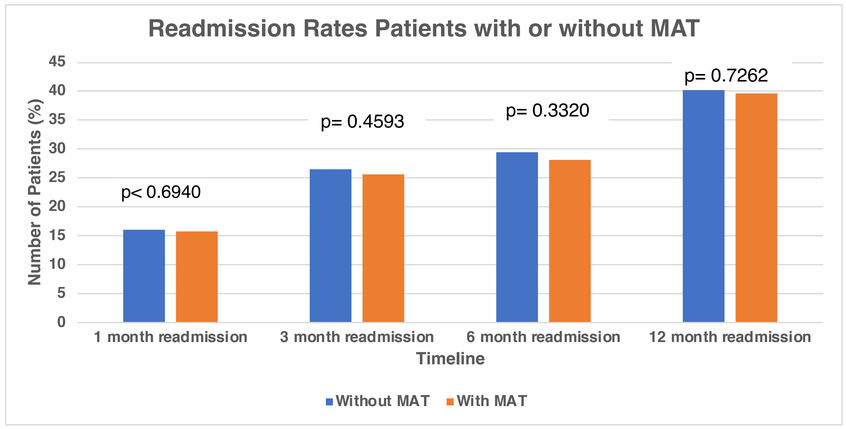


Figure 2: Comparison of patient readmission rate at 1, 3, 6, and 12 month with or without initiation of MAT in the acute care setting

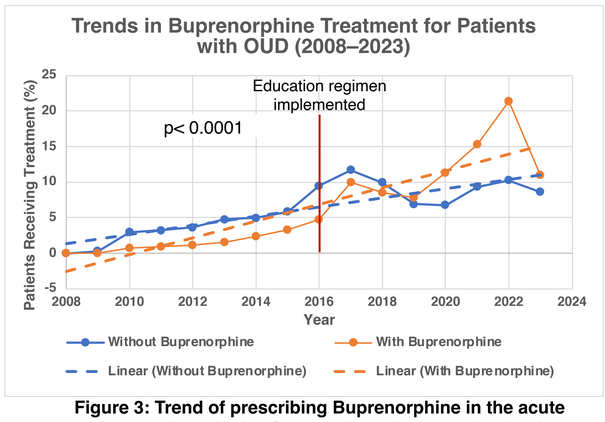


Figure 3: Trend of prescribing Buprenorphine in the acute care setting with implementation of the standardized education regimen in 2016

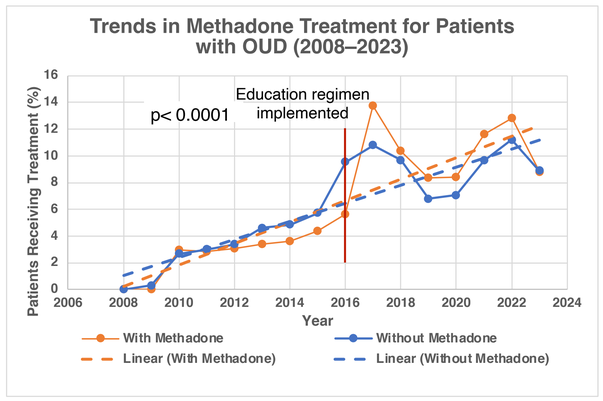


Figure 4: Trend of prescribing Methadone in the acute care setting with implementation of the standardized education regimen in 2016

Conclusions

- Our findings suggest that the implementation of a standardized education regimen for patients with OUD contributed to higher rates of Methadone and Buprenorphine prescriptions. This suggests that healthcare provider knowledge and adaptation of available modalities may influence patient treatment access and prescribing practices. Increasing provider education and awareness may further enhance evidence-based prescribing and improve patient outcomes in OUD management.
- The initiation of Methadone or Buprenorphine does not influence the length of stay or readmission rates, suggesting that concerns about MAT delaying discharge or increasing hospital utilization are unsupported.
- Readmission and length of stay may be influenced more by other factors such as social determinants of health, discharge planning, or connecting patients to resources.
- Since MAT is shown to reduce overdose risk and improve retention in care, acute care initiation of MAT is an important harm reduction strategy.
- Further studies are needed to explore how factors such as housing instability, insurance coverage, transportation, and access to follow-up care influence readmission rates and length of stay, and whether addressing these factors during hospitalization impacts hospital outcomes. Additionally, research is needed to determine whether structured discharge planning and connecting patients to addiction treatment centers improve MAT continuation and reduce readmission rates.
- Despite their proven efficacy in improving patient outcomes, these treatments remain stigmatized and underutilized in the acute care setting. We hope to continue this research to optimize the care and recovery of patients with OUD.

References

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