### Quality ID #271: Inflammatory Bowel Disease (IBD): Preventive Care: Corticosteroid Related Iatrogenic Injury – Bone Loss Assessment
– National Quality Strategy Domain: Effective Clinical Care
– Meaningful Measure Area: Management of Chronic Conditions

#### 2019 COLLECTION TYPE:
MIPS CLINICAL QUALITY MEASURES (CQMs)

#### MEASURE TYPE:
Process

#### DESCRIPTION:
Percentage of patients regardless of age with an inflammatory bowel disease encounter who were prescribed prednisone equivalents greater than or equal to 10 mg/day for 60 or greater consecutive days or a single prescription equating to 600 mg prednisone or greater for all fills and were documented for risk of bone loss once during the reporting year or the previous calendar year. Individuals who received an assessment for bone loss during the year prior and current year are considered adequately screened to prevent overuse of X-ray assessment.

#### INSTRUCTIONS:
This measure is to be submitted a minimum of once per performance period for all patients with a diagnosis of inflammatory bowel disease seen during the performance 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.

#### 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.

#### DENOMINATOR:
All patients, regardless of age, with a diagnosis of inflammatory bowel disease.

**Definition:**
Corticosteroids – Prednisone equivalents used expressly for the treatment of IBD and not for other indications (including premedication before anti-TNF therapy, non-IBD indications) can be determined using the following: 1 mg of prednisone = 1 mg of prednisolone; 5 mg of cortisone; 4 mg of hydrocortisone; 0.8 mg of triamcinolone; 0.8 mg of methylprednisolone; 0.15 mg of dexamethasone; 0.15 mg of betamethasone.

**DENOMINATOR NOTE:** *Signifies that this CPT Category I code is a non-covered service under the Medicare Part B Physician Fee Schedule (PFS). These non-covered services should be counted in the denominator population for MIPS CQMs.*

#### Denominator Criteria (Eligible Cases):

AND


AND

Patients who have received or are receiving corticosteroids greater than or equal to 10 mg/day of prednisone equivalents for 60 or greater consecutive days or a single prescription equating to 600 mg prednisone or greater for all fills: G9469

**NUMERATOR:**

Patients who have received dose of corticosteroids greater than or equal to 10 mg/day of prednisone equivalents for 60 or greater consecutive days or a single prescription equating to 600 mg prednisone or greater for all fills and who were documented for risk of bone loss during the reporting year or the previous calendar year

**Definition:**

Documented – Documentation that an assessment for risk of bone loss has been performed or ordered or that pharmacologic treatment for osteoporosis was prescribed. This includes, but is not limited to, review of systems and medication history, and ordering of Central Dual-energy X-Ray Absorptiometry (DXA) scan.

**Numerator Options:**

**Performance Met:**

Within the past 2 years, Central Dual-energy X-Ray Absorptiometry (DXA) ordered and documented review of systems and medication history or pharmacologic therapy (other than minerals/vitamins) for osteoporosis prescribed (G8861)

**OR**

**Performance Not Met:**

Within the past 2 years, Central Dual-energy X-Ray Absorptiometry (DXA) not ordered and documented, no review of systems and no medication history or pharmacologic therapy (other than minerals/vitamins) for osteoporosis prescribed (G9472)

**RATIONALE:**

Patients with inflammatory bowel disease (IBD) often rely on their gastroenterologist for healthcare maintenance. In addition, the gastroenterologist also provides guidance to the patient’s primary care physician on a broad range of issues such as vaccinations, osteoporosis screening, and cancer/dysplasia surveillance. Screening for osteoporosis is based on a combination of individual risk factors, but a history of prolonged (>3 months) steroid use over 10 mg is reason enough to obtain dual-energy x-ray absorptiometry scanning. (Mosandrew M., Mahadevan U., Kane S. General Health Maintenance in IBD. Inflamm Bowel Dis. 2009; 15:1399–1409.)


The decision to measure bone density should follow an individualized approach. It should be considered when it will help the patient decide whether to institute treatment to prevent osteoporotic fracture. It should also be considered in patients receiving glucocorticoid therapy for two months or more and patients with other conditions that place them at high risk for osteoporotic fracture. (NIH)

The most commonly used measurement to diagnose osteoporosis and predict fracture risk is based on assessment of bone mineral density BMD by dual energy X-ray absorptiometry (DXA). (NIH)
CLINICAL RECOMMENDATION STATEMENTS:
IBD has only a modest effect on BMD, with a pooled Z score of -0.5 (level A evidence). (AGA, American Gastroenterological Association Medical Position Statement: Guidelines on Osteoporosis in Gastrointestinal Diseases, 2003).

Corticosteroid use is the variable most strongly associated with osteoporosis (level A evidence). However, it is difficult to distinguish corticosteroid use from disease activity in terms of causal impact on bone density, because the two are closely linked. (AGA, American Gastroenterological Association Medical Position Statement: Guidelines on Osteoporosis in Gastrointestinal Diseases. 2003.)

