HOSPITAL-LEVEL VARIATION IN ADHERENCE TO CARDIOVASCULAR MEDICATIONS IN THE YEAR FOLLOWING ACUTE MYOCARDIAL INFARCTION: INSIGHTS FROM THE VETERAN’S AFFAIRS HEALTHCARE SYSTEM

Poster Contributions
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Background: Non-adherence to cardiovascular medications is prevalent and associated at the patient-level with increased morbidity and mortality in the year after acute coronary syndrome (ACS). Whether adherence varies at the level of the treating hospital and is associated with hospital-level morbidity and mortality is unknown. Understanding this relationship may guide system-level interventions to improve adherence and patient outcomes.

Methods: Using the VA Patient Treatment File (PTF), we identified all patients with a primary discharge diagnosis of ACS in VA hospitals from January 1, 2010-December 31, 2012. We assessed adherence to cardiac medications (i.e. statin, beta-blocker (BB), ACE inhibitor (ACE)/angiotension receptor blocker (ARB), or anti-platelet drugs) in the year after discharge. Patient-level adherence was calculated using proportion of days covered (PDC) and averaged across non-missing medication classes to the hospital. Adherence was defined as PDC > 0.8. We then assessed hospital-level variation in adherence with 1-year mortality using multivariable random effects modeling.

Results: We identified 15,700 ACS patients at 134 VA hospitals. At the hospital-level, the median percentage of adherent patients was 71.4 % (IQR = 66.7%, 76.7%). The median adherence by class of medication was: statins 71.6% (IQR = 68.0%, 75.8%), BB 76.0% (IQR = 68.9%, 81.8%), ACE/ARB 77.6% (IQR =72.9%, 82.2%), and anti-platelet drugs 74.3% (IQR = 68.2%, 81.8%). The median hospital 1-year mortality rate was 29.2% (IQR=24.3%, 33.3%). After adjusting for patient level traits and hospital size, adherence was not associated with mortality (p=0.69).

Conclusion: At the hospital level, there was variation in adherence to guideline-recommended medications in the year following ACS hospital discharge. However, variation in adherence was not significantly associated with mortality.