**Title:** An Evaluation of Environmental Terminal Cleaning in the Operating Room  

**Project Description:** The Operating Room (OR) is considered a sterile environment and assumed to be the cleanest area in the hospital. Is the Operating Room as clean as perceived? There is currently no method to evaluate how effective the cleaning process is beyond visualization. The goal was to evaluate effectiveness of the current cleaning process, determine barriers and provide suggestions for improvements as indicated.  

**Process:** Operating room cleanliness was evaluated in 15 operating rooms by marking consistent immobile high touch areas with fluorescent gel. The marking was completed on an ongoing basis with a weekly goal. The marking was done after the last case of the day and prior to terminal cleaning. The evaluation was completed the following morning between 6:30 am and 8:00 am. The average sites marked in each room was 24 and the total sites marked were 575.  

**Solution:** The pre-intervention results were dismal ranging from 18% - 61% (Figure 1). The bundle of interventions initiated was:  

1. Terminal cleaning checklist and posting on each OR door  
2. Terminal cleaning competency and completion with the OR support team  
3. Observations of terminal room cleaning  
4. Identification of barriers to terminal cleaning  
5. Team assistance with marking to address questions and dispel fear of reprisal.  
6. Barrier removal  
7. Results posting in OR  
8. OR support team and Director of Infection Control meeting to explain process and address group questions.  

**Measurable Outcomes:** Post-intervention monitoring resulted in an increase in cleaned areas from an average of 41% (high of 61% and low of 18%) to an average of 80% (high 95%, low 65%).  

**Sustainability:** Continued monitoring and celebration of successes have maintained results above 80%.  

**Role of Collaboration and Leadership:** Collaboration among Infection Control, Operating Room leadership, Clinical Nurse Specialist, Patient Safety and front line staff were crucial in the effectiveness of this initiative. Executive leadership was involved maintaining communication, offering assistance and support throughout the process. Leadership offered support in an effort to provide education and encouragement to front line staff in a non-punitive, learning environment to improve outcomes.  

**Innovation:** Evaluation of the cleanliness of the OR environment is currently not evaluated on this level. Deficiencies were not known prior to this evaluation, therefore it was not a response to a failure but an initiative to provide the best practice. A multidisciplinary approach was utilized to assess the need, evaluate learning and competency, and provide a framework toward improved, sustainable outcomes.  

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Week 4 Week 5 Week 6 Week 7

Percent of Sites Cleaned Post-Intervention

88% 65% 72% 95%

Week 1 Week 2 Week 3

Percent of Sites Cleaned Pre-Intervention

45% 18% 61%