

Paper #2

Despite Equivalent Medicare Reimbursement, Facility Costs for Outpatient TKA Are Higher than UKA

Emanuele Chisari, MD, Michael Yayac, MD, Chad A. Krueger, MD, Jess H. Lonner, MD, P. Maxwell Courtney, MD

Introduction: With the recent removal of total knee arthroplasty (TKA) from the Centers for Medicare and Medicaid Services (CMS) Inpatient Only (IPO) list, facility reimbursement for outpatient TKA now falls under the Outpatient Prospective Payment System (OPPS) at the same rate as unicompartmental knee arthroplasty (UKA). The purpose of this study was to compare true facility costs of patients undergoing outpatient TKA with those undergoing UKA.

Methods: We reviewed a consecutive series of 2,310 outpatient TKA and 231 UKA patients from 2015-2019 performed by 31 surgeons at two hospitals within our institution. Outpatient status was determined if the hospital stay was less than two midnights. Facility costs were calculated using a time-driven activity-based costing (TDABC) algorithm. Implant costs, supplies, medications, and personnel costs were compared between outpatient TKA and UKA patients. A multivariate analysis was performed to control for confounding medical and demographic variables.

Results: When compared to patients undergoing UKA, outpatient TKA patients had higher mean implant costs (\$3,403 vs. \$3,081, $p < 0.001$) and overall hospital costs (\$6,350 vs. \$5,594, $p < 0.001$). Outpatient TKA patients had a greater length of stay (1.2 vs 0.5 days, $p < 0.001$) and greater postoperative personnel costs (\$783 vs \$166, $p < 0.001$) than UKA patients. TKA patients did have higher body mass index and older age when compared to UKA patients ($p < 0.05$). When controlling for comorbidities, outpatient TKA was associated with an \$803 (95% CI: \$641-\$966, $p < 0.001$) increase in overall facility costs compared to UKA.

Conclusions: Despite outpatient TKA now being reimbursed from CMS at the same rate as UKA, TKA has increased facility costs to the hospital. While implant costs can vary greatly by institution, CMS should consider appropriately reimbursing outpatient TKA for the additional personnel costs due to a longer length of hospital stay when compared to UKA.

Notes
