# Performance Measurement

Diagnosis and Treatment of Rheumatoid Arthritis: Review of the Performance Measures by the Performance Measurement Committee of the American College of Physicians


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## Introduction

Rheumatoid arthritis (RA) is systemic polyarthritis, which disproportionately affects women. It affects an estimated 1.5 million Americans over the age of 18 and accounts for as much as $8.6 billion in medical costs and an additional $2.7 billion in excess indirect and non-medical costs annually (both in 2000 dollars) (1-2). Over the last decades, advances in therapies and therapeutic approach have dramatically improved health outcomes with the achievement of minimal disease activity or remission in 10-30% of treated patients (3-4). Although the availability of such effective therapies and the opportunity to withhold or discontinue therapy with minimal disease activity or remission warrant periodic assessment of disease activity, such assessment is not routine (54% in 2012) and represents an opportunity for improvement in care (5).

The ACP Performance Measurement Committee (PMC) reviewed performance measures related to the management of rheumatoid arthritis (RA) to assess whether the measures are evidence-based, methodologically sound, and clinically meaningful.

## Methods

We performed a search to identify relevant performance measures from the National Quality Forum (NQF), the American Medical Association-Physician Consortium for Performance Improvement (AMA-PCPI), and National Quality Measures Clearinghouse (NQMC) websites. The inclusion criteria were performance measures currently used in the Centers for Medicare and Medicaid Services (CMS) Physician Quality Reporting System (PQRS) or currently used in the CMS Electronic Record Incentive program. The PMC identified and reviewed 7 performance measures.

## Conclusion

**Recommendation**

ACP supports NQF 0054 for physicians managing Rheumatoid Arthritis (RA), with modifications: "Disease-Modifying Anti-Rheumatic Drug (DMARD) Therapy for Rheumatoid Arthritis."

**Rationale**

The current evidence supports the benefit of DMARD therapy in reducing the symptoms of RA and decelerating the progression of joint damage (6). Furthermore, a wide range of DMARD prescribing across health plans in the 2013 measurement year suggests a performance gap (7). However, given the availability of highly effective therapies and a more aggressive therapeutic approach than in previous decades, remission or minimal disease activity is now achievable for a significant numbers of patients [10-30% (3-4)]. Therefore, DMARD therapy may be appropriately withheld for a period of time (a "drug holiday") or discontinued for such patients. Hence, minimal disease activity or clinical remission should be included in the denominator exclusions. This is a physician level measure and should only be applicable to physicians who are managing and providing medical therapy for RA. Most often this will apply to rheumatologists, but primary care physicians may also manage RA.

**Measure Specifications**

| **NQF 0054: Disease-Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis** | |
|---|---|
| **Status:** | NQF Endorsed, UPDATED November 10, 2014 **(2015 PQRS #108)** |
| **Measure Steward:** | National Committee for Quality Assurance |
| **Description:** | The percentage of patients 18 years and older by the end of the measurement period, diagnosed with rheumatoid arthritis and who had at least one ambulatory prescription for a disease-modifying anti-rheumatic drug (DMARD) |
| **Numerator Statement:** | Patients diagnosed with rheumatoid arthritis who were dispensed at least one ambulatory prescription for a disease-modifying anti-rheumatic drug (DMARD) during the measurement year. |
| **Denominator Statement:** | All patients, ages 18 years and older by December 31 of the measurement year who had two of the following with different dates of service on or between January 1 and November 30 of the measurement year:<br>- Outpatient visit, with any diagnosis of rheumatoid arthritis<br>- Non-acute inpatient discharge, with any diagnosis of rheumatoid arthritis<br>Visit type need not be the same for the two visits |
| **Exclusions:** | Exclude patients who have a diagnosis of HIV. Look for evidence of HIV diagnosis as far back as possible in the patient's history through the end of the measurement year.<br>Exclude patients who have a diagnosis of pregnancy during the measurement year. |
| **Type of Measure:** | Process |
| **Level of Analysis:** | Health Plan, Integrated Delivery System |

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| **Care Setting:** | Ambulatory Care: Clinician Office/Clinic |
| **Data Source:** | Administrative claims, Electronic Clinical Data, Electronic Clinical Data: Pharmacy |

**Recommendation**

ACP supports NQF 2522 for physicians managing Rheumatoid Arthritis (RA): "Rheumatoid Arthritis: Tuberculosis Screening."

