Should Medicare Remove Total Knee Arthroplasty from Its Inpatient Only List? A Total Knee Replacement Is Not a Partial Knee Replacement

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Introduction: The Centers for Medicare and Medicaid Services (CMS) have solicited public comments for the 2017 Proposed Rule to consider removing TKA from the Inpatient Only List. Concerns exist that if TKA is reclassified as an outpatient procedure like unicompartmental knee arthroplasty (UKA), CMS may no longer reimburse facilities for an inpatient stay. The purpose of this study is to determine whether Medicare-aged patients undergoing TKA were comparable to UKA patients with regard to rate of complications and length of stay.

Methods: We queried the American College of Surgeons-National Surgical Quality Improvement Program (ACS-NSQIP) database for all patients over age 65 who underwent elective TKA or UKA from 2014-2015. Demographic variables, medical comorbidities, length of stay, 30-day complication, and readmission rates were compared between UKA and TKA patients. A multivariate logistic regression analysis was then performed to identify independent risk factors for complications and hospital length of stay greater than 1 day. Statistical significance was set at p<0.05.

Results: Of the 50,487 patients in the study, there were 49,136 (97%) TKA patients and 1351 UKA patients (3%). Medicare-aged TKA patients had a longer mean length of stay (2.97 vs. 1.57 days, p<0.001), a higher complication rate (9% vs. 3%, p<0.001), and were more likely to be discharged to a rehabilitation facility (31% vs. 9%, p<0.001) than Medicare-aged UKA patients. When controlling for demographic factors and medical comorbidities, TKA patients were more likely to experience a complication (OR 2.562, 95% CI 1.904-3.447, p<0.001) and require a hospital stay greater than 1 day (OR 14.679, 95% CI 13.094-16.455, p<0.001) than UKA patients.

Conclusions: In the Medicare population, TKA patients have higher complication rates and require longer lengths of stay than UKA patients. When considering removing TKA from the Inpatient Only List, policymakers should use caution when extrapolating UKA data to TKA patients.