Measure #140 (NQF 0566): Age-Related Macular Degeneration (AMD): Counseling on Antioxidant Supplement – National Quality Strategy Domain: Effective Clinical Care

2017 OPTIONS FOR INDIVIDUAL MEASURES:  
REGISTRY ONLY

MEASURE TYPE:  
Process

DESCRIPTION:  
Percentage of Patients aged 50 years and older with a diagnosis of age-related macular degeneration (AMD) or their caregiver(s) who were counseled within 12 months on the benefits and/or risks of the Age-Related Eye Disease Study (AREDS) formulation for preventing progression of AMD

INSTRUCTIONS:  
This measure is to be reported a minimum of once per performance period for AMD patients seen during the performance period. It is anticipated that eligible clinicians who provide the primary management of patients with AMD will submit this measure.

Measure Reporting:  
The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

DENOMINATOR:  
All Patients aged 50 years and older with a diagnosis of AMD

Denominator Criteria (Eligible Cases):  
Patients aged ≥ 50 years on date of encounter  
AND  
AND  
Patient encounter during the performance period (CPT): 92002, 92004, 92012, 92014, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337  
WITHOUT  
Telehealth Modifier: GQ, GT

NUMERATOR:  
Patients with AMD or their caregiver(s) who were counseled within 12 months on the benefits and/or risks of the AREDS formulation for preventing progression of AMD

Definition:  
Counseling – Documentation in the medical record should include a discussion of risk or benefits of the AREDS formulation. Counseling can be discussed with all patients with AMD, even those who do not meet the criteria for the AREDS formulation, or other reasons why the patient would not meet criteria for AREDS formulation as outlined in the AREDS. The ophthalmologist or optometrist can explain why these
supplements are not appropriate for their particular situation. Also, given the purported risks associated with antioxidant use, patients would be informed of the risks and benefits and make their choice based on valuation of vision loss vs. other risks. As such, the measure seeks to educate patients about overuse as well as appropriate use.

**NUMERATOR NOTE:** If patient is already receiving AREDS formulation, the assumption is that counseling about AREDS has already been performed.

**Numerator Options:**

**Performance Met:**
Counseling about the benefits and/or risks of the Age-Related Eye Disease Study (AREDS) formulation for preventing progression of age-related macular degeneration (AMD) provided to patient and/or caregiver(s) *(4177F)*

**Performance Not Met:**
AREDS counseling not performed, reason not otherwise Specified *(4177F with 8P)*

**RATIONALE:**

1) Scientific basis for counseling regarding use of AREDS formulation for patients with AMD

Antioxidant vitamins and mineral supplements help to reduce the rate of progression to advanced AMD for those patients with intermediate or advanced AMD in one eye. From the original AREDS study, there is no evidence that the use of antioxidant vitamin and mineral supplements for patients with mild AMD alters the natural history of mild AMD.

At the same time, published meta-analyses have raised an issue as to the presence of an elevated mortality risk among patients taking elements similar to parts of the AREDS2 formulation. As such, patients need to know of their individualized risk profile for taking the AREDS formula AND the potential benefits, so that they can make their OWN individual decision as to whether or not to take the AREDS formulation.

This indicator thus seeks to directly enhance the provider-patient relationship to apply the results of level 1 randomized controlled trials (RCTs) in a manner that accommodates the needs of each individual patient in a patient-centered manner, rather than a paternalistic approach of either recommending or withholding treatment.

2) Evidence of gap in care.

Antioxidant vitamins and mineral supplements help to reduce the rate of progression to advanced AMD for those patients with intermediate or advanced AMD in one eye. From the original AREDS study, there is no evidence that the use of antioxidant vitamin and mineral supplements for patients with mild AMD alters the natural history of mild AMD.

**CLINICAL RECOMMENDATION STATEMENTS:**

All patients with AMD should be educated about the prognosis of the disease and the potential value of treatment as appropriate for their visual and functional status. Patients can be educated that while central visual loss is common, total visual loss is extremely rare. Patients with AMD can be reassured that there is no harm in using their eyes for normal visual tasks, and they may be told that the effect of total sunlight exposure remains uncertain *(III; Good; Strong)*

Treatment with antioxidants and minerals as described previously in the original AREDS and AREDS2 trials is recommended for patients who have progressed to intermediate or advanced AMD in at least one eye *(I++; Good; Strong)*

Antioxidant Vitamin and Mineral Supplements Used in the Age-Related Eye Disease Study 2

<table>
<thead>
<tr>
<th>Supplement</th>
<th>Daily Dose*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin C</td>
<td>500 mg</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>400 IU</td>
</tr>
<tr>
<td>Lutein/zeaxanthin</td>
<td>10 mg/2 mg</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>80 mg or 25 mg</td>
</tr>
<tr>
<td>Cupric oxide</td>
<td>2 mg</td>
</tr>
</tbody>
</table>


