Risk Factors for Failure to Discharge Prior to " Two Midnights" in Outpatient-Designated Total Hip Arthroplasty

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INTRODUCTION: The Centers for Medicare and Medicaid Services removed total hip arthroplasty (THA) from the inpatient only (IPO) list but continues to classify admissions as inpatient if they include two midnights, complicating care if an outpatient THA requires extended hospitalization. This study evaluates risk factors of patients undergoing outpatient-designated THA with a length of stay (LOS) \geq 2 days.

METHODS:

A total of 17,063 THA procedures designated as outpatient in the National Surgical Quality Improvement Program database between 2015-2020 were stratified by LOS < 2 days (n=2,294, 13.4%) and LOS \geq 2 days (n=14,765, 86.6%). Demographics, comorbidities, and short-term complications were compared with univariate analysis. Multivariable regression analysis identified predictors of LOS \geq 2 days.

RESULTS:

Outpatients with extended LOS were older (mean 65.3 vs. 63.5 years; p<0.01), more likely to have body mass indices (BMI) > 35 (24.0 vs. 17.8 %; p<0.01), and had greater incidences of smoking (15.1% vs. 10.3%; p<0.01), diabetes (15.4% vs. 9.9%; p<0.01), COPD (4.4% vs. 2.3%; p<0.01), and hypertension (57.6% vs. 49.2%; p<0.01). Patients with LOS \geq 2 days had a higher incidence of surgical site infection (p<0.01), hospital readmission (p<0.01) and reoperation (p<0.01) over 30 days. Multivariable analysis demonstrated advanced age, female sex, African American race, Hispanic ethnicity, diabetes, smoking, and hypertension were independent risk factors for LOS \geq 2 days.

DISCUSSION AND CONCLUSION:

Despite removal from the IPO list, a subset of outpatient THA remain at risk for an extended LOS. This study informs surgeons on the relevant risk factors of extended stay, enabling early inpatient preauthorization.