

Osteoarthritis
Physician Performance Measurement Set

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Physician Performance Measures (Measures) and related data specifications, developed by the Physician Consortium for Performance Improvement® (the Consortium), are intended to facilitate quality improvement activities by physicians.

These Measures are intended to assist physicians in enhancing quality of care. Measures are designed for use by any physician who manages the care of a patient for a specific condition or for prevention. These performance Measures are not clinical guidelines and do not establish a standard of medical care. The Consortium has not tested its Measures for all potential applications. The Consortium encourages the testing and evaluation of its Measures.

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Purpose of Measures:

These clinical performance measures, developed by the American Academy of Orthopaedic Surgeons (AAOS) and the Physician Consortium for Performance Improvement® (Consortium), and are designed for individual quality improvement. Unless otherwise indicated, the measures are also appropriate for accountability if appropriate methodological, statistical, and implementation rules are achieved.

Accountability Measures:

Measure #1: Assessment for Use of Anti-inflammatory or Analgesic Over-the-Counter (OTC) Medications

Measure #2: Pain and Function Assessment

Intended Audience and Patient Population:

These measures are designed for use by physicians and for calculating reporting or performance measurement at the individual physician level. When existing hospital-level or plan-level measures are available for the same measurement topics, the Consortium attempts to harmonize the measures to the extent feasible.

These measures are designed for physicians who manage the ongoing care of patients (aged 21 years and older) with a diagnosis of osteoarthritis.

The Consortium also encourages the use of these measures by other health care professionals, where appropriate.

Measure Specifications

The Consortium seeks to specify measures for implementation using multiple data sources, including paper medical record, administrative (claims) data, and particular emphasis on Electronic Health Record Systems (EHRS). Draft specifications to report on these measures for osteoarthritis using administrative (claims) data are included in this document. We have identified codes for these measures, including ICD-9 and CPT (Evaluation & Management Codes, Category I and where Category II codes would apply). Specifications for additional data sources, including EHRS, will be fully developed at a later date. We welcome comments on the draft specifications included in addition to the measure language.

Measure Exclusions:

For process measures, the Consortium provides three categories of reasons for which a patient may be excluded from the denominator of an individual measure:

1. Medical reasons

Includes:

- not indicated (absence of organ/limb, already received/performed, other)
- contraindicated (patient allergic history, potential adverse drug interaction, other)
- intolerant

2. Patient reasons

Includes:

- patient declined
- economic, social, or religious reasons
- other patient reasons

3. System reasons

Includes:

- resources to perform the services not available
- insurance coverage/payor-related limitations
- other reasons attributable to health care delivery system

These measure exclusion categories are not available uniformly across all measures; for each measure, there must be a clear rationale to permit an exclusion for a medical, patient, or system reason. The exclusion of a patient may be reported by appending the appropriate modifier to the CPT Category II code designated for the measure:

- **Medical reasons**: modifier 1P
- **Patient reasons**: modifier 2P
- **System reasons**: modifier 3P

Although this methodology does not require the external reporting of more detailed exclusion data, the Consortium recommends that physicians document the *specific* reasons for exclusion in patients' medical records for purposes of optimal patient management and audit-readiness. The Consortium also advocates the systematic review and analysis of each physician's exclusions data to identify practice patterns and opportunities for quality improvement. For example, it is possible for implementers to calculate the percentage of patients that physicians have identified as meeting the criteria for exclusion.

Please refer to documentation for each individual measure for information on the acceptable exclusion categories and the codes and modifiers to be used for reporting.

Measures #1-2 in the Osteoarthritis measurement set are process measures.

For **outcome measures**, the Consortium specifically identifies all acceptable reasons for which a patient may be excluded from the denominator. Each specified reason is reportable with a CPT Category II code designated for that purpose.

There are no outcome measures in the Osteoarthritis measurement set.

The Consortium continues to evaluate and likely will evolve its methodology for handling exclusions as it gains experience in the use of the measures. The Consortium welcomes comments on its exclusions methodology.

Data Capture and Measure Calculation

The Consortium intends for physicians to collect data on each patient eligible for a measure. Feedback on measures should be available to physicians by patient to facilitate patient management and in aggregate to identify opportunities for improvement across a physician's patient population.

Measure calculations will differ depending on whether a rate is being calculated for performance or reporting purposes.

The method of calculation for performance follows these steps: first, identify the patients (or reports) who meet the eligibility criteria for the denominator (PD); second, identify which of those patients (or reports) meet the numerator criteria (A); and third, for those patients (or reports) who do not meet the numerator criteria, determine whether an appropriate exclusion applies and subtract those patients from the denominator (C). (see examples below)

The methodology also enables implementers to calculate the rates of exclusions and to further analyze both low and high rates, as appropriate (see examples below).

