Development of an inpatient protocol for management of patients who take buprenorphine prior to admission

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Problem

There is currently no standardized procedure to appropriately manage acute pain in patients on home dose buprenorphine

Background

- In 2016, about 2.1 million patients were diagnosed with opioid misuse in the United States[1]
- 2 out of 3 drug related deaths in the US is attributed to opioid misuse[1]
- Long term consequences include the inability to thrive in society, tolerance to pain medications, and risk of withdrawal effects[1]
- Correlation between opioid misuse and presenting to the hospital with traumatic or acute pain[1]
- Buprenorphine's unique mechanism of action can lead to inadequate pain management strategies[2,3]

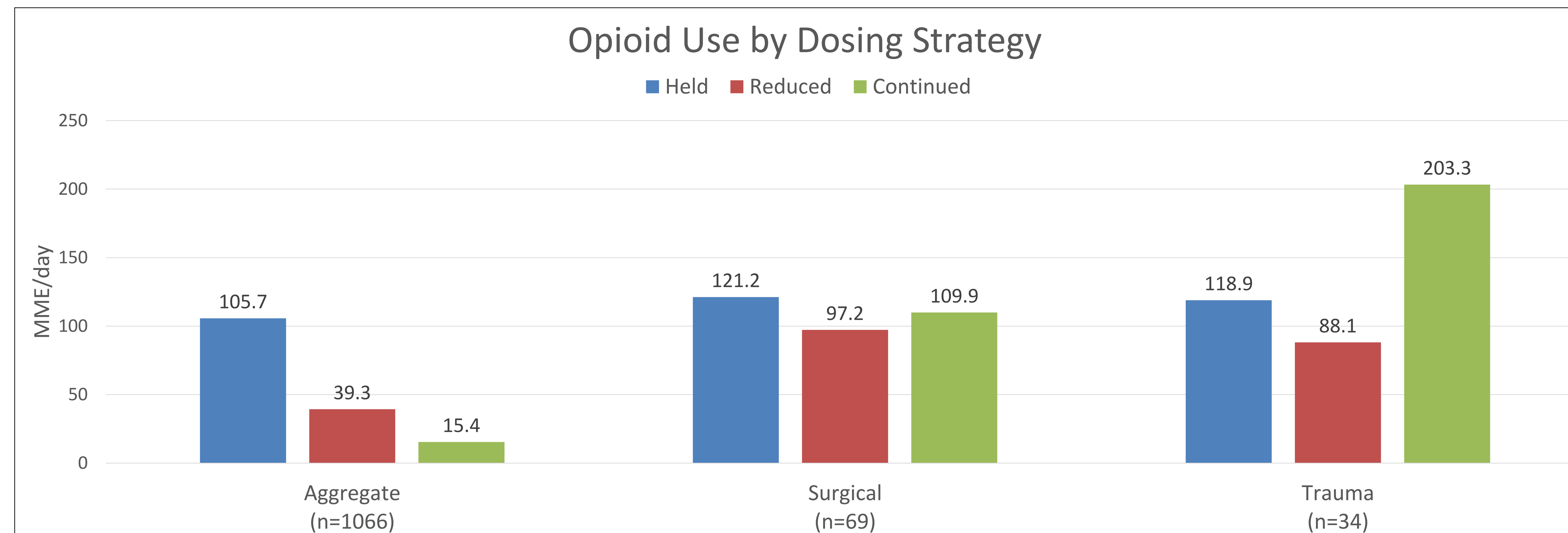
Study Design

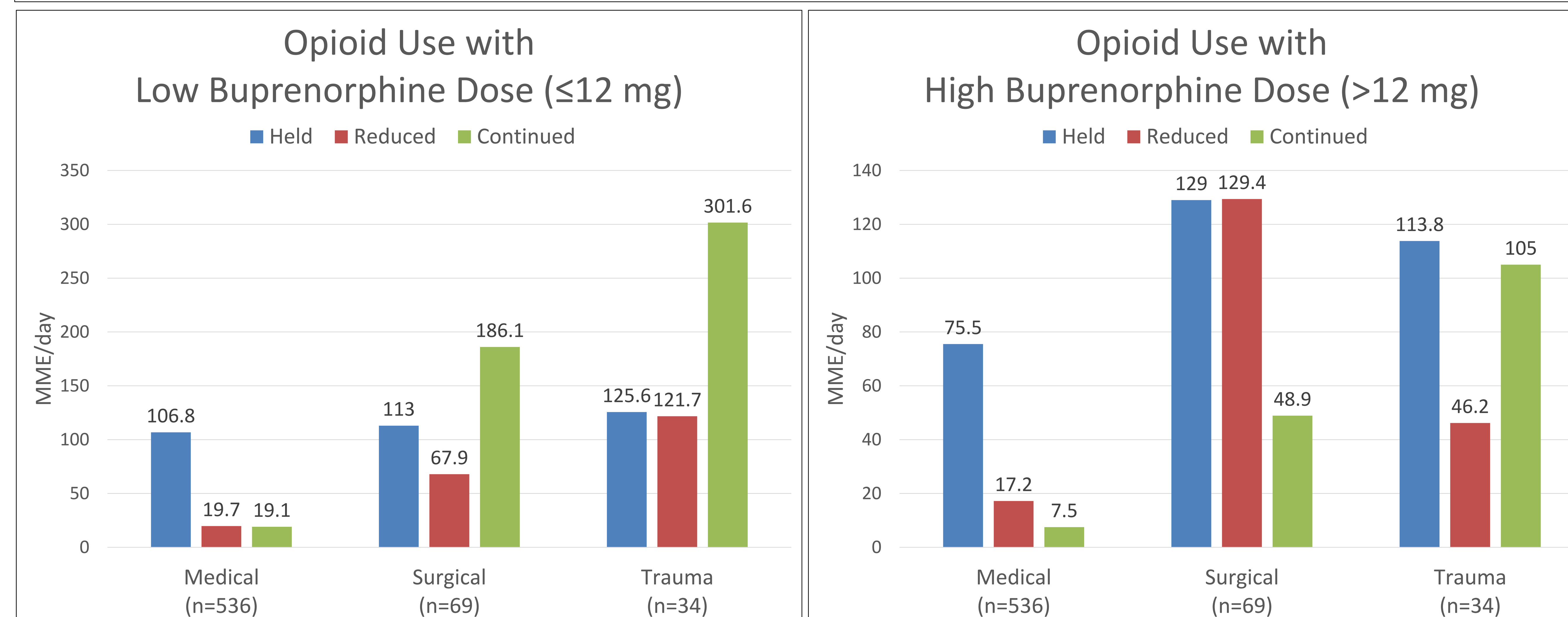
- **Design:** A retrospective study of patient charts between March 29, 2015 to July 31, 2021 with an active prior to admission (PTA) buprenorphine prescription
- **Inclusion Criteria:**
  - Admitted to a Lifespan hospital for > 24 hours
  - Had an active buprenorphine product on home medication list
  - Received an analgesic while hospitalized
- **Question**: How does the inpatient handling of a patient's home buprenorphine affect their inpatient opioid use and pain scores?
- **Primary Outcome**: MME/day utilized during a patient encounter based on dosing strategies during patient encounter (continued, held, reduced)

Dosing Strategy Criteria (% of home buprenorphine dose)		
Held	**Reduced**	**Continued**
<25%	≥25% to ≤75%	>75%

