

## Take Home Naloxone Program at a Major Metropolitan Hospital: Evaluation of Uptake in 2022

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### Background

Growing rates of opioid-related morbidity and mortality has increased the focus on harm reduction strategies with the upscale of 'Take-home Naloxone' (THN) programs across Australia. Despite this, uptake of THN programs in hospital settings have been limited<sup>1</sup>. From July 2022, the Australian Government made THN formulations free of out of pocket expenses to patients at risk of an opioid overdose and their caregivers<sup>1,2</sup>.

In 2020, a local guideline was implemented at Alfred Health, a major metropolitan tertiary referral healthcare organization in Melbourne, providing THN to at-risk patients. From March 2023 Alfred Health joined the national THN program. The local protocol<sup>3</sup> provides intranasal or intramuscular THN to the following:

- Those with an active opioid use disorder, including patients on opioid replacement therapy (ORT)
- Presentation with an opioid related overdose within the preceding 30 days
- Patients discharged on a daily oral morphine equivalent (OME) exceeding 90mg with concurrent factors that may increase the risk of opioid toxicity.

The Society of Hospital Pharmacist's Australia states the successful implementation of THN in hospitals will require "multidisciplinary team engagement," local protocols, with staff and patient education.<sup>4</sup>

### Aim

To evaluate the uptake of the THN program in the Emergency Department (ED) and inpatient wards at Alfred Health prior to implementation of a Commonwealth THN program.

To explore patient factors that may influence THN provision, including gender, length of stay, time of day and discharge destination.

### Method

**Study design:** Retrospective cross-sectional study (see Figure 1).

**Study period:** 1<sup>st</sup> January – 31<sup>st</sup> December 2022

**Participant identification:** Potentially eligible patients were identified using International Classification of Diseases-10<sup>th</sup> edition, Australian Modification (ICD10-AM) coding.

**Inclusion Criteria and ICD10-AM code:**

- Patients with an active opioid use disorder (F11, F11.1)
- Patients receiving ORT (F11.1)
- Patients with opioid related overdose within the preceding 30 days (Y45.0, T40.2)

