

# UREQA2: Ankylosing Spondylitis: Appropriate Pharmacologic Therapy

Measure	UREQA2
Measure Title	Ankylosing Spondylitis: Appropriate Pharmacologic Therapy
Measure Description	Percentage of patients aged 18 years and older with a first diagnosis of ankylosing spondylitis who are treated with nonsteroidal anti-inflammatory drugs (NSAIDs) before initiation of biologic therapy.
Reporting Frequency	This measure is reported once per reporting period
High Priority or Outcome	High Priority
High Priority Type	Appropriate use
Measure Type	Process
NQS Domain	Effective Clinical Care
Inverse Measure	No
Risk Adjusted	No
Proportional Measure	Yes
Continuous Variable Measure	No
Number of Performance Rates	One
Meaningful Measure Area	Medication Management
Specialties	Rheumatology
Does this measure require the use of proprietary software, devices, etc.?	No
MIPS reporting options	Traditional MIPS
Care Setting	Outpatient services
First Performance Year	2018



# UREQA2: Ankylosing Spondylitis: Appropriate Pharmacologic Therapy

#### Denominator

- Patients aged 18 years and older as of the date of service
- Newly diagnosed with ankylosing spondylitis and within the first six
   (6) months of treatment
- Ankylosing spondylitis ICD-10-CMs: M45.0, M45.2, M45.3, M45.5,
   M45.6, M45.7, M45.8, M45.9
- Patient encounter during the performance period (CPT or HCPCS):
   99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215
- WITHOUT Hospice Service Modifier: GV, GW
- Telehealth is supported in this measure

#### **Performance Met**

- Patients who are newly diagnosed with ankylosing spondylitis and are within the first six (6) months of treatment and are prescribed a course of NSAIDs before initiation of biologics.
- Patient may be prescribed NSAIDS six months prior to the ankylosing spondylitis diagnosis.

# **Performance Exceptions**

- NSAIDS contraindicated for the patient. Includes both initial assessment and continual evaluation during NSAID therapy.
- NSAIDs are discontinued due to adverse effects.
- Patient refuses NSAID treatment.
- Other non-biologic pharmacologic agents are prescribed for medical reasons.
- Visit is unrelated to primary management of ankylosing spondylitis.

### **Evidence of Reliability/Validity**

N/A



# UREQA2: Ankylosing Spondylitis: Appropriate Pharmacologic Therapy

#### Other Information

Clinical Recommendation Statements:

The provider should document the pharmacologic treatment plan including rationale for not prescribing NSAIDs as the first course of pharmacologic therapy if applicable.

#### **NQS Domain Rationale**

Ankylosing spondylitis is an immune-mediated inflammatory arthritis of the spine and, less commonly, peripheral joints. There is no known single etiology. It is likely a combination of genetic, environmental, and immunologic factors that can result in active ankylosing spondylitis. As ankylosing spondylitis progresses, deformities of the spine such as flattening of the normal lumbar lordosis, kyphosis of the thoracic spine, and hyperextension of the cervical spine can occur. Fusion of the sacroiliac (SI) joints may also occur. The disease negatively impacts the quality of life (QoL) of those affected. The most common problems are stiffness, back pain, fatigue, poor sleep, side effects of medications, negative body image, and concerns about the future; especially the ability to maintain full-time employment. The latter problem also contributes to the high costs associated with caring for these patients. The initial drug of choice is a nonsteroidal anti-inflammatory drug (NSAID). The ASAS/EULAR recommendations state that NSAIDs should be given continuously and not on an 'as needed' basis. However, the physician should be aware of the gastrointestinal (GI), cardiovascular, and renal risks of such medication and make the appropriate modifications in dosage, when appropriate. The latest American College of Rheumatology (ACR) treatment recommendations published in 2015, also strongly recommend continuous NSAIDs as the initial treatment, stating that the benefits "far outweighed" (Page 6) the risks (2). Contraindications to the use of these drugs should always be taken into account.

