

Minimizing Indwelling Catheter Duration in the Post-Neuro-Spine Surgical Patient: A PACU CAUTI Prevention Effort

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Background

- Catheter-Associated Urinary Tract Infection (CAUTI) is the top 5 most common healthcare-associated infection
- NHSN Indwelling Urinary Catheter (IUC) definition includes IUC in place for > two days, or IUC in place on the day of the event or the day before
- IUCs inserted in the operating room (OR) remained in place during the patient's stay in the Post Anesthesia Care Unit (PACU), even when the patient met the criteria for catheter removal as outlined in the nurse-driven IUC removal protocol
- This Quality Improvement initiative addressed the following question: How can we decrease IUC indwelling time and the risk of CAUTI for neuro-spinal patients in the PACU?

Method

Data collection – Chart Review

- Pre-implementation (March 2024)
- Post-implementation (July-Sept 2024)

- Number of IUCs removed in OR
- IUC length of stay in the PACU

Collaboration (April-June 2024)

- Work collaboratively with the Neuro-Spine surgical team and OR nursing staff to develop a procedure aimed at reducing prolonged IUC use in the PACU

Additional intervention (July 2024)

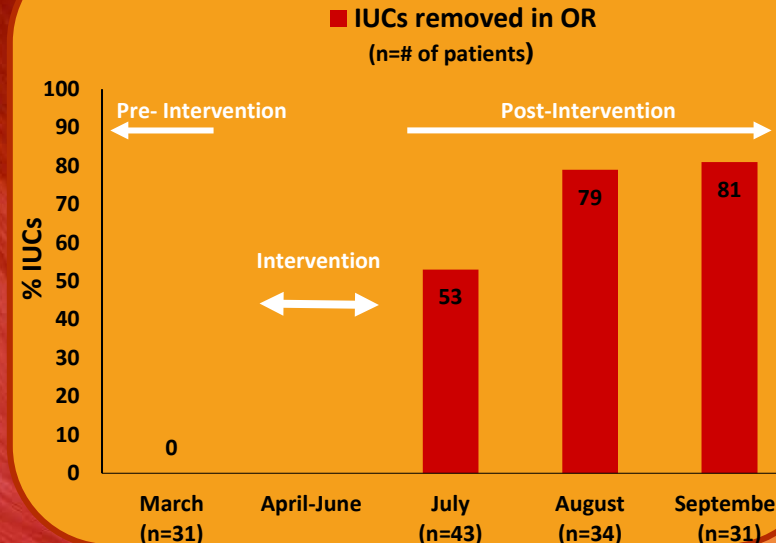
- Removal of IUC in the OR by surgical teams was implemented, if not contraindicated
- OR staff to query removal, and document IUC insertion and removal timely

Information Sharing (April-June 2024)

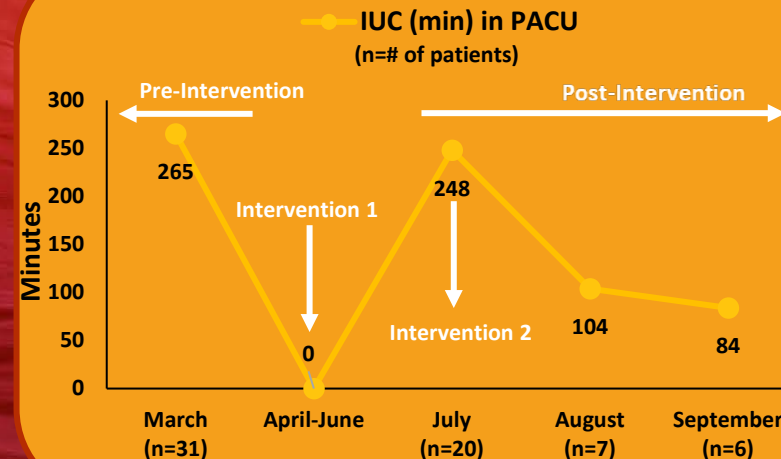
- Emphasize the IUC nurse-driven protocol in PACU
- Conducted in-services to familiarize PACU RNs with the "Discontinue in PACU" drop-down comment section that was not easily displayed
- Upon patient arrival to PACU, RNs were encouraged to query removal upon handoff

Results

% Patients with IUC removed in OR



Duration of IUC in PACU



Results

Data collection post-implementation showed minimal improvement of IUC removal time in PACU in the first two weeks of July. An additional intervention was implemented by collaborating with the OR Neuro-Spine surgical team and in-servicing the OR nurses for the IUC to be discontinued in the OR if not contraindicated. This proved to be the most effective intervention, as evidenced in August and September's improved data.

Discussion

- When working towards a common goal of patient safety, interdepartmental collaboration is effective in obtaining patient quality and safety goals. Education is the biggest key for success.
- PACU RNs can play an important role in patient outcomes. Nurses can help reduce CAUTI, patient length of stay and hospital costs, by being proactive.
- Future collaboration with other surgical services will help reduce IUC time.

References

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- Alexaitis, I., & Broome, B. (2014). Implementation of a Nurse-Driven Protocol to Prevent Catheter-Associated Urinary tract Infections. *Journal of Nurse Care Quality*, 245-252.
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