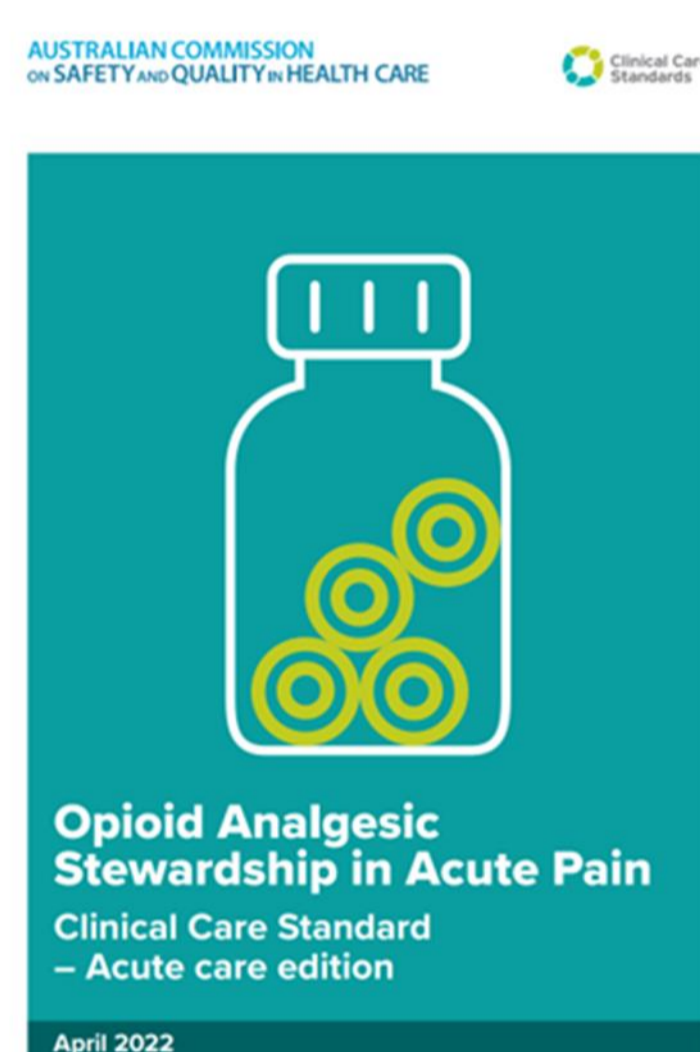


OPIOID-SPARING STRATEGIES FOR DISCHARGE ANALGESIA PRESCRIBING IN NON-COMPLEX SURGERIES: A MISSED OPPORTUNITY.

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- Over-prescribing of conventional opioids post-operatively and at discharge directly contributes to the international crisis of addiction and inappropriate use. A recent meta-analysis concluded opioid prescribing at surgical discharge did not reduce pain intensity compared to non-opioid options but increased well-recognized opioid post-operative adverse events while potentiating diversion and addiction. Even minor surgeries can serve as an initial event for opioid naïve patients to become persistent opioid users
- Adjunct analgesia is advocated to lessen conventional opioid use.
- NSAIDs** work synergistically with opioids, providing opioid-sparing effects. While NSAIDs have well-known long-term contraindications, the relative contraindications for short-term use post-operatively are unlikely to pose substantial risk.
- Atypical opioids (tramadol, tapentadol)** also offer an analgesia option prior to the need for conventional opioid, with a reduced likelihood of opioid-related adverse effects or long-term issues such as diversion and addiction.
- In Australia, conventional opioid analgesia prescribing at discharge is guided by opioid analgesia use in the final 24 hours of admission as laid out by national standards.



Aims

Assess the extent of missed opportunity for adjunctive post-operative analgesia for:

- NSAIDs
- Atypical opioids (tramadol, tapentadol)
- Conventional opioid discharge prescribing patterns

Methods

- Cohort was opioid-naïve patients (n=1,015), non-complex surgery (length of stay 1-4 days post-operatively), data collected retrospectively for a 1.3-year period.
- Medication use during the final 24-hours before discharge and discharge prescribing were quantified.
- Eligibility for short-term NSAID use was against extensive criteria based on co-morbidities (CCF, renal impairment, previous GI bleed, IBD, known ADRs), concurrent medications (anticoagulant or antiplatelet use, ACE I/ARBs in conjunction with furosemide), acute kidney injury, intra-op blood loss > 500ml.
- Analgesia was classified as paracetamol, NSAIDs, atypical opioids (tramadol or tapentadol) and conventional opioids.
- Surgery consisted primarily of laparoscopic procedures, hernia repair, fractures, spinal surgery, superficial soft tissue repair (cyst and abscess drainage, excisions, wound debridement).

