Quality ID # 470 (NQF 2653): Average Change In Functional Status Following Total Knee Replacement Surgery
– National Quality Strategy Domain: Person and Caregiver-Centered Experience and Outcomes
– Meaningful Measure Area: Patient Reported Functional Outcomes

2019 COLLECTION TYPE:
MIPS CLINICAL QUALITY MEASURES (CQMS)

MEASURE TYPE:
Patient Reported Outcome – High Priority

DESCRIPTION:
The average change (preoperative to postoperative) in functional status using the Oxford Knee Score (OKS) for patients age 18 and older who had a primary total knee replacement

INSTRUCTIONS:
This measure is to be submitted each time a patient undergoes a total knee replacement during the denominator identification period. This measure may be submitted by Merit-based Incentive Payment System (MIPS) eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding. Unique to this measure is the Minimum Process of Care Performance Threshold Requirement. This measure based threshold requires that at least 50% of the denominator eligible patients must have both a preoperative and postoperative functional status assessment completed. Therefore, if the performance rate for Submission Criteria One is below 50%, the MIPS eligible clinician would not be able to meet the denominator of the Submission Criteria Two and this measure CANNOT BE SUBMITTED. CMS anticipates that the sum of change for the Submission Criteria Two will be calculated using 100% of procedures that met performance in Submission Criteria One.

NOTE: The standard program requirement of Data Completeness for all denominator eligible procedures (those receiving total knee replacement procedure) must be submitted.

This measure contains elements of a proportion or rate and a simple average of the change in functional status preoperatively to postoperatively among patients having received a total knee replacement procedure. The measure intent is that MIPS eligible clinicians will submit all denominator eligible procedures for performance calculation.

A preoperative and postoperative functional status assessment using the Oxford Knee Score (OKS) a patient reported outcome tool within three months preoperatively AND at one year (9 to 15 months) postoperatively for at least 50% of denominator eligible patients receiving a total knee replacement procedure is a denominator inclusion criterion to be eligible to submit this performance measure - the average change in preoperative to postoperative functional status (Submission Criteria Two). A MIPS eligible clinician must submit 100% of the population identified with a preoperative and postoperative functional status assessment (Performance Met Criteria for Submission Criteria One) of this measure for Submission Criteria Two.

Measure Submission Type:
Measure data may be submitted by individual MIPS eligible clinicians, groups, or third party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality-data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.
THERE ARE TWO SUBMISSION CRITERIA FOR THIS MEASURE:

1) Patients 18 years of age or older as of October 1 of the denominator identification period who had a primary total knee replacement procedure performed during the denominator identification period AND

2) Average change (preoperative to one year postoperative) in functional status for all eligible patients 18 years of age or older as of October 1 of the denominator identification period who had a primary total knee replacement procedure performed during the denominator identification period and whose functional status was measured by the Oxford Knee Score (OKS) patient reported outcome tool within three months preoperatively and at one year (9 to 15 months) postoperatively

SUBMISSION CRITERIA 1: PATIENTS 18 YEARS OF AGE OR OLDER AS OF OCTOBER 1 OF THE DENOMINATOR IDENTIFICATION PERIOD WHO HAD A PRIMARY TOTAL KNEE REPLACEMENT PROCEDURE PERFORMED DURING THE DENOMINATOR IDENTIFICATION PERIOD

DENOMINATOR (SUBMISSION CRITERIA 1):
Patients 18 years of age or older as of October 1 of the denominator identification period who had a total knee replacement procedure performed during the denominator identification period

Definition:
Denominator Identification Period - The twelve month period in which eligible patients have a denominator eligible procedure. This allows for enough time for a follow-up assessment to occur during the twelve month performance period. The denominator identification period includes dates of procedure 10/1/2017 to 9/30/2018.

Denominator Criteria (Eligible Cases) 1:
Patients aged ≥ 18 years by October 1 of the Denominator Identification Period AND
Patient procedure during performance period (CPT): 27445, 27446, 27447

NUMERATOR (SUBMISSION CRITERIA 1):
All eligible patients whose functional status was measured by the Oxford Knee Score (OKS) patient reported outcome tool within three months preoperatively AND at one year (9 to 15 months) postoperatively

Definition:
Denominator Identification Period - The twelve month period in which eligible patients have a denominator eligible procedure. This allows for enough time for a follow-up assessment to occur during the twelve month performance period. The denominator identification period includes dates of procedure 10/1/2017 to 9/30/2018.

