



Postoperative Pain and the Opioid Crisis: An Opioid Stewardship QI Initiative in Thoracic Surgery

TaCharra Laury, MSN, APRN, ACNP-BC, AOCNP

Purpose

The thoracic surgical patient may experience varying degrees of postoperative pain. Opioids are routinely the mainstay of pain management after surgery, with up to 98.6% of postoperative patients prescribed opioids after surgery (Grace et al., 2020). However, advancements in surgical techniques and multimodal regimens have decreased the requirements for opioids.

Studies demonstrate that opioid prescriptions after surgery are largely unused, with rates as high as 80% (Fujii et al., 2018) after various surgical procedures, specifically up to 74% in thoracic surgery patients (Holst et al., 2020). The surplus of opioids in the community allows for potential abuse, misuse, and diversion of opioids (Pommerening et al., 2020). Improvements in APP opioid stewardship are vital after surgery.

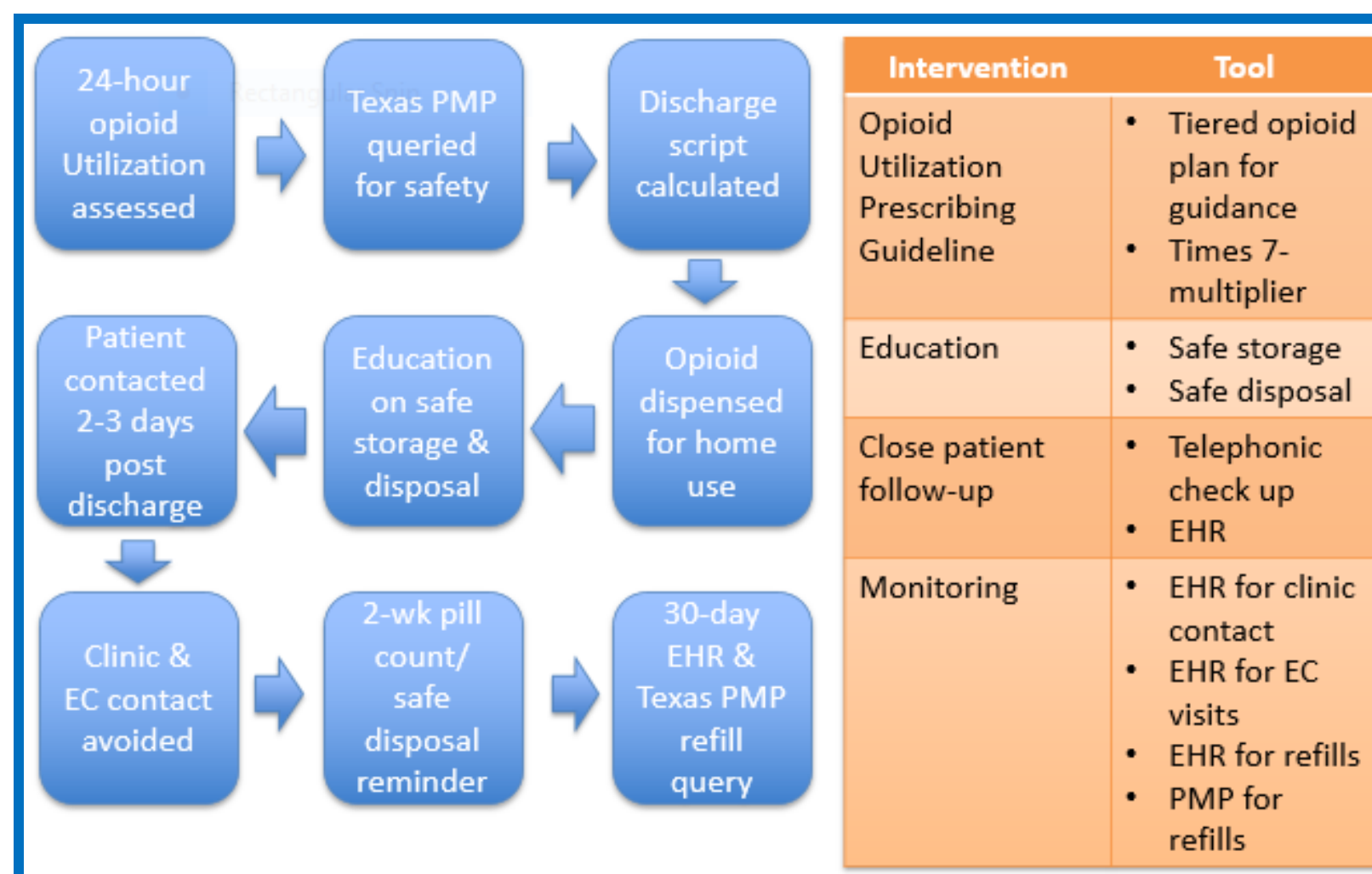
Objectives

