

Category: Resident Posters

9-174 - Impact of methicillin-resistant staphylococcus aureus (MRSA) nasal swab on total duration of MRSA therapy for pneumonia patients

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Purpose: Recent literature has highlighted MRSA nasal screening as a possible antimicrobial stewardship program tool for avoiding unnecessary empiric anti-MRSA therapy for pneumonia. MRSA is an important cause of pneumonia and clinicians must determine when empiric antimicrobial therapy directed toward this pathogen is needed. Negative MRSA nasal swab has been shown to have a high negative predictive value (>95%) across different types of pneumonia. The objective of this study is to assess the impact of negative MRSA nasal swabs on the duration of anti-MRSA therapy in a community hospital setting.

Methods:

This study will be submitted to the institutional review board for approval. The clinical pharmacy surveillance platform, Vigilanz, and the electronic health record system will be used to identify patients in this study. This will be a retrospective cohort study that will assess MRSA nasal swab data from June 2018 to June 2019. The study will include patients greater than or equal to 18 years old with clinical primary diagnosis of pneumonia on anti-MRSA therapy (vancomycin, linezolid, and ceftaroline). The study will exclude vulnerable patient populations, and patients who do not meet the latter inclusion criteria. The Wilcoxon Signed Rank test will be used to measure continuous data while the Chi Square or Fisher's Exact test will be used to measure categorical data. The primary endpoint of the study will be to assess the MRSA antibiotic days of therapy between patients with negative MRSA nasal screening versus no MRSA nasal screening. The secondary endpoints will include the length of stay of the patients, cost, 30 day all cause mortality, and nephrotoxicity as defined by the Kidney Disease: Improving Global Outcomes (KDIGO) guidelines. The following data points will be collected: patient demographics, labs, imaging, antibiotic administration, length of hospital stay, length of intensive care unit stay, and microbiology.