The method of calculation for reporting differs. One program which currently focuses on reporting rates is the Centers for Medicare and Medicaid Services (CMS) Physician Quality Reporting Initiative (PQRI). Currently, under that program design, there will be a reporting denominator determined solely from claims data (CPT and ICD-9), which in some cases result in a reporting denominator that is much larger than the eligible population for the performance denominator. Additional components of the reporting denominator are explained below.

The components that make up the numerator for reporting include all patients/reports from the eligible population for which the physician has reported, including: the number of patients/reports who meet the numerator criteria (A), the number of patients/reports for whom valid exclusions apply (C) and also the number of patients/reports who do not meet the numerator criteria (D). These components, where applicable, are summed together to make up the inclusive reporting numerator. The calculation for reporting will be the reporting numerator divided by the reporting denominator. (see examples below).

Examples of calculations for reporting and performance are provided for each measure.

Calculation for Performance

For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.

Numerator (A) Includes:

Number of patients/reports meeting numerator criteria

Performance Denominator (PD) Includes:

Number of patients/reports meeting criteria for denominator inclusion

Denominator Exclusions (C) Include:

Number of patients/reports with valid medical, patient or system exclusions (where applicable; will differ by measure)

Performance Calculation

$$\frac{A \text{ (# of patients meeting numerator criteria)}}{\text{PD (# patients in denominator)} - C \text{ (# patients with valid denominator exclusions)}}$$

It is also possible to calculate the percentage of patients excluded overall, or excluded by medical, patient, or system reason where applicable:

Overall Exclusion Calculation

$$\frac{C \text{ (# of patients with any valid exclusion)}}{\text{PD (# patients in denominator)}}$$

OR

Exclusion Calculation by Type

$$\frac{C_1 \text{ (# patients with medical reason)}}{\text{PD (# patients in denominator)}}$$

$$\frac{C_2 \text{ (# patients with patient reason)}}{\text{PD (# patients in denominator)}}$$

$$\frac{C_3 \text{ (# patients with system reason)}}{\text{PD (# patients in denominator)}}$$

Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator

Reporting Numerator includes each of the following components, where applicable. (There may be instances where there are no patients to include in A, C, D, or E).

A. Number of patients/reports meeting additional denominator criteria (for measures where true denominator cannot be determined through ICD-9 and CPT Category I coding alone) AND numerator criteria

C. Number of patients/reports with valid medical, patient or system exclusions (where applicable; will differ by measure)

D. Number of patients/reports not meeting numerator criteria and without a valid exclusion

E. All other patients/reports not meeting additional denominator criteria (for measures where true denominator cannot be determined through ICD-9 and CPT Category I coding alone)

Reporting Denominator (RD) Includes:

RD. Denominator criteria (identifiable through ICD-9 and CPT Category I coding)

Reporting Calculation

$$\frac{A \text{ (# of patients meeting additional denominator criteria AND numerator criteria)} + C \text{ (# of patients with valid exclusions)} + D \text{ (# of patients meeting additional denominator criteria NOT meeting numerator criteria)} + E \text{ (# of patients not meeting additional denominator criteria)}}{\text{RD (# of patients in denominator)}}$$

Osteoarthritis (OA)

Measure #1: Assessment for Use of Anti-inflammatory or Analgesic Over-the-Counter (OTC) Medications

This measure may be used as an Accountability measure.

Clinical Performance Measure
<p>Numerator: Patient visits with assessment* for use of anti-inflammatory or analgesic OTC medications</p> <p><i>*Assessment may include: Documentation of current medications, continue same medications, change in medication dose, documentation indicating that the patient was asked about OTC medication use</i></p> <p>Denominator: All patient visits for patients aged 21 years and older with a diagnosis of OA</p> <p>Denominator Exclusions: None</p> <p>Measure: Percentage of patient visits for patients aged 21 years and older with a diagnosis of OA with an assessment for use of anti-inflammatory or analgesic OTC medications</p>
<p>The following clinical recommendation statements are quoted <u>verbatim</u> from the referenced clinical guidelines and represent the evidence base for the measure:</p> <p>[The strength of the recommendations for assessment for use of OTC medications are not specified in the guidelines; however, the assessment for use of OTC medications serves as a basis for treatment modification.]</p> <p><i>American College of Rheumatology¹</i> Although it is one of the safest analgesics, acetaminophen can be associated with clinically important adverse events. Recent reports have highlighted long-recognized conditions in which increased awareness of potential toxicity is important.</p> <p>Additional considerations involved in a practitioner's decision to treat the individual OA patient include existing comorbidities and concomitant therapy, as well as the side effects and costs of specific treatments.</p>
<p>Rationale for the measure: Treatment goals for OA are to reduce pain, maintain or improve joint mobility, and limit functional impairment. Use of anti-inflammatory and analgesics has a documented role in these goals. Assessment of current medication use is a precursor to appropriate pharmacologic therapy.</p>
<p>Data capture and calculations:</p> <p>Calculation for Performance For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator and Denominator.</p> <p>Numerator (A) Includes:</p> <ul style="list-style-type: none">• Patient visits with assessment for use of anti-inflammatory or analgesic OTC medications <p>Denominator (PD) Includes:</p> <ul style="list-style-type: none">• All patient visits for patients aged 21 years and older with a diagnosis of OA