Nonsteroidal anti-inflammatory drugs have been demonstrated to be disease modifying in ankylosing spondylitis. They reduce clinical symptoms and delay the rate of radiographic progression, even in patients with elevated CRP and/or ESR levels and syndesmophytes at initial evaluation. A study published in 2005, also demonstrated slowing of radiographic disease progression with continuous NSAIDs, without a significant Risk (1).





Measure	UREQA8
Measure Title	Vitamin D level: Effective Control of Low Bone Mass/Osteopenia and Osteoporosis: Therapeutic Level Of 25 OH Vitamin D Level Achieved
Measure Description	Percentage of patients aged 65 years and older diagnosed with osteopenia or osteoporosis whose most recent serum 25 Hydroxy-Vitamin D results is greater than or equal to 30.0 ng/dL.
Reporting Frequency	This measure is reported once per reporting period
High Priority or Outcome	High Priority
High Priority Type	Outcome
Measure Type	Outcome
NQS Domain	Effective Clinical Care
Inverse Measure	No
Risk Adjusted	No
Proportional Measure	Yes
Continuous Variable Measure	No
Number of Performance Rates	One
Meaningful Measure Area	Medication Management
Specialties	Rheumatology
Does this measure require the use of proprietary software, devices, etc.?	No
MIPS reporting options	MVP, Traditional MIPS
Care Setting	Outpatient services
First Performance Year	2022



#### **UREQA8: Vitamin D level**

#### Denominator

- Patients aged 65 years and older as of the date of service
- Established diagnosis of low bone mass/osteopenia or osteoporosis
- Patient encounter during the performance period (CPT or HCPCS):
   99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

#### **Denominator Exclusions:**

Hospice Service Modifier: GV, GW

#### Telehealth is supported in this measure

#### Numerator

- Percentage of patients aged 65 years and older diagnosed with osteopenia or osteoporosis whose most recent serum 25 Hydroxy-Vitamin D results is greater than or equal to 30.0 ng/dL.
- Note: Most recent serum 25 Hydroxy-Vitamin D result to be used for numerator calculation

#### **Performance Met**

Most recent serum 25 Hydroxy-Vitamin D result is greater than or equal to 30.0 ng/ml.

#### **Performance Not Met**

- Most recent serum 25 Hydroxy-Vitamin D result is less than 30.0 ng/ml.
- Serum 25 Hydroxy-Vitamin D not ordered
- Serum 25 Hydroxy-Vitamin D result within twelve months is not available

#### **Performance Exceptions**

- Patient refused Vitamin D testing.
- Or Vitamin D level ordered but results not returned prior to conclusion of the performance year.
- Or Vitamin D level performed by another provider and Medical record request initiated but results not yet received prior to the conclusion of the performance year.
- Or ICD 10 diagnoses of malabsorption: K90.49, K90.89, K90.9. Or ICD 10 diagnoses for underdosing or noncompliance: Z91.11, Z91.120, Z91.128, Z91.130, Z91.138, Z91.14, Z91.19.
- Patient is responding well to treatment and no further Vitamin D level checks are required and documented in patient record

#### **Evidence of Reliability/Validity**

N/A



#### Other Information

Clinical Recommendation Statements:

Results from serum 25 Hydroxy-Vitamin D testing must be on file.

#### **NQS Domain Rationale**

Per the United Rheumatology (UR) 2017 Clinical Practice Guidelines for Adult Osteoporosis, serum 25 Hydroxy-Vitamin D levels should be obtained on patients with low bone mass/osteopenia or osteoporosis with a target level of greater than or equal to 30.0 ng/dl. (1)

Vitamin D is essential for development and maintenance of bone, both for its calcium absorption and for ensuring renewal and mineralization of bone tissue. The Journal of Clinical Endocrinology and Metabolism found that levels of 25(OH)D less than 10 ng/ml was linked to a 78% increase risk of falling in men and women over the age of 65. (2) Fifty-two percent of North American women receiving therapy to prevent or treat osteoporosis were found to be vitamin D deficient after measuring serum 25(OH)D levels. (4) A study conducted by the Mayo Clinic suggests "that 25(OH)D levels of greater than 30 ng/mL are needed to ensure PTH suppression into the normal range. (5)

A recent study also finds that vitamin d deficiency can cause rickets and osteomalacia and vitamin d supplementation may have moderate beneficial effects on BMD, fractures and falls. (6).

