

**Measure #347 (NQF 1534): Rate of Endovascular Aneurysm Repair (EVAR) of Small or Moderate Non-Ruptured Infrarenal Abdominal Aortic Aneurysms (AAA) Who Die While in Hospital – National Quality Strategy Domain: Patient Safety**

**2017 OPTIONS FOR INDIVIDUAL MEASURES:**  
**REGISTRY ONLY**

**MEASURE TYPE:**  
Outcome

**DESCRIPTION:**  
Percent of patients undergoing endovascular repair of small or moderate infrarenal abdominal aortic aneurysms (AAA) that die while in the hospital

**INSTRUCTIONS:**  
This measure is to be reported **each time** an EVAR is performed during the **performance period**. It is anticipated that eligible clinicians who provide services of EVAR, 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:**

Patients aged 18 and older with infrarenal non-ruptured endovascular AAA repairs

**Denominator Criteria (Eligible Cases):**

Patients aged 18 and older

**AND**

Patient procedure during **performance period** (CPT): 34800, 34802, 34803, 34804, 34805

**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 who die in the hospital following endovascular AAA repair

**Numerator Instructions:**

**INVERSE MEASURE** - A lower calculated performance rate for this measure indicates better clinical care or control. The "Performance Not Met" numerator option for this measure is the representation of the better clinical quality or control. Reporting that numerator option will produce a performance rate that trends closer to 0%, as quality increases. For inverse measures a rate of 100% means all of the denominator eligible patients did not receive the appropriate care or were not in proper control.

**Numerator Options:**

*Performance Met:*

Documentation of patient death in the hospital following endovascular AAA repair (G9262)

**OR**

*Performance Not Met:*

Documentation of patient survival in the hospital following endovascular AAA repair (G9263)

**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.

**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.

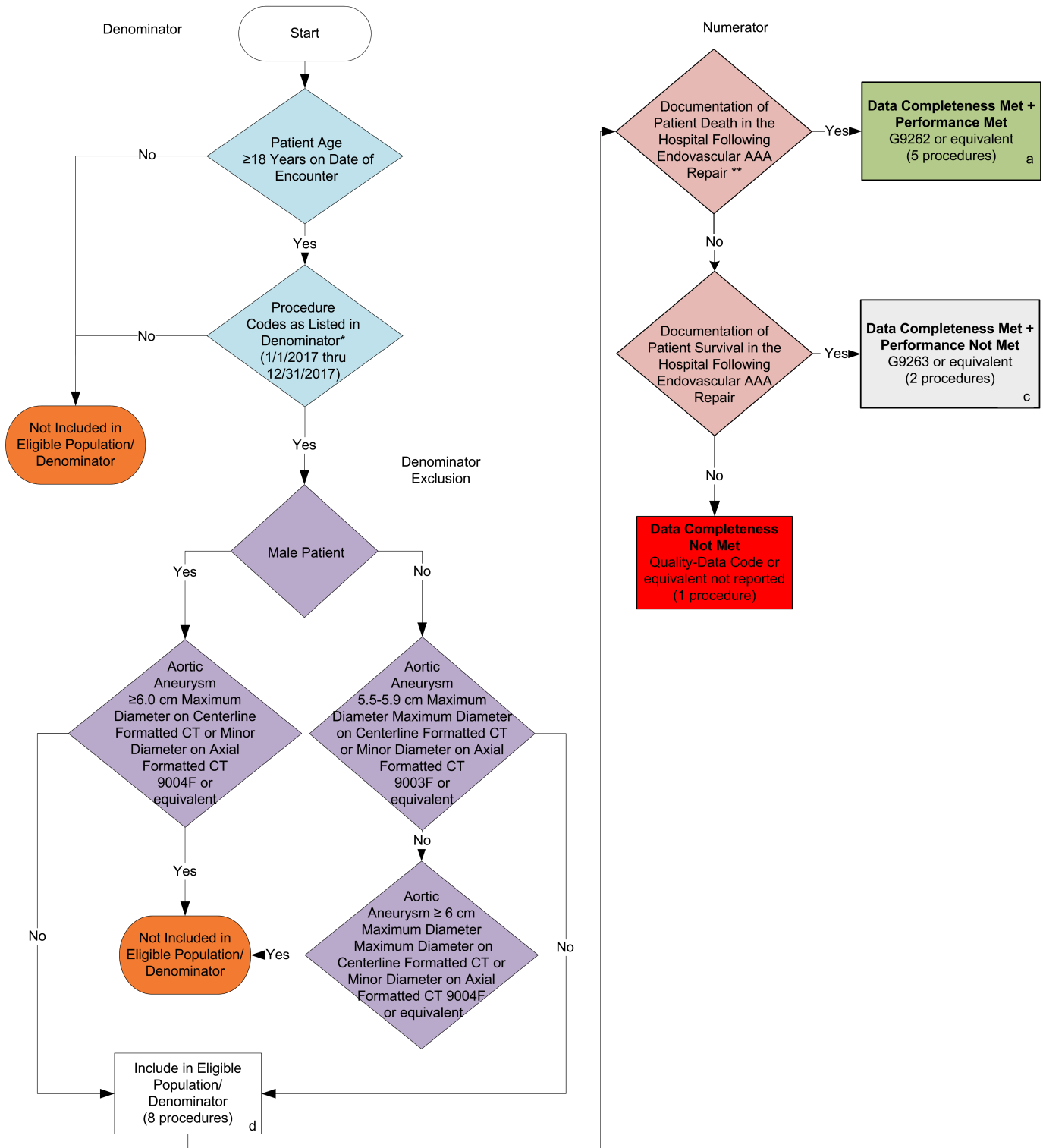
Surveillance is recommended for most patients with a fusiform AAA in the range of 4.0 cm to 5.4 cm in maximum diameter.