Measure Assessment Period (Performance Period) - The period of time following the procedure date that is in which a postoperative Oxford Knee Score (OKS) functional status score can be obtained.
Preoperative Assessment Oxford Knee Score (OKS) - A preoperative Oxford Knee Score (OKS) functional assessment score can be obtained from the patient any time up to three months preoperatively, inclusive of the date of the procedure. Assessment scores obtained via a telephone screening or more than three months before the procedure will not be used for measure calculation.
Postoperative Assessment Oxford Knee Score (OKS) - A postoperative Oxford Knee Score (OKS) functional assessment score can be obtained from the patient one year (9 to 15 months) after the date of procedure. Assessment scores obtained via a telephone screening or prior to nine months and after fifteen months postoperatively will not be used for measure calculation.
Oxford Knee Score (OKS) patient Reported Outcome Tool - The Oxford Knee Score (OKS) is a 12-item patient-reported outcome tool PRO specifically designed and developed to assess function and pain after total knee replacement (TKR) surgery (arthroplasty). It is short, reproducible, valid and sensitive to clinically
important changes. The OKS was designed to be completed by the patient thus minimizing potential bias unwittingly introduced by surgeons when assessing the results themselves. The PRO was designed and developed by researchers at Oxford University Innovation and the University of Oxford. A copy of the tool can be obtained below or at the following link: https://innovation.ox.ac.uk/outcome-measures/oxford-knee-score-oks/. Indicate that this tool is for use in a CMS program and licensing fees should be waived.
https://innovation.ox.ac.uk/clinical-outcomes/information-for-cms-members/

**NUMERATOR NOTE:** In the event that a patient’s functional status is measured by the Oxford Knee Score (OKS) within three months preoperatively OR at one year (9 to 15 months) postoperatively, but not for both the preoperative and postoperative functional status measurements, then submit Performance Not Met M1046. In the event that a patient’s functional measurement status is unknown OR was obtained via a telephone screening OR was measured by the Oxford Knee Score (OKS) greater than three months preoperatively OR more than one year (9 to 15 months) postoperatively, then submit Performance Not Met M1046. In the event that a patient’s functional status is measured using a different patient reported functional status assessment tool for either the preoperative or postoperative functional status assessment measurement, then submit Performance Not Met M1046.

### Numerator Options:

**Performance Met:** Functional status measurement with score was obtained utilizing the Oxford Knee Score (OKS) patient reported outcome tool within three months preoperatively AND at one year (9 to 15 months) postoperatively (M1045)

**Performance Not Met:** Functional status measurement with score was not obtained utilizing the Oxford Knee Score (OKS) patient reported outcome tool within three months preoperatively AND at one year (9 to 15 months) postoperatively (M1046)

**SUBMISSION CRITERIA 2: AVERAGE CHANGE (PREOPERATIVE TO ONE YEAR POSTOPERATIVE) IN FUNCTIONAL STATUS FOR ALL ELIGIBLE PATIENTS 18 YEARS OF AGE OR OLDER AS OF OCTOBER 1 OF THE DENOMINATOR IDENTIFICATION PERIOD WHO HAD A PRIMARY TOTAL KNEE REPLACEMENT PROCEDURE PERFORMED DURING THE DENOMINATOR IDENTIFICATION PERIOD AND WHOSE FUNCTIONAL STATUS WAS MEASURED BY THE OXFORD KNEE SCORE (OKS) PATIENT REPORTED OUTCOME TOOL WITHIN THREE MONTHS PREOPERATIVELY AND AT ONE YEAR (9 TO 15 MONTHS) POSTOPERATIVELY**

**DENOMINATOR (SUBMISSION CRITERIA 2):**
Patients 18 years of age or older as of October 1 of the denominator identification period who had a total knee replacement procedure performed during the denominator identification period and whose functional status was measured by the Oxford Knee Score (OKS) patient reported outcome tool within three months preoperatively AND at one year (9 to 15 months) postoperatively

**Definition:**
- **Denominator Identification Period** - The twelve month period in which eligible patients have a denominator eligible procedure. This allows for enough time for a follow-up assessment to occur during the twelve month performance period. The denominator identification period includes dates of procedure 10/1/2017 to 9/30/2018
- **Measure Assessment Period (Performance Period)** - The period of time following the procedure date that is in which a postoperative Oxford Knee Score (OKS) functional status score can be obtained.
- **Preoperative Assessment Oxford Knee Score (OKS)** - A preoperative Oxford Knee Score (OKS) functional assessment score can be obtained from the patient any time up to three months preoperatively,
inclusive of the date of the procedure. Assessment scores obtained via a telephone screening or more than three months before the procedure will not be used for measure calculation.