**Rationale**

Biologic Disease-Modifying Anti-Rheumatic (DMARD) therapy can reactivate latent tuberculosis, leading to significant morbidity and even mortality (5, 8). Administrative data suggests that over 1 in 4 individuals with RA receive biologic DMARDs (8). Over 1.3 million individuals in the United States have RA (9-10); therefore this measure is expected to impact over 300,000 Americans with RA (9-10). This is a physician level measure and should only be applicable to physicians who are managing and providing medical therapy for RA. Most often this will apply to rheumatologists, but primary care physicians may also manage RA.

**Measure Specifications**

| **NQF 2522: Rheumatoid Arthritis: Tuberculosis Screening** | |
|---|---|
| **Status:** | NQF Endorsed, Updated November 10, 2014 **(2015 PQRS #176)** |
| **Measure Steward:** | American College of Rheumatology |
| **Description:** | Percentage of patients 18 years and older with a diagnosis of rheumatoid arthritis who have documentation of a tuberculosis (TB) screening performed within 12 months prior to receiving a first course of therapy using a biologic disease-modifying anti-rheumatic drug (DMARD) |
| **Numerator Statement:** | Any record of TB testing documented or performed (PPD, IFN-gamma release assays, or other appropriate method) in the medical record in the 12 months preceding the biologic DMARD prescription |
| **Denominator Statement:** | Patients 18 years and older with a diagnosis of rheumatoid arthritis who are seen for at least one face-to-face encounter for RA who are newly started on biologic therapy during the measurement period |
| **Exclusions:** | None |
| **Type of Measure:** | Process |
| **Level of Analysis:** | Clinician: Individual |
| **Care Setting:** | Ambulatory Care: Clinician Office/Clinic |
| **Data Source:** | Electronic Clinical Data: Electronic Health Record |

**Recommendation**
ACP supports 2523 for physicians managing Rheumatoid Arthritis (RA): "Rheumatoid Arthritis: Assessment of Disease Activity."

**Rationale**
Using validated disease activity assessments is a standard component of guideline-based care and has been shown to improve patient outcomes including; functional status, health-related quality of life, and radiographic disease progression (11). This is a physician level measure and should only be applicable to physicians who are managing and providing medical therapy for RA. Most often this will apply to rheumatologists, but primary care physicians may also manage RA.

**Measure Specifications**

| **NQF 2523: Rheumatoid Arthritis: Assessment of Disease Activity** | |
|---|---|
| **Status:** | NQF Endorsed, Updated November 10, 2014 **(2015 PQRS #177)** |
| **Measure Steward:** | American College of Rheumatology |
| **Description:** | Percentage of patients 18 years and older with a diagnosis of rheumatoid arthritis and >=50% of total number of outpatient RA encounters in the measurement year with assessment of disease activity using a standardized measure |
| **Numerator Statement:** | Number of patients with >=50% of total number of outpatient RA encounters in the measurement year with assessment of disease activity using a standardized measure |
| **Denominator Statement:** | Patients 18 years and older with a diagnosis of rheumatoid arthritis seen for two or more face-to-face encounters for RA with the same clinician during the measurement period |
| **Exclusions:** | None |
| **Type of Measure:** | Process |
| **Level of Analysis:** | Clinician: Individual |
| **Care Setting:** | Ambulatory Care: Clinician Office/Clinic |
| **Data Source:** | Electronic Clinical Data: Electronic Health Record |

**Recommendation**
ACP supports NQF 2524 for physicians managing Rheumatoid Arthritis (RA): "Rheumatoid Arthritis: Functional Status Assessment."

