

**Quality ID #259: Rate of Endovascular Aneurysm Repair (EVAR) of Small or Moderate Non-Ruptured Infrarenal Abdominal Aortic Aneurysms (AAA) without Major Complications (Discharged to Home by Post Operative Day #2) – National Quality Strategy Domain: Patient Safety**

**2018 OPTIONS FOR INDIVIDUAL MEASURES:**  
**REGISTRY ONLY**

**MEASURE TYPE:**  
Outcome

**DESCRIPTION:**  
Percent of patients undergoing endovascular repair of small or moderate non-ruptured infrarenal abdominal aortic aneurysms (AAA) that do not experience a major complication (discharged to home no later than post-operative day #2)

**INSTRUCTIONS:**  
This measure is to be submitted **each time** an endovascular 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 endovascular repairs of non-ruptured, infrarenal abdominal aortic aneurysms

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq 18$  years on date of encounter

**AND**

**Diagnosis for non-rupture, infrarenal abdominal aortic aneurysms (ICD-10-CM): I71.4**

**AND**

**Patient procedure during the performance period (CPT): 34701, 34703, 34705**

**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 #2 following EVAR of AAA

**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 discharged to home no later than post-operative day #2 following EVAR (**G8826**)

**OR****Performance Not Met:**

Patient not discharged to home by post-operative day #2 following EVAR (**G8833**)

**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 two days of endovascular 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 comorbidities.

*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.

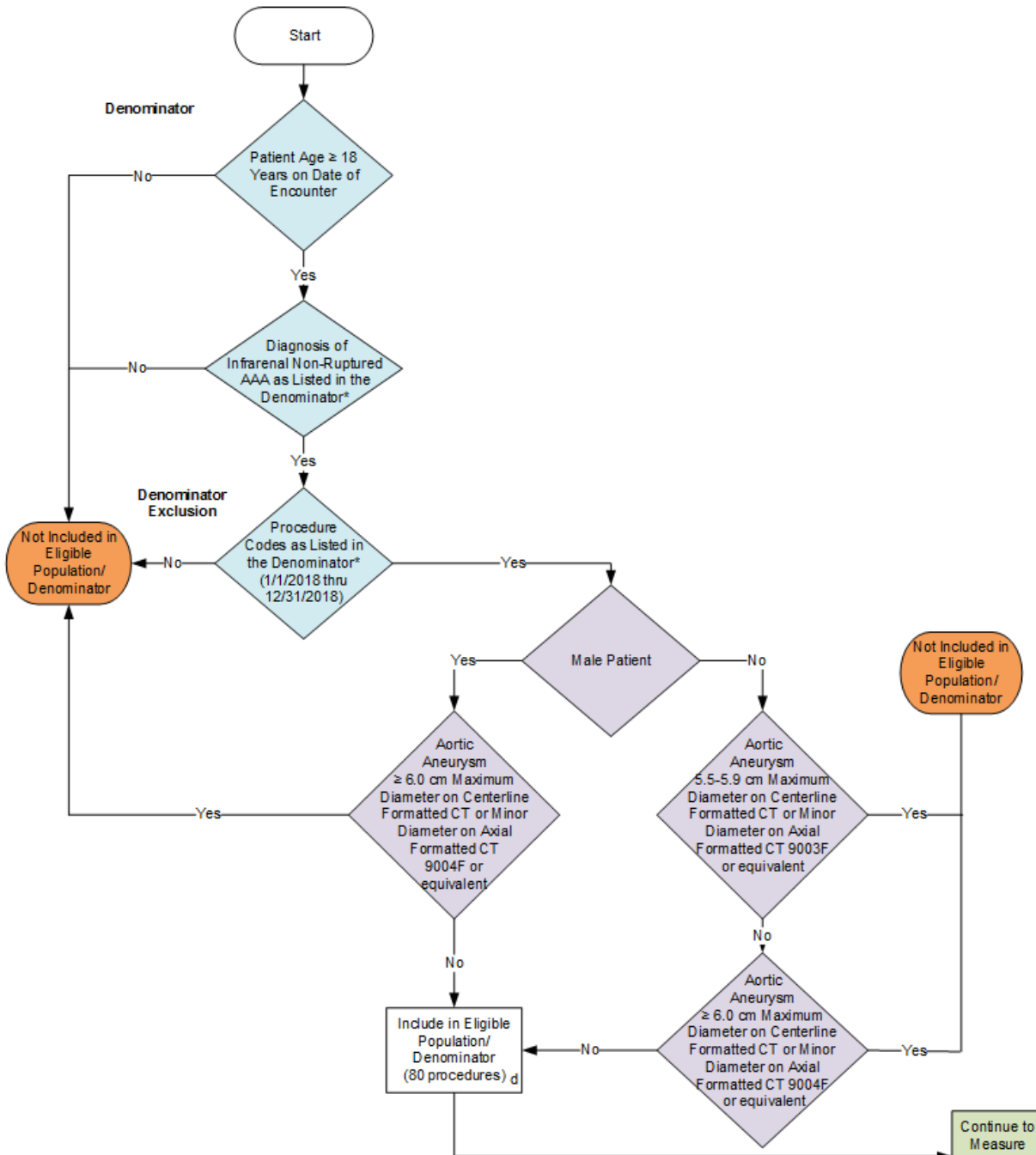
*Level of recommendation: Strong*

*Quality of evidence: Moderate*

**COPYRIGHT:**

This measure is owned by the Society for Vascular Surgery - SVS.

