

Quality ID #445 (CBE 0119): Risk-Adjusted Operative Mortality for Coronary Artery Bypass Graft (CABG)

**2025 COLLECTION TYPE:**  
MIPS CLINICAL QUALITY MEASURES (CQMS)

**MEASURE TYPE:**  
Outcome – High Priority

**DESCRIPTION:**  
Percent of patients aged 18 years and older undergoing isolated CABG who die, including both all deaths occurring during the hospitalization in which the CABG was performed, even if after 30 days, and those deaths occurring after discharge from the hospital, but within 30 days of the procedure.

**INSTRUCTIONS:**  
This measure is to be submitted a minimum of **once per performance period** for patients undergoing isolated CABG during the performance period. This measure may be submitted by Merit-based Incentive Payment System (MIPS) eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

**Measure Submission Type:**  
Measure data may be submitted by individual MIPS eligible clinicians, groups, or third-party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third-party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third-party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

**DENOMINATOR:**  
All patients undergoing isolated CABG

**Denominator Criteria (Eligible Cases):**  
Patients aged  $\geq$  18 years on date of encounter

**AND**

Patient procedure during the performance period (CPT): 33509, 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536

**WITHOUT**

Telehealth Modifier (including but not limited to): GQ, GT, POS 02, POS 10

**OR**

Patient procedure during the performance period (CPT): 33509, 33510, 33511, 33512, 33513, 33514, 33516, 33533, 33534, 33535, 33536

**AND**

Patient procedure during the performance period (CPT): 33530

**WITHOUT**

Telehealth Modifier (including but not limited to): GQ, GT, POS 02, POS 10

**NUMERATOR:**  
Number of patients undergoing isolated CABG who die, including both all deaths occurring during the hospitalization in which the operation was performed, even if after 30 days, and those deaths occurring after discharge from the hospital, but within 30 days of the procedure

**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. Submitting 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:***

Patient died including all deaths occurring during the hospitalization in which the operation was performed, even if after 30 days, and those deaths occurring after discharge from the hospital, but within 30 days of the procedure (**G9812**)

**OR**

***Performance Not Met:***

Patient did not die within 30 days of the procedure or during the index hospitalization (**G9813**)

**RATIONALE:**

Quality measurement and outcome analysis of this common cardiac procedure will drive process improvement for providers and assist patients with decision-making related to treatment of coronary disease.

**CLINICAL RECOMMENDATION STATEMENTS:**

Mortality is likely the single most important negative outcome that can be associated with a surgical procedure. Coronary artery bypass grafting is the most common cardiac surgery performed in the US.

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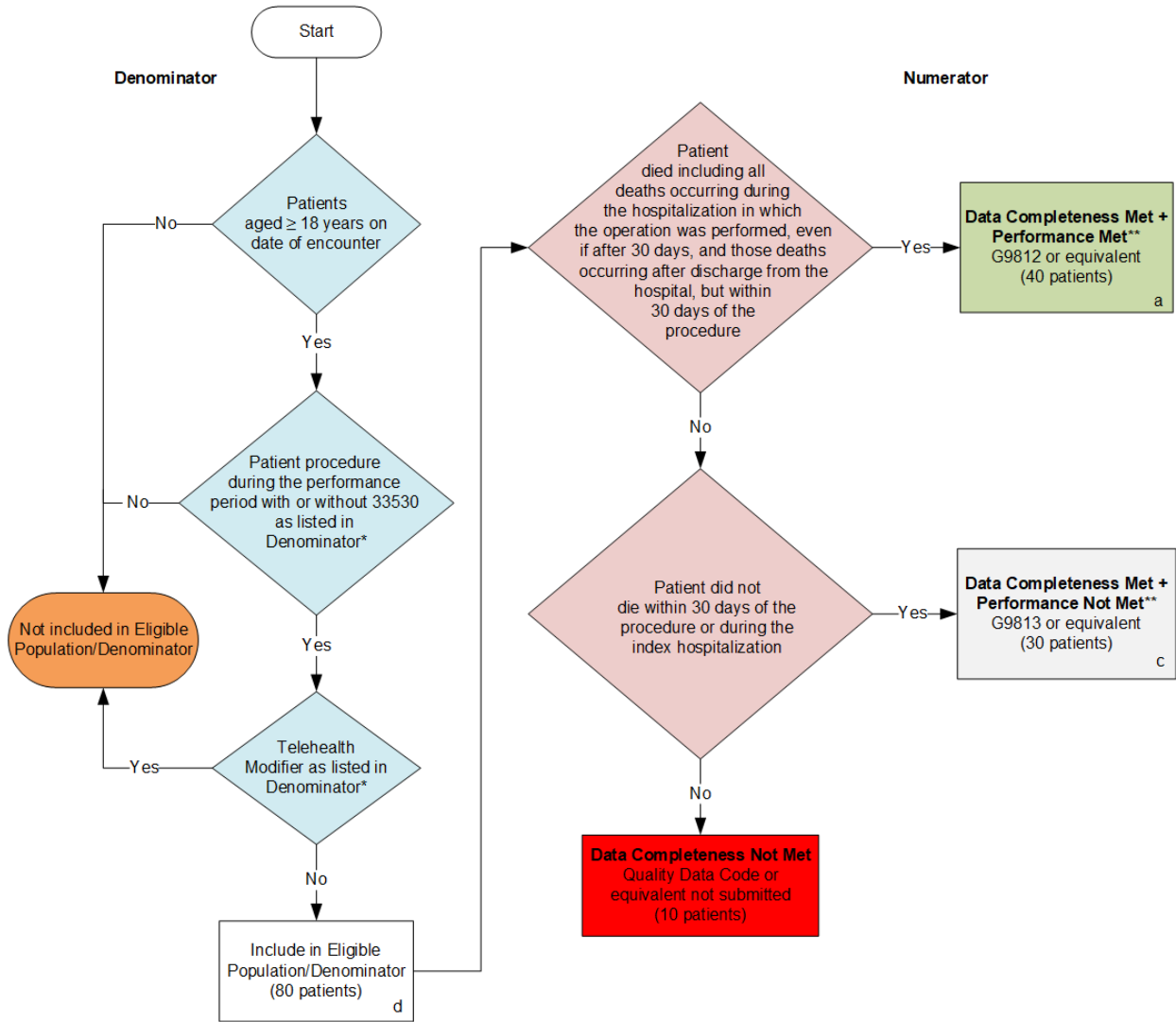
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**2025 Clinical Quality Measure Flow for Quality ID #445 (CBE 0119):  
Risk-Adjusted Operative Mortality for Coronary Artery Bypass Graft (CABG)**

*Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.*



**SAMPLE CALCULATIONS**

**Data Completeness=**  

$$\frac{\text{Performance Met (a=40 patients)} + \text{Performance Not Met (c=30 patients)}}{\text{Eligible Population / Denominator (d=80 patients)}} = \frac{70 \text{ patients}}{80 \text{ patients}} = 87.50\%$$

**Performance Rate\*\*=**  

$$\frac{\text{Performance Met (a=40 patients)}}{\text{Data Completeness Numerator (70 patients)}} = \frac{40 \text{ patients}}{70 \text{ patients}} = 57.14\%$$

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

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

NOTE: Submission Frequency: Patient-Process

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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.

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**2025 Clinical Quality Measure Flow Narrative for Quality ID #445 (CBE 0119):  
Risk-Adjusted Operative Mortality for Coronary Artery Bypass Graft (CABG)**

*Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.*

1. Start with Denominator:
2. Check *Patients aged greater than or equal to 18 years on date of encounter*.
  - a. If *Patients aged greater than or equal to 18 years on date of encounter* equals No, do not include in *Eligible Population/Denominator*. Stop processing.
  - b. If *Patients aged greater than or equal to 18 years on date of encounter* equals Yes, proceed to check *Patient procedure during the performance period with or without 33530 as listed in Denominator\**.
3. Check *Patient procedure during the performance period with or without 33530 as listed in Denominator\**:
  - a. If *Patient procedure during the performance period with or without 33530 as listed in Denominator\** equals No, do not include in *Eligible Population/Denominator*. Stop processing.
  - b. If *Patient procedure during the performance period with or without 33530 as listed in Denominator\** equals Yes, proceed to check *Telehealth Modifier as listed in Denominator\**.
4. Check *Telehealth Modifier as listed in Denominator\**:
  - a. If *Telehealth Modifier as listed in Denominator\** equals Yes, do not include in *Eligible Population/Denominator*. Stop processing.
  - b. If *Telehealth Modifier as listed in Denominator\** equals No, include in *Eligible Population/Denominator*.
5. Denominator Population:
  - 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 patients in the Sample Calculation.
6. Start Numerator
7. Check *Patient died including all deaths occurring during the hospitalization in which the operation was performed, even if after 30 days, and those deaths occurring after discharge from the hospital, but within 30 days of the procedure*:
  - a. If *Patient died including all deaths occurring during the hospitalization in which the operation was performed, even if after 30 days, and those deaths occurring after discharge from the hospital, but within 30 days of the procedure* equals Yes, include in *Data Completeness Met and Performance Met\*\**.
    - *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 40 patients in Sample Calculation.
  - b. If *Patient died including all deaths occurring during the hospitalization in which the operation was performed, even if after 30 days, and those deaths occurring after discharge from the hospital, but within 30 days of the procedure* equals No, proceed to check *Patient did not die within 30 days of the procedure or during the index hospitalization*.

8. Check *Patient did not die within 30 days of the procedure or during the index hospitalization*:
  - a. If *Patient did not die within 30 days of the procedure or during the index hospitalization* equals Yes, include in *Data Completeness Met and Performance Not Met\*\**.
    - *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 30 patients in the Sample Calculation.
  - b. If *Patient did not die within 30 days of the procedure or during the index hospitalization* equals No, proceed to check *Data Completeness Not Met*.
9. Check *Data Completeness Not Met*:
  - If *Data Completeness Not Met*, the Quality Data Code or equivalent was not submitted. 10 patients have been subtracted from the Data Completeness Numerator in the Sample Calculation.

### **Sample Calculations**

Data Completeness equals Performance Met (a equals 40 patients) plus Performance Not Met (c equals 30 patients) divided by Eligible Population / Denominator (d equals 80 patients). All equals 70 patients divided by 80 patients. All equals 87.50 percent.

Performance Rate\*\* equals Performance Met (a equals 40 patients) divided by Data Completeness Numerator (70 patients). All equals 40 patients divided by 70 patients. All equals 57.14 percent.

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

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

NOTE: Submission Frequency: Patient-Process

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.