Postoperative Assessment Oxford Knee Score (OKS) - A postoperative Oxford Knee Score (OKS) functional assessment score can be obtained from the patient one year (9 to 15 months) after the date of procedure. Assessment scores obtained via a telephone screening or prior to nine months and after fifteen months postoperatively will not be used for measure calculation.

Oxford Knee Score (OKS) patient Reported Outcome Tool - The Oxford Knee Score (OKS) is a 12-item patient-reported outcome tool PRO specifically designed and developed to assess function and pain after total knee replacement (TKR) surgery (arthroplasty). It is short, reproducible, valid and sensitive to clinically important changes. The OKS was designed to be completed by the patient thus minimizing potential bias unwittingly introduced by surgeons when assessing the results themselves. The PRO was designed and developed by researchers at Oxford University Innovation and the University of Oxford. A copy of the tool can be obtained below or at the following link: https://innovation.ox.ac.uk/outcome-measures/oxford-knee-score-oks/. Indicate that this tool is for use in a CMS program and licensing fees should be waived. https://innovation.ox.ac.uk/clinical-outcomes/information-for-cms-members/

Denominator Criteria (Eligible Cases) 2:
Minimum Process of Care Threshold Requirement: MIPS eligible clinician has at least 50% of all eligible patients receiving primary total knee replacement procedure that have a functional status measured with the Oxford Knee Score (OKS) patient reported outcome tool within 3 months preoperatively AND at 1 year (9 to 15 months) postoperatively AND Functional status was measured by the Oxford Knee Score (OKS) patient reported outcome tool within three months preoperatively AND at one year (9 to 15 months) postoperatively: M1047

NUMERATOR (SUBMISSION CRITERIA 2):
The average change (preoperative to one year postoperative) in functional status for all eligible patients

NUMERATOR NOTE: For the purposes of submitting this measure Data Completeness has been determined in Submission Criteria One. The rate calculated for Submission Criteria Two of this measure is calculated using the subset of patients identified in the Performance Met Numerator Option of Submission Criteria One.

RATIONALE:
Annually there are over 500,000 total knee replacement (TKR) procedures performed in the US. It is projected that by 2030 the volume of this procedure will increase to over 3.48 million per year due to the aging baby-boomers, increased obesity and indications for TKR that extend to both younger as well as older patients (AAOS 2006 Kurtz). From 2000 to 2006, the Medicare TKR rate overall in the United States increased 58%, from 5.5 to 8.7 per 1000 and TKR revisions currently represent 8.2% of all Medicare dollars spent (Ong 2006). It is estimated that annual hospital charges for TKR will approach 40.8 billion dollars annually by 2015 (Kaiser-Permanente 2007).

For the Minnesota Medicare population in 2006, 9,856 patients underwent a primary hip or knee replacement procedure (DRG 544) and 1,174 patients had a hip or knee revision (DRG 545). Nationally, for DRG 544 the average charge per hospitalization was $38,447 with an average payment of $11,916 (Value driven health care 2008 CMS).

This PRO measure was developed with a focus on functional status from a patient’s perspective to address and understand current gaps in care for patients undergoing total knee replacement surgery. Other measures have been developed that assess the ability to administer PRO tools pre and post-operatively, but no measures exist for this population or attempt to reflect the change in score demonstrating the functional status outcome that could be expected for patients undergoing this procedure.

CLINICAL RECOMMENDATION STATEMENTS:
The American Association of Hip and Knee Surgeons (AAHKS) Total Knee Replacement Performance Measurement Set 2013 indicates a focus on collecting patient risk factors and implementing process measures with a future focus on outcome measures.

