



AT THE FOREFRONT
**UChicago
Medicine**



Overhauling Your OR Count Process: A Multimodal Approach to RFO's

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BACKGROUND

- At University of Chicago Medicine, between 2022 and 2024, there were 4 retained foreign objects, also known as RFOs, identified in the operating room.
- An RFO is classified as a sentinel event due to the risk of serious patient harm.
- The reported annual incidence of RFO ranges approximately between 0.01%—0.02% or 1 per 5,000—10,000 surgeries (Schwappach & Pfeiffer 2021).
- After the RFO's were reviewed, nursing leadership established an interdisciplinary committee of nurses, surgical technologists, informaticists, central sterile processing technicians and leadership, OR educators, and surgeons to look at all aspects of the count process to implement changes that lead to a reduction in RFO's.

METHODS

- A committee of interdisciplinary members was established to review count sheets for trays, soft goods, and sharps, identify revisions to aid the count process and RFO elimination, and evaluate policy changes for the overall count procedure. Epic charting was also identified as a method to leverage packing awareness by ensuring all levels of patient care are aware when an item has been intentionally packed.
- The end result was that we revised the instrument count sheets to include a uniform, standardized format for counting miscellaneous items and items smaller than 4 cm, implemented format changes to the paper count sheet to strengthen nurses' visual cues, and added Epic charting sections for intraoperative nursing and all levels of care, ensuring that intentionally packed items are consistently visible in the LDA iRFO documentation within the WALDO avatar across all care areas.

RESULTS

- The interdisciplinary group met and the nursing team suggested a nurse driven protocol where the nursing team could order a RFO x-ray to rule out RFO's if certain criteria were met from the count policy (PC80).
- From this idea, the creation of a virtual checklist was completed to guide each RN in the OR to answer 'yes or no' for each trigger from the PC80 Count Policy. If a response is "Yes", an x-ray ordering section with additional information appears, guiding the nurse to enter the RFO x-ray order, once complete, they can document the RFO results and chart the name of the radiologist who read the findings. If all responses are "no," then the RN would be able to complete the case without an RFO x-ray.
- The team additionally identified that all levels of patient care should be able to document and view RFO information within the WALDO section. This ensures that care teams on the floor can update RFO charting when emergent packing occurs outside of the operating room, and use it as a communication tool for when the retained foreign object is removed.
- The creation of the iRFO section of WALDO was performed. Formerly, you would have to scroll through multiple cells of the WALDO flowsheet to see any packing and it was not apparent that a patient had a packing if you received them in the OR from a prior procedure.

IMPLICATIONS

- We found that RFO communication through easy-to-use Epic charting provides the most reliable and efficient method for identifying retained wound packing and ensuring timely removal when clinically indicated.
- The iRFO and RFO Checklist in Epic are in need of routine maintenance to address the constant nuances of the count process to prevent RFO's intraoperatively.

