

## **Evaluating Patient-Reported Outcome Measure Collection and Attainment of Substantial Clinical Benefit in Total Joint Arthroplasty Patients**

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### **INTRODUCTION:**

Patient-reported outcome measures (PROMs) are important markers of post-surgical outcomes following total joint arthroplasty (TJA). Recent policies by CMS will require hospitals to achieve at least 50% postoperative PROM collection rates in order to qualify for their full annual payment in fiscal year 2028. This study aims to: 1) quantify provider PROMs collection rates for TJA patients, 2) compare mean improvements in postoperative PROMs in TJA patients, 3) identify the proportion of TJA patients achieving substantial clinical benefit (SCB), and 4) identify factors associated with TJA patient completion of matched PROMs and achievement of SCB at 1 year.

### **METHODS:**

This retrospective cohort study included 1,493 primary total hip arthroplasty (THA) and 2,959 primary total knee arthroplasty (TKA) patients who underwent surgery at a single institution from 5/2019-12/2023. The primary outcomes were 1-year paired hip or knee PROM collection (HOOS JR and KOOS JR) and SCB achievement rates (22 for HOOS JR and 20 for KOOS JR). Secondary outcomes involved identifying factors associated with PROM completion and SCB achievement. Statistical analyses included descriptive statistics, t-tests, and logistic regression analysis with significance set at  $p < 0.05$ .

### **RESULTS:**

Approximately 61% of patients in both groups completed 1-year paired PROMs, with 94.1% of THA and 78.3% of TKA patients achieving SCB. Factors associated with higher PROMs completion included technology use (PROMs application, text reminders). For TJA patients, a lower preoperative PROM was associated with achievement of SCB at 1 year. For THA patients, a lower BMI was associated with SCB attainment. For TKA patients, male gender was significantly associated with SCB attainment.

### **DISCUSSION AND CONCLUSION:**

The study indicates compliance with CMS 50% PROM collection requirement and a high rate of SCB achievement among TJA patients at one AMC. Technological engagement and certain patient demographic factors emerged as factors associated with successful PROM collection and SCB attainment.