

.00001) (Table 1). **Conclusions:** This investigation demonstrated that steam sterilization was the most effective method, followed by ETO and HPGP and, lastly, VHP.

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Presentation Type:

Poster Presentation

Comparison of Bacterial Contamination in a Children's Outpatient Clinic: General Medicine Versus Pulmonary Units

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Background: The bacteria that inhabit outpatient healthcare facilities influence patient outcomes and recovery, although the diversity and quantity of these bacterial communities is largely unknown. Whether differences in bacterial presence exist in individual medical specialty units of an outpatient clinic is also largely unknown. The purpose of this study was to compare bacterial species found in the general medicine and pulmonary units of an outpatient children's clinic associated with a teaching hospital.

Methods: In total, 6 locations (4 floor sites, counters, air ducts) were sampled in 3 rooms in the pulmonary (PUL) unit and 3 rooms in the general medicine (GM) unit on 13 days over a 6-month period. Sterile double transport swabs were utilized, transported on ice to a microbiology lab, and used to inoculate Hardy Diagnostics Cdiff Banana Broth (for *Clostridium difficile*), CHROM MRSA agar (for methicillin-resistant *Staphylococcus aureus* [MRSA]), eosin methylene blue (Levine-type, for Lac+ gram negatives [GN]), and *Pseudomonas* isolation agar (for *Pseudomonas* spp and *P. aeruginosa* [PS and PSA]). Media were incubated for 48 hours at 37°C and were scored for bacterial presence based on colonial observation. **Results:** The presence of bacteria isolated from GM and PUL units differed by species and location. Based on the percentage of positive swabs, the presence of GN was widespread in both units (Fig 1). Additionally, bacterial presence was greatest on the floors (GN ranged from 72% to 85% on floors in the 2 units), whereas counters had fewer positive swabs (GN ranged from 23% to 38% on counters), and swabs from return



Fig. 1.

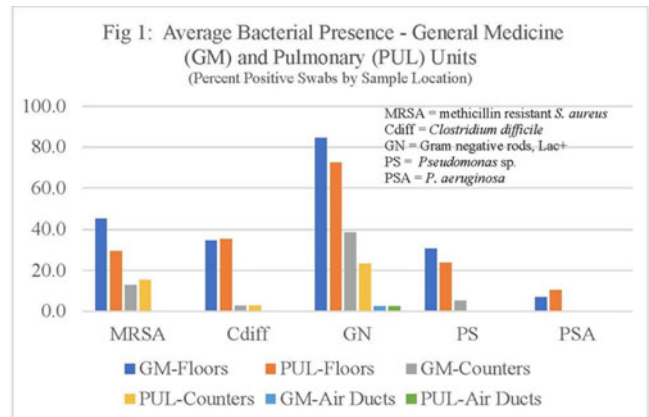


Fig. 2.

air ducts rarely led to bacterial growth. The 1 case in which swabs from the PUL unit resulted in higher levels of bacterial growth than for the GM unit was for PSA (GM, 8%; PUL, 13%). *C. difficile* detection was the same on both units (ie, 35% of floor samples showed contamination). **Conclusions:** The levels of environmental bacterial presence observed for these clinic units differed in some cases by unit and ranged from not detectable to very high levels. Detection of *C. difficile* on 35% of floor samples in both units could be problematic. Additionally, for the PUL unit, contamination of 13% of floor samples by PSA should raise concerns because many patients in this clinic have cystic fibrosis (CF). Although many CF patients are colonized by PSA, others may potentially contract an infection by this pathogen from the clinical environment. This observation supports current infection control recommendations for CF patients in outpatient settings.

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Comparison of Matched Patient Data for SSIs following Total Hip and Total Knee Arthroplasty: IPC Versus NSQIP Surveillance

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Background: In Alberta, Canada, surgical site infections (SSIs) following total hip and knee replacements (THR and TKR) are reported using the infection prevention and control (IPC) surveillance system, which surveys all THR and TKR using the NHSN definitions; and the National Surgical Quality Improvement Program (NSQIP), which uses different definitions and sampling strategies. Deterministic matching of patient data from these sources was used to examine the overlap and discrepancies in