**Rationale**
ACP supports this measure because therapeutic treatment goals include preservation of function and quality of life (13-14). Findings of a joint examination alone may not adequately reflect disease activity and structural damage; therefore, periodic measurements of functional status should be performed (12). Additionally, it is important to determine whether a decline in function is the result of inflammation, mechanical damage, or both because treatment approaches will differ accordingly (12). This is a physician level measure and should only be applicable to physicians who are managing and providing medical therapy for RA. Most often this will apply to rheumatologists, but primary care physicians may also manage RA.

**Measure Specifications**

| **NQF 2524: Rheumatoid Arthritis: Functional Status Assessment** | |
|---|---|
| **Status:** | NQF Endorsed, Updated November 10, 2014 **(2015 PQRS #178)** |
| **Measure Steward:** | American College of Rheumatology |
| **Description:** | Percentage of patients 18 years and older with a diagnosis of rheumatoid arthritis for whom a functional status assessment was performed at least once during the measurement period |
| **Numerator Statement:** | Number of patients with functional status assessment documented once during the measurement period. Functional status can be assessed using one of a number of valid and reliable instruments available from the medical literature |
| **Denominator Statement:** | Patients age 18 and older with a diagnosis of rheumatoid arthritis seen for two or more face-to-face encounters for RA with the same clinician during the measurement period |
| **Exclusions:** | None |
| **Type of Measure:** | Process |
| **Level of Analysis:** | Clinician: Individual |
| **Care Setting:** | Ambulatory Care: Clinician Office/Clinic |
| **Data Source:** | Electronic Clinical Data: Electronic Health Record |

**Recommendation**

ACP supports NQF 2525 for physicians managing RA, with modifications: "Rheumatoid Arthritis (RA): Disease Modifying Anti-Rheumatic Drug (DMARD) Therapy."

**Rationale**

The current evidence supports the benefit of DMARD therapy in reducing the symptoms of RA and decelerating the progression of joint damage (6). Furthermore, a wide range of DMARD prescribing across health plans in the 2013 measurement year suggests a performance gap (9). However, given the availability of highly effective therapies and a more aggressive therapeutic approach than in previous decades, remission or minimal disease activity is now achievable for a significant numbers of patients [10-30% (3-4]. Therefore, DMARD therapy may be appropriately withheld for a period of time (a "drug holiday") or discontinued for such patients and minimal disease activity or clinical remission should be included in the denominator exclusions. This is a physician level measure and should only be applicable to physicians who are managing and providing medical therapy for RA. Most often this will apply to rheumatologists, but primary care physicians may also manage RA.

**Measure Specifications**

| **NQF 2525: Rheumatoid Arthritis: Disease Modifying Anti-Rheumatic Drug (DMARD) Therapy** | |
|---|---|
| **Status:** | NQF Endorsed, Updated November 10, 2014 |
| **Measure Steward:** | American College of Rheumatology |
| **Description:** | Percentage of patients 18 years and older with a diagnosis of rheumatoid arthritis who are newly prescribed disease modifying anti-rheumatic drug (DMARD) therapy within 12 months |
| **Numerator Statement:** | Patient received a DMARD |
| **Denominator Statement:** | Patient age 18 years and older with a diagnosis of rheumatoid arthritis seen for two or more face-to-face encounters for RA with the same clinician during the measurement period |
| **Exclusions:** | Patients with a diagnosis of HIV; patients who are pregnant; or patients with inactive Rheumatoid Arthritis |
| **Type of Measure:** | Process |
| **Level of Analysis:** | Clinician: Individual |
| **Care Setting:** | Ambulatory Care: Clinician Office/Clinic |
| **Data Source:** | Electronic Clinical Data: Electronic Health Record |

**Recommendation**
ACP does not support PQRS 179 for physicians managing Rheumatoid Arthritis (RA): "Assessment and Classification of Disease Prognosis."

**Rationale**
ACP does not support this measure because there is no evidence supporting annual frequency or describing appropriate frequency for assessment or classification of disease prognosis. Additionally, it seems unnecessary to reassess prognosis annually if a poor prognosis has been established based on factors that will not change such as high titer anti-citric citrullinated peptide (anti-CCP) antibodies, rheumatoid factor (RF) or radiographic erosions.