* These doses are not those listed on the commercially available vitamin/mineral supplements because of a change in labeling rules by the U.S. Food and Drug Administration that specifies that the doses must reflect the amounts available at the end of the shelf life.
2017 Registry Individual Measure Flow
#140 NQF #0566: Age-Related Macular Degeneration (AMD): Counseling on Antioxidant Supplement

Start

Denominator

Patient Age at Date of Service ≥ 50 Years

No

Not Included in Eligible Population/Denominator

Yes

Diagnosis of AMD as Listed in Denominator*

No

Numerator

Counseling about the Benefits and/or Risks of the Age-Related Eye Disease Study (AREDS) Formulation for Preventing Progression of Age-Related Macular Degeneration (AMD) Provided to Patient and/or Caregiver(s)

No

AreDS Counseling not Performed, Reason not Specified

No

Encounter as Listed in Denominator* (1/1/2017 thru 12/31/2017)

Yes

Telehealth Modifier: GQ, GT

No

Include in Eligible Population/Denominator (8 patients)

Yes

Data Completeness Met + Performance Met 4177F or equivalent (4 patients)

a

Data Completeness Met + Performance Not Met 4177-8P or equivalent (3 patients)

c

Data Completeness Not Met Quality-Data Code or equivalent not reported (1 patient)

d

SAMPLE CALCULATIONS:

Data Completeness =
Performance Met (a=4 patients) + Performance Not Met (c=3 patients) = 7 patients = 87.50%
Eligible Population / Denominator (d=8 patients) = 8 patients

Performance Rate =
Performance Met (a=4 patients) = 4 patients = 57.14%
Data Completeness Numerator (7 patients) = 7 patients

*See the posted Measure Specification for specific coding and instructions to report this measure.
NOTE: Reporting Frequency – Patient-process

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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.
2017 Registry Individual Measure Flow

#140 NQF #0566: Age-Related Macular Degeneration (AMD): Counseling on Antioxidant Supplement

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

1. Start with Denominator

2. Check Patient Age:
   a. If Age greater than or equal to 50 years of age on Date of Service equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
   b. If Age greater than or equal to 50 years of age on Date of Service equals Yes during the measurement period, proceed to check Patient Diagnosis.

3. Check Patient Diagnosis:
   a. If Diagnosis of AMD as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Diagnosis of AMD as Listed in the Denominator equals Yes, proceed to check Encounter Performed.

4. Check Encounter Performed:
   a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, include in the Eligible population.

5. Telehealth Modifier
   a. If Telehealth as listed in the Denominator equals Yes, do not include in the Eligible Denominator Population. Stop Processing.
   b. If Telehealth as listed in the Denominator equals No, include in the Eligible Population.

6. 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 8 patients in the sample calculation.

7. Start Numerator

8. Check Counseling about the Benefits and/or Risks of the Age-Related Eye Disease Study (AREDS) Formulation for Preventing Progression of Age-Related Macular Degeneration (AMD) Provided to Patient and/or Caregiver(s):
   a. If Counseling about the Benefits and/or Risks of the Age-Related Eye Disease Study (AREDS) Formulation for Preventing Progression of Age-Related Macular Degeneration (AMD) Provided to Patient and/or Caregiver(s) equals Yes, include in Data Completeness Met and Performance Met.
b. Data Completeness Met and Performance Met letter is represented in the Data Completeness Rate and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 4 patients in Sample Calculation.

c. If Counseling about the Benefits and/or Risks of the Age-Related Eye Disease Study (AREDS) Formulation for Preventing Progression of Age-Related Macular Degeneration (AMD) Provided to Patient and/or Caregiver(s) equals No, proceed to AREDS Counseling Not Performed, Reason Not Specified

9. Check AREDS Counseling not Performed, Reason not Specified:

a. If AREDS Counseling not Performed, Reason not Specified equals Yes, include in the Data Completeness Met and Performance Not Met.

b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness Rate in the Sample Calculation listed at the end of this document. Letter c equals 3 patients in the Sample Calculation.

c. If AREDS Counseling not Performed, Reason not Specified equals No, proceed to Data Completeness Not Met.

10. Check Data Completeness Not Met:

a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not reported. 1 patient has been subtracted from the data completeness numerator in the sample calculation.

### SAMPLE CALCULATIONS:

**Data Completeness**

\[
\text{Performance Met (a=4 patients) + Performance Not Met (c=3 patients)} = 7 \text{ patients} = \frac{87.50\%}{8 \text{ patients}}
\]

**Performance Rate**

\[
\text{Performance Met (a=4 patients)} = 4 \text{ patients} = 57.14\%
\]

\[
\text{Data Completeness Numerator (7 patients)} = 7 \text{ patients}
\]