NEXT STEPS

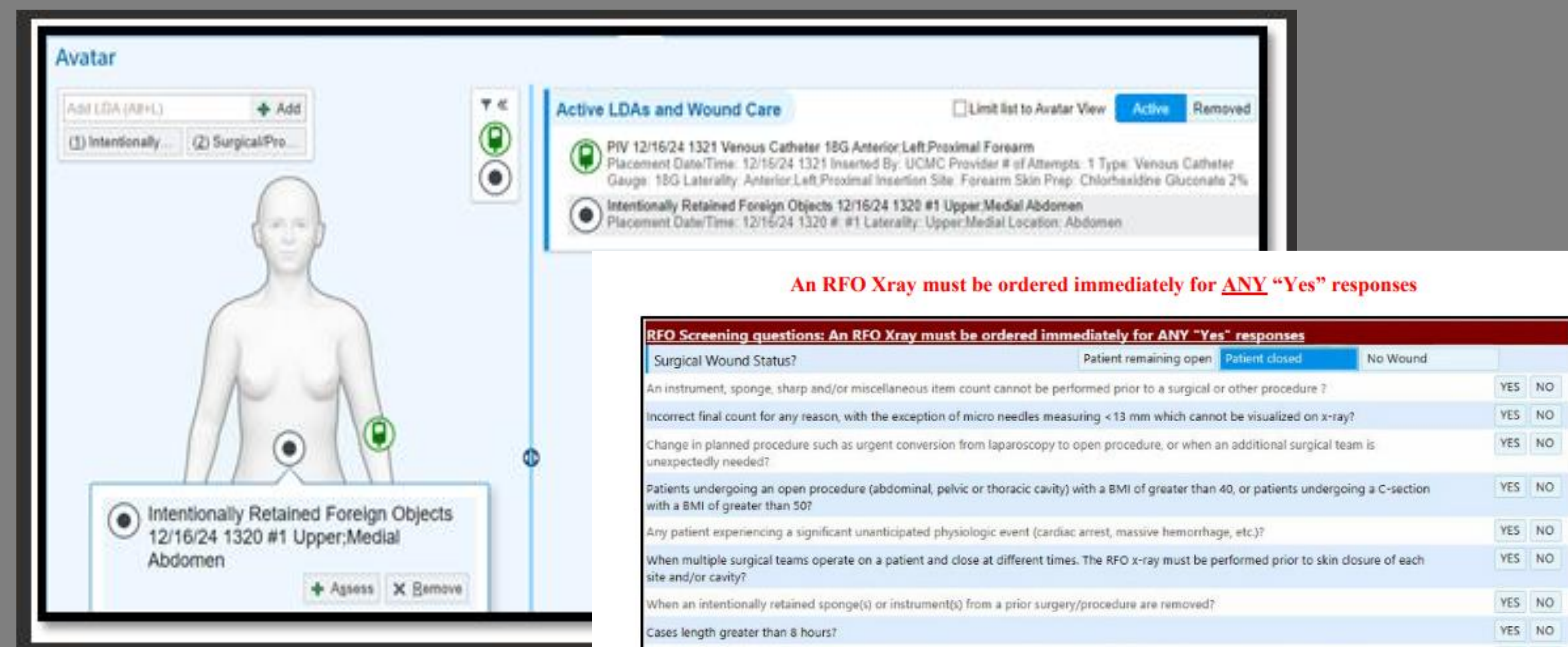
- The CDOR team will continue to proactively review surgical cases to assess the effectiveness of the iRFO workflow and identify opportunities for optimization, particularly as new and evolving products enter the perioperative setting that may be used for wound packing.
- We plan to assess and flag any potential RFO risk when introducing new wound-packing products, and continuously update both the RFO checklist and the iRFO documentation section in WALDO to align with evolving packing materials, policies, and new practices.

REFERENCES

Schwappach, D., & Pfeiffer, Y. (2023). Root causes and preventability of unintentionally retained foreign objects after surgery: a national expert survey from Switzerland. *Patient Safety in Surgery*, 17(1), 1–10. <https://doi-org.proxy.uchicago.edu/10.1186/s13037-023-00366-9>

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iRFO and RFO Checklist Epic Documentation examples

- b. If ANY of the RFO Screening Questions yield a "Yes" response, the "RFO Xray ordered?" question will populate:
- | | | |
|--|-----|---------------------------------|
| Cases length greater than 8 hours? | YES | NO |
| Use donor organ procurement and organ transplant recipient cases with the exception of routine single kidney transplant cases? | YES | NO |
| When the OR nursing staff involved in the case have worked a total of 16 hours or more within a 24 hour time period? | YES | NO |
| RFO Xray ordered? | YES | NO, Patient Clinically Unstable |
- i. If the "No, Patient Clinically Unstable" option is selected, document who the need for the RFO Xray was endorsed to (i.e. "Susan Jones RN, 4E ICU")
- Endorsed RFO Xray need to: _____
- ii. If the "Yes" option is selected, the RFO Xray information fields will populate
- c. Order the RFO Xray if indicated