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**Increased Institutional Discharge Disposition in Chronic Obstructive Pulmonary Disease Patients Undergoing Primary Total Hip Arthroplasty: A Nationwide Analysis**

**Introduction:** Total hip arthroplasty (THA) is among the most common surgical procedures in the United States. The need for institutional care following THA can significantly increase the burden on the healthcare system, leading to higher costs and resource utilization. This study sought to assess the relationship between Chronic Obstructive Pulmonary Disease (COPD) on institution discharge disposition among patients who underwent primary THA.

**Methods:** A retrospective cohort study using the National Inpatient Sample (2010–2021) assessed COPD as the primary exposure. Confounders included demographics, health status, and facility characteristics. The primary outcome was institutional discharge disposition. Univariate analyses were performed to assess differences between cohorts. Multivariable regression analysis adjusted for confounding variables was performed to identify institutional discharge disposition of patients with COPD undergoing THA.

**Results:** Our study identified 819,733 cases of primary THA that fulfilled study inclusion criteria, of which 59,845 (7.30%) had a diagnosis of COPD. Many patients in both cohorts had female sex, White race, and Medicare insurance. Most of the procedures were performed in large, urban-teaching, and private, non-profit hospitals. On multivariable regression analysis, compared to patients without COPD, those with COPD had 1.33 times higher (95% CI 1.30-1.36;  $p < 0.001$ ) odds of institutional discharge disposition.

**Conclusion:** Compared to patients without COPD, those with COPD undergoing primary THA demonstrated a significantly higher risk of requiring institutional discharge. This finding signifies the need for targeted preoperative optimization and discharge planning tailored to this high-risk population. Further research is essential to explore interventions that reduce institutional discharge rates for THA patients with COPD.