

ATTACKING SURGICAL SITE INFECTIONS ONE BUG AT A TIME

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Identification of the problem – Overview: In 2016, an average of 16 patients per month arrived to the preoperative unit with a history of Methicillin Resistant Staphylococcus Aureus (MRSA). Surgeons demonstrated variations in preoperative surveillance and treatment practices. Known MRSA patients required contact isolation throughout hospitalization, 1:1 nursing care in the post anesthesia care unit, with surgical site infection (SSI) prevention and contact isolation education. Patients expressed dissatisfaction and perceived stigma associated with isolation.

EP Question/Purpose: If the surgical patient with a history of MRSA could be cultured and treated prior to the day of surgery (DOS), could we clear the colonization resulting in less number of patients requiring isolation during their stay? The variations in practice, poor patient satisfaction and increased risk for developing a SSI were key drivers for change.

Methods/Evidence: A clinical decision map was developed using the Johns Hopkins Nursing Evidence-Based Model by an interdisciplinary team from 9 peer-reviewed journal articles with strong research content. This process for screening, treating, and removing patients from MRSA status was presented to the surgeons and nurses in the perianesthesia area. A letter was designed to notify the surgeon when a patient was found to have a history of MRSA and explained the best practice options available for treatment prior to DOS. Patients are educated during their phone interview and receive an email with “FAQ’s for MRSA” from the Center for Disease Control and encouraged to have cultures to document their current MRSA status. If there are two sets of negative results, the information is emailed to the Infection Preventionist Nurse for confirmation and removal from isolation.

Significance of Findings/Outcomes: From January thru December 2017, 18 patients have been taken off isolation prior to DOS. An additional 6 patients were removed from isolation during their recovery. Data was obtained from medical records of 231 patients who were flagged for isolation, with 115 flagged for a history of MRSA. The SSI rate from 2016 to 2017 decreased by 67%.

Implications for perianesthesia nurses and future research: Implementation of an evidence-based clinical decision map together with early surgeon communication and consistent perioperative documentation of MRSA surveillance and treatment may result in less patients requiring contact isolation on DOS.