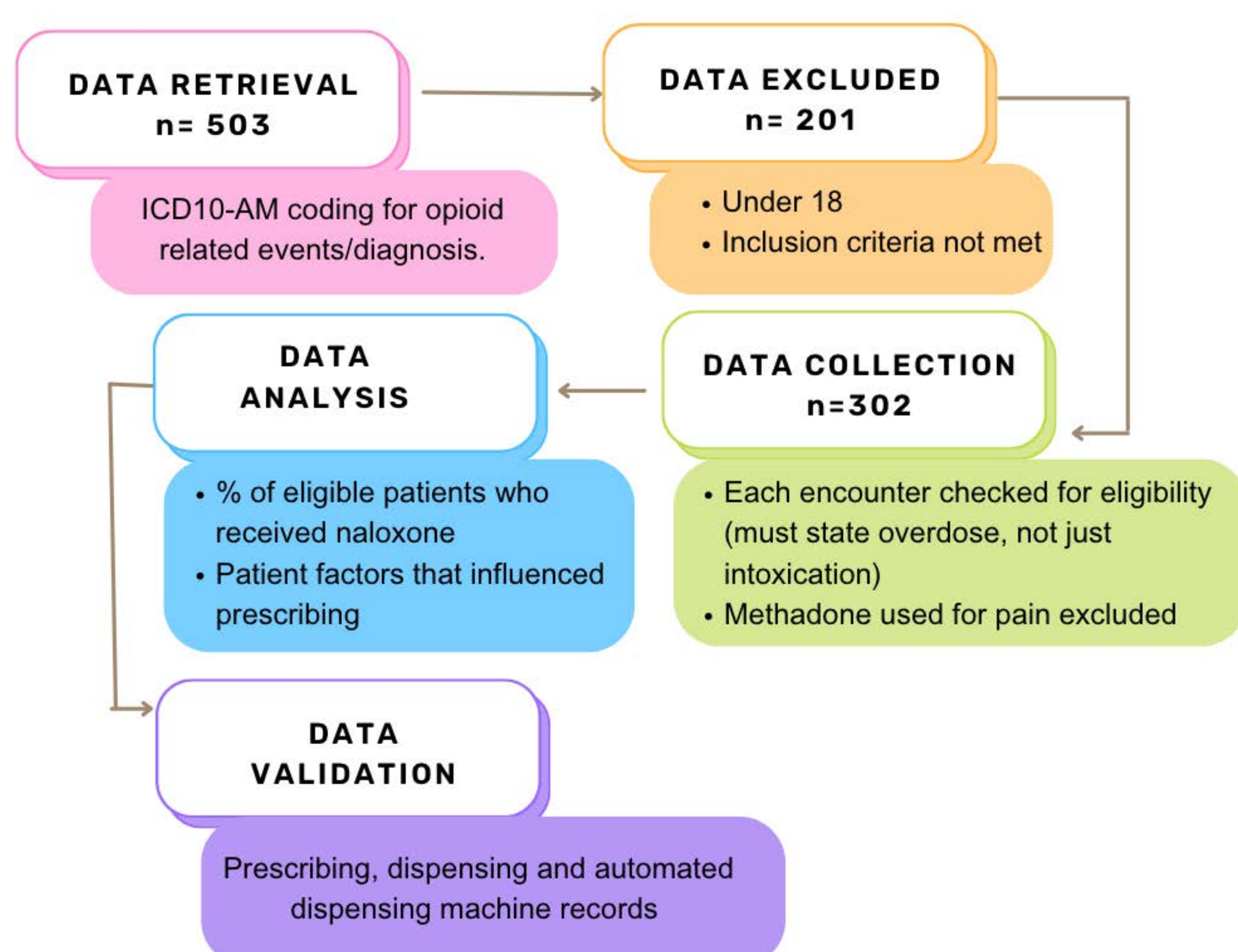


Figure 1. Methodology flowchart

### Results

A total of 302 patients met the inclusion criteria, median age 43 years (IQR 32-52) and 59.3% male. Of patients eligible for THN, 240 had active opioid-misuse disorder (39 received THN), 137 recent opioid overdose (17 received THN) and 113 on ORT (22 received THN), see Figure 2. Forty (13.2%) patients received THN; 22 prescriptions for community dispensing (7.2%) and 18 direct THN supply (6.0%).

A significantly higher proportion of patients discharged from inpatient wards received THN than from ED (21.1% vs 5.8%, p<0.001). Factors contributing to low provision are shown in Figure 3.

