Quality ID #258: Rate of Open Repair of Small or Moderate Non-Ruptured Infrarenal Abdominal Aortic Aneurysms (AAA) without Major Complications (Discharged to Home by Post-Operative Day #7) – National Quality Strategy Domain: Patient Safety

2018 OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

MEASURE TYPE:
Outcome

DESCRIPTION:
Percent of patients undergoing open repair of small or moderate sized non-ruptured infrarenal abdominal aortic aneurysms who do not experience a major complication (discharge to home no later than post-operative day #7)

INSTRUCTIONS:
This measure is to be submitted each time an open repair AAA is performed during the performance period. It is anticipated that eligible clinicians who provide services of AAA repair, as described in the measure, based on the services provided and the measure-specific denominator coding will submit this measure. This measure may be submitted by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Submission:
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 open repairs of non-ruptured, infrarenal abdominal aortic aneurysms

Denominator Criteria (Eligible Cases):
Patients aged ≥ 18 years on date of encounter
AND
Patient procedure during the performance period (CPT): 35081, 35102
AND NOT
DENOMINATOR EXCLUSIONS:
For women:
Aortic aneurysm 5.5 - 5.9 cm maximum diameter on centerline formatted CT or minor diameter on axial formatted CT: 9003F
OR
Aortic aneurysm 6.0 cm or greater maximum diameter on centerline formatted CT or minor diameter on axial formatted CT: 9004F
OR
For men:
Aortic aneurysm 6.0 cm or greater maximum diameter on centerline formatted CT or minor diameter on axial formatted CT: 9004F

NUMERATOR:
Patients discharged to home no later than post-operative day #7

Definition:
Home – For purposes of submitting this measure, home is the point of origin prior to hospital admission prior to procedure of AAA. For example, if the patient comes from a skilled facility and returns to the skilled facility post AAA repair, this would meet criteria for discharged to home.

Numerator Options:

**Performance Met:**
Patient discharge to home no later than post-operative day #7 (G8818)

**OR**

**Performance Not Met:**
Patient not discharged to home by post-operative day #7 (G8825)

RATIONALE:
Elective repair of a small or moderate sized AAA is a prophylactic procedure and the mortality/morbidity of the procedure must be contrasted with the risk of rupture over time. Surgeons should select patients for intervention who have a reasonable life expectancy and who do not have a high surgical risk. Discharge to home within one week of open AAA repair is an indicator of patients who were not frail prior to the procedure and who did not experience a major complication. The proposed measure will therefore serve as an indicator of both appropriateness and overall outcome.

**CLINICAL RECOMMENDATION STATEMENTS:**


Elective repair is recommended for patients that present with a fusiform AAA ≥ 5.5 cm in maximum diameter, in the absence of significant co-morbidities.

*Level of recommendation: Strong*

*Quality of evidence: High*

Surveillance is recommended for most patients with a fusiform AAA in the range of 4.0 cm to 5.4 cm in maximum diameter.

*Level of recommendation: Strong*

*Quality of evidence: Moderate*

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2018 Registry Flow for Quality ID #258:
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Denominator

Start

Patient Age ≥ 18 Years on Date of Encounter

No

Procedure Codes as Listed in Denominator

1/1/2016 thru 2/28/2016

Not Included in Eligible Population/Denominator

Yes

Male Patient

Yes

Aortic Aneurysm ≥ 6.0 cm Maximum Diameter on Centerline Formatted CT or Minor Diameter on Axial Formatted CT 9004F or equivalent

Yes

Aortic Aneurysm 5.5-5.9 cm Maximum Diameter on Centerline Formatted CT or Minor Diameter on Axial Formatted CT 9003F or equivalent

No

Not Included in Eligible Population/Denominator

No

Include in Eligible Population/Denominator

(80 procedures)

Numerator

Patient Discharged to Home no later than Post-Operative Day #7

Yes

Data Completeness Met + Performance Met G0816 or equivalent (50 Procedures) a

No

Patient Not Discharged to Home by Post-Operative Day #7

Yes

Data Completeness Met + Performance Not Met G0825 or equivalent (20 procedures) c

No

Data Completeness Not Met Quality-Data Code or equivalent not submitted (10 procedures)