Also, another study completed study showed that compared to low serum 25(OH)D levels, high serum 25(OH)D levels reduce the risk of hip fractures in the patients.(7)

One study showed that compared to low serum 25(OH)D levels, high serum 25(OH)D levels reduce the risk of hip fractures in the patients aged 60 years or older.

- (1) 2017 United Rheumatology Clinical Practice Guideline: Adult Osteoporosis. Retrieved on July 16, 2018 from https://www.unitedrheumatology.org/united-rheumatology-clinical-guidelines/#tab-id-4
- (2) 2006 The Journal of Clinical Endocrinology and Metabolism. Vitamin D status in relation to one-year risk of recurrent falling in older men and women. Retrieved on July 16, 2018 from https://www.ncbi.nlm.nih.gov/pubmed/16684818
- (3) 2018 International Osteoporosis Foundation. Osteoporosis and musculoskeletal disorders. Retrieved on July 16, 2018 from https://www.iofbonehealth.org/osteoporosis-musculoskeletal-disorders/osteoporosis/prevention/vitamin-d
- (4) 2008 The Journal of Clinical Endocrinology and Metabolism. Prevalence of Vitamin D inadequacy among postmenopausal North American women receiving osteoporosis therapy. Retrieved on July 16, 2018 from https://www.ncbi.nlm.nih.gov/pubmed/15797954/
- (5) 2010 Mayo Clinic Proceedings. Vitamin D Deficiency in Adults: When to Test and How to Treat. Retrieved on August 12, 2018 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2912737/
- (6) 2019 Endocrine Connect. Vitamin D testing and treatment: a narrative review of current evidence. Retrieved May 30, 2023 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6365669/



## **UREQA8: Vitamin D level**

- (7) 2020 The relationship between serum vitamin D and fracture risk in the elderly: a meta-analysis. Retrieved August 7, 2023 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7045381/
- (8) 2020, The relationship between serum vitamin D and fracture risk in the elderly. Journal of Orthopaedic Surgery and Research. Retrieved August 1, 2023 from https://josr-

online.biomedcentral.com/articles/10.1186/s13018-020-01603-y#:~:text=Previous%20studies%20show%20a%20correlation%20between% 20low%20serum,occurrence%20of%20osteoporotic%20hip%20fractures% 20in%20the%20elderly.



Measure	UREQA9
Measure Title	Screening for Osteoporosis for Men Aged 70 Years and Older
Measure Description	Percentage of male patients aged 70 years and older who had a central dual-energy X-ray absorptiometry (DXA) to screen for osteoporosis
Reporting Frequency	This measure is reported once per reporting period
High Priority or Outcome	No
High Priority Type	NA
Measure Type	Process
NQS Domain	Effective Clinical Care
Inverse Measure	No
Risk Adjusted	No
Proportional Measure	Yes
Continuous Variable Measure	No
Number of Performance Rates	One
Meaningful Measure Area	Medication Management
Specialties	Rheumatology
Does this measure require the use of proprietary software, devices, etc.?	No
MIPS reporting options	Traditional MIPS
Care Setting	Outpatient services
First Performance Year	2022



#### Denominator

- Male patients aged 70 years and older on date of encounter
- Patient encounter during the performance period (CPT or HCPCS):
   99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

#### **Denominator Exclusions:**

- Diagnosis of osteoporosis.
- Hospice Service Modifier: GV, GW

### Telehealth is supported in this measure

#### Numerator

Percentage of male patients aged 70 years and older who had a central dual-energy X-ray absorptiometry (DXA) to screen for osteoporosis

#### **Performance Met**

Patient with documented results of a central Dual-energy X-Ray Absorptiometry (DXA) ever being performed

# **Performance Not Met**

Patient with central Dual-energy X-Ray Absorptiometry (DXA) results not documented, reason not given

### **Performance Exceptions**

- Patient reason for not obtaining DXA Scan (e.g. patient refuses DXA Scan)
- Z59.9 Economic circumstances affecting care
- Dexa Scan by another provider. Medical record request initiated but results not yet received.