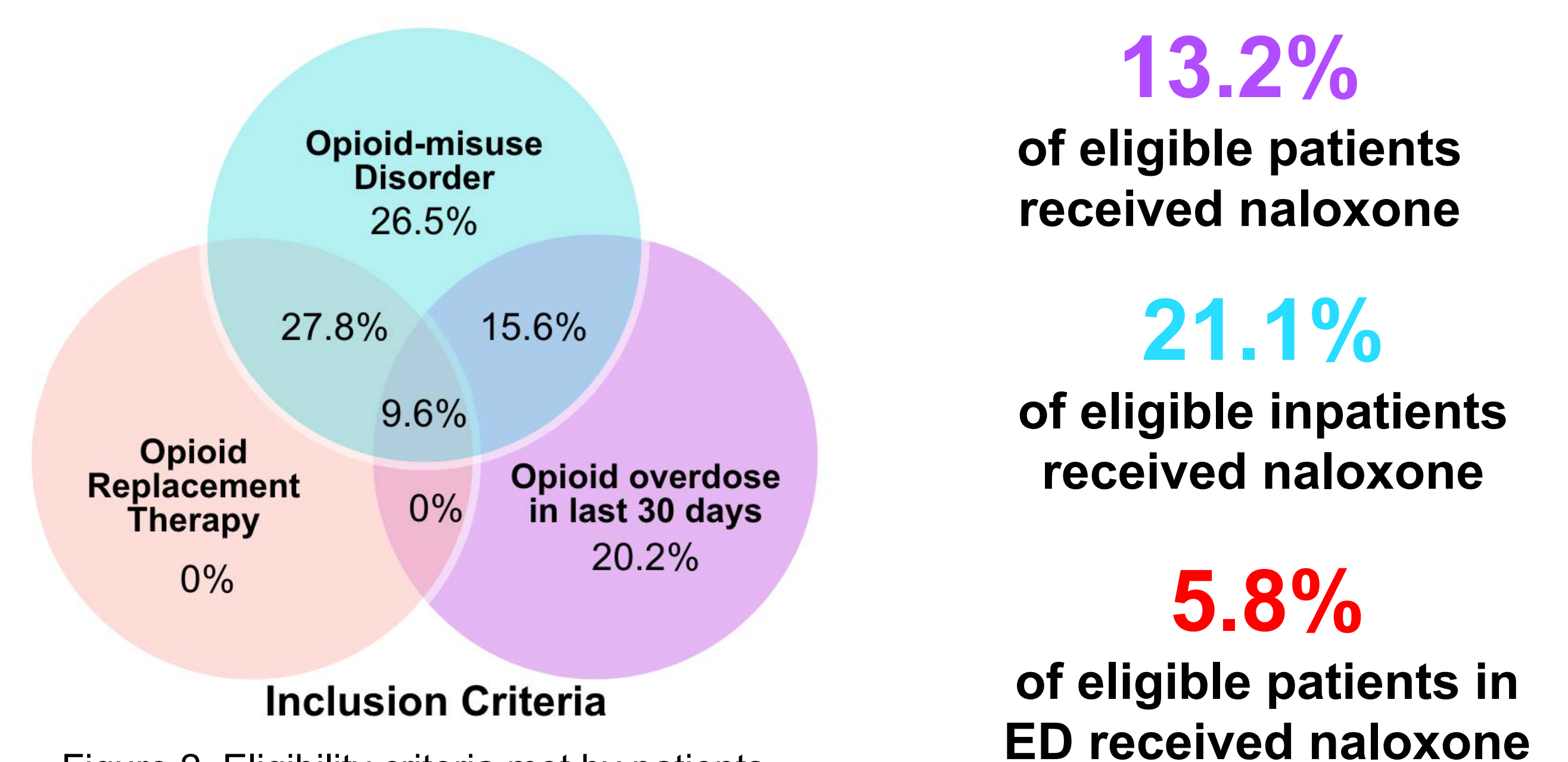


Figure 2. Eligibility criteria met by patients

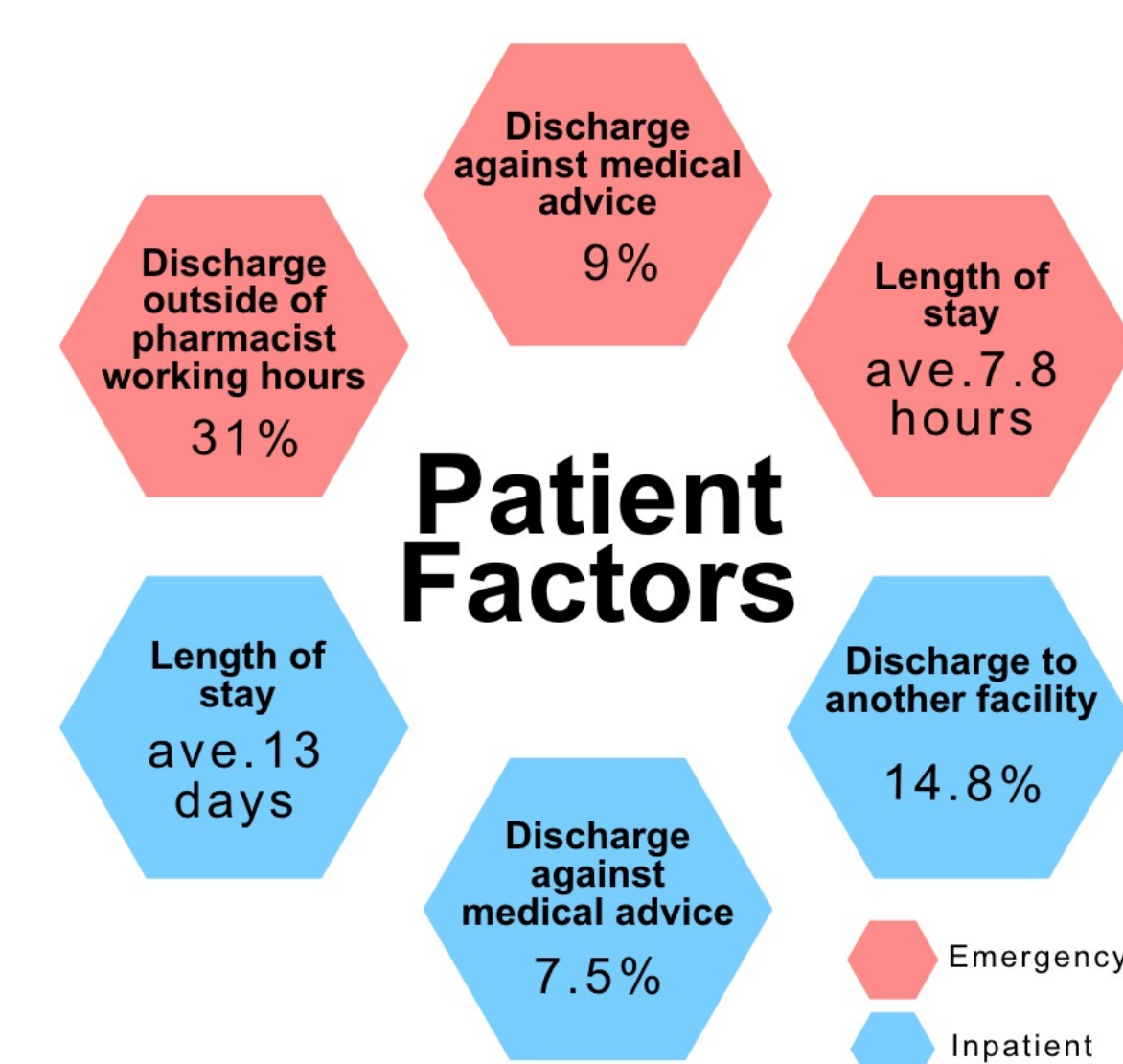


Figure 3. Patient factors affecting provision of THN

Data validation using automated dispensing machine records identified THN provision to 126 cases (41.7% provision), indicating that 86 (68.3%) cases of THN were not coded for eligible conditions.

### Discussion

THN provision on discharge was underutilised in 2022. The rate of THN provision was higher for inpatients than in the ED. Underutilisation in ED may be due to discharges outside of pharmacist working hours, discharge against medical advice and a shorter length of stay.

There were several limitations to the study, impacting the identification of eligible patients. ICD-10AM coding did not identify all eligible patients with an active opioid use disorder, opioid-related overdose and/ or those prescribed ORT. This study did not include patients discharged on a daily OME >90mg with concurrent opioid toxicity risk factors.

Implementation of the Commonwealth THN program in March 2023 may facilitate greater organisational uptake. Guidelines are currently being made to include: early identification and multi-disciplinary team assessment for all at-risk admissions; nurse-initiated provision pathways; and incorporation of THN into current discharge processes. Further research should evaluate the impact of this new funding structure and systems to reduce barriers to THN provision.

### Conclusion

Naloxone provision on discharge was underutilised prior to implementation of the Commonwealth THN program in March 2023. Challenges exist in identifying eligible patients using ICD-10AM coding. Further research is required to determine barriers for THN provision.

### References

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