95% CI, 0.140–0.99; P = 0.04). However, acquisition rates of vancomycin-resistant Enterococcus spp. and multidrug-resistant Acinetobacter baumanii did not significantly decrease. 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

Emily T. Martin, MPH, PhD; Mor Dadon, BS;1,2 Talia Lazarovitch, PhD;3 Hendaya Masri, BS;2,4 Tal Maya, BS;2,5 Katie Jaffe, BS;6 Sharon Moscovitch, MD;1,4 Ronit Zaidenstein, MD;2,7 and Dor Drachman, MD, PhD;3,8 Epidemiology, University of Michigan School of Public Health, Ann Arbor, Michigan, 2Unit of Infection Control, Assaf Harofeh Medical Center, Zerifin, Israel, 3Sacker Faculty of Medicine, Tel-Aviv University, Tel-Aviv, Israel, 4Assaf Harofeh Medical Center, Zerifin, Israel

**Session:** 135. Healthcare Epidemiology: Environmental and Occupational Health

**Friday, October 5, 2018: 12:30 PM**

**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 employed 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 fluorescentescence system used GEE with clustered room cleaner. 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 bedrail (71%) and lowest for the light switch button (38%). The used 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 98% 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 acquisition, and mortality.

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

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

Bergen Overholser, MD, Gastroenterology1, Karen Reynolds, LPN2 and Donald Wheeler, PhD;1 Gastrointestinal Associates, Knoxville, Tennessee, 1Quality Department, Gastrointestinal Associates, Knoxville, Tennessee and 2SPC Press, Knoxville, Tennessee

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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 family and physician (HOCI). Hypochlorous acid (HOCl) is a disinfecting solution that is 80–200 times more disinfecting (C&D) methods subject staff to toxic chemicals and can be damaging to human pathogens and specifically multidrug-resistant organisms (MDRO) in four identical medical units. Single-use wipes (Clinell®; universal wipes and sporicidal wipes for rooms of patients with C. difficile), were employed 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 fluorescentescence system used GEE with clustered room cleaner. Staff were surveyed on intervention feasibility, acceptability, and satisfaction.

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**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 acquisition, and mortality.

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

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

Lori Handy, MD, MSCE; Cysia Berpalko, MPH;2 Hilary Hei, MPH;2 Carly Ehritz, MSN, RN, ACNS-P;3 Sara Townsend, MS-HQS, CIC2 and Julia Shackle Sammons, MD, MSCE;1 Fredman School of Medicine, Department of Pediatrics, Division of Infectious Diseases, Department of Infection Prevention and Control, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania, 2Department of Nursing, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania, 3Department of Infection Prevention and Control, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania

**Session:** 135. Healthcare Epidemiology: Environmental and Occupational Health

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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), 87% 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. The reported increased frequency of cleaning due to accessibility. Additionally, the brightly colored signage was a visual cue to discontinue 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.

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**Figure 1.** HOCl Solutions: Shareholder, none to date.

**Poster Abstracts**