However, there is strong evidence that those on long-term steroids of greater than three months have a significant increase risk of fracture (Papaioannou A. et al. All Patients with Inflammatory Bowel Disease Should Have Bone Density Assessment: Pro. Inflammatory Bowel Diseases. 2001.7(2):158-162) DXA screening is recommended in inflammatory bowel disease patients with one or more risk factors: history of vertebral fractures, postmenopausal, male >50 years of age, chronic corticosteroid therapy, or hypogonadism. If the initial DXA is normal, the AGA recommends repeat testing in 2-3 years. If the patient has osteoporosis, or has a history of a low trauma fracture, evaluation for secondary causes should be completed. Suggested studies include a complete blood count, serum concentrations of alkaline phosphatase level, calcium, creatinine, and 25-OH vitamin D, serum protein electrophoresis, serum calcium, and a testosterone level in males. (Bernstein CN, Leslie WD, Leboff MS. AGA technical review on osteoporosis in gastrointestinal diseases. Gastroenterology. 2003;124(3):795–841).

Data on the treatment of osteoporosis in Crohn’s disease depend on studies that are not specific to IBD. The evidence levels and recommendation grades are accordingly marked down. Weight bearing, isotonic exercise [EL2b, RG B], stopping smoking [EL3b, RG C], avoiding alcohol excess [EL4, RG D], and maintaining adequate dietary calcium (>1 g/day) [EL2b, RG B] are beneficial. Hormone replacement treatment is no longer generally advised in post-menopausal women with osteoporosis [EL2b, RG B], but regular use of bisphosphonates, calcitonin and its derivatives, and raloxifene may reduce or prevent further bone loss [EL2b, RG C]. Data in men with osteoporosis are less secure but bisphosphonates are probably of value, [EL3b, RG C], newer data also support the use of strontium salts [EL2a, RG B]. Patients receiving systemic steroid therapy should receive calcium and vitamin D for prophylaxis [EL5, RG D]. (Assche G et al., Second European evidence-based consensus on ulcerative colitis’ diagnosis and management. Journal of Crohn’s and Colitis (2013) 7, 1-33.)

Diagnosis of osteoporosis in adults is best made from at T score of less than -2.5 on radiographic bone densitometry [EL1a, RG A], all other diagnosis methods having current limitations [EL2b, RG B]. The presence of osteoporosis identifies patients at above average risk for fracture and who should receive treatment [EL2b, RG B]. Osteopenia may be a prognostic marker for future osteoporosis, but presents little direct risk [EL2b, RG C]. However if the T score is less than -1.5, treatment with calcium and vitamin D should be recommended [EL4, RG C]. Pre-existing history of fracture is of substantial adverse prognostic significance and patients should be treated for osteoporosis even if the T score is normal [EL4, RG C]. (Assche G et al., Second European evidence-based consensus on ulcerative colitis’ diagnosis and management. Journal of Crohn’s and Colitis (2013) 7, 1-33.)

COPYRIGHT:
Physician Performance Measures (Measures) and related data specifications have been developed by the American Gastroenterological Association (AGA) Institute.

These performance Measures are not clinical guidelines and do not establish a standard of medical care, nor have been tested for all potential applications. Neither the AGA, any of its affiliates, the American Medical Association (AMA), the Physician Consortium for Performance Improvement (PCPI™), nor its members shall be responsible for any use of the Measures.
Measures are subject to review and may be revised or rescinded at any time by the AGA. The Measures may not be altered without the prior written approval of the AGA. Measures developed by the AGA, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes, eg, use by health care providers in connection with their practices. Commercial use is defined as the sale, license, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain. Commercial uses of the Measures require a license agreement between the user and the AGA.

THE MEASURES AND SPECIFICATIONS ARE PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND

2015 American Gastroenterological Association. All Rights Reserved.

Limited proprietary coding is contained in the Measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. The AGA, its affiliates, AMA the PCPI and its members disclaim all liability for use or accuracy of any current procedural terminology (CPT) or other coding contained in the specifications. CPT® contained in the Measures specifications is copyright 2018.

2018 American Medical Association. LOINC is copyright 2018

2018 Regenstrief Institute, Inc. This material contains SNOMED Clinical Terms (SNOMED CT) copyright 2018

2018 International Health Terminology Standards Development Organization. All Rights Reserved
2019 Clinical Quality Measure Flow for Quality ID #271:
Inflammatory Bowel Disease (IBD): Preventive Care: Corticosteroid Related Iatrogenic Injury –
Bone Loss Assessment

Start

Denominator

No

Diagnosis of Inflammatory Bowel Disease as listed in Denominator?

Yes

Not Included in Eligible Population/Denominator

No

Encounter as Listed in Denominator (1/1/2019 thru 12/31/2019)

Yes

Patient Who is Receiving or had Received Prednisone Therapy ≥ 10 mg/day for 60 Consecutive Days OR Single Prescription ≥ 60 mg/day for All Fills: G9463 or equivalent.