## **Evidence of Reliability/Validity**

N/A



#### **NQS Domain Rationale**

Osteoporosis is common in men with a lifetime risk of fracture for men 50 years of age and older of between 13 and 30%. (1). Osteoporotic fractures in men are associated with considerable morbidity while mortality in the setting of recent hip fracture is 2-3 times higher in men than in women. (2,3,4). There are 5 drugs approved by the FDA for treatment of osteoporosis in men: alendronate, risedronate, zoledronate, denosumab and teriparatide.

Screening older males with central DXA for the presence of osteoporosis is an effective method for identifying individuals at high risk for fracture. (5). Currently, screening males over the age of 70 by central DXA is recommended by the NOF (6), ISCD (7), The Endocrine Society (8) and United Rheumatology (9). Obtaining a DXA study is also part of the Welcome to Medicare Exam for both men and women. The Cardiovascular Health Study demonstrated that screening for osteoporosis using hip BMD was associated with a lower incidence of hip fracture compared to standard care in both men and women. (10) Recently, Schousboe et al demonstrated that DXA screening of older males at high risk for fracture by using a weight cut off was cost effective. (11).

Although male osteoporosis is even less well recognized than in women, screening older males for the presence of osteoporosis by DXA study is clearly warranted: osteoporosis is a common disease in men, is associated with a significant healthcare burden and effective treatments are currently available.

By age 65 years, at least 6 percent of men have DEXA-determined osteoporosis, so risk factor assessment before this age is reasonable. (11). "Men in their fifties do not experience the rapid loss of bone mass that women do in the years following menopause. By age 65 or 70, however, men and women are losing bone mass at the same rate, and the absorption of calcium, an essential nutrient for bone health throughout life, decreases in both sexes. Excessive bone loss causes bone to become fragile and more likely to fracture" (12).

"The burden of osteoporosis is enormous. Fragility fractures of all types can lead to serious consequences and even death. Not infrequently, they cause a significant impairment in the quality of life, decreased mobility, and increased risk of long-term care admission and mortality. Among fragility fractures with the highest incidence, hip fractures lead to a mortality of 15–20%, while vertebral fractures lead to sequelae such as chronic pain, balance disorders, digestive, and respiratory disorders" (14)



