Ansell

CASE STUDY

SAFETY.
tailor-made

O.R. Turnover Safety Assessment

IMPROVING O.R. TURNOVER EFFECTIVENESS:

AnsellGUARDIAN® program delivers data needed to make clinical enhancements

ORGANIZATION PROFILE

This organization is a nationally ranked academic healthcare system in the Eastern United States. The system comprises multiple facilities including three primary hospitals with over 1,500 beds and performs more than 70,000 annual O.R. turnovers and procedures combined.

Solutions AnsellGUARDIAN® O.R. Turnover Safety Assessment; SANDEL® Room Turnover Solutions

CHALLENGES

- High risk of cross-contamination between patients
- Insufficient data to obtain management approval for clinically superior products
- Lack of resources to provide training on room turnover practices

KEY STRATEGIES

- AnsellGUARDIAN® clinical assessment of room turnover procedure, timing, and ATP testing
- Updated O.R. cleaning checklist
- Formal training on cleaning and PPE protocols based on AORN and AHE standards

OUTCOMES

- Approval to implement clinically superior products
- Reduced risk of cross-contamination through product solutions and cleaning process improvements
- Improved compliance with turnover procedures, hand hygiene, and PPE requirements

BACKGROUND

This healthcare system had been using Ansell operating room turnover kits, including disposable antimicrobial linens, bags and mops, in their facilities for more than eight years, but had experienced some difficulty in producing relevant data to obtain management approval to implement additional disposable patient care equipment, like disposable patient straps, to further reduce the risk of cross-contamination between patients. The facilities also recognized that there was room for improvement in their operating room turnover procedures and were dissatisfied with other environmental monitoring programs they had tried, which utilized qualitative measurement methods like fluorescent gel. This case study will detail their biggest challenges with room turnover and how their partnership with Ansell enabled them to make significant improvements in efficiency and cleaning effectiveness.

PROCESS

As part of the AnsellGUARDIAN® program, Ansell clinicians, who are Certified Surgical Cleaning Technician Trainers (T-CSCT), were on-site at the facilities to perform a detailed assessment of the facilities' current operating room turnover procedures, measurement of overall turnover efficiency, and environmental cleaning verification using ATP testing.

A detailed survey was used to capture observation data such as the number of staff involved in room turnover, roles of staff, steps followed in the cleaning process, guideline compliance, supplies used, PPE and hand hygiene requirements met, and more.

Stopwatch timing was performed to calculate the precise amount of time spent retrieving supplies, such as mops and bags, and overall time spent cleaning the operating room after each case.

Adenosine Triphosphate (ATP) testing measures the amount of bioburden on a surface using Relative Light Units (RLU) to provide a quantitative measurement of cleaning effectiveness, where the higher the result means the more contaminated a surface is. For the operating room, the maximum RLU for a passing measurement is 20. The level of contamination on surfaces in the operating room is especially important because it can lead to cross-contamination between patients which could result in surgical site infections (SSI). In these facilities, more than 20 surfaces in the O.R. were tested after both procedural cleaning and terminal cleaning.

FINDINGS

Upon completion of the assessment, Ansell clinicians presented a detailed review of their findings [portion of data in Table 1] and provided recommended areas of improvement. One of the most impactful findings was that the cleaning checklist used for room turnover was much less detailed than the checklists suggested by the Association of periOperative Registered Nurses (AORN). By reviewing and updating the checklist, the facilities were able to improve best practices and ensure compliance with processes like "clean-to-dirty" wiping and mopping, hand hygiene, and PPE donning. Another key finding was that roles for staff performing room turnover were not clearly defined, which resulted in inefficiencies, possible duplication of work, or even missed steps. Clarifying the roles of everyone involved helped streamline the process and improve cleaning effectiveness. The results of the ATP testing [see Table 2] showed that, even after cleaning, many surfaces in the operating room still had failing levels of contamination. It can be difficult or even impossible to completely remove all contamination from surfaces, especially those that are porous like O.R. table mattresses and patient straps, so by having knowledge of which surfaces pose the greatest risk, action can be taken to help prevent cross-contamination. This health system already used Ansell's STAT-BLOC™ disposable, antimicrobial linens which provide complete protection against bacterial migration to ensure that any surface contamination on the O.R. table does not reach the patient surface.[1]

Table 1

MOST SIGNIFICANT AREAS OF IMPROVEMENT IDENTIFIED		
Observation	Before AnsellGUARDIAN® Assessment	Recommendations from AnsellGUARDIAN® Assessment
% of staff with assigned roles during room turnover	Lower than 25% threshold	100%
% of time hand washing protocols were met		
% of time PPE requirements were met		
% of straps that passed ATP test		

Table 2

ATP TESTING RESULTS FOR PROCEDURAL AND TERMINAL CLEANING *(Maximum acceptable RLU limit for the O.R. is 20)*			
Surface	**# of Tests Performed**	**Range or RLU**	**Average RLU**
O.R. Floor From Base	16	17 - 8,782	1163
Reusable Patient Positioner	16	3 - 608	168
Reusable Patient Strap	29	2 - 509	110
O.R. Table	33	2 - 693	125
Patient Transfer Device	15	6 - 228	45

RESULTS

To effectively implement change, the health system utilized a number of complimentary education tools from Ansell including live on-site training, training videos, educational posters, and more. Ansell clinicians also worked hand-in-hand with the clinical staff at each facility to share industry guidelines and tools that could be used as reference.

The health system also used the ATP data to justify the need to replace reusable patient straps with disposable patient straps and received immediate management approval to implement. Additionally, as part of Ansell's Value Add Program and on-going partnership, squeegee mops were provided to replace the bristle brooms currently utilized. This helped to reduce ATP results from the O.R. floor and meet guideline standards indicating not to use bristle brooms due to risks of cross-contamination and aerosolization.

Ansell and this health system will continue to partner for ongoing monitoring and training to ensure continuous success and to provide the highest level of both staff and patient safety. Implementing AnsellGUARDIAN® recommendations would result in the following outcomes:

Implementing disposable straps **increases passing ATP scores by 83%**

Improves compliance with **PPE protocols by 94% and hand washing protocols by 95%**

Reduces cross-contamination between rooms and eliminates aerosolization risk

Improves compliance with **assigned turnover duties by 100%**

For more information or additional clinical resources, please visit www.ansell.com/AnsellGUARDIAN/room-turnover

[1]Data on file. Ansell Healthcare LLC.

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