Medical Xpress

Study reveals wide discrepancy in multidrug surveillance among intensive care units

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Screening practices for multidrug-resistant organisms (MDROs) in intensive care units (ICUs) vary widely from hospital to hospital, according to a new study published in the October issue of the *American Journal of Infection Control*, the official publication of the Association for Professionals in Infection Control and Epidemiology (APIC).

The P-NICE interdisciplinary research team from the Columbia University School of Nursing collected and analyzed survey responses from the infection preventionists (IPs) of 250 hospitals that participated in the Centers for Disease Control and Prevention's (CDC's) National Healthcare Safety Network (NHSN) in 2008. The goal of the study was to explore the relationship between hospital and infection control characteristics and the adoption, monitoring, and implementation of infection control policies aimed at MDROs.

Researchers found that participating NHSN ICUs routinely screened for methicillin-resistant *Staphylococcus aureas* (59 percent). However, other potentially deadly MDROs were screened for far less frequently: vancomycin-resistant *Enterococcus* (22 percent), gram-negative rods (12 percent), and *C. difficile* (11 percent).

Forty percent of ICUs reported a written policy to screen for any MDRO, and less than one-third (27 percent) had a policy for periodic screening following admission. One-third reported a policy requiring isolation/contact precautions pending screening, 98 percent reported requiring contact precautions for culture-positive patients, and 42

percent reported a policy for grouping colonized patients together.

The study found that state-mandated reporting, being a teaching hospital, having 201-500 beds, and being located in the western United States were factors associated with having a policy to screen all admissions for any MDRO. Periodic screening after admission was correlated with mandated reporting, teaching status, and use of an electronic surveillance system.

"There is significant variation in adoption of screening and infection control interventions aimed at MDRO and *C. difficile* in NHSN ICUs, which is congruent with data from other studies and may reflect wide variation in published recommendations or their interpretation," said Monika Pogorzelska, PhD, MPH, lead study author. "Additionally, with the current increase in mandatory reporting, IPs may be focusing on fulfilling mandates rather than implementing policies based on their experience and hospital needs. Further research is needed to provide additional insight on effective strategies and how best to promote compliance."

"Rather than being driven by legislative mandates that are not evidence based, MDRO screening should be based on a facility's risk assessment, as the epidemiology of these organisms can vary from region to region," said APIC 2012 President Michelle Farber, RN, CIC. "APIC recommends that each institution designs an HAI prevention program that is effective for their facility and needs."

More information: "Wide variation in adoption of screening and infection control interventions for multidrug-resistant organisms: A national study" by Monika Pogorzelska, Patricia W. Stone, and Elaine L. Larson appears in the American Journal of Infection Control, Volume 40, Issue 8 (October 2012).