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Title:
Evaluation of the clinical impact of a penicillin allergy pharmacy assessment on non-preferred antimicrobial use in a community hospital

Purpose: In order to advance patient outcomes, promote antibiotic stewardship, and reduce the risk of antimicrobial resistance, reported penicillin allergies need to be assessed in order to determine their clinical significance to guide medication therapy. Historically, Olathe Medical Center has assessed patient allergies upon admission. While the process determined what a patient's medication allergy was, it did not always provide details that effectively provided direction for guideline-directed therapy. The purpose of this study is to compare the number of patients having received preferred and non-preferred antibiotic therapy, with a reported penicillin allergy, pre-implementation versus post-implementation of a pharmacy-directed penicillin allergy assessment.

Methods: This was conducted as a comparison analysis utilizing a pre-implementation versus post-implementation technique. The pre-implementation period ranged from December 1, 2019 to February 29, 2020. Patients were included if they had a listed penicillin allergy and were on non-preferred therapy, including: vancomycin, clindamycin, fluoroquinolones and other non-beta lactam antibiotics. The post-implementation period ranged from December 1, 2020 to February 28, 2021. The intervention was a pharmacist's clinical assessment of a patient's penicillin allergy using a clinical tool, Vigilanz. An alert would fire for patients on non-preferred therapy with a listed penicillin allergy. The pharmacist would then assess the allergy to determine if therapy was appropriate or could be changed. The primary endpoint is the number of patients having received preferred and non-preferred antibiotic therapy with a reported penicillin allergy. This data will be analyzed using a Chi-squared test.

Results: In progress

Conclusion: In progress