Advanced Practice Registered Nurses (APRNs) will have increased knowledge and confidence in the importance of opioid stewardship and the implementation of opioid utilization as guidance for safe opioid prescribing at discharge after thoracic surgery. APRNs will have increased knowledge in implementing a quality improvement process on safe opioid prescribing and education to improve patient safety.

Review of Literature

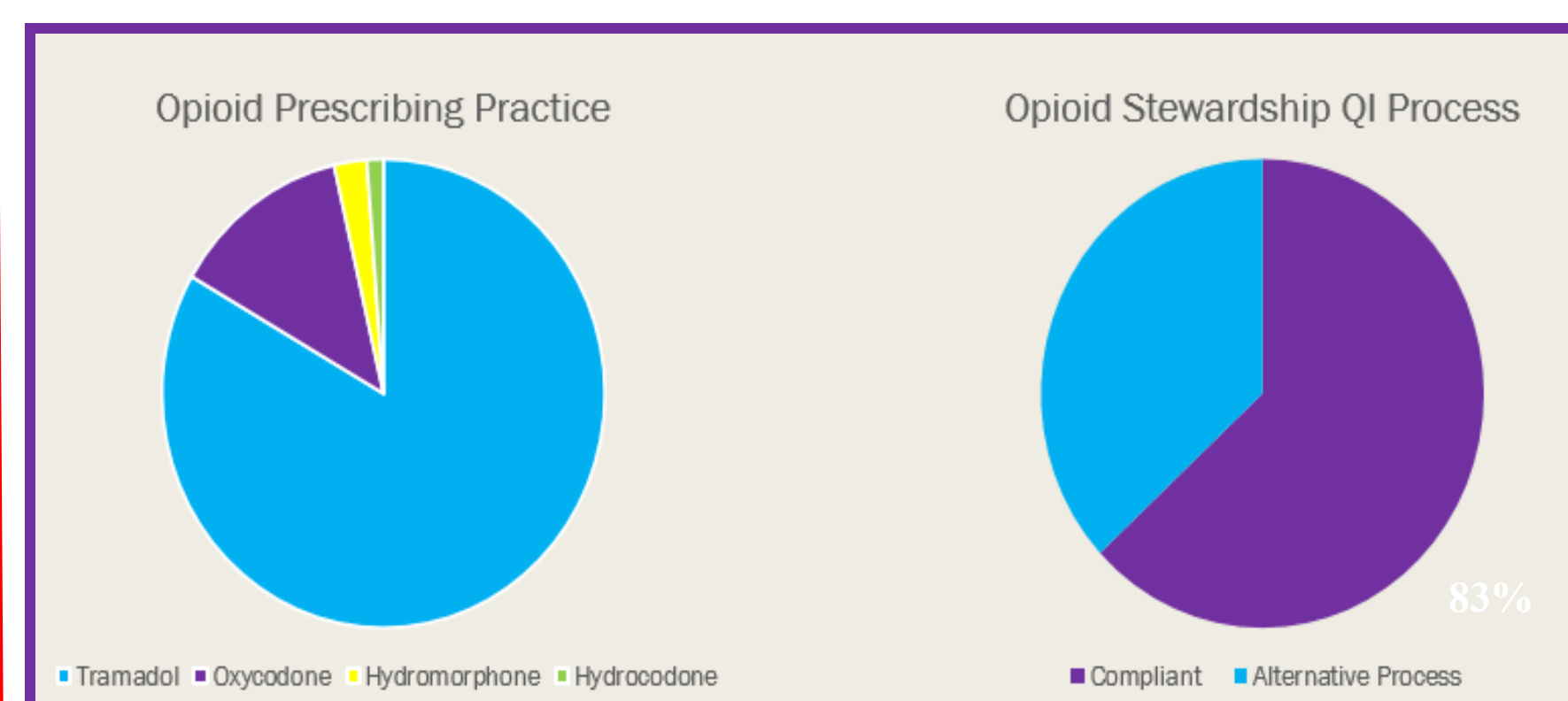
- Implement patient-centered, efficient, effective, equitable, timely, and safe opioid-utilization prescribing guidelines (Chen et al. [2017], Grace et al. [2020], and Hill et al. [2018])
- Educate patients & caregivers on the proper storage and disposal of opioids (Feinberg et al., 2017)
- Educate thoracic surgery providers responsible for prescribing opioids at discharge to the postoperative thoracic surgery patient on opioid stewardship and restrictive opioid prescribing guidelines (Hopkins et al., 2020; Sceats et al., 2019; Warner et al., 2020).

