

# Evaluating the impact of specific policy changes on discharge opioid prescribing patterns

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## Background:

Opioids are frequently initiated in a hospital setting and are a key risk factor for ongoing use.<sup>1-4</sup> The risk of harm is considerably higher for slow-release (SR) opioids.<sup>5</sup> The initial dose and quantity of opioids prescribed on discharge are risk factors for long term use.<sup>2,6-8</sup> Surgical patients are often prescribed unnecessary opioids “just in case”.<sup>9</sup>

## Aim:

To evaluate discharge opioid prescribing patterns for surgical patients between 2012 and 2020 and investigate the relationship with specific policy changes.

## Method:

A retrospective audit of surgical discharge prescriptions between January 2012 and December 2020 at three metropolitan hospitals was undertaken. Data collected included medication, formulation, strength and quantity prescribed. For each patient, the total quantity of opioids prescribed on discharge was converted to oral morphine equivalent daily dose (OMEDD).<sup>10</sup>

Sub-analysis of prescribing patterns two years before and after the release of the Faculty of Pain Medicine - Australian and New Zealand College of Anaesthetists (FPM-ANZCA) position statement to reduce inappropriate use of SR opioid formulations and six months before and after the introduction of mandatory real-time prescription monitoring (SafeScript) were undertaken.<sup>11,12</sup>

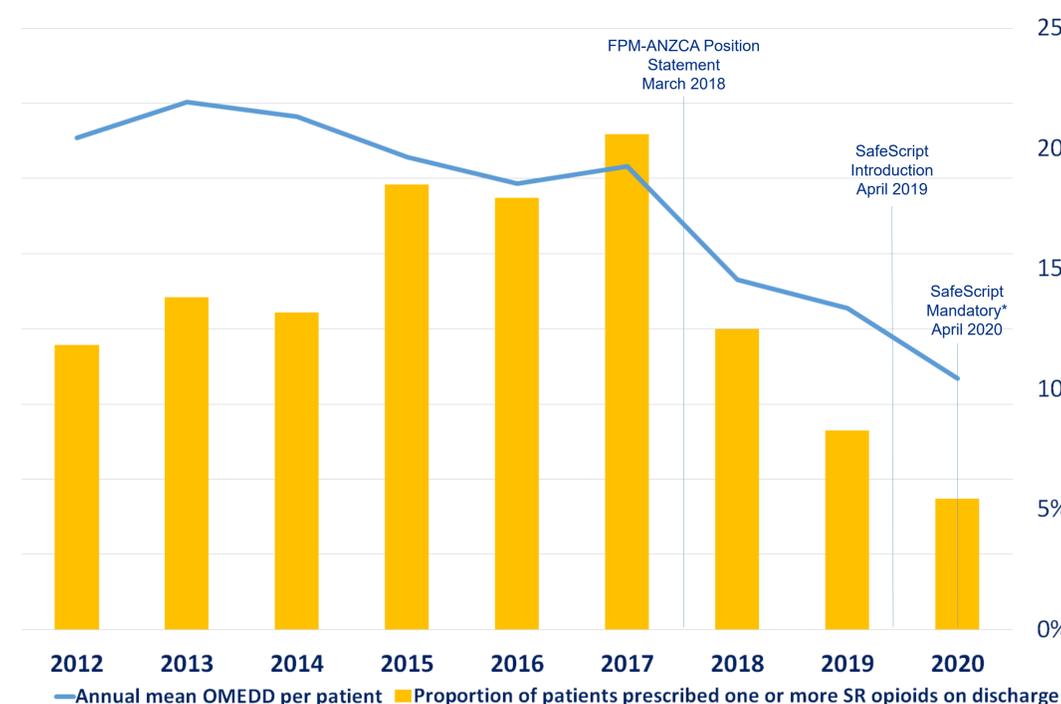


Figure 1: Annual opioid prescribing and key dates \*State-wide SafeScript mandatory exemption in place for hospital based prescribers

## Results:

A total of 117,989 discharges were identified of which 76,770 were prescribed one or more opioids. From 2014 to 2020 there was a year on year decrease in mean OMEDD on discharge with the exception of 2017 (figure 1).

The FPM-ANZCA position statement and introduction of SafeScript were associated with decreased quantity of opioid prescribing and proportion of patients prescribed one or more SR opioids (figures 2,3).<sup>11,12</sup>

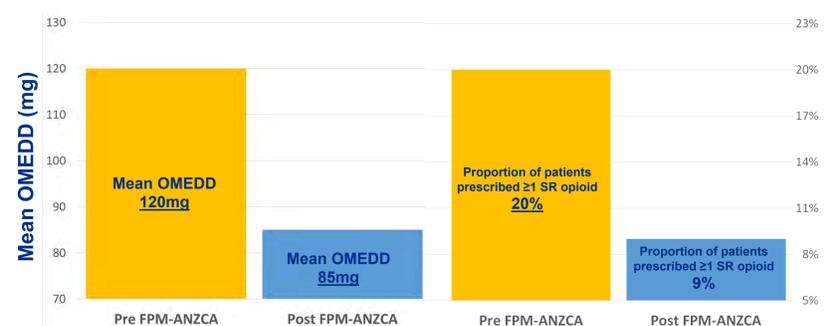


Figure 2: FPM-ANZCA Position Statement Sub-analysis (pre: Apr 2016 -> Mar 2018, post: Apr 2018 -> Sep 2020)

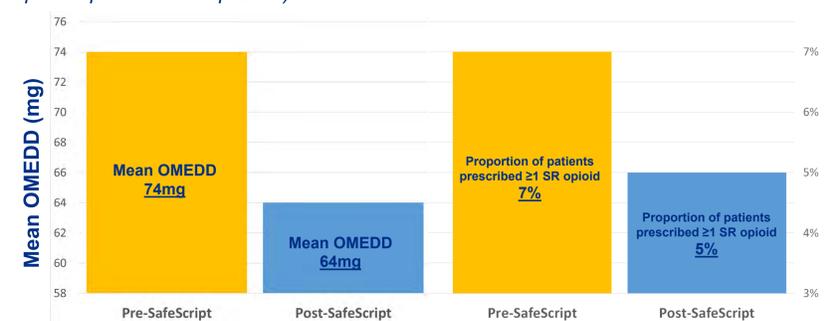


Figure 3: Mandatory SafeScript Sub-analysis (pre: Oct 2019 -> Mar 2020, post: Apr -> Sep 2020)

## Discussion:

The release of the FPM-ANZCA statement was a considerable catalyst for a change to pain management practices in Australia.<sup>11</sup> At this time, the Eastern Health multidisciplinary acute pain service embarked in a comprehensive education campaign designed to discourage the use of SR opioids in acute pain. This, combined with a general increased awareness of the harms of opioids in the community, likely contributed to the rapid decline in both overall quantity, and use of SR opioids on discharge in the later years of the study.

Limitations of this study include being based on prescription data only and being limited to metropolitan public hospitals.

## Conclusion:

The quantity of opioids prescribed on discharge from the hospitals in this study has decreased over time. SafeScript and the FPM-ANZCA position statement were associated with reductions in the prescription of opioids, in particular the prescription of SR opioids.

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