# Long-term prescribed opioid use after hospitalisation or emergency department presentation among opioid-naïve adults in New South Wales (NSW), Australia (2014–2020)

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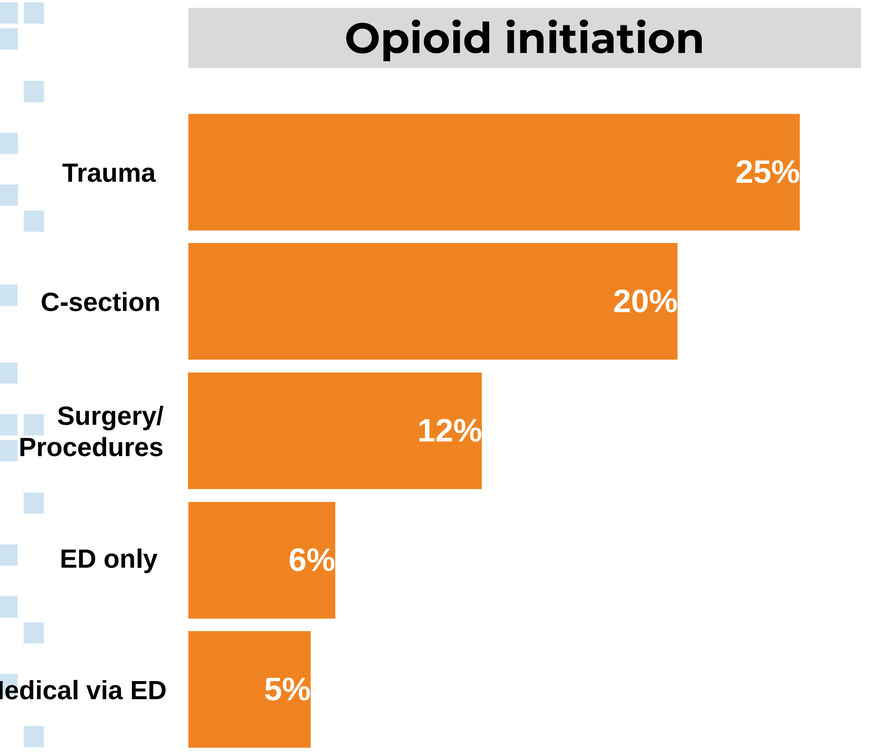
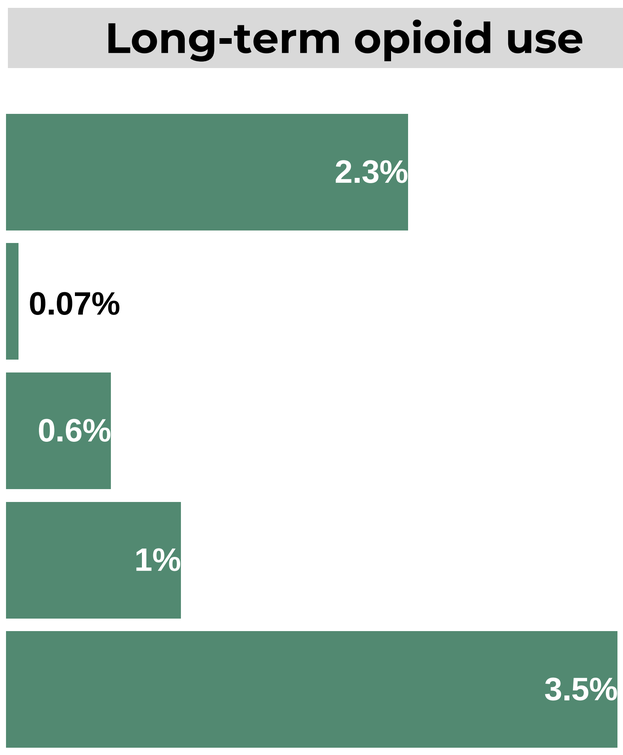
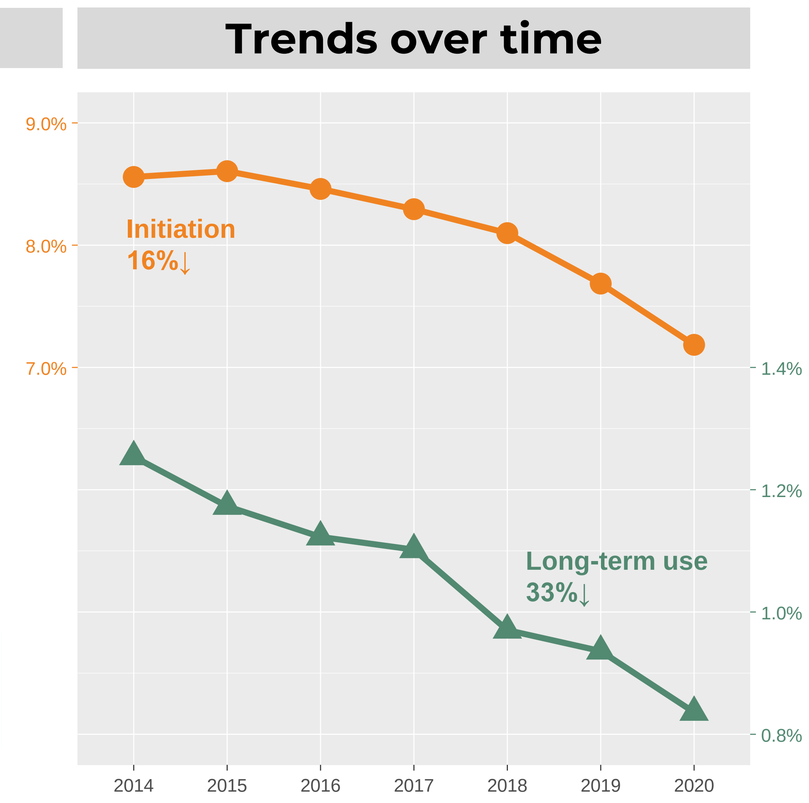
**Background:** Opioids initiated for acute pain, particularly post-surgery, can be a precursor to long-term use, increasing the risk of opioid-related harm. There is limited Australian evidence on opioid use following hospital or emergency department (ED) visit.

