Methods

Design: Retrospective chart review of EMR at LGH

Study Period: April 2018 to July 2019

Inclusion Criteria: Patients who were prescribed a β-lactam antibiotic and had a documented allergy to penicillins

Exclusion Criteria:
- Prescribed a β-lactam antibiotic prior to allergy documentation
- Allergy status changed to "cancelled" prior to β-lactam antibiotic exposure
- Prescribed a β-lactam antibiotic but never received it according to the Medication Administration Record (MAR)
- Chart Review: Performed for the first β-lactam antibiotic exposure post-documentation of an allergy to penicillins. Given the anticipated volume of eligible patients, a 25% sample was randomly selected for 30-day chart review post-exposure.

Sample Validation: To validate the 25% sample, prescribing patterns of alerted versus non-alerted β-lactam antibiotics were compared between the sample and total population. To approximate prescribing patterns in the total population, the first β-lactam antibiotic ordered for all patients with a documented allergy to penicillins was recorded. Unlike the sample population, administration was not confirmed against the MAR.

Statistical analysis: Statistical analysis performed with Microsoft Excel.