**MEASURE CALCULATION EXAMPLE:**

<table>
<thead>
<tr>
<th>Patient</th>
<th>Pre-op OXFORD KNEE SCORE (OKS) PATIENT REPORTED OUTCOME TOOL</th>
<th>Post-op OXFORD KNEE SCORE (OKS) PATIENT REPORTED OUTCOME TOOL</th>
<th>(Pre-op minus Post-op)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient A</td>
<td>33</td>
<td>45</td>
<td>12</td>
</tr>
<tr>
<td>Patient B</td>
<td>17</td>
<td>39</td>
<td>22</td>
</tr>
<tr>
<td>Patient C</td>
<td>16</td>
<td>31</td>
<td>15</td>
</tr>
<tr>
<td>Patient D</td>
<td>23</td>
<td>40</td>
<td>17</td>
</tr>
<tr>
<td>Patient E</td>
<td>34</td>
<td>42</td>
<td>8</td>
</tr>
<tr>
<td>Patient F</td>
<td>10</td>
<td>42</td>
<td>32</td>
</tr>
<tr>
<td>Patient G</td>
<td>14</td>
<td>44</td>
<td>30</td>
</tr>
<tr>
<td>Patient H</td>
<td>32</td>
<td>44</td>
<td>12</td>
</tr>
<tr>
<td>Patient I</td>
<td>19</td>
<td>45</td>
<td>26</td>
</tr>
<tr>
<td>Patient J</td>
<td>26</td>
<td>19</td>
<td>-7</td>
</tr>
<tr>
<td>Patient K</td>
<td>24</td>
<td>43</td>
<td>19</td>
</tr>
<tr>
<td>Patient L</td>
<td>29</td>
<td>34</td>
<td>5</td>
</tr>
<tr>
<td>Patient M</td>
<td>23</td>
<td>39</td>
<td>16</td>
</tr>
<tr>
<td>Patient N</td>
<td>29</td>
<td>45</td>
<td>16</td>
</tr>
<tr>
<td>Patient O</td>
<td>29</td>
<td>45</td>
<td>16</td>
</tr>
<tr>
<td>Patient P</td>
<td>34</td>
<td>41</td>
<td>7</td>
</tr>
<tr>
<td>Patient Q</td>
<td>11</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Patient R</td>
<td>13</td>
<td>39</td>
<td>26</td>
</tr>
<tr>
<td>Patient S</td>
<td>18</td>
<td>45</td>
<td>27</td>
</tr>
</tbody>
</table>

**AVERAGE PERCENT CHANGE IN OXFORD KNEE SCORE (OKS) PATIENT REPORTED OUTCOME TOOL POINTS ON A 48 POINT SCALE**

**15.9**

**COPYRIGHT:**
© MN Community Measurement, 2018. All rights reserved.
MEASURE TOOL:
Oxford Knee Score (OKS) patient Reported Outcome Tool:

PROBLEMS WITH YOUR KNEE

Check (✓) one box for every question.

1. During the past 4 weeks...
   How would you describe the pain you usually have from your knee?
   None          Very mild          Mild          Moderate          Severe

2. During the past 4 weeks...
   Have you had any trouble with washing and drying yourself (all over) because of your knee?
   No trouble at all          Very little trouble          Moderate trouble          Extreme difficulty          Impossible to do

3. During the past 4 weeks...
   Have you had any trouble getting in and out of a car or using public transportation because of your knee? (whichever you would tend to use)
   No trouble at all          Very little trouble          Moderate trouble          Extreme difficulty          Impossible to do

4. During the past 4 weeks...
   For how long have you been able to walk before pain from your knee becomes severe? (with or without a cane)
   No pain/more than 30 minutes          16 to 30 minutes          5 to 15 minutes          Around the house only          Not at all/severe pain when walking

5. During the past 4 weeks...
   After a meal (sitting at a table), how painful has it been for you to stand up from a chair because of your knee?
   Not at all painful          Slightly painful          Moderately painful          Very painful          Unbearable

6. During the past 4 weeks...
   Have you been limping when walking because of your knee?
   Rarely/never          Sometimes, or just at first          Often, not just at first          Most of the time          All of the time

© Oxford University Innovation Limited, 1998. All rights reserved. Oxford Knee Score – English for the United States.
7. **During the past 4 weeks...**  
**Could** you kneel down and get up again afterwards?  

