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**CBE ID**

3639

**Title**

Clinician-Level and Clinician Group-Level Total Hip Arthroplasty and/or Total Knee Arthroplasty (THA and TKA) Patient-Reported Outcome-Based Performance Measure (PRO-PM)

**Endorsement Status**

Endorsed

**Is Under Review**

No

**Next Maintenance Cycle**

Fall 2027

**Previous Endorsement Cycle**

Fall 2021

**Initial Endorsement**

Tue, 07/26/2022 - 00:00

**Steward**

Centers for Medicare & Medicaid Services

**1.0 New or Maintenance**

Maintenance

**1.1 Measure Structure**

Single Measure

**1.3 Electronic Clinical Quality Measure (eCQM)**

No

**1.6 Measure Description**

This patient-reported outcome-based performance measure uses the same measure specifications as the NQF-endorsed (NQF # 3559) hospital-level risk-standardized improvement rate (RSIR) following elective primary THA/TKA with the following exception: this measure attributes the outcome to a clinician or clinician group. Specifically, this measure will estimate a clinician-level and/or a clinician group-level RSIR following elective primary THA/TKA for Medicare fee-for-service (FFS) patients 65 years of age and older. Improvement will be calculated with patient-reported outcome data collected prior to and following the elective procedure. The preoperative data collection timeframe will be 90 to 0 days before surgery and the postoperative data collection timeframe will be 270 to 365 days following surgery.

**1.7 Measure Type**

Patient-reported Outcome Performance Measure (PRO-PM)

## 1.8 Level of Analysis

Clinician: Group/Practice, Clinician: Individual

### 1.14 Numerator

The numerator is the risk-standardized proportion of patients undergoing an elective primary THA or TKA who experience a 22 point or 20 point or more improvement, for hip replacement and knee replacement patients respectively between preoperative and postoperative assessments on joint-specific patient-reported outcome measures (PROMs). The patient-level improvement thresholds are an a priori, patient-defined substantial clinical benefit (SCB) threshold of improvement which is an anchor-based threshold developed using patient-report of satisfaction with change in Hip dysfunction and Osteoarthritis Outcome Score for Joint Replacement (HOOS, JR)/Knee injury and Osteoarthritis Outcome Score for Joint Replacement (KOOS JR) scores (Lyman and Lee, 2018). This measure uses the same SCB threshold developed for the hospital-level measure, which was reviewed and recommended for endorsement by the NQF Surgery Standing Committee in 2020. SCB improvement is defined as follows: - For THA patients, an increase of 22 points or more on the Hip dysfunction and Osteoarthritis Outcome Score for Joint Replacement (HOOS, JR); and- For TKA patients, an increase of 20 points or more on the Knee injury and Osteoarthritis Outcome Score for Joint Replacement (KOOS, JR). SCB thresholds were defined using published literature (Lyman and Lee, 2018) and vetted by the hospital-level THA/TKA PRO-PM development Patient Working Group, Technical Expert Panel (TEP), Technical Advisory Group, and Orthopedic Clinical Expert. References: Lyman S and Lee YY. (2018). What are the minimal and substantial improvements in the HOOS and KOOS and JR versions after total joint replacement? *Clin Orthop Relat Res*, 467(12):2432-2441.

### 1.15 Denominator

The cohort (target population) includes Medicare fee-for-service (FFS) patients 65 years of age and older undergoing elective primary THA/TKA procedures. The cohort does not include patients with hip fractures, pelvic fractures, revision THAs/TKAs, and bone metastases. The rationale for each is outlined below: Fracture of the pelvis or lower limbs coded in the principal or secondary discharge diagnosis fields on the index admission claim (Note: Periprosthetic fractures must be additionally coded as POA in order to disqualify a THA/TKA from cohort inclusion, unless exempt from POA reporting.) Rationale: Patients with fractures have higher mortality, complication, and readmission rates, and the procedures are typically not elective. A concurrent partial hip or knee arthroplasty procedure Rationale: Partial arthroplasty procedures are primarily done for hip and knee fractures and are typically performed on patients who are older, frailer, and have more comorbid conditions. A concurrent revision, resurfacing, or implanted device/prosthesis removal procedure Rationale: Revision procedures may be performed at a disproportionately small number of hospitals and are associated with higher mortality, complication, and readmission rates. Resurfacing procedures are a different type of procedure involving only the joint's articular surface and are typically performed on younger, healthier patients. Elective procedures performed on patients undergoing removal of implanted device/prostheses procedures may be more complicated. Malignant neoplasm of the pelvis, sacrum, coccyx, lower limbs, or bone/bone marrow or a disseminated malignant neoplasm coded in the principal discharge diagnosis field on the index admission claim Rationale: Patients with these malignant neoplasms are at increased risk

for complication, and the procedure may not be elective.

## 1.20 Types of Data Sources

Claims Data, Other

### 6.1.2 Current or Planned Use(s)

Public Reporting, Payment Program

### 6.1.3 Current Use(s)

Not in use

## Exclusions

The measure has three denominator exclusions, listed below.

### 1. Staged Procedures

Patients with staged procedures, defined as more than one elective primary THA or TKA performed on the same patient during distinct hospitalizations during the measurement period, are excluded. All THA/TKA procedures for patients with staged procedures during the measurement period are removed from the measure cohort.

### 2. Patients who die within 270 days of the procedure

All patients who expired within 9 months (270 days) of the THA/TKA procedure are removed from the measure cohort.

### 3. Patients who leave against medical advice.

Finally, patients who leave their index admission against medical advice are removed from the measure cohort.

## Measure Disclaimer

N/A

## Planned Use

Payment Program, Public Reporting

## Risk Adjustment

Statistical risk model

## Target Population

Elderly (Age  $\geq$  65)

## Steward Organization

Centers for Medicare & Medicaid Services

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