Performance Calculation

A (# of patient visits meeting measure criteria)

PD (# of patient visits in denominator)

Components for this measure are defined as:

A	# of patient visits with assessment for use of anti-inflammatory or analgesic OTC medications
PD	# of patient visits for patients aged 21 years and older with a diagnosis of OA

Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator

Reporting Numerator includes each of the following instances:

- A. Patient visits with assessment for use of anti-inflammatory or analgesic OTC medications
- D. Patient visits with no documented assessment for use of anti-inflammatory or analgesic OTC medications

Reporting Denominator (RD) Includes:

- All patient visits for patients aged 21 years and older with a diagnosis of OA

Reporting Calculation

A(# of patient visits meeting numerator criteria) + D(# of patient visits NOT meeting numerator criteria)

RD (# of patient visits in denominator)

Components for this measure are defined as:

A	# of patient visits with assessment for use of anti-inflammatory or analgesic OTC medications
D	# of patient visits with <u>no</u> documented assessment for use of anti-inflammatory or analgesic OTC medications
RD	# of patient visits for patients aged 21 years and older with a diagnosis of OA

Measure Specifications – *Measure #1: Assessment for Use of Anti-inflammatory or Analgesic Over-the-Counter (OTC) Medications*

Measure specifications will be provided for multiple data sources.

A. 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.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patient visits for patients aged 21 years and older with a diagnosis of OA

ICD-9 diagnosis codes: 715.00, 715.04, 715.09, 715.00, 715.04, 715.09, 715.10, 715.11, 715.12, 715.13, 715.14, 715.15, 715.16, 715.17, 715.18, 715.20, 715.21, 715.22, 715.23, 715.24, 715.25, 715.26, 715.27, 715.28, 715.30, 715.31, 715.32, 715.33, 715.34, 715.35, 715.36, 715.37, 715.38, 715.80, 715.89, 715.90, 715.91, 715.92, 715.93, 715.94, 715.95, 715.96, 715.97, 715.98

AND

CPT service codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99385, 99386, 99387, 99395, 99396, 99397, 99401, 99402, 99403, 99404

Numerator: Patient visits with assessment for use of anti-inflammatory or analgesic OTC medications

- **Report the CPT Category II code designated for this numerator:**
 - 1007F: Use of anti-inflammatory or analgesic over-the-counter (OTC) medications for symptom relief assessed

Denominator Exclusion: None

B. Electronic Health Record System *(in development)*

C. Paper Medical Record *(in development)*

Osteoarthritis (OA)
Measure #2: Pain and Function Assessment

This measure may be used as an Accountability measure.

Clinical Performance Measure

Numerator: Patient visits with assessment for level of function and pain documented (may include the use of a standardized scale or the completion of an assessment questionnaire, such as an SF-36, AAOS Hip & Knee Questionnaire)

Denominator: All patient visits for patients aged 21 years and older with a diagnosis of OA

Denominator Exclusions: None

Measure: Percentage of patient visits for patients aged 21 years and older with a diagnosis of osteoarthritis with assessment for function and pain

The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

[The strength of the recommendations for symptom and functional assessment is not specified in the guidelines; however, symptom and functional assessment serves as a basis for treatment modification.]

American Academy of Orthopaedic Surgeons²

Control of pain and maintenance of activity correlate well with satisfactory quality of life. If the patient is not satisfied with the outcome due to continued pain and limitation of activity, more aggressive intervention may be warranted.

Treatment response criteria:

Good:

Patient satisfied with outcome

Symptoms decreasing

Patient satisfied with progress

Poor:

Patient dissatisfied with outcome

No decrease in symptoms

Patient unsatisfied with progress

American Geriatric Society³

The management of OA includes patient education, therapeutic modalities, exercise, and medications in parallel. Treatment goals include pain control, maximizing functional independence and improving quality of life within the constraints imposed by both OA and comorbidities. During the initial evaluation in managing osteoarthritis in the older patient, characterize pain severity and complete an inventory of physical impairments and disabilities.