Methods

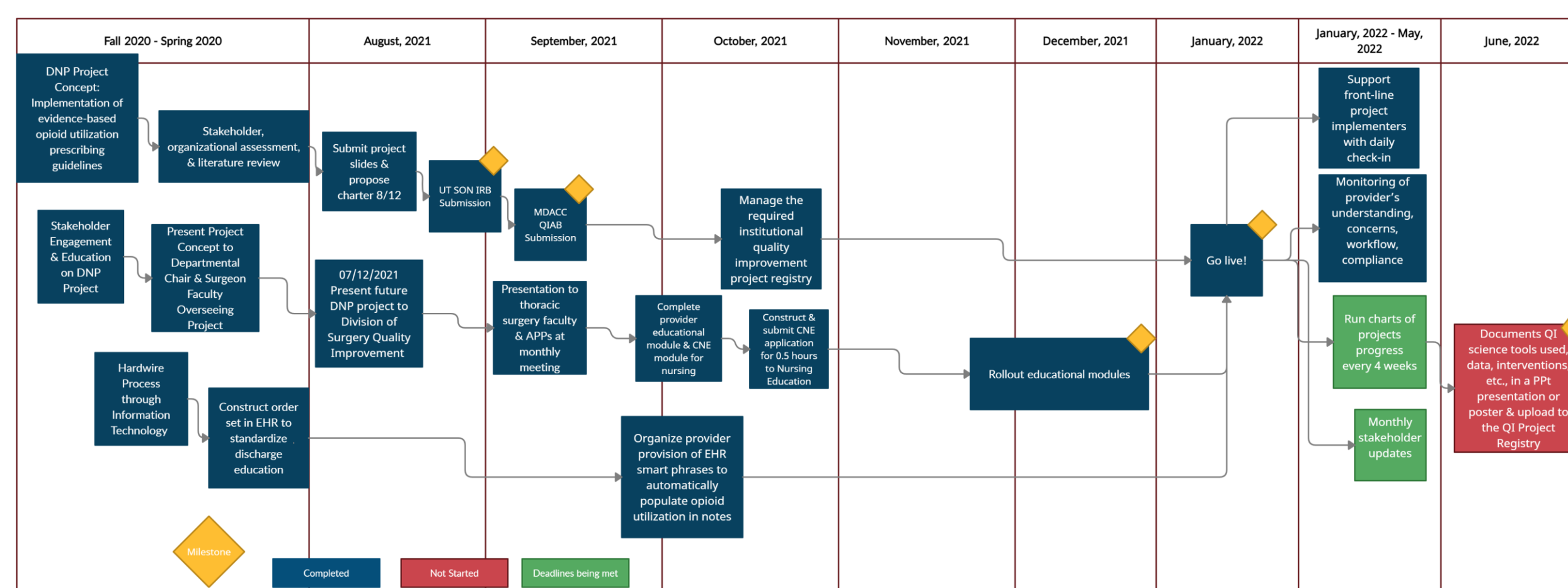


Results