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

NOTE: Submission Frequency - Procedure

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**SAMPLE CALCULATIONS:**

| Data Completeness | Performance Met (n=50 procedures) - Performance Not Met (n=20 procedures) = | Eligible Population / Denominator (d=80 procedures) | 70 procedures = 87.50%  
|--------------------|---------------------------------------------------------------------------|------------------------------------------------------|---------------------------|
|                    | Performance Rate = Performance Met (n=50 procedures) = 50 procedures = 71.43%  
|                    | Data Completeness Numerator (70 procedures) = 70 procedures               |                                                      |                           |

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

NOTE: Submission Frequency - Procedure

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2018 Registry Flow for Quality ID

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Please refer to the specific section of the specification to identify the denominator and numerator information for use in submitting this Individual Specification. This flow is for registry data submission.

1. Start with Denominator
2. Check Patient Age:
   a. If the Age greater than or equal to 18 years of age on date of encounter equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
   b. If the Age greater than or equal to 18 years of age on date of encounter equals Yes during the measurement period, proceed to check Procedure Codes.
3. Check Procedure Codes:
   a. If Procedure Codes as listed in the denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Procedure Codes as listed in the denominator equals Yes, proceed to check Male Patient.
4. Check Gender Male Patient:
   a. If Male Patient equals No, proceed to check Aortic Aneurysm 5.5 through 5.9 cm Maximum Diameter on Centerline Formatted CT or Minor Diameter on Axial Formatted CT.
   b. If Male Patient equals Yes, proceed to check Aortic Aneurysm greater than or equal to 6.0 cm Maximum Diameter on Centerline Formatted CT or Minor Diameter on Axial Formatted CT.
5. Check Aortic Aneurysm 5.5 through 5.9 cm Maximum Diameter on Centerline Formatted CT or Minor Diameter on Axial Formatted CT:
   a. If Aortic Aneurysm 5.5 through 5.9 cm Maximum Diameter on Centerline Formatted CT or Minor Diameter on Axial Formatted CT equals No, proceed to check Aortic Aneurysm greater than or equal to 6.0 cm Maximum Diameter.
   b. If Aortic Aneurysm 5.5 through 5.9 cm Maximum Diameter on Centerline Formatted CT or Minor Diameter on Axial Formatted CT equals Yes, do not include in Eligible Patient Population. Stop Processing.
6. Check Aortic Aneurysm greater than or equal to 6.0 cm Maximum Diameter on Centerline Formatted CT or Minor Diameter on Axial Formatted CT:
   a. If Aortic Aneurysm greater than or equal to 6.0 cm Maximum Diameter on Centerline Formatted CT or Minor Diameter on Axial Formatted CT equals No, include in Eligible Population.
   b. If Aortic Aneurysm greater than or equal to 6.0 cm Maximum Diameter on Centerline Formatted CT or Minor Diameter on Axial Formatted CT equals Yes, do not include in Eligible Patient Population. Stop Processing.
7. 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 procedures in the sample calculation.

8. Start Numerator

9. Check Patient Discharged to Home no later than Post-Operative Day number 7
   a. If Patient Discharged to Home no later than Post-Operative Day number 7 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 procedures in Sample Calculation.
   c. If Patient Discharged to Home no later than Post-Operative Day number 7 equals No, proceed to Patient Not Discharged to Home by Post-Operative Day number 7

10. Check Patient Not Discharged to Home by Post-Operative Day number 7
    a. If Patient Not Discharged to Home by Post-Operative Day number 7 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 procedures in the Sample Calculation.
    c. If Patient Not Discharged to Home by Post-Operative Day number 7 equals No, proceed to Data Completeness Not Met.

11. Check Data Completeness Not Met
    a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 10 procedures have been subtracted from the Data Completeness numerator in sample calculation.

### SAMPLE CALCULATIONS:

Data Completeness:  
\[
\text{Performance Met (a=50 procedures)} \div \text{Performance Not Met (c=20 procedures)} = \frac{50}{20} = 70 \text{ procedures} = 87.50\
\text{Denominator (d=80 procedures)} = 80 \text{ procedures}
\]

Performance Rate:  
\[
\text{Performance Met (a=50 procedures)} = \frac{50}{70} = 71.43\%
\text{Data Completeness numerator (70 procedures)} = 70 \text{ procedures} \]