**2018 Registry Flow for Quality ID #259:**  
**Rate of Endovascular Aneurysm Repair (EVAR) of Small or Moderate Non-Ruptured Infrarenal Abdominal Aortic Aneurysms (AAA) without Major Complications (Discharged to Home by Post-Operative Day #2)**



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

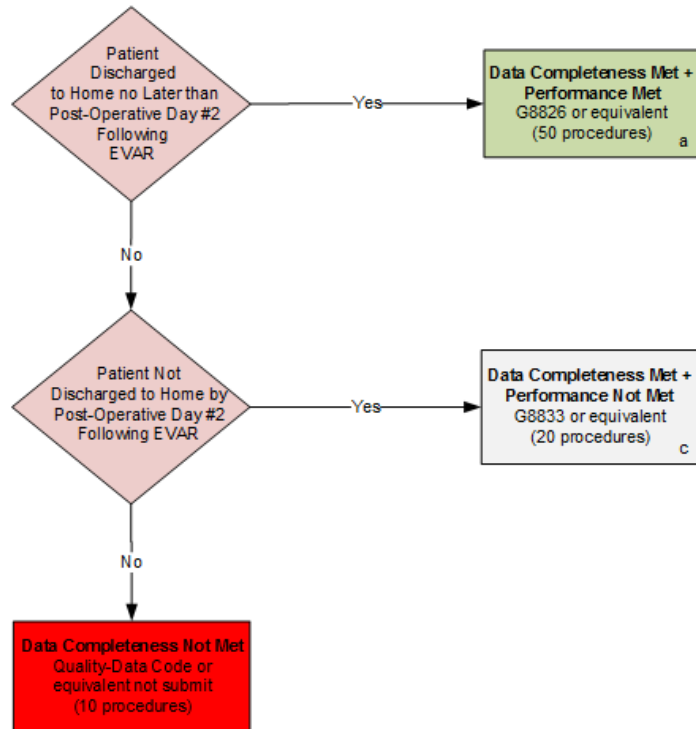
NOTE: Submission Frequency: Procedure

CPT only copyright 2017 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.

v2

**2018 Registry Flow for Quality ID #259:  
Rate of Endovascular Aneurysm Repair (EVAR) of Small or Moderate Non-Ruptured Infrarenal  
Abdominal Aortic Aneurysms (AAA) without Major Complications (Discharged to Home by Post-  
Operative Day #2)**

Numerator



**2018 Registry Flow for Quality ID #259:  
Rate of Endovascular Aneurysm Repair (EVAR) of Small or Moderate Non-Ruptured Infrarenal  
Abdominal Aortic Aneurysms (AAA) without Major Complications (Discharged to Home by Post-  
Operative Day #2)**

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a=50 procedures)} + \text{Performance Not Met (c=20 procedures)}}{\text{Eligible Population / Denominator (d=80 procedures)}} = \frac{70 \text{ procedures}}{80 \text{ procedures}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a =50 procedures)}}{\text{Data Completeness Numerator (70 procedures)}} = \frac{50 \text{ procedures}}{70 \text{ procedures}} = 71.43\%$$

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

NOTE: Submission Frequency: Procedure

CPT only copyright 2017 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.

v2

**2018 Registry Flow for Quality ID**  
**#259: Rate of Elective Endovascular Aortic Repair (EVAR) of Small or Moderate Non-Ruptured**  
**Infrarenal Abdominal Aortic Aneurysms (AAA) without Major Complications (Discharged to Home**  
**by Post-Operative Day #2)**

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 Patient Age at Date of Encounter is equal to or greater than 18 years equals No during the performance period, do not include in Eligible Patient Population. Stop Processing.
  - b. If Patient Age at Date of Encounter is equal to or greater than 18 years equals Yes during the performance period, proceed to check Diagnosis of Infrarenal Non-Ruptured AAA.
3. Check Diagnosis of Infrarenal Non-Ruptured AAA:
  - a. If Diagnosis of Infrarenal Non-Ruptured AAA equals No, do not include in the Eligible Patient Population. Stop Processing.
  - b. If Diagnosis of Infrarenal Non-Ruptured AAA equals Yes, proceed to check Procedure Performed.
4. Check Procedure Performed:
  - 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. Start Numerator
10. Check Patient Discharged to Home no Later than Post-Operative Day # 2 following EVAR
  - a. If Patient Discharged to Home no Later than Post-Operative Day # 2 following EVAR equals Yes, include in Data Completeness Met and Performance Met.
  - b. Data Completeness Met and Performance Met letter 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 the Sample Calculation.
  - c. If Patient Discharged to Home no Later than Post-Operative Day #2 following EVAR equals No, proceed to Patient Not Discharged to Home by Post-Operative Day #2 Following EVAR.
11. Check Patient Not Discharged to Home by Post-Operative Day # 2 Following EVAR:
  - a. If Patient Not Discharged to Home by Post-Operative Day #2 Following EVAR 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 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 #2 Following EVAR equals No, proceed to Data Completeness Not Met.
12. Check Data Completeness Not Met
  - a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not submitted. 10 procedures have been subtracted from Data Completeness Numerator in the Sample Calculation.

SAMPLE CALCULATIONS:			
<b>Data Completeness=</b>			
Performance Met (a=50 procedures) + Performance Not Met (c=20 procedures)	=	70 procedures	= 87.50%
Eligible Population / Denominator (d=80 procedures)	=	80 procedures	
<b>Performance Rate=</b>			
Performance Met (a =50 procedures)	=	50 procedures	= 71.43%
Data Completeness Numerator (70 procedures)	=	70 procedures	