

**Quality ID #421: Appropriate Assessment of Retrievable Inferior Vena Cava (IVC) Filters for Removal  
– National Quality Strategy Domain: Effective Clinical Care**

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

**MEASURE TYPE:**  
Process

**DESCRIPTION:**

Percentage of patients in whom a retrievable IVC filter is placed who, within 3 months post-placement, have a documented assessment for the appropriateness of continued filtration, device removal or the inability to contact the patient with at least two attempts

**INSTRUCTIONS:**

This measure is to be submitted **each time** for patients with an IVC filter procedure during the performance period. There is no diagnosis associated with 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.

***NOTE:** Include only patients that have IVC filter placement through September 30 of the performance period. This will allow the evaluation of at least 90 days of IVC filter removal within the performance period.*

**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 patients who have a retrievable IVC filter placed with the intent for potential removal at time of placement

**Denominator Criteria (Eligible Cases):**

All patients, regardless of age

**AND**

Patient procedure during the performance period (CPT): 37191

**AND**

Intent for Potential Removal at Time of Placement: G9539

**AND**

Patient alive 3 Months Post Procedure: G9540

**NUMERATOR:**

Number of patients that have appropriate IVC filter follow-up

**Definition:**

**Appropriate IVC Filter follow-up** - For the purposes of this measure, the appropriate follow-up would include:

- 1 - Filter removed OR;
- 2 - Documentation of re-assessment for the appropriateness of filter removal OR;
- 3 - Documentation of at least two attempts to reach the patient to arrange a clinical re-assessment for the appropriateness of filter removal

**NUMERATOR NOTE:** *The procedure for removal of an intravascular filter from the vena cava (CPT 37193) within three months would be considered performance met.*

**Numerator Options:**

**Performance Met:**

Filter removed within 3 months of placement (G9541)

**OR**

**Performance Met:**

Documented re-assessment for the appropriateness of filter removal within 3 months of placement (G9542)

**OR**

**Performance Met:**

Documentation of at least two attempts to reach the patient to arrange a clinical re-assessment for the appropriateness of filter removal within 3 months of placement (G9543)

**OR**

**Performance Not Met:**

Patients that do not have the filter removed, documented re-assessment for the appropriateness of filter removal, or documentation of at least two attempts to reach the patient to arrange a clinical re-assessment for the appropriateness of filter removal within 3 months of placement (G9544)

**RATIONALE:**

There is a need for increased physician awareness of the potential harms of inappropriate continued inferior vena cava filtration in patients with retrievable filters. Patients with retrievable inferior filters need to be carefully followed for re-assessment of the clinical need for continued inferior vena cava filtration, leading to removal of such devices when clinically appropriate. Complexities of our healthcare system, notably the use of inferior vena cava filters in the in-patient setting, followed by transfer of care to physicians in the outpatient setting highlight the importance of patient follow-up for physicians placing retrievable inferior vena cava filters.