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## 2017 Registry Individual Measure Flow

### #347 (NQF 1534): Rate of Endovascular Aneurysm Repair (EVAR) of Small or Moderate Non-Ruptured Infrarenal Abdominal Aortic Aneurysms (AAA) Who Die While in Hospital



\*See the posted Measure Specification for specific coding and instructions to report this measure.  
 \*\*A lower calculated performance rate for this measure indicates better clinical care or control.  
 NOTE: Reporting Frequency – Procedure

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**2017 Registry Individual Measure Flow**  
**#347 (NQF 1534): Rate of Endovascular Aneurysm Repair (EVAR) of Small or Moderate Non-Ruptured Infrarenal Abdominal Aortic Aneurysms (AAA) Who Die While in Hospital**

**SAMPLE CALCULATIONS:**

**Data Completeness=**

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

**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.

\*\*A lower calculated performance rate for this measure indicates better clinical care or control.

NOTE: Reporting Frequency – Procedure

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## 2017 Registry Individual Measure Flow

### #347 (NQF 1534): Rate of Endovascular Aneurysm Repair (EVAR) of Small or Moderate Non- Ruptured Infrarenal Abdominal Aortic Aneurysms (AAA) Who Die While in Hospital

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

NOTE: A lower calculated performance rate for this measure indicates better clinical care or control.

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 Performed.
3. Check Procedure Performed:
  - a. If Procedure as listed in the denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Procedure 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 equals No, 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.
  - 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 Documentation of Patient Death in the Hospital Following Endovascular AAA Repair:
    - a. If Documentation of Patient Death in the Hospital Following Endovascular AAA Repair 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 Documentation of Patient Death in the Hospital Following Endovascular AAA Repair equals No, proceed to check Documentation of Patient Survival in the Hospital Following Endovascular AAA Repair.
  10. Check Documentation of Patient Survival in the Hospital Following Endovascular AAA Repair:
    - a. If Documentation of Patient Survival in the Hospital Following Endovascular AAA Repair equals Yes, include in Data Completeness Met and Performance Not Met.
    - b. Data Completeness Met and Performance Not Met letter 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 Documentation of Patient Survival in the Hospital Following Endovascular AAA Repair 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 episode has been subtracted from the data completeness numerator in sample calculation.

**SAMPLE CALCULATIONS:**

**Data Completeness=**

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

**Performance Rate=**

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