<table>
<thead>
<tr>
<th>Yes, easily</th>
<th>With little difficulty</th>
<th>With moderate difficulty</th>
<th>With extreme difficulty</th>
<th>No, impossible</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. **During the past 4 weeks...**  
Have you been troubled by **pain from your knee** in bed at night?  

<table>
<thead>
<tr>
<th>No nights</th>
<th>Only 1 or 2 nights</th>
<th>Some nights</th>
<th>Most nights</th>
<th>Every night</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. **During the past 4 weeks...**  
How much has **pain from your knee** interfered with your usual work (including housework)?  

<table>
<thead>
<tr>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Greatly</th>
<th>Totally</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. **During the past 4 weeks...**  
Have you felt that your knee might suddenly “give out” or let you down?  

<table>
<thead>
<tr>
<th>Rarely/never</th>
<th>Sometimes, or just at first</th>
<th>Often, not just at first</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. **During the past 4 weeks...**  
**Could** you do the grocery shopping **on your own**?  

<table>
<thead>
<tr>
<th>Yes, easily</th>
<th>With little difficulty</th>
<th>With moderate difficulty</th>
<th>With extreme difficulty</th>
<th>No, impossible</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. **During the past 4 weeks...**  
**Could** you walk down one flight of stairs?  

<table>
<thead>
<tr>
<th>Yes, easily</th>
<th>With little difficulty</th>
<th>With moderate difficulty</th>
<th>With extreme difficulty</th>
<th>No, impossible</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Finally, please check that you have answered each question.  

Thank you very much.
2019 Clinical Quality Measure Flow for Quality ID #470 NOF #2653: Average Change In Functional Status Following Total Knee Replacement Surgery Submission Criteria One

**Multiple Performance Rates**

**Denominator**
- Start
- Patient Age ≥ 18 Years by October 1 of the Denominator Identification Period
- No
- Not included in Eligible Population/Denominator
- Yes
- Procedure as listed in Denominator*
  - (10/1/2017 thru 09/30/2018)
- No
- Yes
- Include in Eligible Population/Denominator (10 patients)

**Numerator**
- Functional Status Measurement With Score Was Obtained Utilizing the Oxford Knee Score (OKS) Patient Reported Outcome Tool Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively
- Yes
- Data Completeness Met + Performance Met (OXXX or equivalent (9 patients)
- No
- Functional Status Measurement With Score Was Not Obtained Utilizing the Oxford Knee Score (OKS) Patient Reported Outcome Tool Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively
- Yes
- Data Completeness Met + Performance met (OXXX or equivalent (1 patient)
- No
- Data Completeness Not Met Quality Data Code or equivalent not submitted (1 patient)

**SAMPLE CALCULATIONS:**

<table>
<thead>
<tr>
<th>Data Completeness Calculation</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Met (≥ 9 patients) + Performance Not Met (≥ 1 patient)</td>
<td>9 patients</td>
</tr>
<tr>
<td>Eligible Population / Denominator (d=10 patients)</td>
<td>10 patients</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance Rate Calculation</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Met (≥ 9 patients)</td>
<td>9 patients</td>
</tr>
<tr>
<td>Data Completeness Numerator (9 patients)</td>
<td>9 patients</td>
</tr>
</tbody>
</table>

*See the posted Measure Specification for specific coding and instructions to submit this measure.

NOTE: Submission Frequency, Outcome

CPT only copyright 2018 American Medical Association. All rights reserved.
The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specifications.
2019 Clinical Quality Measure Flow for Quality ID #470 NQF #2653:
Average Change In Functional Status Following Total Knee Replacement Surgery
Submission Criteria Two

Multiple Performance Rates

Start

Denominator

Minimum Process of Care Threshold Requirement
Eligible Clinician Has at Least 50% of All Eligible Patients Receiving Primary Total Knee Replacement Procedure That Have a Functional Status Measured With the Oxford Knee Score (OKS) Patient Reported Outcome Tool Within Three Months Preoperatively AND at 1 Year (9 to 15 Months) Postoperatively*.

