Evaluation of naltrexone use in hospitalized psychiatric patients at an academic medical center

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Truman Medical Centers

Truman Medical Centers (TMC) is a not-for-profit two acute-care hospital health system in Kansas City. The TMC health system includes TMC Hospital Hill, TMC Lakewood, TMC Behavioral Health, the Jackson County Health Department, and a number of primary care practices throughout Eastern Jackson County.

TMC is the primary teaching hospital for the University of Missouri-Kansas City Schools of Medicine, Pharmacy, Nursing, and Dentistry and specializes in chronic disease management, orthopedics, family medicine, women’s health, and trauma services.

Methods

- A list of patients with naltrexone orders placed by physicians from Aug 8, 2019 to Mar 1, 2020 were obtained from the facility’s electronic record system. Investigators included all orders, excluding outpatient orders, for a randomized, non-interventional, retrospective analysis.
- Investigators collected data regarding patients’ naltrexone indication, liver function tests, urine drug screens, readmissions, return visits to the emergency department (ED), and psychiatric service consultations.
- Reasons for inappropriate initiation included if naltrexone was administered to a patient with a Class C Child-Pugh Score, there was not a complete seven-day opioid washout, or naltrexone was ordered without placing a psychiatric consult per the hospital’s approval for use requirement.
- The primary outcome was the percentage of appropriate naltrexone initiation in inpatients with alcohol and/or opioid use disorder.
- Readmission rates and ED visits involving alcohol and/or opioid use were then evaluated along with the formulation of naltrexone prescribed at initial discharge.

Results

- 144 naltrexone orders were placed during the seven-month study period. Reasons for inappropriate naltrexone initiation (n = 59) were as follows:
  - 5 patients (3.5%) had Class C Child-Pugh Score
  - 25 patients (17%) had inadequate opioid washout period
  - 10 patients (7%) had unknown opioid washout period
  - 19 patients (13%) of orders had no psychiatric consults

- Six patients were readmitted for alcohol and/or opioid use within 30 days of discharge and eight patients visited the ED for alcohol and/or opioid use within 30 days of discharge.
- Naltrexone formulations at initial discharge:
  - 103 (71.5%) patients were discharged on oral naltrexone
  - 15 (10.4%) patients were discharged on long-acting injectable naltrexone
  - 26 (18%) patients were discharged with no naltrexone therapy

Conclusion

- Over 40% of naltrexone orders were initiated incorrectly.
- This medication use evaluation highlights both clinical and operational targets to ensure optimal patient outcomes while avoiding preventable drug related problems.
- A formal protocol for naltrexone is recommended followed by immediate re-education that targets both operational and clinical aspects of naltrexone initiation and monitoring.
- Further investigation into naltrexone dosage formulation and its correlation to rates of readmission and ED visits should also be evaluated.

References


Disclosures

Authors of this presentation have the following to disclose concerning possible financial or personal relationship with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.

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