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## **An evaluation of patient area cleaning in 3 hospitals using a novel targeting methodology**

Carling PC, Janet Briggs J, Hylander, D, Perkins J.

**Background:** Although environmental cleaning and disinfecting practices have become a cornerstone of patient care, assessment of actual compliance with such procedures has not been reported. Using a novel methodology, we developed a means to monitor directly such activities.

**Methods:** A nontoxic target solution, which intensely fluoresces with a black light, was formulated to be inconspicuous yet readily removed by housekeeping products. Small volumes of material were confidentially applied to 12 target sites in patient rooms in 3 hospitals following terminal cleaning. The targets were reevaluated following terminal cleaning after several patients had occupied the room.

**Results:** One hundred fifty-seven rooms and 1404 targets were evaluated. In the 3 hospitals studied, only 45%, 42%, and 56% of targets were removed by routine terminal cleaning/disinfecting activities. The frequency with which various individual sites were cleaned varied widely but was similar in all hospitals.

**Conclusion:** The use of a novel target compound to evaluate housekeeping practices confirmed high rates of cleaning of traditional sites but poor cleaning of many sites that have significant potential for harboring and transmitting microbial pathogens. This methodology has the potential for being used to evaluate objectively the cleaning/disinfecting activities in various health care settings.