Objective: Test ability of iClean to decontaminate mobile equipment used in a closed room for 24 hours.

Step 1: Verify microbial contamination of mobile equipment results in recoverable organisms after 24 hours, without the use of the iClean.

In order to test this, an IV pump was contaminated with a 0.5 McFarland standard of both Enterococcus (non-VRE) and S. aureus (non-MRSA). The solution was applied using gloved hands. Cultures were taken immediately and grew both Enterococcus and S. aureus. The IV pump was allowed to sit undisturbed for 24 hours. After 24 hours, it was re-cultured and grew Enterococcus only after 48 hours of incubation.

Step 2: Verify organisms are no longer viable after 24 hour treatment with the iClean.

An IV pump was contaminated with a 0.5 McFarland of Enterococcus. The solution was applied using gloved hands. Cultures were taken immediately and grew Enterococcus after 24 hours of incubation.

The IV pump was placed in a closed room with the iClean and left undisturbed for 24 hours. After 24 hours, repeat cultures of both the front of the IV pump and the handle were taken and
did not grow Enterococcus. The cultures were “no growth” after 48 hours of incubation.

Conclusion: After 24 hour treatment with the iClean in a closed room, applied Enterococcus was unable to be recovered from the equipment by culture method.

Potential next step: Perform a similar experiment in a patient room upon discharge of a patient known to be infected with Enterococcus, prior to cleaning by Environmental Services. Pretreatment cultures of varies touch points in the room would be taken. iClean would be used for 24 hours. Next, cultures would be taken of the same touch points to determine if the Enterococcus is still viable for culture.

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