**Setting**

The University of Pittsburgh Medical Center (UPMC) Presbyterian is a 766-bed tertiary care facility affiliated with the University of Pittsburgh Schools of the Health Sciences.

**Background**

**General:**
- Present in soil and environment
- Leading cause of antibiotic-associated diarrhea and colitis
- Hospitals major reservoirs
- ~20% to 40% of hospitalized patients become colonized
- Increasing Incidence
- 2ndary diagnosis in 67% of US hospital stays (AHQR, 2012)
- Transmitted by fecal-oral route
- Spread primarily on the hands on HCW

**Reservoir:**
- Humans
- Inanimate objects/common contaminant

**Environment:**
- CD spores
- Critical source of contamination plays a significant role in CD spread
- In one study, spores were found in 78% of the rooms occupied by patients with CDI, 59% of carriers, and 24% of CD culture negative patients

**Sporidial Options**
- Inanimate objects/common contaminant
- Humans
- IPs, EVS and Administration were instrumental

**Leading cause of antibiotic**

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**Current Study**
- B and H2O2/PA disinfectants were utilized over time across the same patient care areas.
- **Period 1 (B)**: 1/06 – 11/12 (71 months)
- **Washout (W)**: 12/12 – 7/13 (18 months) - both products used.
- **Period 2 (H2O2/PA)**: 8/13 – 4/14 (9 months)
- CD HAI rates were compared in all time periods
- Environmental Service (EVS) Surveys were conducted in P2

**H2O2/PA Implementation**
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<th>Disinfectant</th>
<th>Dates</th>
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<th>CD HAI Rate</th>
<th>Slope (m)</th>
<th>Y intercept (b)</th>
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<tr>
<td>W+B</td>
<td>A</td>
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<td>4.7</td>
<td>0.0021</td>
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**Results**

- **P2 Survey results**
- Overall perception of less damage to the environment
- Odor appreciated but diffused quickly
- Environment appeared cleaner

**Conclusions**

- **H2O2/PA products were not associated with a significant increase in CD HAIs**
- IPs, EVS and Administration were instrumental in promoting the "NEW SMELL OF CLEAN!"
- To date there has been no damage to furniture or equipment, there is no precipitate to remove and the patient care area appears cleaner.
- Staff were particularly fond of the 1 step cleaning
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