

catheters, and mechanical ventilation were present in the previous 2 days among 73%, 20%, and 25% of all HOB events, respectively. Only 10% of all HOB events occurred in a patient without an indwelling device. Only 20% of HOB events resulted in a National Healthcare Safety Network (NHSN) reported CLABSI.

Conclusion. Half of HOB events are potentially preventable in this pilot study. HOB may be an indicator for a large number of preventable HAIs not currently measured by NHSN. Larger studies across a variety of hospital settings are needed to assess the generalizability of these results and the implications of HOB surveillance for infection prevention practices and patient outcomes.

Figure 1: Microorganisms Identified from Stratified Sampled Hospital Onset Bacteremia and Fungemia (HOB) Events across 3 Academic Medical Centers, n=60

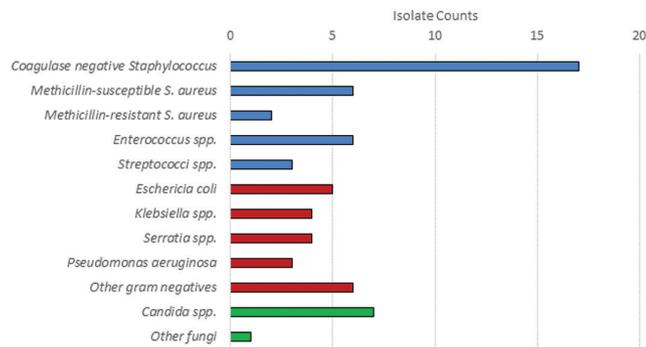


Figure 2: Attribution of Stratified Sampled Hospital Onset Bacteremia and Fungemia (HOB) Events across 3 Academic Medical Centers, n=60

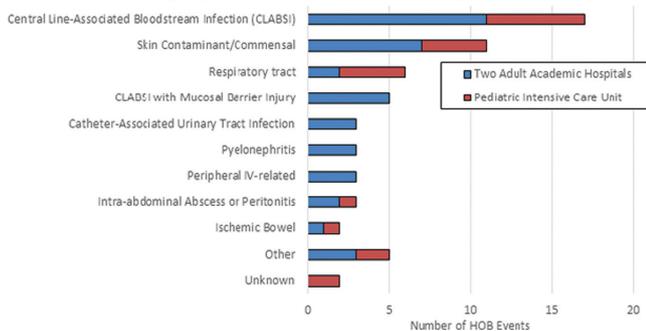
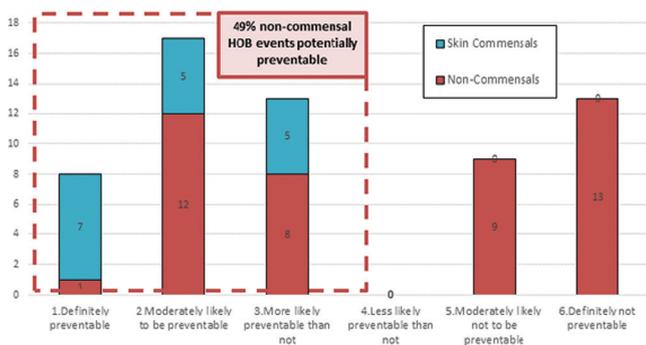


Figure 3: Preventability Rating of Hospital Onset Bacteremia and Fungemia (HOB) Events with and without Common Skin Commensals, across 3 Academic Medical Centers, n=60



Disclosures. All authors: No reported disclosures.

480. Lack of Association Between Surface Disinfection and Fluorescent Marker Score

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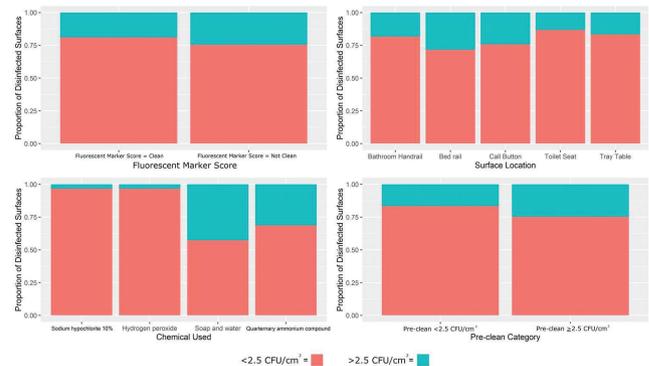
Background. The Centers for Disease Control and Prevention (CDC) recommend that hospitals ensure compliance with cleaning and disinfection

procedures. Environmental Management Service (EMS) coordinators have used multiple methods to gauge effectiveness of cleaning activities. These methods include visual inspection, Adenosine Triphosphate (ATP) bioluminescence markers, fluorescent markers, and microbiological sampling. Although microbiological sampling is considered the "gold standard," it is expensive and time consuming; therefore, alternative methods such as fluorescent markers are more commonly used. The purpose of this study was to determine whether fluorescent clean score was associated with a clean surface as determined by microbiological sampling.

Methods. The project was conducted at a 120-bed hospital within the Central Texas Veterans Healthcare System (CTVHCS). Rooms selected for inclusion were marked with a fluorescent marker in predetermined locations by a member of the research team. When the EMS staff person completed the routine cleaning process a member of the research team recorded the fluorescent score and obtained microbiological samples from the room. The aerobic bacterial colony (ABC) count for pre-cleaning and post-manual cleaning was also categorized into "clean" and "not-clean" categories, where clean was defined as ABC counts <2.5 CFU/cm².

Results. A chi-squared test of independence revealed that there was no association between surfaces considered "clean" according to ABC criteria and "clean" according to fluorescent marker score, chi-square = 1.6167, df = 1, P = 0.20. A mixed effects logistic regression model showed that fluorescent clean score was not a significant predictor of a clean surface as defined by the <2.5 CFU/cm² criteria (P = 0.96).

Conclusion. While the fluorescent marker has been shown to be useful for determining if a surface has been wiped, our results show that fluorescent marker score may not be a good proxy for assessing surface disinfection. Our results suggest that fluorescent markers only determine if the manual process of wiping has been conducted without taking into account other variables that play a role in disinfecting the surface.



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481. How Clean Are the Clinics? Assessment of Environmental Cleanliness in Ambulatory Care

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Background. The patient care environment plays an important role in the transmission of potential pathogens. Efforts to improve the thoroughness of environmental cleaning and disinfection have largely concentrated on ICUs and other inpatient units. The purpose of this study was to ascertain baseline data on the thoroughness of cleaning in ambulatory care clinics.

Methods. High touch surfaces (exam tables, chair arms, light switches, etc.) in patient rooms, waiting rooms, and clinic common areas were marked with an invisible, UV-tagged gel (DAZO, Ecolab) in the AM and PM to assess thoroughness of cleaning by both Environmental Services (EVS) workers and clinical care medical assistants (MA). Surveys were conducted in 8 ambulatory care clinics for five consecutive days (Monday-Friday).

Results. Results are summarized in Table 1. A total of 14,288 environmental surfaces were assessed in the 8 ambulatory clinics and the overall rate of cleaning ranged from 31% to 74%, 29% to 77%, and 0% to 22% for examination rooms, common clinic areas, and waiting rooms, respectively. The thoroughness of cleaning for EVS workers vs. Medical Assistants (MA) was 49% vs. 46% (examination rooms) and 46% vs. 43% (common clinical areas). Waiting room surfaces were cleaned at a rate of only 6.8%. While many high touch objects were regularly cleaned, some were consistently missed by both groups (eg ophthalmoscopes, keyboards, and stethoscopes).