Total Knee Replacement
Measure #5: Identification of Implanted Prosthesis in Operative Report

Measure Description

Percentage of patients undergoing total knee replacement whose operative report identifies the prosthetic implant specifications including the prosthetic implant manufacturer, the brand name of the prosthetic implant, and the size of the prosthetic implant

Measure Components

Numerator Statement	Patients whose operative report identifies the prosthetic implant specifications including the prosthetic implant manufacturer, the brand name of the prosthetic implant, and the size of the prosthetic implant
Denominator Statement	All patients undergoing a total knee replacement
Denominator Exceptions	None
Supporting Guideline & Other References	The following evidence statements are quoted verbatim from the referenced clinical guidelines: Effective tracking of devices from the manufacturing facility, through the distributor network (including distributors, retailers, rental firms and other commercial enterprises, device user facilities, and licensed practitioners) and ultimately, to the patient is necessary for the effectiveness of remedies prescribed by the act, such as patient notification (section 518 (a) of the act) or device recall (section 518 (e) of the act). 21 CFR 821.1 (b)[25]

Measure Importance

Relationship to desired outcome	It is important to capture the type of prosthesis used. The rates of prosthesis failure which will require a revision increases from 10 percent at 10 years to approximately 20 percent at 20 years following surgery.[18] The FDA requires appropriate tracking of the device but this information may not be readily available to the surgeon performing the revision. The surgeon performing the revision needs to be able to identify the prosthesis and size of the prosthesis that were used in the initial surgery, to determine if a complete revision is required or if a partial revision could be performed. The initial operative report should contain the necessary information which will ultimately help the future treating physician who performs the revision surgery.
Opportunity for Improvement	The SooHoo et al study used a quality indicator that included 4 elements that should be documented in an operative note. The elements included knee stability, range of motion, patellar tracking, and the implants used in the procedure. The variation between the 3 hospitals where the total knee replacement operative notes included the 4 important elements, ranged from 26 to 59 percent.[13]
IOM Domains of Health Care Quality Addressed	• Safe • Effective • Efficient
Exception Justification	This measure has no exceptions.

Harmonization with Existing Measures	Harmonization with existing measures was not applicable to this measure.

Measure Designation

Measure purpose	• Quality improvement • Accountability
Type of measure	• Process
Level of Measurement	• Individual practitioner
Care setting	• Hospital care
Data source	• Electronic health record (EHR) data • Administrative Data/Claims (inpatient or outpatient claims) • Administrative Data/Claims Expanded (multiple-source) • Paper medical record • Registry data

Technical Specifications: Administrative/Claims Data

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

The specifications listed below are those needed for performance calculation. Additional CPT II codes may be required depending on how measures are implemented. (Reporting vs. Performance)

Denominator (Eligible Population)	All patients undergoing a total knee replacement CPT Service Code: 27446, 27447, 27438, or 27442
Numerator	Patients whose operative report identifies the prosthetic implant specifications including the prosthetic implant manufacturer, the brand name of the prosthetic implant, and the size of the prosthetic implant Report the CPT Category II code: XXXXF: *Patients whose operative report identifies the prosthetic implant specifications* in development for this numerator