



“This study evaluates clinical outcomes and cost-benefit analysis before and after implementation of a global environmental cleaning algorithm on all hospital-acquired infection (HAI) rates.” Everett et al (2014).

Reference:

Everett, B.R., Sitton, J.T. and Wilson, M. (2014) Efficacy and Cost-Benefit Analysis of a Global Environmental Cleaning Algorithm on Hospital-Acquired Infection Rates. Journal of patient safety. August 26th. .

72% reduction in central line-associated bloodstream infection rate [@ivteam #ivteam](http://ctt.ec/c9S7m+)

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Abstract:

OBJECTIVE: This study evaluates clinical outcomes and cost-benefit analysis before and after implementation of a global environmental cleaning algorithm on all hospital-acquired infection (HAI) rates.

METHODS: A retrospective, quasi-experimental study design was used to review the hospital’s procedure and infection rate database for all HAIs from January 1, 2009, through June 30, 2011. We calculated the infection rates and did a cost-benefit analysis before and



after the environmental cleaning algorithm was instituted on July 19, 2010.

RESULTS: The methicillin-resistant *Staphylococcus aureus* rates per 1000 patient days decreased 63%. The central line-associated bloodstream infection rate had a 72% reduction. The catheter-associated urinary tract infection rate dropped 79%. The vancomycin-resistant *Enterococcus* rate went down 53%. The hospital-acquired *Acinetobacter baumannii* infection rate had a 65% reduction. The medical intensive care unit ventilator-associated pneumonia rate was reduced 72%. Cardiothoracic sternal wound surgical site infection (SSI) rate dropped 93%, spinal fusion SSI decreased 56%, and total knee arthroplasty SSI was eliminated with a 100% reduction. The hospital avoided an estimated 13 deaths and \$5,800,526 in costs during a 1-year period.

CONCLUSIONS: This global environmental cleaning protocol was associated with decreased HAIs and hospital costs.

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