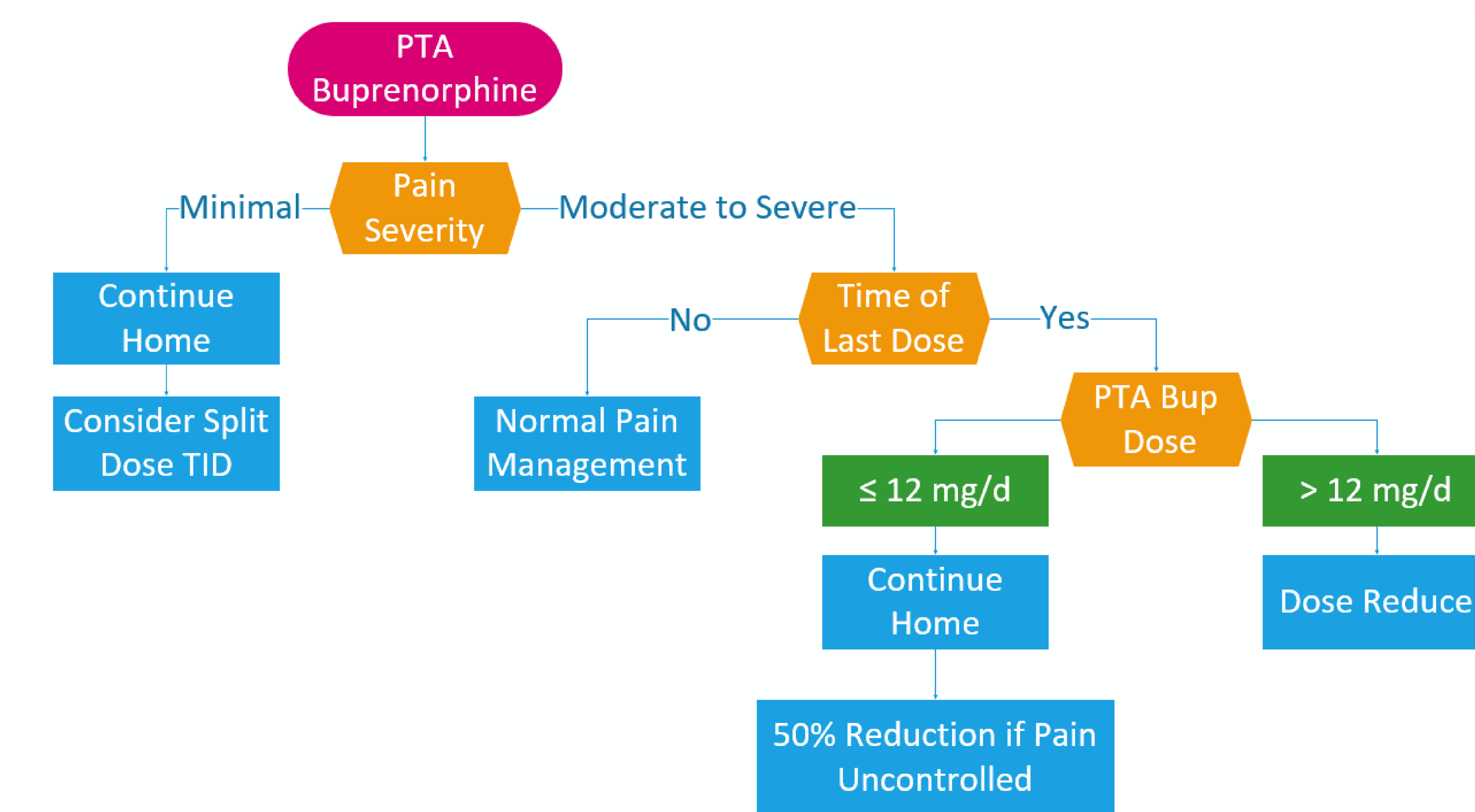
Project Timeline

Results





Flowchart



Conclusion

- **Overall Cohort/Medicine:** Continuing PTA buprenorphine in the inpatient setting had lower analgesic requirements and lower pain scores
- **PTA Dose**: Reducing normal PTA buprenorphine dose in trauma units had the lowest opioid use with similar pain scores
- Exception is normal PTA doses in surgical units where continuing was the best option
- **Conclusion**: Continuing home dose buprenorphine up to 12 mg is the optimal analgesia strategy. High home doses should be reduced to 12 mg daily to allow for full opioid agonist use in the patient.

Relevant References

1. Opioid Crisis Statistics. U.S. Department of Health and Human Services. Updated February 12, 2021.
2. Greenwald MK, Comer SD, Fiellin DA. Buprenorphine maintenance and mu-opioid receptor availability in the treatment of opioid use disorder: implications for clinical use and policy. *Drug Alcohol Depend*.
3. Jasinski DR, Pevnick JS, Griffith JD. Human pharmacology and abuse potential of the analgesic buprenorphine: a potential agent for treating narcotic addiction. Arch Gen Psychiatry. 1978 Apr;35(4):501-16.

Disclosures and Contact Information

All authors have nothing to disclose.

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