Results. After terminal cleaning, the average ATP score in the HOCl CLEANING and DISINFECTING study arm was significantly lower than that for the STANDARD CLEANING and DISINFECTING rooms ($P < 0.0017$) (Figure 1). In evaluating the effect of the HOCl misting, the ATP scores in the HOCl rooms had a post cleaning, pre-misting average score of 2.7. The post misting average score was 1.7, showing that misting produced a further significant reduction (improvement) in ATP scores ($P < 0.01$).

Conclusion. HOCl cleaning and disinfection in GI ASCs is more effective than standard procedures in lowering ATP scores following endoscopic procedures in procedure rooms. HOCl terminal misting of the rooms further improves the cleaning and disinfecting results.

Figure 1. B. Overholt, HOCl Solutions: Shareholder, none to date.

1152. Leveraging Human Factors Engineering to Optimize Low-level Disinfection of Redesigned Medical Tools

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Background. Inadequate cleaning and disinfection of shared medical equipment can lead to healthcare-associated infections and outbreaks. Stethoscopes were identified as the most commonly used piece of shared equipment at our institution, but cleaning practices were inconsistent among providers. We aimed to assess provider attitudes and practices around stethoscope disinfection and to subsequently implement a test of change (TOC) supported by human factors observations to improve cleaning consistency and frequency.

Methods. We conducted an anonymous electronic survey via SurveyMonkey paired with human factors observations in a free-standing children’s hospital. We surveyed physicians, nurses, and advanced practice providers to identify barriers to regular stethoscope cleaning. Quantitative results, human factors observations, and workflow simulations on a single unit were used to design an intervention to standardize low-level disinfection. Small mesh baskets holding alcohol prep pads labeled with brightly colored signage were installed by the exit of each patient room on one trial unit. Following implementation, a post-survey and direct observations on the unit were conducted.

Results. Of those surveyed healthcare providers who completed the pre-survey (n = 38), 82% believed stethoscopes pose an infection risk to patients. However, only 38% of respondents reported cleaning their stethoscope between patient encounters. The most cited barrier to cleaning was a lack of easily accessible cleaning product (49%). After the unit-based TOC, alcohol from baskets were utilized by 80% of the 25 surveyed providers. Providers reported increased frequency of cleaning due to accessibility. Additionally, the brightly colored signage was a visual cue to disinfect equipment. Increased satisfaction of families reinforced the behavior. Direct observations revealed an increased frequency of cleaning while qualitative interviews elicited increased awareness from staff.

Conclusion. Leveraging human factors engineering to inform the placement and design of easily accessible disinfection supplies correlated with increased frequency of stethoscope cleaning by healthcare providers. Future steps include implementation in all inpatient care areas.

Disclosures. All authors: No reported disclosures.