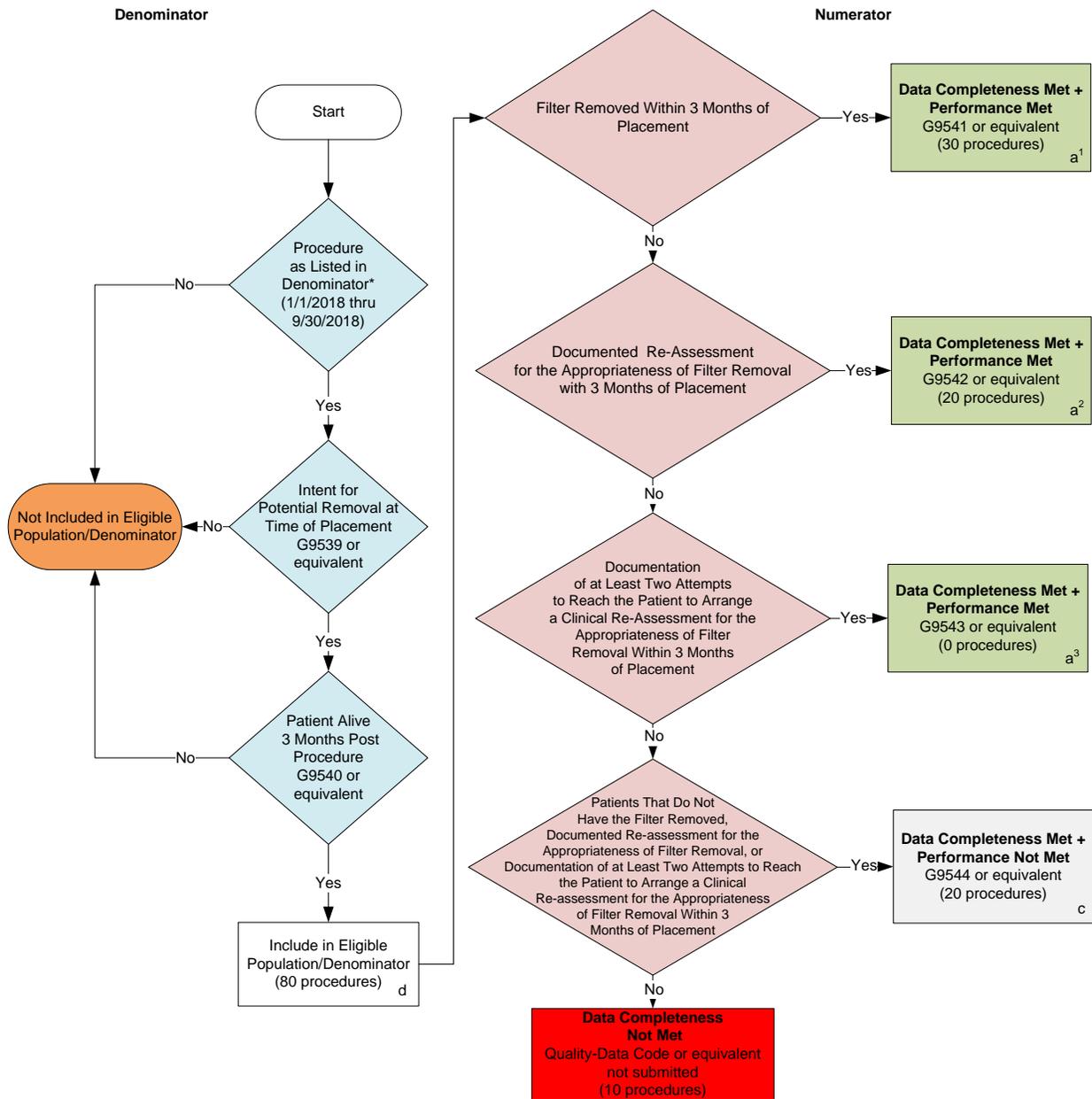
**CLINICAL RECOMMENDATION STATEMENTS:**

Retrievable filter complications have been increasingly noted in the FDA MAUDE database and in the literature. Retrievable filters were designed differently than permanent filters and the incidence of device related complications with long term insertions are higher than in comparison to permanent filters. The FDA has recommended that physicians that place these filters carefully monitor these patients and remove these filters at the earliest possible time. Dedicated follow-up for IVC filters has led to an increase in retrieval rate. The FDA recommends that all physicians placing IVC Filters and those responsible for ongoing care of these patients remove the filter as soon as protection from pulmonary embolism is no longer needed. The FDA encourages follow-up on patients to consider risks and benefits of filter removal.

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## 2018 Registry Flow for Quality ID #421: Appropriate Assessment of Retrievable Inferior Vena Cava (IVC) Filters for Removal



### SAMPLE CALCULATIONS:

**Data Completeness=**  

$$\frac{\text{Performance Met } (a^1+a^2+a^3=50 \text{ procedures}) + \text{Performance Not Met } (c=20 \text{ procedures})}{\text{Eligible Population / Denominator } (d=80 \text{ procedures})} = \frac{70 \text{ procedures}}{80 \text{ procedures}} = 87.50\%$$

**Performance Rate=**  

$$\frac{\text{Performance Met } (a^1+a^2+a^3=50 \text{ procedures})}{\text{Data Completeness Numerator } (70 \text{ procedures})} = \frac{50 \text{ procedures}}{70 \text{ procedures}} = 71.43\%$$