Yes

Include in Eligible Population/Denominator (80 patients)

No

Within the Past 2 Years, Central Dual-Energy X-Ray Absorptiometry Ordered and Documented Review of Systems and Medication History or Pharmacologic Therapy for Osteoporosis Prescribed

Yes

Data Completeness Met + Performance Met G9661 or equivalent (50 patients)

No

Within the Past 2 Years, Central Dual-Energy X-Ray Absorptiometry Not Ordered and Documented, No Review of Systems and No Medication History or Pharmacologic Therapy for Osteoporosis Prescribed

Yes

Data Completeness Met + Performance Not Met G9472 or equivalent (50 patients)

No

Data Completeness Not Met Quality Measure or equivalent not submitted (10 patients)

SAMPLE CALCULATIONS:

Data Completeness:
Performance Met (a=50 patients) + Performance Not Met (c=29 patients) = 79 patients = 87.30%
Eligible Population / Denominator (d=80 patients)

Performance Rate:
Performance Met (a=50 patients) = 50 patients / 80 patients = 71.43%
Data Completeness Numerator (70 patients) = 70 patients / 80 patients

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

NOTE: Submission Frequency: Patient-episode

Copyright © 2016 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 specification.
2019 Clinical Quality Measure Flow Narrative for Quality ID #271
Inflammatory Bowel Disease (IBD): Preventive Care: Corticosteroid Related Iatrogenic Injury – Bone Loss Assessment

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

1. Start with Denominator
2. Check Patient Diagnosis:
   a. If Diagnosis of Inflammatory Bowel Disease as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Diagnosis of Inflammatory Bowel Disease as Listed in the Denominator equals Yes, proceed to check Encounter Performed.
3. Check Encounter Performed:
   a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, proceed to check Patient Who is Receiving or had Received Prednisone Therapy ≥ 10mg/day 60 Consecutive Days OR Single Prescription ≥ 600mg for All Fills.
4. Check Patient Who is Receiving or had Received Prednisone Therapy ≥ 10mg/day 60 Consecutive Days OR Single Prescription ≥ 600mg for All Fills:
   a. If Patient Who is Receiving or had Received Prednisone Therapy ≥ 10mg/day 60 Consecutive Days OR Single Prescription ≥ 600mg for All Fills equals No, do not include in Eligible Population. Stop Processing.
   b. If Patient Who is Receiving or had Received Prednisone Therapy ≥ 10mg/day 60 Consecutive Days OR Single Prescription ≥ 600mg for All Fills equals Yes, include in Eligible Population.
5. 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 80 patients in the Sample Calculation.
6. Start Numerator
7. Check Within the Past 2 Years, Central Dual-Energy X-Ray Absorptiometry Ordered and Documented Review of Systems and Medication History or Pharmacologic Therapy for Osteoporosis Prescribed:
   a. If Within the Past 2 Years, Central Dual-Energy X-Ray Absorptiometry Ordered and Documented Review of Systems and Medication History or Pharmacologic Therapy for Osteoporosis Prescribed equals Yes, include in Data Completeness Met and Performance Met.
   b. Data Completeness Met and Performance Met is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 50 patients in the Sample Calculation.
   c. If Within the Past 2 Years, Central Dual-Energy X-Ray Absorptiometry Ordered and Documented Review of Systems and Medication History or Pharmacologic Therapy for Osteoporosis Prescribed equals No, proceed to check Within the Past 2 Years, Central Dual-Energy X-Ray Absorptiometry Not Ordered and
Documented, No Review of Systems and No Medication History or Pharmacologic Therapy for Osteoporosis Prescribed.

8. Check Within the Past 2 Years, Central Dual-Energy X-Ray Absorptiometry Not Ordered and Documented, No Review of Systems and No Medication History or Pharmacologic Therapy for Osteoporosis Prescribed:

a. If Within the Past 2 Years, Central Dual-Energy X-Ray Absorptiometry Not Ordered and Documented, No Review of Systems and No Medication History or Pharmacologic Therapy for Osteoporosis Prescribed equals Yes, include in the Data Completeness Met and Performance Not Met.

b. Data Completeness Met and Performance Not Met is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 20 patients in the Sample Calculation.

c. If Within the Past 2 Years, Central Dual-Energy X-Ray Absorptiometry Not Ordered and Documented, No Review of Systems and No Medication History or Pharmacologic Therapy for Osteoporosis Prescribed equals No, proceed to check Data Completeness Not Met.

9. Check Data Completeness Not Met:

a. Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 10 patients have been subtracted from Data Completeness Numerator in the Sample Calculation.

<table>
<thead>
<tr>
<th>SAMPLE CALCULATIONS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Completeness:</td>
</tr>
<tr>
<td>Performance Met (a=50 patients) x Performance Not Met (c=20 patients) = 70 patients = 87.50%</td>
</tr>
<tr>
<td>Eligible Population / Denominator (d=80 patients) = 80 patients</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance Rate:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Met (a=50 patients) = 50 patients = 71.43%</td>
</tr>
<tr>
<td>Data Completeness Numerator (70 patients) = 70 patients</td>
</tr>
</tbody>
</table>