

Measuring the impact of a growing opioid analgesic stewardship model in a private hospital

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Background

Measurement is a critical part of implementing and testing change in a stewardship program. Reporting of oral morphine equivalents (OMEs) per encounter can track impact of opioid analgesic stewardship (OAS) initiatives and support health services' compliance with national standards.¹ Private hospitals perform 60% of surgical procedures² and have a responsibility to lead innovative strategies in safe opioid use.

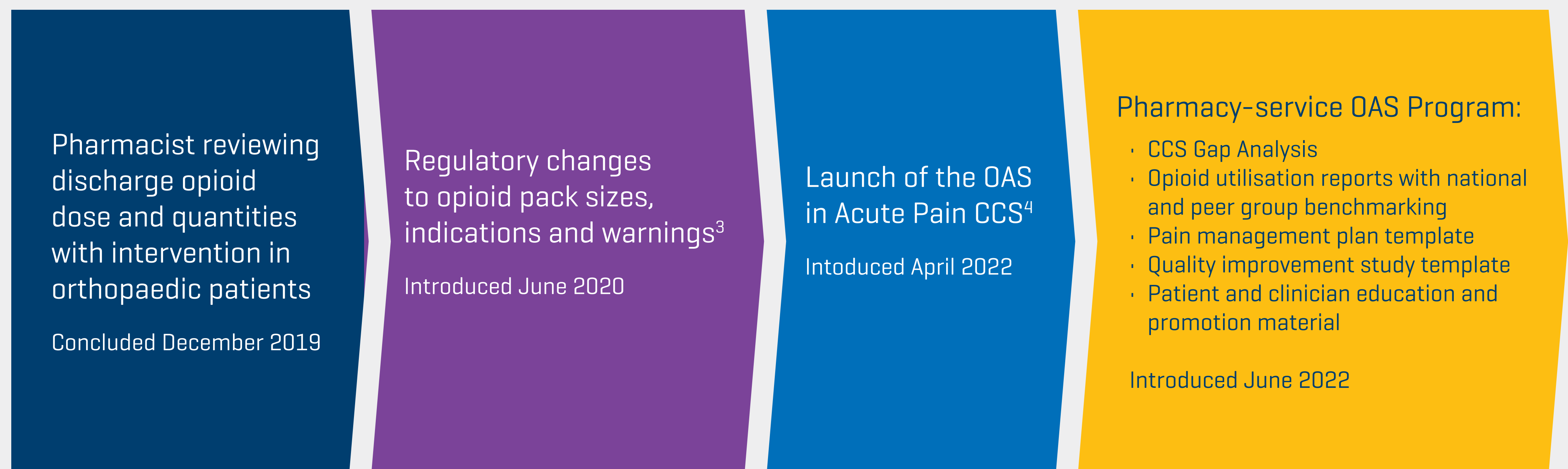
Aims

To monitor opioid discharge prescribing over time in an orthopaedic ward at a private metropolitan hospital and the impact of multilevel interventions.

