

BACKGROUND

This study builds on a 2024 quality improvement initiative in which the perianesthesia (PACU) nurse's role was leveraged to minimize unnecessary and prolonged indwelling urinary catheter (IUC) use among neurospinal patients, particularly during transitions from the Operating Room (OR) to the PACU and onward to inpatient units.

Multidisciplinary (Neurosurgery team, OR, and PACU nurses) targeted interventions, including optimized IUC orders, intraoperative IUC removal reminders, and reinforcement of the nurse-driven removal protocol, led to a significant practice change. IUC removal in the OR increased from 0% to 75%, while average PACU indwelling time decreased from 265 to 145 minutes.

This follow-up study (Oct 2024-Sept 2025) evaluated the sustainability of practice changes one year after implementation, with a continued focus on process reliability and nursing-driven interventions.

METHODS

Data Collection

Initial Post-intervention Period (comparison):
Q3 (July - Sept 2024)

Post-intervention (Sustainability Period)
Oct 2024 - Sept 2025
(Q4 2024 – Q3 2025)

Design:

Retrospective QI study to evaluate the sustainability of interventions one-year post-implementation.

Measures collected:

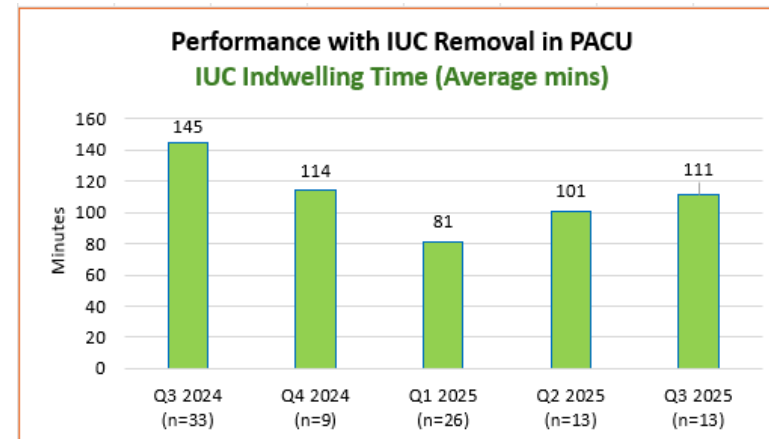
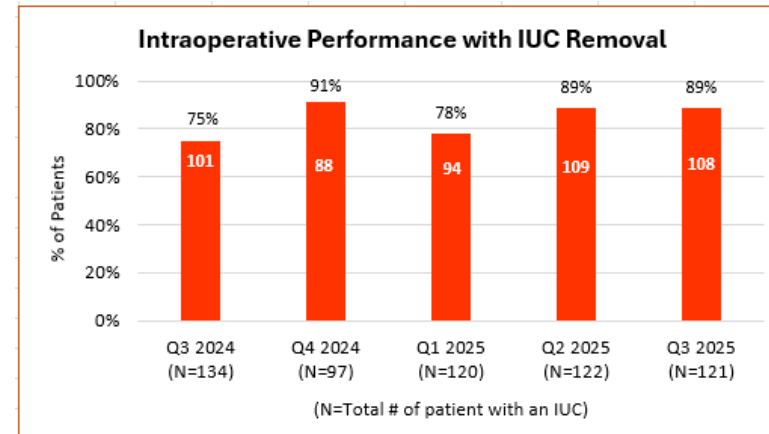
- Percentage of IUCs removed in the OR
- IUC indwelling time in the PACU (minutes)

Data Source:

Electronic Medical Record (EHR) chart review

KEY FINDINGS

- Sustained improvement in IUC removal practices in the OR
- Sustained reduction in PACU IUC indwelling time; some variability in timely reassessment and removal of IUC still exists
- Interventions resulted in a consistent and sustainable practice change, not just short-term compliance



RESULTS

- On average, IUC removal in the OR increased from 75% during the initial post-intervention period (July-Sept 2024) to 87% by Sept 2025
- Average dwell time decreased from 145 minutes to 102 minutes over one year, indicating sustained improvement

DISCUSSION

- The PACU is a critical transition point where timely clinical decision-making directly impacts patient outcomes
- PACU nurses play a key role in reassessing the ongoing need for indwelling urinary catheters once anesthesia-related indications have resolved. Delays in catheter removal at this stage can lead to unnecessary continuation on inpatient units, increasing total IUC delays and the risk of CAUTIs
- Variability in timely reassessment and removal persists, highlighting the need for continued PACU staff education and reinforcement
- Multidisciplinary collaboration was key to success in intraoperative IUC removal

REFERENCES

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