

Category: Resident Posters

9-173 - Impact of required antibiotic stop dates and indications on length of treatment in hospitalized patients with pneumonia

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Purpose:

The CDC Core Elements of Hospital Antibiotic Stewardship Programs recommends implementing policies to support optimal antibiotic prescribing including documentation of dose, duration and indication. On January 31, 2017, the study institution implemented new physician order entry screens in the electronic health record requiring the input of indication and duration on all antibiotic orders. The objective of this study is to determine if implementation of mandatory indication and duration for antibiotic orders decreases antibiotic duration of therapy in hospitalized patients with pneumonia.

Methods:

This study was submitted to the Institutional Review Committee 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, pre-post, time-interrupted, quasi-experimental study. The pre-implementation study period will include patients from March 1st, 2015 to November 30th, 2016, and the post-implementation period will include patients from March 1st, 2017 to November 30th, 2018. The study will include adult patients with bacterial pneumonia who received antibiotic therapy for at least 48 hours. The study will exclude patients under 18 years of age, pregnant patients, incarcerated patients, patients who were administered antibiotics for indications other than pneumonia and patients with a diagnosis of only viral, fungal, or parasitic pneumonia based on International Classification of Diseases, 10th Revision (ICD-10) diagnosis codes. The primary endpoint is length of antimicrobial therapy for treatment of pneumonia. Secondary endpoints are 30-day all-cause mortality, length of hospital stay, length of intensive care unit (ICU) stay, 30 day readmission, Clostridium difficile infection, antimicrobial resistance, cost analysis, and antibiotic days of therapy for individual antibiotics. The following data points will be collected: patient demographics, laboratory, imaging, antibiotic administration, length of hospital stay, length of ICU stay, number of hospital admissions, and mechanical ventilation status.