EMORY
AMBULATORY SURGERY CENTER

Improving Narcotic Safety Protocols in a Surgery Center

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EHC Care Transformation

Background / Purpose

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- In July 2024, nursing leads at a Magnet ® designated musculoskeletal surgery center identified a critical need to assess and optimize the dispensing practices of narcotics used for physiatry procedures. This initiative was prompted by a medication safety event that raised concerns regarding narcotic inventory control. As a follow-up to this event, narcotic medications were tracked to monitor utilization and minimize the risk of misplaced or lost drugs. In response to these concerns, the orthopedic surgery center sought to improve inventory tracking, reduce narcotic waste, and ensure the safe handling of controlled substances.

  An additional aim of this study was to assess and reduce the number of narcotic medications dispensed in relation to actual usage in the orthopedic surgery center's procedural area by effectively educating staff on proper narcotic inventory tracking. By comparing pre- and post-intervention data on narcotic return rates, this study sought to determine whether improvements could be made in minimizing narcotic waste without compromising patient safety or the effectiveness of pain management during procedures. Implementing best practices for narcotic distribution, inventory control, and disposal can contribute to better medication safety and regulatory compliance.

- According to Bailey and Jeffs (2022), narcotic stewardship is essential in patient centered care. Narcotic counts should be audited on a regular basis. Automated dispensing machines are a way to safeguard controlled medications and reduce medication errors (Zheng, Wu Yi et al, 2021).

Methods/Data Analysis

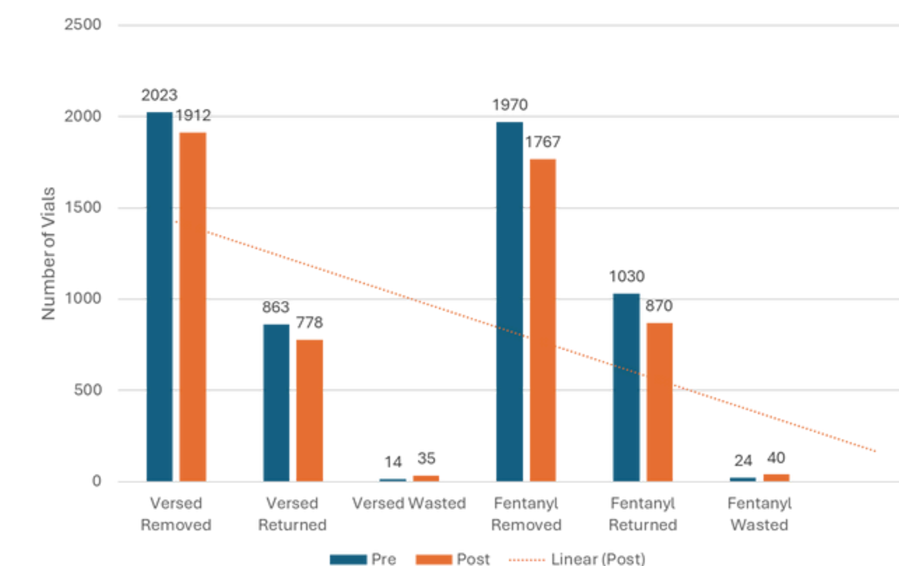
Methods

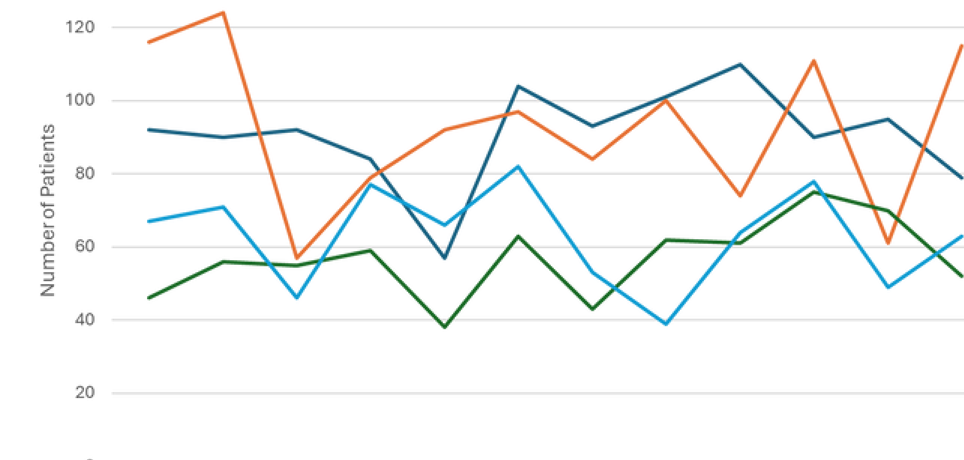
- After reviewing evidence and obtaining nursing leadership approval to complete the project, the project lead developed an excel spreadsheet which was used to document daily and weekly data tracking of fentanyl and versed doses removed, returned and wasted. In addition, wastes were also documented.

- Pre-intervention data was collected over 12 weeks from August 2024 to November 2024. Staff nurses including the pain management nurse were educated about the project purpose and proper documentation requirements using the excel spreadsheet. The pain management nurse was also educated about the importance of accurate retrieval and stocking of narcotics based on scheduled cases. Post-intervention data was collected over 12 weeks from November 2024-January 2025. Additional data was collected from the surgery center controlled-drug-administration records.

- A distribution chart was created, based on providers pattern of usage for the type of procedure. Data was monitored regularly by project lead and project lead encouraged staff to adjust narcotic doses on actual patient needs to reduce waste.

Results





Discussion / Conclusion

Discussion/Conclusion

- Pre and post data shows there was a reduction in the amount of fentanyl and versed removed after project implementation. Despite this improvement, barriers did exist. Planning the amount of narcotics dispensed could change depending on patient need and directly impact medication dispensing amounts.. The total amount of narcotics dispensed was challenging to track as the amount needed for each day varied depending on the types of cases being performed and not knowing in advance if the provider planned to use sedation or not.
- At the time of the project completion, the surgery center relied heavily on paper documentation of narcotic removal and wasting. Staff were required to document all cases performed over 24 weeks. This was time consuming for both the staff and project lead who was responsible for tracking the data, monitoring staff compliance with project and providing ongoing education. Education is a continuous process. After the intervention there were no instances of narcotics being misplaced or lost.

Implications For Practice

Implications

- Proactively allotting narcotics for scheduled procedures and adjusting pars based on what is needed can enhance medication safety, reduce narcotic waste, and improve overall operational efficiency without compromising patient care. In addition, educating the staff about the importance of proper narcotic dispensing practices has increased staff awareness about the importance of accurate narcotic administration and documentation. This increase of awareness benefits the surgery center as the team prepares to obtain automated medication dispensing machines.

Acknowledgements (Grants, People)

Emory Ambulatory Surgery Center Sr. Mgr. Greg Weicher, MSN, RN
Emory Ambulatory Surgery Center CNS-Asia Glaze, MSN, APRN, AGCNS-BC, NPD-BC
Emory Ambulatory Surgery Center Physiatry Nursing Staff
Emory Ambulatory Surgery Center Medication Nurse

Supporting Evidence/References

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- Zheng, W. Y., Lichtner, V., Van Dort, B. A., & Baysari, M. T. (2021). The impact of introducing automated dispensing cabinets, barcode medication administration, and closed-loop electronic medication management systems on work processes and safety of controlled medications in Hospitals: A systematic review. *Research in Social and Administrative Pharmacy*, *17*(5), 832–841. https://doi.org/10.1016/j.sapharm.2020.08.001