**Measure Specifications**

| **PQRS 179: Assessment and Classification of Disease Prognosis** | |
|---|---|
| **Status:** | Not NQF Endorsed |
| **Measure Steward:** | American Medical Association - Physician Consortium for Performance Improvement |
| **Description:** | Percentage of patients 18 years and older with a diagnosis of rheumatoid arthritis (RA) who have an assessment and classification of disease prognosis at least once within 12 months |
| **Numerator Statement:** | Patients with at least one documented assessment and classification (good/poor) of disease prognosis* utilizing clinical markers of poor prognosis** within 12 months<br><br>*Poor prognosis: RA patients with features of poor prognosis have active disease with high<br>tender and swollen joint counts, often have evidence of radiographic erosions, elevated levels of<br>rheumatoid factor (RF) and or anti-cyclic citrullinated peptide (anti-CCP) antibodies, and an<br>elevated erythrocyte sedimentation rate, and an elevated C-reactive protein level.<br>** Prognostic classification should be based upon at a minimum the following markers of poor<br>prognosis: functional limitation (e.g., HAQ Disability Index), extra-articular disease (e.g. vasculitis,<br>Sjorgen's syndrome, RA lung disease, rheumatoid nodules), RF positivity, positive anti-CCP<br>antibodies (both characterized dichotomously, per CEP recommendation), and/or bony erosions<br>by radiography |
| **Denominator Statement:** | Patients 18 years and older with a diagnosis of Rheumatoid Arthritis (RA) |
| **Exclusions:** | None |

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| **Type of Measure:** | Process |
| **Care Setting:** | Ambulatory Care |
| **Data Source:** | Administrative claims; Medical record; Electronic medical record; Administrative claims supplemented by medical records; Registries; Prospective data collection flow-sheet |

**Recommendation**

ACP does not support PQRS 180: "Glucocorticoid Management."

**Rationale**

Although we recognize the importance of managing the lowest effective dose of glucocorticoids and using alternative therapies when possible, both the numerator and the denominator are poorly specified. A cleaner measure would specify "patients with rheumatoid arthritis (RA) who are on glucocorticoids" in the denominator statement. Additionally, the current American College of Rheumatology clinical guidelines demonstrate the importance of assessing glucocorticoid use, but only in patients who have specifically been prescribed glucocorticoid therapy (15).

**Measure Specifications**

| **PQRS 180: Glucocorticoid Management** | |
|---|---|
| **Status:** | Not NQF Endorsed |
| **Measure Steward:** | American Medical Association - Physician Consortium for Performance Improvement |
| **Description:** | Percentage of patients 18 years and older with a diagnosis of rheumatoid arthritis (RA) who have been assessed for glucocorticoid use and, for those on prolonged doses of prednisone > 10 mg daily (or equivalent) with improvement or no change in disease activity, documentation of glucocorticoid management plan within 12 months |
| **Numerator Statement:** | Patients who have been assessed for glucocorticoid use at least once within 12 months, and for those on prolonged doses* of prednisone > 10 mg qD (or equivalent**) with improvement or no change in disease activity, documentation of a glucocorticoid management plan***<br><br>*Prolonged doses are doses >6 months in duration<br>**Prednisone equivalents can be determined using the following:<br>1 mg of prednisone = 1 mg of prednisolone; 5 mg of cortisone; 4 mg of hydrocortisone; 0.8 mg of<br>triamcinolone; 0.8 mg of methylprednisolone; 0.15 mg of dexamethasone; 0.15 mg of betamethasone.<br>***Glucocorticoid management plan: documentation of attempt to taper steroids OR<br>documentation of a new prescription for a non-glucocorticoid DMARD OR |

| | |
|---|---|
| | increase in dose of<br>non-glucocorticoid DMARD dose for persistent RA disease activity at current or reduced dose. |
| **Denominator Statement:** | Patients 18 years and older with a diagnosis of rheumatoid arthritis (RA) |
| **Exclusions:** | Documentation of medical reason(s) for not documenting glucocorticoid dose (i.e., glucocorticoid prescription is for a medical condition other than RA) |
| **Type of Measure:** | Process |
| **Care Setting:** | Ambulatory Care |
| **Data Source:** | Administrative claims; Medical record; Electronic medical record; Administrative claims supplemented by medical record; Registries; Prospective data collection flow-sheet |

