



Quality of Care and Outcomes Assessment

HOSPITAL CHARACTERISTICS ASSOCIATED WITH PROVIDING OPTIMAL MEDICAL THERAPY FOR PERCUTANEOUS CORONARY INTERVENTION PATIENTS: A REPORT FROM THE NCDR®

ACC Oral Contributions
McCormick Place North, N229
Sunday, March 25, 2012, Noon-12:15 p.m.

Session Title: Improving PCI Outcomes
Abstract Category: 31. Quality of Care and Outcomes Assessment
Presentation Number: 928-8

Authors: *William Borden, John Spertus, Alvin I. Mushlin, Matthew Roe, Lisa Kaltenbach, Rita Redberg, Weill Cornell Medical College, New York, NY, USA*

Background: All percutaneous coronary intervention (PCI) patients should receive optimal medical therapy (OMT) after intervention to reduce the risk of future cardiovascular events. Rates of OMT after PCI have been shown to vary. We sought to determine which hospital characteristics are associated with providing higher rates of OMT after PCI.

Methods: Using data from the CathPCI Registry®, we examined patients undergoing elective PCI for stable coronary artery disease (CAD) from January 1, 2009 to March 31, 2011. We calculated the rate of OMT in each center, defined as the percent of patients upon discharge after PCI receiving the following: aspirin and/or thienopyridine, beta blocker, statin, and ACE/ARB, if applicable. A patient was considered to be receiving OMT if they were prescribed, or had a contraindication to, each of the medications. We analyzed rates of OMT by hospital characteristics using a multivariable logistic regression model with random intercepts for Hospital Referral Regions defined by the Dartmouth Atlas of Health Care.

Results: Amongst 300,772 patient encounters, the overall rate of OMT after PCI was 47.4%. After adjusting for other hospital characteristics, higher OMT rates were found in hospitals with the following characteristics: university-owned (OR 1.13; 95% CI 1.09-1.17, $p<0.0001$), graduate medical education (GME) (OR 1.04; 95% CI 1.01-1.06, $p=0.003$), and with more board certified cardiologists per facility (OR 1.02 per increase of 10 cardiologists; 95% CI 1.01-1.03, $p<0.0001$). Lower rates of OMT were mildly associated with hospitals with more Medicare certified beds (OR 0.98 per increase of 100 beds; 95% CI 0.97-0.98, $p<0.0001$) and more Medicare patients (OR 0.97 per increase of 10%; 95% CI 0.96-0.98, $p<0.0001$).

Conclusions: University-owned and GME hospitals provide higher degrees of OMT for patients after receiving PCI. Hospitals with more Medicare patients provide lower degrees of OMT, which may reflect undocumented contraindications in elderly patients. Opportunities for improving the care of patients with stable CAD may result from identifying and sharing the best practices of hospitals that provide more comprehensive secondary prevention after PCI.