STOP Eligible Clinician Not Eligible to Submit Performance for Submission Criteria Two

The Average Change (Preoperative to One Year (9 to 15 Months) Postoperative) in Functional Status for All Eligible Patients

Yes

Functional Status Was Measured by the Oxford Knee Score (OKS) Patient Reported Outcome Tool Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively***

No

The Average Change In Functional Status Following Total Knee Replacement Surgery Sample Calculation

<table>
<thead>
<tr>
<th>Patient</th>
<th>Change in Functional Status Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient 1</td>
<td>12</td>
</tr>
<tr>
<td>Patient 2</td>
<td>22</td>
</tr>
<tr>
<td>Patient 3</td>
<td>15</td>
</tr>
<tr>
<td>Patient 4</td>
<td>17</td>
</tr>
<tr>
<td>Patient 5</td>
<td>3</td>
</tr>
<tr>
<td>Patient 6</td>
<td>30</td>
</tr>
<tr>
<td>Patient 7</td>
<td>-7</td>
</tr>
</tbody>
</table>

Average Change of Functional Status=

\[
\frac{\text{Total Sum of Scores from Patient Sample}}{\text{Total Number of Scores from Patient Sample}} = 13.1 \text{ points}
\]

NOTE: Submission Frequency: Outcome

*See the posted Measure Specification for specific coding and instructions to submit this measure.

**The denominator for submission criteria two is the performance met population calculated for submission criterion one. Eligible Clinician Has At Least 50% of All Eligible Patients Receiving Primary Total Knee Replacement Procedure That Have A Functional Status Measured With The Oxford Knee Score (OKS) Patient Reported Outcome Tool Within Three Months Preoperatively AND at 1 Year (9 To 15 Months) Postoperatively is a denominator inclusion criterion for submission criterion two of the measure.

© Only copyright 2019 American Medical Association. All rights reserved.

The measure definitions were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.
2019 Clinical Quality Measure Flow Narrative for Quality ID #470 NQF# 2643:
Average Change in Functional Status Following Total Knee Replacement Surgery

Please refer to the specific section of the specification to identify the denominator and numerator information for use in submitting this Individual Specification.

Submission Criteria One

1. Start with Denominator

2. Check Patient Age:
   a. If Patient Age is greater than or equal to 18 Years by October 1 of the Denominator Identification Period equals No, do not include in Eligible Population. Stop Processing.
   b. If Patient Age is greater than or equal to 18 Years by October 1 of the Denominator Identification Period equals Yes during the Measurement Period, proceed to check Procedure Performed.

3. Check Procedure Performed:
   a. If Procedure as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Procedure as Listed in the Denominator equals Yes, include in Eligible Population.

4. Denominator Population:
   a. Denominator Population is all Eligible Patients in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 10 patients in the Sample Calculation.

5. Start Numerator

6. Check Functional Status Measurement With Score Was Obtained Utilizing the Oxford Knee Score (OKS) Patient Reported Outcome Tool Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively:
   a. If Functional Status Measurement With Score Was Obtained Utilizing the Oxford Knee Score (OKS) Patient Reported Outcome Tool Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively equals Yes, include in Data Completeness and Performance Met. Data Completeness and Performance Met letter is represented in Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 8 patients in the Sample Calculation.
   b. If Functional Status Measurement With Score Was Obtained Utilizing the Oxford Knee Score (OKS) Patient Reported Outcome Tool Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively equals No, proceed to check Functional Status Measurement With Score Was Not Obtained Utilizing the Oxford Knee Score (OKS) Patient Reported Outcome Tool Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively.

7. Check Functional Status Measurement With Score Was Not Obtained Utilizing the Oxford Knee Score (OKS) Patient Reported Outcome Tool Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively:
a. If Functional Status Measurement With Score Was Not Obtained Utilizing the Oxford Knee Score (OKS) Patient Reported Outcome Tool Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively equals Yes, include in Data Completeness Met and Performance Not Met.

b. Data Completeness Met and Performance Not Met letter is represented in Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 1 patient in the Sample Calculation.

c. If Functional Status Measurement With Score Was Not Obtained Utilizing the Oxford Knee Score (OKS) Patient Reported Outcome Tool Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively equals No, proceed to check Data Completeness Not Met.

8. Check Data Completeness Not Met:

a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 1 patient has been subtracted from the Data Completeness Numerator in the Sample Calculation.

