

Implementing an Innovative Tool for Rounding in Locations with High Level Disinfection



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Background

Rounding in locations where high-level disinfection and sterilization (HLDs) occurs is critical for Infection Preventionists (IPs) to ensure patient safety and regulatory compliance. These areas assure all re-usable critical items that have contact with mucous membranes or sterile body cavities go through HLDs according to the manufacturer's instructions for use and Spaulding Classification System. This level of cleaning is fundamental in reducing the incidence of healthcare associated infections.

These locations have unique challenges requiring a specialized approach to rounding to ensure well maintained spaces for reprocessing. We sought to optimize the rounding process to increase efficiency, remove barriers, and standardize communication of findings to stakeholders.

Objectives

- To learn how the Plan Do Study Act (PDSA) methodology can be applied to Infection Prevention processes.
- To describe how iterative implementation methodology leads to improved outcomes.
- To demonstrate how technology can be applied to streamline Infection Prevention workflows.

Study Design

The PDSA cycles was applied over 26 months for iterative optimization. The implementation team reviewed questions, built the data collection tool, and tested an automatic email notification system. Feedback from users and stakeholders was applied to the next cycle. Means, percent change, and unpaired t-tests were used to analyze the results to inform the next PDSA cycle.

Results

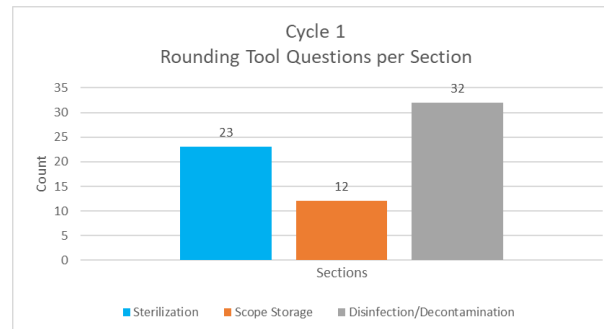
Two PDSA cycles and 41 rounds were completed

Changes to the tool from Cycle 1 to 2

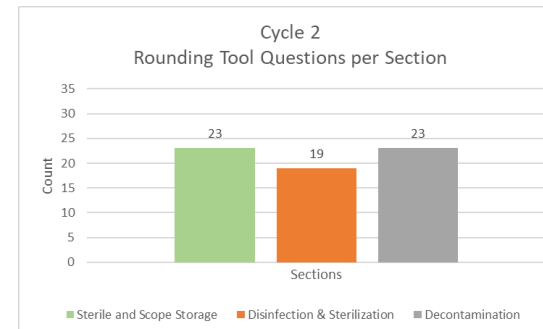
- reordered questions to match the HLDs process flow
- addition of standardized dust questions

Dust questions led to data capture of cleanliness during Cycle 2

- Sterile/Scope storage areas free of dust 36% of the time
- Disinfection/Sterilization areas free of dust 50% of the time
- Decontamination areas free of dust 53% of the time



Cycle 1 consisted of 11 rounds
Automatic summary emails sent: 91% of the time
Mean time to complete round = 98.4 minutes
96 total findings



Cycle 2 consisted of 30 rounds
Automatic summary emails sent: 90% of the time
Mean time to complete round = 116.7 minutes
337 total findings

- Cycle 1 to Cycle 2 resulted in 18.6% increase (p=0.67) in IPs time
- Cycle 1 to Cycle 2 also showed 251.0% increase (p=0.47) findings

Cycle 1: Themes of Findings	Cycle 2: Themes of Findings
Dust in sterile processing room, items in sterile room missing stickers	Dust in sterile processing room, items not stored appropriately
Scope not hung appropriately, expired scopes stored, instrument packaged incorrectly	Expired scopes stored, dust in scope area, expired disposable items present, scope not hung appropriately
Disinfection job aide not visible, bottles and strips missing expiration stickers, soiled room not negative pressure, disinfection area not clean	Dust in decontamination area, disposable cleaning items not disposed, evidence of past due or expired equipment

Conclusion

Using improvement tools, such as PDSA cycles, are an effective method for transforming workflows and optimizing the IPs experience of HLDs rounding. Additionally, the PDSA cycles have allowed our teams to recommend improvement opportunities to our HLDs partners. Even with a small sample size, we were able to measure outcomes and adapt the tool. These changes led to more improved rounding logistics, standardized communication, and more efficient methods of accessing expertise in HLDs. Needs were met for both IPs and stakeholders. We plan to apply PDSA cycles to other types of rounds in the future.



References

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Disclosures

No disclosures to report