Total patients	1015
Age (y) (mean±SD)	54±20
Hospital LOS (days) median (IQR)	3.4 (2.5-4.5)
Post-op LOS (days) median (IQR)	2.0 (1.1-3.1)
Estimated renal function (mL/min/1.73m ²)	95±23
Possible NSAID contra-indications N (%)	387 (38.1)
Known tramadol/tapentadol intolerance N (%)	20 (2.0)

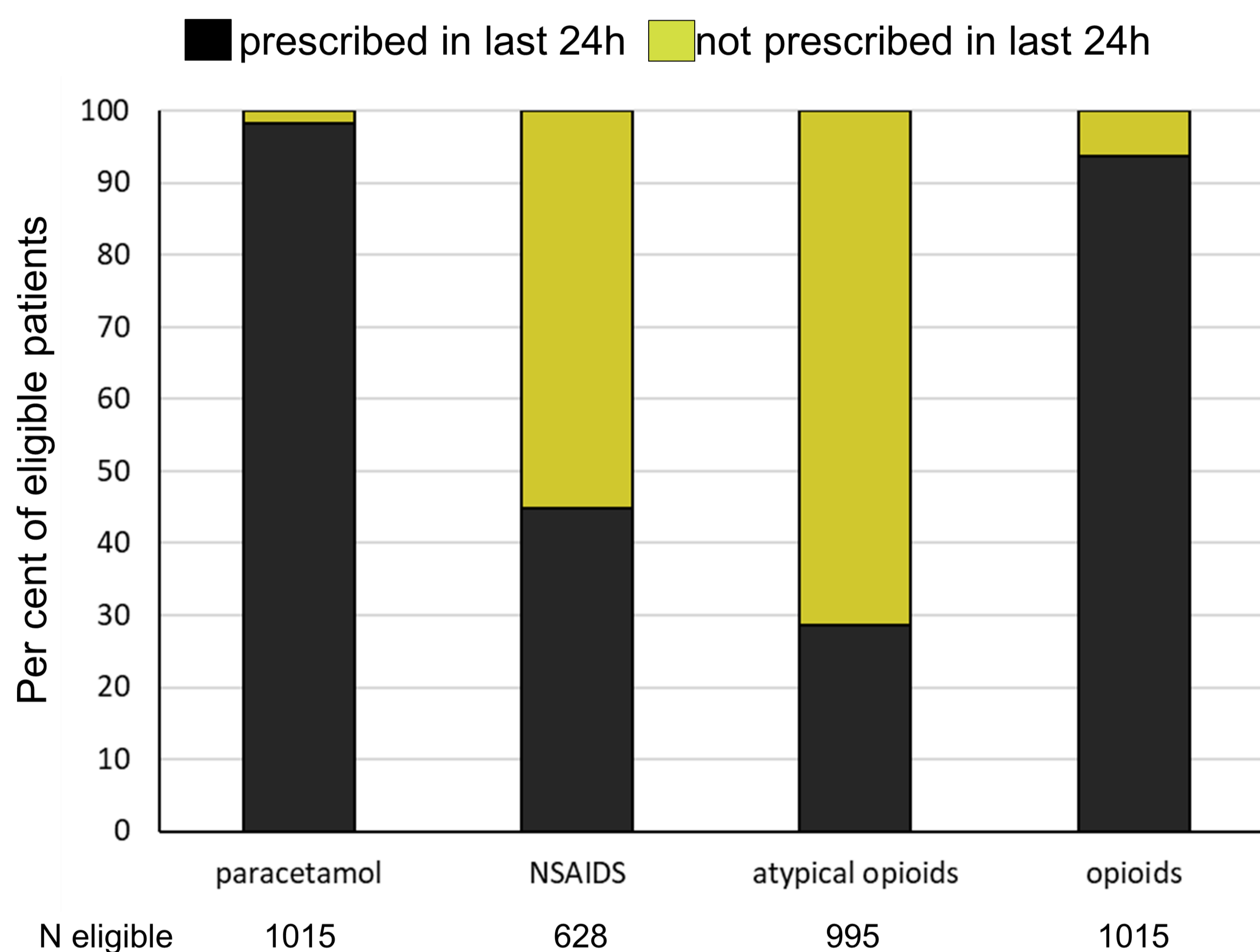
Results

1. Patients eligible for NSAID use (n=628, 61.9% of cohort)

- 415 (40.9% of total cohort) were not prescribed NSAIDs
- Of these 415:
 - 265 (63.9%) received conventional opioids in the final 24 hours
 - 210 (50.6%) received conventional opioids at discharge

2. Patients eligible for atypical opioid use (n=995, 98.0% of cohort)

- 710 (71.4%) were not prescribed atypical opioid in the final 24 hours of admission
- Of these 710 patients:
 - 407 (57.3%) received conventional opioids in the final 24 hours
 - 342 (48.2%) received conventional opioids at discharge



3. Discharge prescribing for conventional opioids

- 79 (7.8%) **did not** use conventional opioids in the final 24 hours but were prescribed conventional opioids on discharge.
- 48 (4.7%) required more than 20mg of oxycodone in the final 24 hours but **were not** prescribed opioid analgesia on discharge.

Discussion

- Use of NSAIDs and atypical opioids as post-operative adjunct analgesia prior to reverting to conventional opioids remains greatly under-utilised. The result is over-use of conventional opioids, exposing patients unnecessarily to opioid adverse effects. Further to this, there was a poor relationship between inpatient analgesia use and the amount prescribed at discharge.
- On the background of high patient turnover in an increasingly complex health system there is little opportunity for medicos to accurately assess discharge analgesia needs.
- Digital health environments represent an exciting opportunity to develop decision support systems that will assist prescribers to make better post-operative analgesia prescribing decisions.