<table>
<thead>
<tr>
<th>SAMPLE CALCULATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Completeness</strong></td>
</tr>
<tr>
<td>Performance Met (a = 8 patients)</td>
</tr>
<tr>
<td>= 8 patients</td>
</tr>
<tr>
<td>= 80.00%</td>
</tr>
<tr>
<td><strong>Performance Rate</strong></td>
</tr>
<tr>
<td>Performance Met (a = 8 patients)</td>
</tr>
<tr>
<td>= 8 patients</td>
</tr>
<tr>
<td>= 90.99%</td>
</tr>
</tbody>
</table>
2019 Clinical Quality Measure Flow Narrative for Quality ID #470 NQF# 2643:
Average Change in Functional Status Following Total Knee Replacement Surgery

Please refer to the specific section of the specification to identify the denominator and numerator information for use in submitting this Individual Specification.

Submission Criteria Two

1. Check Minimum Process of Care Threshold Requirement:
   a. If Minimum Process of Care Threshold Requirement: MIPS Eligible Clinician Has at Least 50% of All Eligible Patients Receiving Primary Total Knee Replacement Procedure That Have a Functional Status Measured With the Oxford Knee Score (OKS) Patient Reported Outcome Tool Within 3 Months Preoperatively AND at 1 Year (9 to 15 Months) Postoperatively equals Yes, proceed to check Functional Status Was Measured by the Oxford Knee Score (OKS) Patient Reported Outcome Too Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively.
   b. If Minimum Process of Care Threshold Requirement: MIPS Eligible Clinician Has at Least 50% of All Eligible Patients Receiving Primary Total Knee Replacement Procedure That Have a Functional Status Measured With the Oxford Knee Score (OKS) Patient Reported Outcome Tool Within 3 Months Preoperatively AND at 1 Year (9 to 15 Months) Postoperatively equals No, MIPS Eligible Clinician may not submit for Submission Criteria Two. Stop Processing.

2. Check Functional Status Was Measured by the Oxford Knee Score (OKS) Patient Reported Outcome Too Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively:
   a. If Functional Status Was Measured by the Oxford Knee Score (OKS) Patient Reported Outcome Too Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively equals Yes, proceed to Calculate the Average Change.
   b. If Functional Status Was Measured by the Oxford Knee Score (OKS) Patient Reported Outcome Too Within Three Months Preoperatively AND at One Year (9 to 15 Months) Postoperatively equals No, MIPS Eligible Clinician may not submit for Submission Criteria Two. Stop Processing.

3. Start Numerator

4. Start Calculating the Average Change
   a. The Average Change (Preoperative to One Year (9 to 15 Months) Postoperative) in Functional Status for All Eligible Patients.
   b. Average all of the change values; overall result represents the average improvement of X points on a 48 point Functional Status Assessment Scale.
Average all of the change values; overall result represents the Patient average improvement of X points on a 48 point functional status scale.

<table>
<thead>
<tr>
<th></th>
<th>PREOPERATIVE OXFORD KNEE SCORE (OKS) PATIENT REPORTED OUTCOME TOOL SCORE</th>
<th>POSTOPERATIVE OXFORD KNEE SCORE (OKS) PATIENT REPORTED OUTCOME TOOL SCORE</th>
<th>(PREOPERATIVE OKS SCORE MINUS THE POSTOPERATIVE OKS SCORE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient 1</td>
<td>33</td>
<td>45</td>
<td>12</td>
</tr>
<tr>
<td>Patient 2</td>
<td>17</td>
<td>39</td>
<td>22</td>
</tr>
<tr>
<td>Patient 3</td>
<td>16</td>
<td>31</td>
<td>15</td>
</tr>
<tr>
<td>Patient 4</td>
<td>23</td>
<td>40</td>
<td>17</td>
</tr>
<tr>
<td>Patient 5</td>
<td>34</td>
<td>42</td>
<td>8</td>
</tr>
<tr>
<td>Patient 6</td>
<td>10</td>
<td>42</td>
<td>32</td>
</tr>
<tr>
<td>Patient 7</td>
<td>14</td>
<td>44</td>
<td>30</td>
</tr>
<tr>
<td>Patient 8</td>
<td>26</td>
<td>19</td>
<td>-7</td>
</tr>
</tbody>
</table>

**AVERAGE CHANGE IN OXFORD KNEE SCORE (OKS) PATIENT REPORTED OUTCOME TOOL SCORE POINTS**

16.1