\*See the posted Measure Specification for specific coding and instructions to submit this measure.  
 Note: Submission Frequency: Procedure

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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. v2

## 2018 Registry Flow for Quality ID

### #421: Appropriate Assessment of Retrievable Inferior Vena Cava Filters for Removal

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 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 Intent for Potential Removal at Time of Placement.
3. Check Intent for Potential Removal at Time of Placement:
  - a. If Potential Removal at Time of Placement equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Potential Removal at Time of Placement equals Yes, proceed to check Patient Alive 3 Months Post Procedure.
4. Check Patient Alive 3 Months Post Procedure:
  - a. If Patient Alive 3 Months Post Procedure equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Patient Alive 3 Months Post Procedure equals Yes, proceed to Include in Eligible Population.
5. 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.
6. Start Numerator
7. Check Filter Removed Within 3 Months of Placement:
  - a. If Filter Removed Within 3 Months of Placement 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 a1 equals 30 procedures in the Sample Calculation.
  - c. If Filter Removed Within 3 Months of Placement equals No, proceed to Documented Re-Assessment for the Appropriateness of Filter Removal with 3 Months of Placement.
8. Check Documented Re-Assessment for the Appropriateness of Filter removal with 3 Months Placement:
  - a. If Documented Re-assessment for the Appropriateness of Filter Removal with 3 Months of Placement 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 a2 equals 20 procedures in the Sample Calculation.
  - c. If Documented Re-assessment for the Appropriateness of Filter Removal with 3 Months of Placement equals No, proceed to Documentation of at Least Two Attempts to Reach the Patient to Arrange a Clinical Re-Assessment for the Appropriateness of Filter Removal with 3 Months of Placement.
9. Check Documentation of at Least Two Attempts to Reach the Patient to Arrange a Clinical Re-Assessment for the Appropriateness of Filter Removal with 3 Months of Placement:
- a. If Documentation of at Least Two Attempts to Reach the Patient to Arrange a Clinical Re-Assessment for the Appropriateness of Filter Removal with 3 Months of Placement 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 a3 equals 0 procedures in the Sample Calculation.
  - c. If Documentation of at Least Two Attempts to Reach the Patient to Arrange a Clinical Re-Assessment for the Appropriateness of Filter Removal with 3 Months of Placement equals No, proceed to Patients that do not have the Filter Removed, Documented Re-assessment for the Appropriateness of Filter Removal, or Documentation of at Least Two Attempts to Reach the Patient to Arrange a Clinical Re-assessment for the Appropriateness of Filter Removal within 3 Months of Placement.
10. Check Patients that do not have the Filter Removed, Documented Re-assessment for the Appropriateness of Filter Removal, or Documentation of at Least Two Attempts to Reach the Patient to Arrange a Clinical Re-assessment for the Appropriateness of Filter Removal within 3 Months of Placement:
- a. If Patients that do not have the Filter Removed, Documented Re-assessment for the Appropriateness of Filter Removal, or Documentation of at Least Two Attempts to Reach the Patient to Arrange a Clinical Re-assessment for the Appropriateness of Filter Removal within 3 Months of Placement 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 20 procedures in the Sample Calculation.
  - c. If Patients that do not have the Filter Removed, Documented Re-assessment for the Appropriateness of Filter Removal, or Documentation of at Least Two Attempts to Reach the Patient to Arrange a Clinical Re-assessment for the Appropriateness of Filter Removal within 3 Months of Placement No, proceed to Data Completeness Not Met.
11. 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 the Data Completeness Numerator in Sample Calculation.

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a}^1+\text{a}^2+\text{a}^3=50 \text{ procedures)} + \text{Performance Not Met (c=20 procedures)}}{\text{Eligible Population / Denominator (d=80 procedures)}} = \frac{70 \text{ procedures}}{80 \text{ procedures}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a}^1+\text{a}^2+\text{a}^3=50 \text{ procedures)}}{\text{Data Completeness Numerator (70 procedures)}} = \frac{50 \text{ procedures}}{70 \text{ procedures}} = 71.43\%$$