#### Citations

#### Citations:

- (1) Bliuc D, Nguyen ND, Milch VE, Nguyen TV, Eisman JA, Center JR 2009 Mortality risk associated with low-trauma osteoporotic fracture and subsequent fracture in men and women. JAMA 301: 513–521
- (2) Forse'n L, Sogaard AJ, Meyer HE, Edna T, Kopjar B 1999 Survival after hip fracture: short- and long-term excess mortality according to age and gender. Osteoporosis Int 10:73–78
- (3) Haentjens P, Magazine J, Colo'n-Emeric CS, Vanderschueren D, Milisen K, Velkeniers B, Boonen S 2010Meta-analysis: excess mortality after hip fracture among older women and men. Ann Intern Med 152:380 –390
- (4) Holt G, Smith R, Duncan K, Hutchison JD, Gregori A 2008 Gender differences in epidemiology and outcome after hip fracture: evidence from the Scottish Hip Fracture Audit. J Bone Joint Surg 90B:480 483
- (5) Viswanathan M, Reddy S, Berkman N, et al. Screening to Prevent Osteoporotic Fractures: An Evidence Review for the US Preventive Services Task Force: Evidence Synthesis No 162. Rockville, MD: Agency for Healthcare Research and Quality; 2017.AHRQ publication 15-05226-EF-1.
- (6) Cosman F, de Beur S, LeBoff M, Lewiecki EM, Tanner B, Randall S, Lindsay R. 2014. Clinician's Guide to Prevention and Treatment of Osteoporosis. Osteoporosis Int DOI 10.1007/s00198-014-2794-2
- (7) Official Positions of the International Society of Clinical Densitometry 2015. https://iscd.app.box.com/v/OP-ISCD-2015-Adult
- (8) Watts N, Adler R, Bilezikian J, Drake M, Eastell R, Orwoll E, Finkelstein J 2012. Osteoporosis in Men: An Endocrine Society Clinical Practice Guideline. J Clin Endocinologist Metab 97: 1802-1822.
- (9) United Rheumatology Clinical Practice Guideline Adult Osteoporosis v1.1.2017
- (10) Kern LM, Powe NR, Levine MA, et al. Association between screening for osteoporosis and the incidence of hip fracture. Ann Intern Med. 2005;142(3):173-181.f doi:10.7326/0003-4819-142-3-200502010-00007
- (11) Schousboe JT, GourlayM, Fink HA, et al; Osteoporotic Fractures in Men (MrOS) and Study of Osteoporotic Fractures (SOF) Research Groups. Costeffectiveness of bone densitometry among Caucasian women and men without a prior fracture according to age and body weight. Osteoporosis Int. 2013; 24(1):163-177. doi:10.1007/s00198-012-1936-7
- (12) 2008. Armstrong, C. ACP Guidelines on Screening for Osteoporosis in Men. Retrieved on August 31, 2018 from https://www.aafp.org/afp/2008/1001/p882.html
- (13) 2015. National Institute of Arthritis and Musculoskeletal and Skin Diseases: Osteoporosis in Men. Retrieved on August 31, 2018 from https://www.bones.nih.gov/health-info/bone/osteoporosis/men
- (14) 2021. National Library of Medicine: Osteoporosis in Med: A review of an underestimated bone condition. Retrieved on August 1, 2023 from Osteoporosis in Men: A Review of an Underestimated Bone Condition PMC (nih.gov)



Measure	UREQA10
Measure Title	Ankylosing Spondylitis: Controlled Disease Or Improved Disease Function
Measure Description	Percentage of qualifying visits for patients aged 18 years and older with a diagnosis of ankylosing spondylitis whose most recent BASDAI score is less than 4 OR who were in suboptimal disease control (BASDAI score >= 4.0) and who have seen an improvement by at least one point over the previous BASDAI score within the last 12 months.
Reporting Frequency	This measure is reported once per reporting period
High Priority or Outcome	High Priority
High Priority Type	Outcome
Measure Type	Outcome
NQS Domain	Effective Clinical Care
Inverse Measure	No
Risk Adjusted	No
Proportional Measure	Yes
Continuous Variable Measure	No
Number of Performance Rates	One
Meaningful Measure Area	Medication Management
Specialties	Rheumatology
Does this measure require the use of proprietary software, devices, etc.?	No
MIPS reporting options	MVP, Traditional MIPS
Care Setting	Outpatient services
First Performance Year	2023



#### Denominator

- Patients aged 18 years and older as of the date of service
- Diagnosis of ankylosing spondylitis: M45.0, M45.1, M45.2, M45.3,
   M45.4, M45.5, M45.6, M45.7, M45.8, M45.9,
- At least one established patient encounter during the performance period (CPT or HCPCS): 99212, 99213, 99214, 99215 for disease controlled patients (BASDAI <4.0) OR at least two established patient encounter visits during last 12 months (with one being during measurement period): 99212, 99213, 99214, 99215
- POS 11 Office, 19 Off Campus-Outpatient Hospital or 22 On Campus-Outpatient Hospital

#### **Denominator Exclusions:**

- Telehealth Modifier: GQ, GT, 95, POS 02
- Hospice Service Modifier: GV, GW

#### Numerator

Percentage of qualifying visits for patients aged 18 years and older with a diagnosis of ankylosing spondylitis whose most recent BASDAI score is less than 4

OR

Who were in suboptimal disease control (BASDAI score >= 4.0) and who have seen an improvement by at least one point over the previous BASDAI score within the last 12 months.