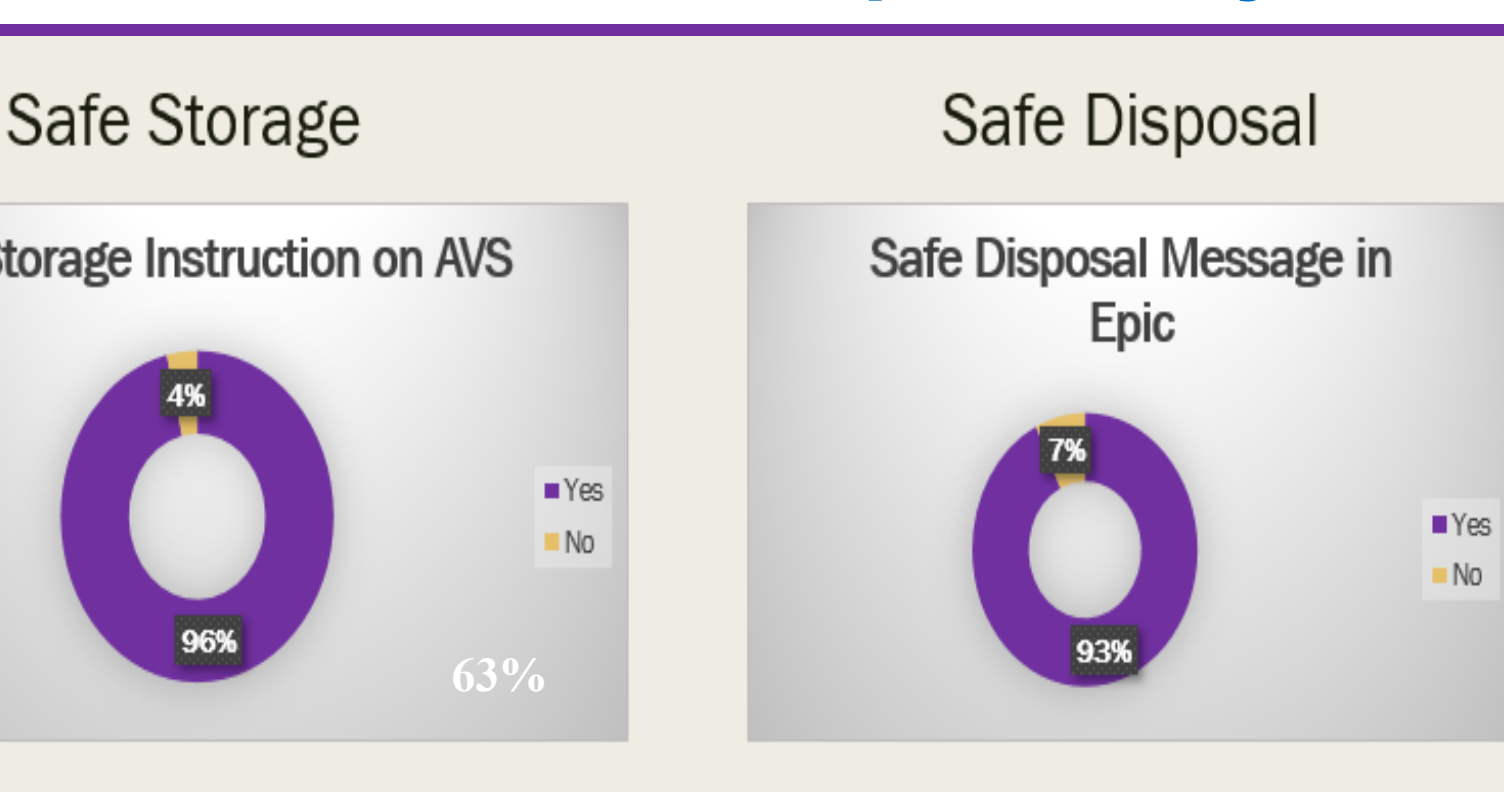
Advanced Practice Provider Practice Trends



