

**Measure #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**

**2017 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 reported **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 report this measure. This measure may be reported by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

**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 open repairs of non-ruptured, infrarenal abdominal aortic aneurysms

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 18$  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 reporting 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:**

*The Care of Patients with an Abdominal Aortic Aneurysm: The Society for Vascular Surgery Practice Guidelines.* (Chaikof et al, J Vasc Surg, 50:4, supplement, 2009)

Elective repair is recommended for patients that present with a fusiform AAA  $\geq 5.5$  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.

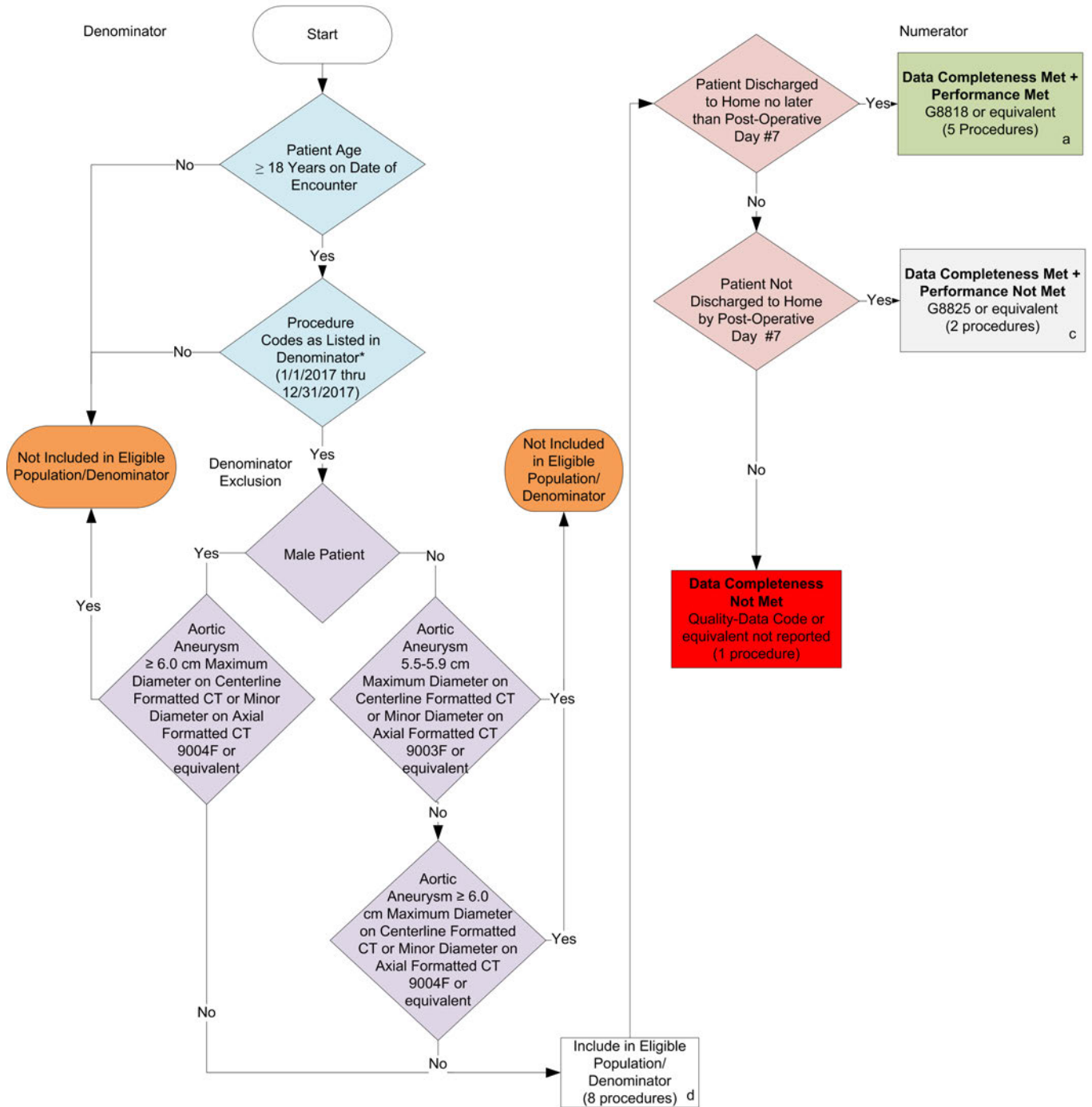
*Level of recommendation: Strong*

*Quality of evidence: Moderate*

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**2017 Registry Individual Measure Flow**  
**#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)**



\*See the posted Measure Specification for specific coding and instructions to report this measure.  
 NOTE: Report Frequency - Procedure

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**2017 Registry Individual Measure Flow**  
**#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)**

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a=5 procedures) + Performance Not Met (c=2 procedures)}}{\text{Eligible Population / Denominator (d=8 procedures)}} = \frac{7 \text{ procedures}}{8 \text{ procedures}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a =5 procedures)}}{\text{Data Completeness Numerator (7 procedures)}} = \frac{5 \text{ procedures}}{7 \text{ procedures}} = 71.43\%$$

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

NOTE: Report Frequency - Procedure

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## 2017 Registry Individual Measure Flow

### #258: Rate of Open Elective Repair of Small or Moderate Non-Ruptured Infrarenal Abdominal Aortic Aneurysms (AAA) without Major Complications (Discharged to Home by Post-Operative Day #7)

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 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 8 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 5 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 2 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 reported. 1 procedure has been subtracted from the Data Completeness numerator in sample calculation.

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a=5 procedures) + Performance Not Met (c=2 procedures)}}{\text{Eligible Population / Denominator (d=8 procedures)}} = \frac{7 \text{ procedures}}{8 \text{ procedures}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a =5 procedures)}}{\text{Data Completeness Numerator (7 procedures)}} = \frac{5 \text{ procedures}}{7 \text{ procedures}} = 71.43\%$$