#### **Performance Met**

- PM1: Percentage of patients whose most recent BASDAI score is less than 4
- PM2: Who were in suboptimal disease control (BASDAI score >=
   4.0) and who have seen an improvement by at least one point over
   the previous BASDAI score within the last 12 months. Note: patient
   must of had two established patient encounters in the last 12
   months (with one being during measurement period): 99212,
   99213, 99214, 99215

#### **Performance Not Met**

- PNM1: BASDAI scoring not completed at least once during last 12 months of date of service
- PNM2: Patient has had one BASDAI score in last 12 months
  that was greater than or equal to 4.0 and there was not a
  second BASDAI score to show improvement over time in last
  12 months for those patients with at least two established
  patient encounters in last 12 months, (with one being during
  measurement period): 99212, 99213, 99214, 99215

#### **Performance Exceptions**

Patient reason for not obtaining BASDAI score (e.g. patient refuses to complete clinical survey, late arrival for visit, communication barrier, medical reason for not completing BASDAI score)





#### Clinical Recommendation Statement

- BASDAI less than 4.0 is considered Optimal control
- BASDAI greater than or equal to 4.0 is considered Sub optimal control
- Use the highest BASDAI score within the last 12 months prior to date of service for the baseline BASDAI score to be used for comparison. (If the patient has three or more BASDAI scores during the last 12 months, start with the highest suboptimal BASDAI score for measure calculation purposes.)
- Use the most recent BASDAI score for numerator calculation in showing the improvement over time.
- If all of the patients BASDAI scores within the last 12 months are optimal (BASDAI less than 4.0), the patient is not to be counted in the denominator. Only patients that are sub-optimal within the last 12 months of date of service are to be included in the denominator.

#### **NQS Domain Rationale**

Ankylosing spondylitis is an immune-mediated inflammatory arthritis of the spine and, less commonly, peripheral joints. There is no known single etiology. It is likely a combination of genetic, environmental, and immunologic factors that can result in active ankylosing spondylitis.

As ankylosing spondylitis progresses, deformities of the spine such as flattening of the normal lumbar lordosis, kyphosis of the thoracic spine, and hyperextension of the cervical spine can occur. Fusion of the sacroiliac (SI) joints may also occur.

The disease negatively impacts the quality of life (QoL) of those affected. The most common problems are stiffness, back pain, fatigue, poor sleep, side effects of medications, negative body image, and concerns about the future; especially the ability to maintain full-time employment. The latter problem also contributes to the high costs associated with caring for these patients.

Measuring disease activity is important for tracking a patient's progress toward the treatment target and is extremely important in monitoring outcomes (1).

United Rheumatology recommends the use of the BASDAI to measure disease activity in patients with ankylosing spondylitis (1). The BASDAI is the result of the work of a research team consisting of rheumatologists, physiotherapists, and research associates with a special interest in AS who developed the index in Bath, England.



### Citations

### Citations:

- (1) United Rheumatology Clinical Practice Guideline Axial Spondyloarthritis, Version 1.1.2016, April 2016
- (2) BASDAI. Assess Disease Activity in Ankylosing Spondylitis. Calculate by QxMD. https://qxmd.com/calculate/basdai.
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- (4) J Rheumatology. 1994 Dec;21(12):2286-91. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/7699630?dopt=Abstract.
- (5) Ottawa (ON): Canadian Agency for Drugs and Technologies in Health. https://www.ncbi.nlm.nih.gov/books/NBK525580/. 2017
- (6) Yasser El Miedany. Patient Reported Outcome Measures in Rheumatic Disease. 2016. Springer.