## One in four people admitted for trauma started an opioid and 2.3% of them went on to long-term use




## The proportion of hospital or ED visits where people started opioids and remained on them long-term was small and declined




## Methods

*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 residents of NSW (no opioid dispensed in year prior to ED/hospital admission) followed for 9 months post-hospital/ED

*Opioid initiations:* An opioid dispensing within 7 days of discharge

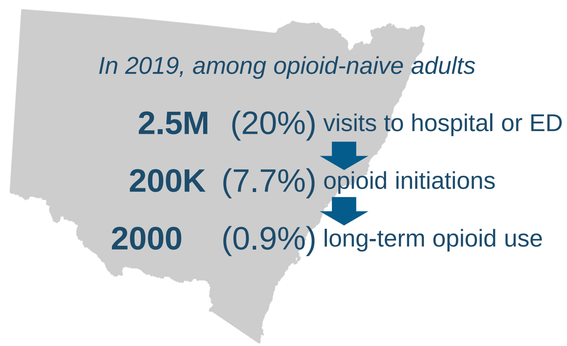
*Long-term use:* 90 days of continuous opioid exposure in the period 90–270 days after initiation

*Statistical analysis:* Proportions standardised to admission or initiation population using model-based direct standardisation from age–sex splines. 95% CI with robust standard errors.

## Results

- 16.2 million admissions by 4.2 million opioid-naïve adults

### Representative results for 2019




- **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

**Conclusions:** Long-term prescribed opioid use decreased from 2014 to 2020. Higher rates of long-term use following trauma and medical admissions via ED warrant monitoring and surveillance. Strategies supporting access to multidisciplinary pain services will facilitate best-practice care.

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