

Opioids initiated for acute pain, particularly post-surgery, can be a precursor to long-term use, increasing the risk of opioid-related harm. There is limited Australian evidence on opioid use following hospital or emergency department (ED) visit.

*Design:* Descriptive population-based cohort study

*Real-world administrative data:* All hospital and ED visits between 2014–2020 in NSW, linked to medicine dispensings, deaths and cancer registrations (Medicines Intelligence Data Platform)

*Study population:* Opioid-naïve adult

16.2 million admissions by 4.2 million opioid-naïve adults

**High long-term use** following **trauma** (2.3%, 95% CI 2.2–2.4) and **medical admissions via ED** (3.5%, 95% CI 3.3–3.6)

**Decreases** in both opioid **initiation** and **long-term use** over time

