

HIGH-LEVEL DISINFECTION AND STERILIZATION OF INSTRUMENTS IN AN AMBULATORY HEALTH CARE SETTING

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Category: Patient Safety

Background

Competencies in high-level disinfection (HLD) and sterilization and adherence to evidenced-based protocols are essential in the prevention of post-procedural infections. (Doell, 2010). The Nursing Leadership in the Department of Urology identified this safety gap – lack of process, policies, and quality monitoring – and implemented a quality improvement initiative with positive outcomes in Urology and an optimal level of practice in accordance with the Association of Perioperative Registered Nurses (AORN) standards. Upon approval by organizational leadership, this initiative was implemented across the FGP.

Objectives

The objective of this project is to evaluate clinical staff knowledge pre and post training, compliance with quality control monitoring, and process & equipment.

Methods

14 of the 44 FGP clinics perform HLD and/or sterilization. An on-site survey was performed at these 13 clinics excluding the pilot site. Each clinic was assessed for current practices, quality monitoring and supplies in comparison with AORN standards. A three-phased implementation plan was developed and implemented.

- Phase 1- Managers order supplies and identify sterilization champions for their clinic.
- Phase 2- Pre-test administered one week before in-service on HLD and/or sterilization. Post-test administered one week after in-service. (Clinics performing only sterilization received test focused on sterilization. Clinics performing HLD and sterilization received test focused on both).
- Phase 3- Sterilization champions ensure continuous process and quality monitoring, process is included in clinical quality rounds.

Results

Knowledge Improvement:

41 recipients completed the sterilization pre-test, with an average score of 47%. 23 of the 41 recipients completed the post-test with an average score of 74%.

22 recipients completed the HLD and sterilization pre-test, with an average score of 48%. 13 of the 22 recipients completed the post-test with an average score of 69%.

Quality monitoring:

Only 2 of the 13 clinics maintained quality control logs pre-intervention – Urology and Surgery. Post-intervention, 4 additional clinics implemented and maintained quality control logs. In total, 6 clinics have implemented and maintained quality monitoring. In-services are pending for 7 more clinics.

Process and Equipment:

Enzymatic cleaning solutions standardized at 7 of the 13 clinics.

Quality monitoring equipment purchased and implemented at 4 of the 13 clinics.

Discussion

Despite common knowledge, need for standardized process, policy and training was evident. Volume of participants was higher than anticipated, however response to post-test was significantly lower. Also, gaining access to clinics for intervention and training was a significant challenge.

Next steps, intermittent training is needed to ensure continuous competency in HLD and sterilization for quality and patient safety.