

Employee-Led Effort Dramatically Reduces Rates of Hospital Super Bug

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A staff-driven, organizational behavior management intervention focusing on handwashing, patient charts, and effective documentation reduced the incidence of potentially deadly staph infections by 70 percent in two intensive care units over a six-month study period.

Lead investigator Dominic Cooper, an industrial/organizational psychologist at Indiana University Bloomington, said the findings demonstrate that an organizational behavior management approach can improve quality care practices in a hospital setting and dramatically reduce the incidence of methicillin-resistant *Staphylococcus aureus* (MRSA) and other hospital-acquired infections.

The study marks the first known organizational behavior management application to the problem of MRSA.

"The importance of this study cannot be over-estimated," Cooper said. "MRSA is one of the top 10 causes of death in the United States. Approximately 126,000 people a year contract MRSA while in U.S. hospitals, with incident rates increasing year-on-year. It is endemic in many hospitals and even epidemic in some."

His findings were published in the December issue of the journal *Therapeutics and Clinical Risk Management*.

The research was conducted in England, where MRSA costs the British National Health Service an estimated \$3.4 billion annually in additional hospital stays. Cooper said MRSA costs the American healthcare system an estimated \$17 billion to \$30 billion a year in extended hospital stays, additional treatment costs and infection control costs, discounting the costs of litigation. MRSA is a bacterial infection that can infect wounds and affect the respiratory system. It can cause a serious form of pneumonia, which can lead to death. Staph infections are fairly common, but some become resistant to the antibiotic methicillin, making them more difficult to treat, particularly in patients who already are sick.

Organizational behavioral management approaches have been used for roughly 30 years to improve various aspects of workplace performance. The approach applies behavioral psychology research to workplace problems, where more than 95 percent of incidents are triggered by undesired behavior. The approach relies heavily on employee buy-in and problem-solving, as well as management support. It targets a few behaviors that cause the majority of the problems. The goal is to motivate employees to do the right thing at the right time on a daily basis.

Cooper's study involved two intensive care units at a hospital in northern England. The hospital had successfully lowered its incidence of MRSA during the previous two years using traditional MRSA improvement strategies, such as revised protocols, patient screenings and intensive monitoring.

As part of the behavioral management approach, the ICU employees identified the issues to address -- hand washing, patient charts and documentation. Also, with the help of special training, the employees implemented a daily monitoring plan and created special checklists for employees regarding the three sets of behavior. Each day during the study an employee would monitor the staff for 20 minutes, evaluating their attention to the three categories of behavior. The wards employed around 140 people, with the study including doctors, nurses, healthcare assistants, administrative members of the care team, and visitors (physicians, hospital staff, family members, and friends).

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Source: Indiana University