

# A retrospective audit of co-prescribing non-opioid analgesia with opioids in adults discharged from Emergency Departments.

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## Background:

Opioid-related deaths are the number one cause of unintentional medication-related deaths in Australia.<sup>1</sup> One strategy to reduce the use of opioids is co-prescribing of regular non-opioid analgesia such as paracetamol and non-steroidal anti-inflammatories (NSAIDs).<sup>2</sup>

## Aim:

To determine the rate of co-prescribing of paracetamol and/or NSAIDs for patients discharged from Emergency Departments (EDs) with a prescription for opioids.

## Method:

A retrospective audit of patients discharged from three EDs who were provided with a prescription for an analgesic medication in 2019 was undertaken. Data was collected from the electronic medical record and included location and date of prescription as well as type, dose and quantity of opioid and non-opioid analgesic. For patients prescribed opioids, the total quantity of all opioids was converted to oral morphine equivalent daily dose (OMEDD).<sup>3</sup>

## Results:

From the 11,065 patients who were given a prescription for one or more analgesic medications, 10,039 (91%) were discharged with a prescription for an opioid; of which, only 4,949 (45%) were co-prescribed paracetamol, NSAIDs or both (figure 1).

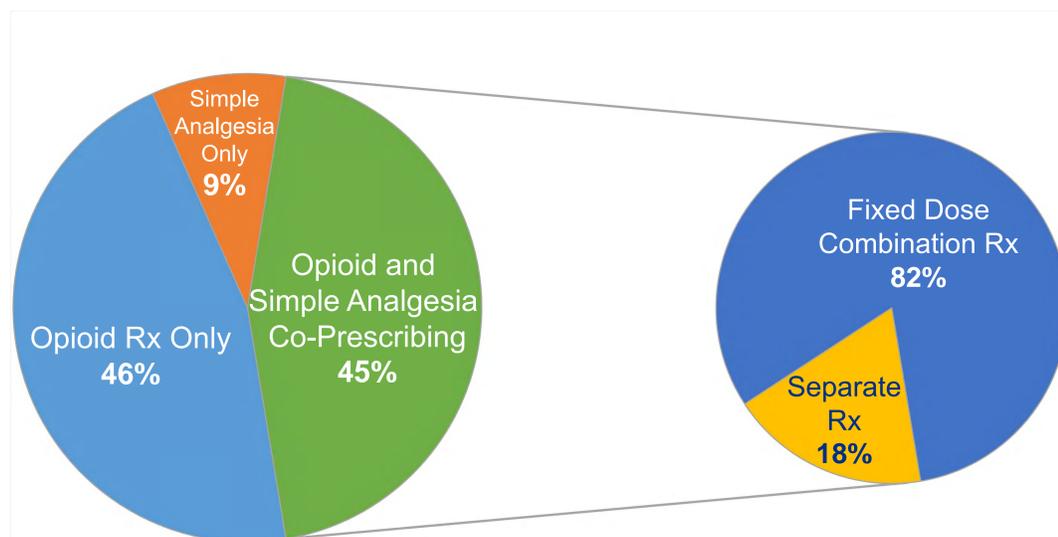
The majority of co-prescribing occurred with fixed dose combination products such as paracetamol-codeine (4,037; 82%). Co-prescribing was associated with lower overall OMEDD (mean: 86mg vs 116mg p<0.001) (figure 2).

Compared to females, males were more likely to be co-prescribed an opioid with simple analgesia (51% vs 48%, p=0.001). Significant variations in co-prescribing rates were observed between different EDs.

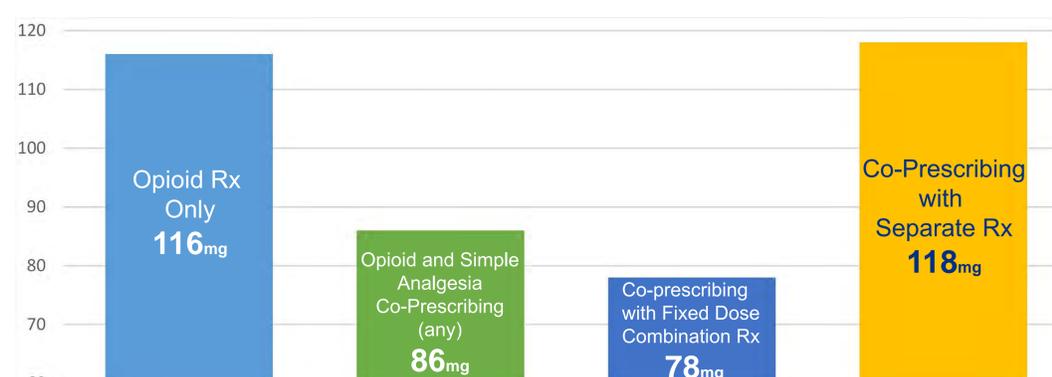
The most frequently prescribed opioids were oxycodone (5,849 prescriptions) and codeine (4,108 prescriptions).

**Table 1:** Pharmaceutical Benefit Scheme (PBS) maximum quantities (2019) and equivalent OMEDD

Medication	PBS Qty	OMEDD per tab <sup>2</sup>	OMEDD PBS max qty <sup>2</sup>
Oxycodone 5mg Immediate Release Tablets	20 tablets	15mg	300mg
Paracetamol 500mg – Codeine 30mg Tablets	20 tablets	7.5mg	150mg



**Figure 1:** Emergency Department Analgesia Prescribing (Jan – Dec 2019, n=11,065)



**Figure 2:** Mean OMEDD - Emergency Department Analgesia Prescribing (Jan – Dec 2019, n=11,065)

## Discussion:

Increasingly, evidence supports co-prescribing of non-opioid analgesia with opioids, however, local uptake of this advice remains low.<sup>4</sup> The reduced total OMEDD prescribed on discharge for patients co-prescribed simple analgesia was primarily driven by the use of paracetamol-codeine combination products (table 1). Co-prescribing using fixed combination products in isolation negates any opioid sparing effect of paracetamol and/or NSAIDs.

Our study did not determine if other methods had been used to recommend simple analgesia such as verbal or other written directions provided by ED staff.

Future research should focus on evaluating the role of departmental educational programs and system-based strategies to better guide prescribing appropriate non-opioid analgesics to help reduce opioid-related harm.

## Conclusion:

Half of the patients discharge from the three EDs in this study with a prescription for opioids were co-prescribed simple analgesia.

The majority of co-prescribing occurred through the use of fixed dose combination products.

## References:

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4. Remy C, Marret E, Bonnet F. Effects of acetaminophen on morphine side-effects and consumption after major surgery: meta-analysis of randomized controlled trials. *Br J Anaesth.* 2005;94(4):505-13.