**Gaps in Performance Measurement — Opportunities to Promote High-Value Care**

There is a need for performance measures that focus on the individualized care of patients with RA including the appropriate discontinuation of DMARDs in patients who have achieved remission or minimal disease activity.

**References**


1. Gabriel SE, Crowson CS, Campion ME, O'Fallon WM. Direct medical costs unique to people with arthritis. JRheumatol. 1997;24(4):719-25.

2. Gabriel SE, Crowson CS, Campion ME, O'Fallon WM. Indirect and nonmedical costs among people with rheumatoid arthritis and osteoarthritis compared with nonarthritic controls. JRheumatol. 1997;24(1):43-8.

3. De Punder YM, Fransen J, Kievit W, Houtman PM, Visser H, van de Laar MA, van Riel PL. The prevalence of clinical remission in RA patients treated with anti-TNF: results from the Dutch Rheumatoid Arthritis Monitoring (DREAM) registry. Rheumatology. 2012;51(9):1610-7.

4. Jayakumar K, Norton S, Dixey J, James D, Gough A, Williams P, Prouse P, Young A; Early Rheumatoid Arthritis Study (ERAS). Sustained clinical remission in rheumatoid arthritis: prevalence and prognostic factors in an inception cohort of patients treated with conventional DMARDS. Rheumatology. 2012;51(1):169-75.

5. Grossman JM, Gordon R, Ranganath VK et al. American College of Rheumatology 2010 Recommendations for the prevention and treatment of glucocorticoid-induced osteoporosis. Arthritis Care & Research. 2010;62(11):1515-1526.

6. Smolen JS et al. EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2013 update. Ann Rheum Dis. Mar 2014;73(3):492–509.

7. National Committee for Quality Assurance (NCQA). HEDIS 2014: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2013. various p.

8. Zhang J, Xie F, Delzell E et al. Trends in the use of biologic agents among rheumatoid patients enrolled in the US Medicare Program. Arthritis Care & Research. 2013;65(11):1743-1751.

9. National Quality Forum. Prioritization of high-impact Medicare conditions and measure gaps. Measure Prioritization Advisory Committee Report. 2010

10. Yazdany, Jinoos, Kazi, Salahuddin, Francisco, Melissa, Myslinski, Rachel. “Uptake of the American College of Rheumatology’s Rheumatology Clinical Registry (RCR): Quality Measure Summary Data”. Annual Scientific Meeting. American College of Rheumatology. Reed Convention Center, Washington, DC. 27 October 2013. Conference Presentation.

11. Scott DL, Symmons DP, Coulton, BL, Popert, AJ. Long-term outcome of treating rheumatoid arthritis: Results after 20 Years. The Lancet. 1987;1(8542):1108-1111.

12. American College of Rheumatology Subcommittee on Rheumatoid Arthritis Guidelines. Guidelines for the management of rheumatoid arthritis: 2002 Update. Arthritis Rheum. 2002 Feb;46(2):328-46.

13. Helmick CG, Felson DT, Lawrence RC et al. Estimates of the prevalence of arthritis and other rheumatic conditions in the US. Part 1. Arthritis & Rheumatology. 2008;58(1):15-25.

14. Harris ED. Clinical features of rheumatoid arthritis. In: Ruddy S, Harris ED, Sledge CB, Kelley WN, eds. Kelley’s Textbook of rheumatology. 7th ed. Philadelphia: WB Saunders, 2005:1043–78.

15. American College of Rheumatology Subcommittee on Rheumatoid Arthritis Guidelines. Guidelines for the management of rheumatoid arthritis: 2002 update. Arthritis Rheum. 2002;46:328–46.

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