In a report published in the November issue of Infection Control and Hospital Epidemiology, the team, composed of internationally acclaimed epidemiologists Richard P. Wenzel, M.D., Gonzalo Bearman, M.D., and Michael B. Edmond, M.D., of the VCU School of Medicine, said "hospitals get more bang for their buck with evidence-based infection control prevention."

Some states, including Pennsylvania, Illinois, California and New Jersey, are mandating universal nasal screening for methicillin-resistant Staphylococcus aureus, or MRSA, in hospitalized patients. MRSA is a strain of Staph bacteria that does not respond to penicillin and related antibiotics, but can be treated with other drugs.

"The key safety question today, since it is possible to reduce the total risk of hospital infections by half with a broad-based infection control program, is what is the incremental benefit of a component focusing on a single antibiotic-resistant pathogen?" said Wenzel.

Using epidemiological principles and focusing on deadly bloodstream infections, the team modeled a focused-screening program that was assumed to be effective in reducing MRSA rates by 50 percent and compared it to a hospital-wide program designed to reduce the rates of all infections by half.

According to Wenzel, chair of internal medicine at the VCU School of Medicine and immediate past president of the International Society for Infectious Diseases, MRSA infections cause only 14 percent of hospital infections, and investing huge resources into their control would be less effective than implementing programs that would reduce the burden of all infections by 50 percent.

Also in the model, the MRSA screening was inferior to the general infection control programs, preventing fewer infections, fewer deaths and was also less effective in reducing years of life lost from infections. The MRSA screening tests have false positives.

Published on: Thu, 30 Oct 2008