A comprehensive evaluation is the initial step in designing a physical activity program individualized for the patient with OA. The information obtained provides the foundation for developing an appropriate exercise prescription for each patient. Assessment objectives can be divided into two broad categories: arthritis-related factors (current medications, joint pain, inflammation, stability, and range of motion) and Impairments associated with inactivity (altered body composition, muscle weakness, poor cardiovascular fitness).

Treatment should be re-evaluated at four weeks for reduced pain and improved function.

American Geriatric Society Clinical Practice Guideline: The Management of Persistent Pain in Older Persons⁴

The key to effective treatment of persistent pain lies in comprehensive assessment. All older persons should be screened for persistent pain on initial evaluation, on admission to any health care service, and periodically thereafter. Any persistent pain that has an impact on physical function, psychological function, or quality of life should be considered a significant problem.

The verbally administered zero to ten scale is a good first choice for assessment of pain intensity; however, other scales such as word descriptor scales, faces scales, or pain thermometers may be more appropriate for some patients.

Rationale for the measure:

Osteoarthritis can be a debilitating condition. An assessment of patient symptoms and functional status is important as it serves as the basis for making treatment modifications, which in turn, assists in improving the patient's quality of life.

Data capture and calculations:

Calculation for Performance

For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator and Denominator.

Numerator (A) Includes:

- Patient visits with assessment for level of function and pain documented

Denominator (PD) Includes:

- All patient visits for patients aged 21 years and older with a diagnosis of OA

Performance Calculation

$$\frac{\text{A (\# of patient visits meeting measure criteria)}}{\text{PD (\# of patient visits in denominator)}}$$

Components for this measure are defined as:

A	# of patient visits with assessment for level of function and pain documented
PD	# of patient visits for patients aged 21 years and older with a diagnosis of OA

Calculation for Reporting

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator

Reporting Numerator includes each of the following instances:

- A. Patient visits with assessment for level of function and pain documented
- D. Patient visits with no documented assessment for level of function and pain

Reporting Denominator (RD) Includes:

- All patient visits for patients aged 21 years and older with a diagnosis of OA

Reporting Calculation

$$\frac{\text{A(\# of patient visits meeting numerator criteria) + D(\# of patient visits NOT meeting numerator criteria)}}{\text{RD (\# of patient visits in denominator)}}$$

Components for this measure are defined as:

A	# of patient visits with assessment for level of function and pain documented
D	# of patient visits with <u>no</u> documented assessment for level of function and pain
RD	# of patient visits for patients aged 21 years and older with a diagnosis of OA

Measure Specifications – Measure #2: Pain and Function Assessment

Measure specifications will be provided for multiple data sources.

A. 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.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patient visits for patients aged 21 years and older with a diagnosis of OA

ICD-9 diagnosis codes: 715.00, 715.04, 715.09, 715.00, 715.04, 715.09, 715.10, 715.11, 715.12, 715.13, 715.14, 715.15, 715.16, 715.17, 715.18, 715.20, 715.21, 715.22, 715.23, 715.24, 715.25, 715.26, 715.27, 715.28, 715.30, 715.31, 715.32, 715.33, 715.34, 715.35, 715.36, 715.37, 715.38, 715.80, 715.89, 715.90, 715.91, 715.92, 715.93, 715.94, 715.95, 715.96, 715.97, 715.98

AND

CPT service codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99385, 99386, 99387, 99395, 99396, 99397, 99401, 99402, 99403, 99404

Numerator: Patient visits with assessment for level of function and pain documented

- **Report the CPT Category II code designated for this numerator:**
 - 1006F: Osteoarthritis symptoms and functional status assessed (may include the use of a standardized scale or the completion of an assessment questionnaire, such as an SF-36, AAOS Hip & Knee Questionnaire)

Denominator Exclusion: None

B. Electronic Health Record System (in development)

C. Paper Medical Record (in development)

References

- ¹ American College of Rheumatology Subcommittee on Osteoarthritis Guidelines. Recommendations for the Medical Management of Osteoarthritis of the Hip and Knee. 2000 Update. *Arthritis Rheum*. Sept 2000;43: 1905-1915.
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- ³ American Geriatrics Society. American Geriatrics Society Panel on Exercise and Osteoarthritis. Exercise Prescription for Older Adults with Osteoarthritis Pain: Consensus Practice Recommendations. *Journal of the Amer Geriatrics Soc*. 2001; 49:808-823.
- ⁴ American Geriatrics Society. AGS Clinical Practice Guideline: The Management of Persistent Pain in Older Persons. Available at: http://www.americangeriatrics.org/education/manage_pers_pain.shtml. Accessed January 2003.