

Achieving the CMS Defined Substantial Clinical Benefit Following Total Knee Arthroplasty (TKA) and Total Hip Arthroplasty (THA) in MARCQI

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INTRODUCTION:

The Centers for Medicare and Medicaid Services (CMS) begins a mandatory requirement to report patient-reported outcome measures (PROMs) for inpatient hip and knee arthroplasty procedures on 7/1/2024, comprising of a 0-90 day preoperative score and a 300-425 day postoperative score. The requirement urges collection of PROMs for $\geq 50\%$ of all the fee-for-service part A claims. This study analyzes the success rates of collection of the CMS-required PROMs across Michigan Arthroplasty Registry Collaborative Quality Initiative (MARCQI) participating sites. CMS also defined a threshold of "substantial clinical benefit" (SCB) is a 22-point increase in HOOS-JR score for THA and a 20-point increase in KOOS-JR score for TKA.

METHODS:

Patients were included in the study who underwent primary TKA or THA between 1/1/2022 and 6/30/2022 in the MARCQI database. The pre-operative and post-operative collection rates of HOOS JR and KOOS JR were determined at 0-90 days pre-operatively and 300-425 post-operatively. The collection rate of 'matched pairs' of patients with pre-operative and post-operative HOOS/KOOS JR were determined for each of the 81 MARCQI sites. SCB was defined as a 22-point increase in HOOS-JR and a 20-point increase in KOOS-JR.

RESULTS: During this time period there were 8,826 THA and 12,210 TKA performed. 22% of the patients who underwent primary THA or TKA during this time period have matched pairs of pre-operative and post-operative HOOS JR or KOOS JR. 91% (74/81) MARCQI sites collected $\geq 50\%$ pre-operative HOOS JR and KOOS JR. 7.4% (6/81) MARCQI sites had $\geq 50\%$ matched pairs to meet the CMS requirement and 14.8% (12/81 sites) had $\geq 33\%$ matched pairs. Of the 73 MARCQI sites that have matched pairs of pre-op and post-op HOOS JR and KOOS JR, 90% of sites would meet the CMS improvement threshold of 60% patients achieving SCB.

DISCUSSION AND CONCLUSION:

In a statewide registry that has emphasized PROM collection since 2018, as of 2022 there are only a minority of sites that are able to collect $\geq 50\%$ matched pairs to meet the CMS requirement. Of the sites that have collected matched pairs, 90% of sites would meet the CMS improvement threshold of 60% patients achieving SCB.