Gantt Chart



Patient Education on Opioid Safety



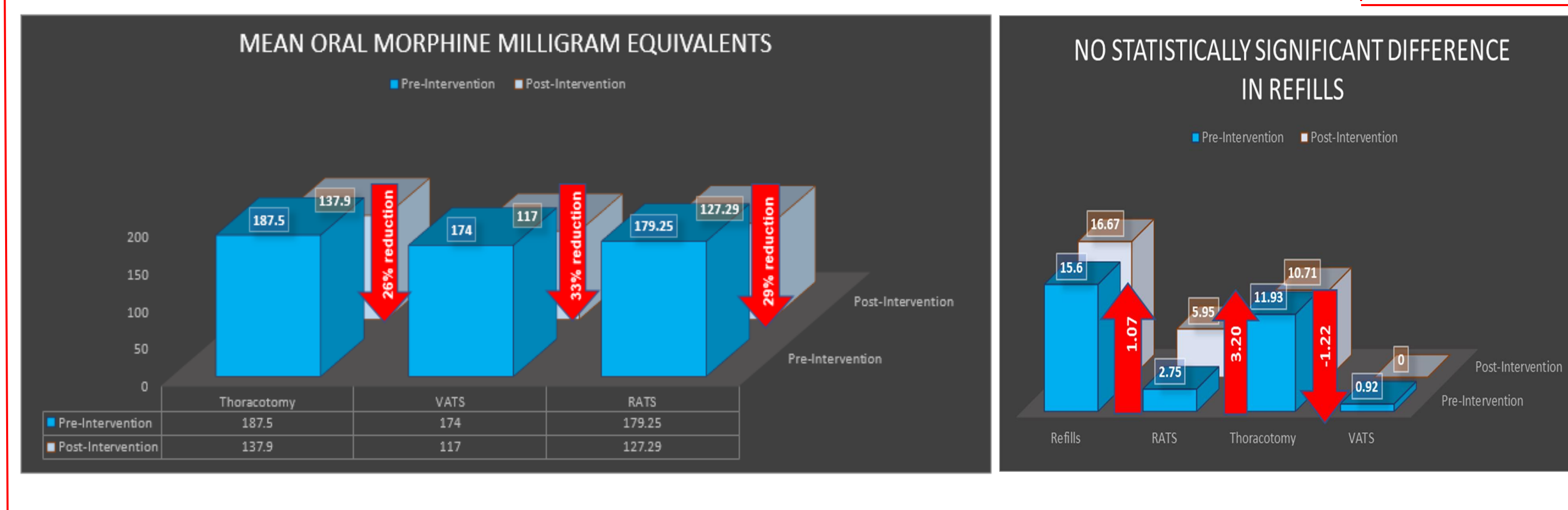
Implications for Nurse Practitioners

Postoperative pain management after thoracic surgery is often the responsibility of nurse practitioners. There are several ways in which providers could improve opioid stewardship:

- Implement patient-centered, opioid-utilization-driven prescribing guidelines to target opioid requirements based on the final 24-hours before discharge to effectively manage postoperative pain after discharge and decrease the unused community surplus.
- Present individually guided, succinct provider opioid stewardship education by an expert in postoperative pain management,

highlighting the opioid epidemic, the provider's vital role in opioid prescribing, and a chance of opioid misuse, abuse, and diversion. Thorough explanation of the opioid prescribing guideline and the data surrounding the benefits to patient outcomes.

- Integrate patient education throughout the perioperative experience, but principally upon discharge, on the safe storage and disposal of opioids to reduce the surplus of unused opioids available in the community.



Summary of Innovation of Practice References

- Review the utilization of opioids in the final 24-hours before discharge and multiply by seven to guide the number of opioids prescribed at discharge after lung resection.
- Provide high-quality education to providers via a self-paced learning module, written tools, and in-person to improve opioid prescribing practice and efficiently but effectively decrease opioid prescribing; however, guideline compliance requires more stringent oversight, direct observation, and formative feedback.
- Implement methods to hardwire patient education on safe opioid storage and disposal to improve compliance and possibly patient safety, i.e., automatically built into discharge education and order sets for the discharge after visit summary and automated messages directly to the patient in the electronic health record.

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tcwoodard@mdanderson.org

