GRANTEE HIGHLIGHT

VA Medical Center Memphis

Improving antimicrobial stewardship in the VA Medical Center through Beta-Lactam Allergy Assessment and Challenge (BLAAC)

VA | U.S. Department of Veterans Affairs

Beta-lactam allergic subjects, including veterans, are more likely to be treated with an alternate broad-spectrum antibiotic. Broad-spectrum antibiotics use has multiple negative consequences e.g., increased incidence of C diff, VRE, MRSA infections, adverse drug events, and treatment failure, leading to prolonged hospital stays and higher cost. Surprisingly more than 95% of patients, including veterans with reported PCN or beta-lactam allergy, ultimately tolerate PCN and related beta-lactam antibiotics. Routine assessment for PCN and beta-lactam allergies is an effective tool for optimizing the use of beta-lactam antibiotics and reducing the use of broad-spectrum antibiotics. Allergy assessment and testing would serve to promote several core elements of antimicrobial stewardship, including the simplification of antibiotic therapy, optimization of antibiotic dosing, and potential conversion from injected to oral treatment regimens.

The overall goal of the program is to utilize clinical pharmacists to perform allergy assessment and drug challenges among beta-lactam allergic veterans to optimize beta-lactam antibiotics utilization and minimize cost and multiple adverse sequelae associated with broad-spectrum antibiotics use.

The project will be implemented at the VA Medical Center, Memphis TN. The hospital serves about 206,000 veterans residing in 53 counties of eastern Arkansas, western Tennessee, and northern Mississippi. Most of the counties are part of the delta region, considered Health Professional Shortage Areas (HPSAs) by the US Department of Health and Human Services. Veteran populations are racially and ethnically diverse. Twenty-one percent (21%) of the veteran populations are minorities and most of them are African Americans (11%) and Hispanics (7%).

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The medical center allergist is responsible for the overall implementation of the project and will train the clinical pharmacist to perform beta-lactam drug allergy assessment, testing, and challenge in the inpatient settings. Clinical pharmacists are already trained and doing this in the outpatient setting. Subjects with penicillin or beta-lactam allergy will be identified by the clinical surveillance tool “TheraDoc” program integrated into the VA electronic medical record. The pharmacist will classify the subjects as low-risk vs. moderate to high-risk based on prior allergy history. Then clinical pharmacist will do a single dose amoxicillin drug challenge through standard procedure. Moderate- and high-risk patients will be referred to an outpatient beta-lactam allergy clinic for further assessment. Subjects not reacting to drug challenges will be cleared of allergy and will be eligible for further antibiotics administration.

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