95% CI, 0.14–0.99; P = 0.04.) However, acquisition rates of vancomycin-resistant *Enterococcus* spp. and multidrug-resistant *Acinetobacter baunmannii* had not significantly decreased. The hazard of acquiring hospital acquired pneumonia during intervention period compared with baseline period was 0.46 (95% CI, 0.23–0.94; P = 0.03). There were not significant reduction in hospital acquired BSI, UTI, and CDAD, after photocatalyst antimicrobial coating.

Conclusion. MRSA acquisition rate and hospital acquired pneumonia were significantly reduced after photocatalyst antimicrobial coating. This study provides evidence that photocatalyst antimicrobial disinfection can be an adjunctive measure to control MRSA acquisition in high incidence setting.

Disclosures. **All authors:** No reported disclosures.

1150. Cleaning High Touch Surfaces of Patients' Rooms: Make It Easier, and It Simply Gets Cleaner

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Background. The healthcare environment has been established as a reservoir for human pathogens and specifically multidrug-resistant organisms (MDRO). High touch surfaces and fomites in a patient's room mediate transmission between infected and uninfected patients and personnel. Efforts to reduce hospital-associated infections due to MDROs often focus on room cleaning; however, adherence to and thoroughness of cleaning pose significant challenges.

Methods. A crossover trial was implemented in January 2016 (for 15 months) at Assaf Harofeh Medical Center (Israel) in four identical medical units. Single-use wipes (Clinell®; universal wipes and sporicidal wipes for rooms of patients with *C. difficile*), were compared with common practices which consisted of reusable cloths and bleach (1,000–5,000 ppm). Six-month cleaning and intervention periods were used on units in alternating sequences, separated by washout periods. Cleaning was monitored twice a week (bedrail, bedside table, clinical binder, call button, and lamp switch), by a fluorescent marker system (Clinell®). Comparisons used GEE with clustering for room. Staff were surveyed on intervention feasibility, acceptability, and satisfaction.

Results. Complete cleaning in all five test locations was found in 23% of 400 total assessments and was more common in the intervention group (34% vs. 12%; OR = 3.7; P < 0.001). Cleaning adherence was highest for the bed rail (71%) and lowest for the call button (38%). The use of wipes had the largest effect on adherence for the light switch (59% vs. 26%; OR = 4.2; P < 0.001). Intervention timing was not associated with overall adherence (P = 0.10). 94% of staff reported overall satisfaction of "very good" or "excellent," and 90% of staff reported that use of the wipes shortened the cleaning process.

Conclusion. The use of cleaning wipes resulted in greater adherence to room cleaning and the method was reported to be acceptable to staff. Future aims of this large study (over 10,000 patients were enrolled and data collection not yet completed) are to determine the impact of this intervention on rates of hospital-acquired infections, MDRO acquisitions, and mortality.

Disclosures. **E. T. Martin**, Clinell: Grant Investigator, Research grant. **D. Marchaim**, Clinell: Grant Investigator, Grant recipient.

1151. A Safer, More Effective Method for Cleaning and Disinfecting GI Endoscopic Procedure Rooms

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Background. Healthcare acquired infections are increasing. Current cleaning and disinfecting (C&D) methods subject staff to toxic chemicals and can be damaging to the facility. Hypochlorous acid (HOCl) is a disinfecting solution that is 80–200 times more effective than bleach in surface disinfection of bacteria yet is nontoxic to humans. The aim of this study was to determine whether HOCl is as effective as standard cleaning methods for C&D GI ambulatory surgery center (ASC) rooms as determined by ATP (adenosine triphosphate) measurements over a 2-week period.

Methods. Two similar GI ASCs, each with two procedure rooms, were studied. One ASC received postprocedure STANDARD C&D with quaternary ammonium compounds in nonwoven fabric for surface wiping of high touch areas followed by terminal benzalkonium chloride foam/spray on these areas. The second ASC received HOCl C&D using on-site freshly prepared HOCl, 1,000 ppm. Microfiber cloths semi-wet with HOCl were used for wiping surfaces for both C&D. In the HOCl rooms, after terminal manual wiping, misting with HOCl of the entire room was performed. Selected high touch area ATP testing was performed in all rooms before procedures in the AM and 10 minutes after terminal manual cleaning. In the HOCL rooms, testing was also performed 10 minutes after misting. High touch areas tested in each room included: endoscopic cart (three locations/cart), both gurney bed rails, computer mouse (two), working counters (two areas), light switch, door knob. ATP scores were compared within each site using analysis of means (ANOM).

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.

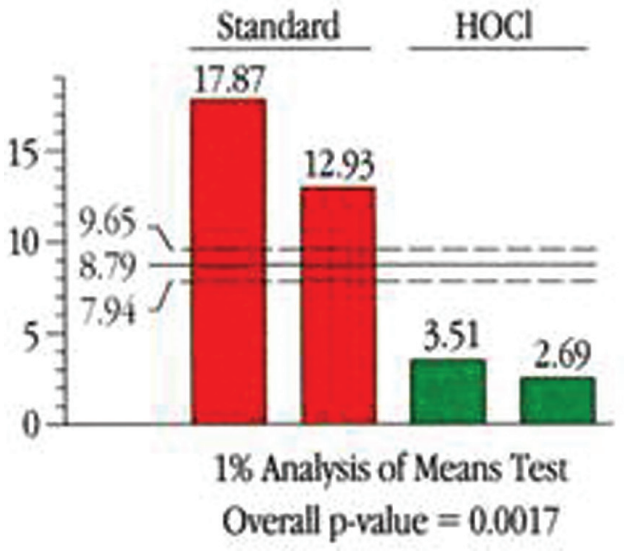

Figure 1.

Disclosures. **B. Overholt**, HOCl Solutions: Shareholder, none to date.

1152. Leveraging Human Factors Engineering to Optimize Low-level Disinfection of Bedside 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 postsurvey and direct observations on the unit were conducted.

Results. Of those surveyed healthcare providers who completed the pre-survey (n = 383), 92% 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; 74% 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.