Methods

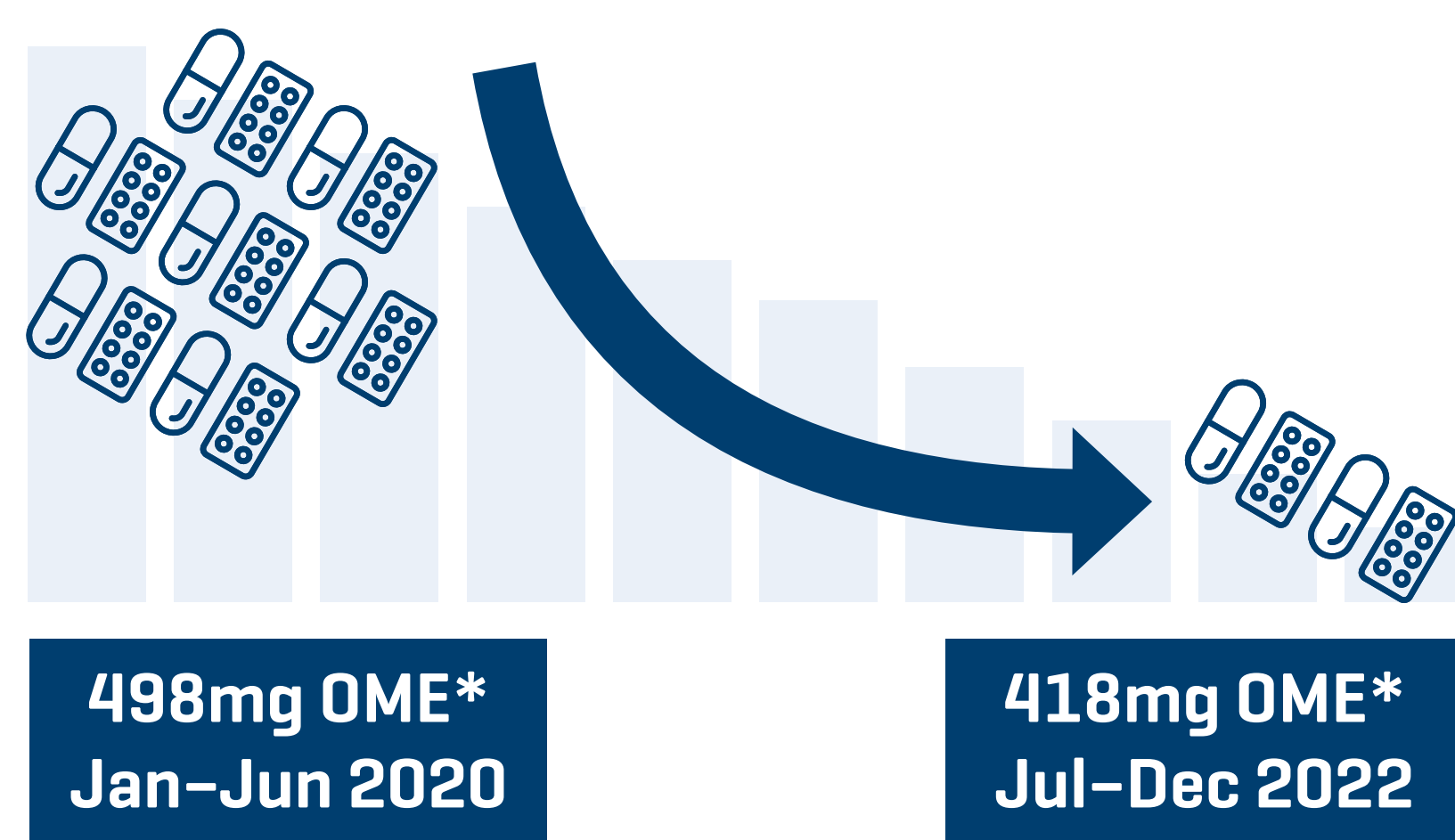
Surveillance of average total OMEs supplied per patient on discharge (encounter) was reviewed from January 2020 to December 2022. OME averages were determined at six monthly increments and mapped to internal quality improvement interventions and external regulatory changes, as described in Figure 1.

Figure 1: Timeline of OAS internal quality improvement interventions and external regulatory changes



