

# Association Between Routine Patient Reported Outcome Measure Utilization Among Total Joint Arthroplasty Surgeons and Clinically Meaningful Outcome Achievement

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## INTRODUCTION:

Patient-reported outcome measures (PROMs) measure quality of care after total joint arthroplasty (TJA), and their reporting will be mandatory by 2027 per the Center for Medicare and Medicare Services (CMS). Point-of-care use of PROMs preoperatively may help inform treatment decisions and guide clinical decision-making; however, there is a paucity of data to suggest that clinical application of PROMs influences outcomes. The purpose of this study was to evaluate the association between PROM utilization on rates of minimum clinically important difference (MCID), substantial clinical benefit (SCB), and patient acceptable symptom state (PASS) achievement among patients undergoing primary total joint arthroplasty (TJA).

## METHODS:

The study cohort included [7,441](#) consecutive patients who underwent primary TJA (4,458 THAs and 2,983 TKAs) and completed both preoperative PROMs within 180 days of their surgery date, and postoperative PROMs (HOOS JR/KOOS JR and PASS) between 270-450 days after surgery. PROM utilization among surgeons was based a survey asking "How often do you look at the preoperative PROMs scores of your patients before making a recommendation for TKA or THA?" Surgeons were classified as PROM users or non-users if they responded "[sometimes/frequently/always](#)," or "rarely/never," respectively. The primary outcome was the proportion of patients achieving MCID, SCB, or PASS on the HOOS JR/KOOS JR at one-year postoperatively. Multiple linear regression analyses were conducted adjusting for pre-operative patient age, sex, and BMI.

## RESULTS:

Among TKA patients, no significant difference in KOOS JR MCID was observed between surgeon cohorts. However, PASS and SCB attainment attainment were 40% ( $p<0.001$ ) and 28% ( $p=0.002$ ) more likely, respectively, when surgeons utilized PROMs preoperatively compared to the group that did not utilize PROMs. Among primary THA patients, there was no significant difference in HOOS JR MCID, SCB, or PASS attainment rates at one year post-operatively between surgeon cohorts that utilized PROMs and those that did not.

## DISCUSSION AND CONCLUSION:

TKA patients of surgeons who routinely take into account the preoperative PROMs are more likely to achieve a SCB and PASS compared with those whose surgeons do not routinely reference PROMs for preoperative decision-making. This relationship was not observed for THA, which may reflect the more predictable satisfaction among patients in this population.