

## **Unintended BPCI Consequences Following Removal of TKA from Inpatient-Only List**

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**Introduction:** Centers for Medicare and Medicaid Services (CMS) beginning in 2013 introduced the Bundled Payments for Care Improvement (BPCI) initiative to test innovative payment and service delivery models. Early BPCI implementers report decreased length of stays (LOS), discharges to inpatient facilities, and readmission rates with overall cost savings. Removing TKA from the Medicare Inpatient Only list may change the case-mix of patients included in 2018 BPCI bundles. The purpose of the study was to compare expenditures and post-acute events of a subset of total joint arthroplasty (TJA) patients discharged after 24 hours to all TJA patients regardless of LOS.

**Methods:** CMS data of 1,729 patients who underwent TJA in 2017 were identified using Diagnosis-Related Groups 469 and 470. All 1,729 patients were compared to a subset of 1,042 patients who had a LOS>24 hours. Expenditures and post-acute events within a 90-day episode including admission to an IRF/SNF, home health (HH) and readmissions were analyzed. Statistical analyses were performed using Wilcoxon tests and Chi Square tests.

**Results:** The median expenditures were \$18,362 (IQR \$13,447-\$19,185) for all TJA patients and \$21,118 (IQR \$15,368-\$22,772) for TJA patients discharged after 24 hours ( $p<0.001$ ). The median post-acute care spent was \$5,509 (IQR \$1,685-\$5,725) for all patients and \$7,429 (IQR \$2,961-\$8,159) for patients with LOS>24 hours ( $p<0.001$ ). Patients with a LOS>24 hours had a higher rate of SNF admissions (32% vs. 20%;  $p<0.001$ ), IRF admissions (1% vs. 0%;  $p=0.25$ ), HH (67% vs. 59%;  $p<0.001$ ) and readmissions (8% vs. 6%;  $p=0.12$ ).

**Conclusions:** Implications of removing TKA from the Inpatient Only List could potentially remove up to 40% of patients from the BPCI program leading to substantially less savings of almost \$3,000 per patient, on average. Remaining bundle patients are also more likely to require HH and SNF following discharge.