Results

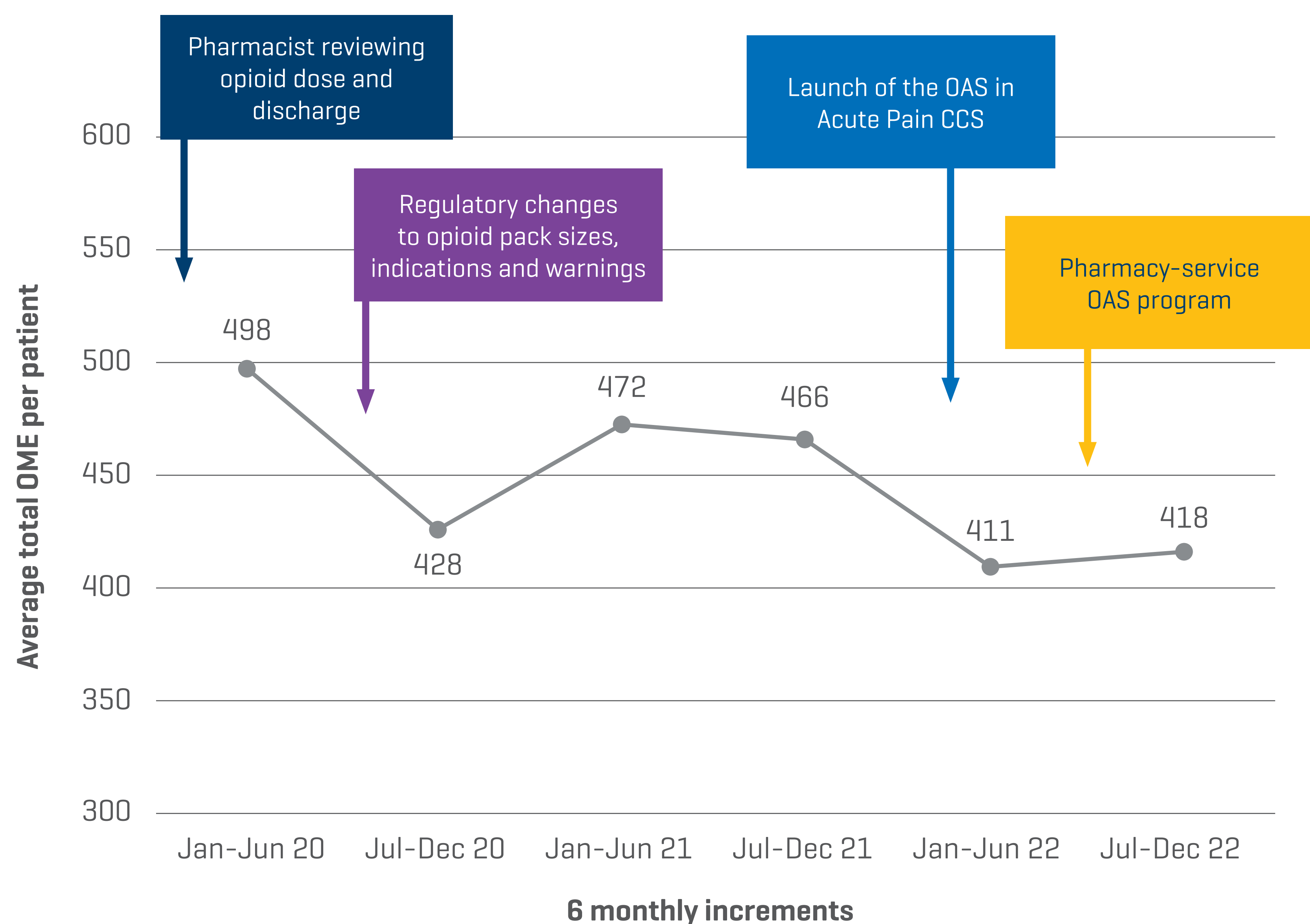
An overall reduction of 80mg OMEs supplied per encounter was observed over the three-year period (5209 encounters).



* Average total OME per patient at discharge

In the 6-months following regulatory changes affecting pack sizes and indications for opioid preparations, an initial 14% reduction in average OMEs per patient was observed. Furthermore, analysis shows in the 6-months post engagement of key hospital stakeholders, release of the national Clinical Care Standards (CCS) and adoption of the pharmacy-service OAS program, there was a 12% decrease in average OMEs per patient. Refer to Figure 2: Trending average total OME per patient on discharge with interventions.

Figure 2: Trending average total OME per patient on discharge with interventions



Discussion

Internal and external interventions reduced OMEs supplied on discharge to orthopaedic patients. Opioid reporting using a standardised unit of measure allows for monitoring of trends, and future benchmarking with the pharmacy-service provider's hospitals and evidence in literature. The average OME per patient at discharge, although reduced from baseline, remains high in the orthopaedic cohort. The CCS recommends a maximum of seven days' opioid analgesic discharge supply,⁴ and for example when converting the average total OME in the final data period (July – December 2022) the average daily OME is 60mg. The risk of unintentional opioid toxicity increases by 3.1 times for daily doses of 50-100mg OME, compared to those taking <20 mg OME.⁵ Continued auditing of opioid prescribing patterns and feedback to relevant stakeholders, as well as monitoring the impact of new stewardship interventions, including the implementing of a pain management plan, will be tracked using these reports.

References

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