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

<u>2026 COLLECTION TYPE:</u>
MERIT-BASED INCENTIVE PAYMENT SYSTEM (MIPS) CLINICAL QUALITY MEASURE (CQM)

<u>MEASURE TYPE:</u>
Outcome – High Priority

- *INVERSE MEASURE: LOWER SCORE – BETTER*

<u>DESCRIPTION:</u>
Percent of patients aged 18 years and older undergoing isolated coronary artery bypass graft (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.

<u>INSTRUCTIONS:</u>
Reporting Frequency:
This measure is to be submitted a minimum of **once per performance period** for denominator eligible cases as defined in the denominator criteria.

Intent and Clinician Applicability:
This measure is intended to reflect the quality of surgical services provided for patients undergoing an isolated CABG procedure. "Isolated CABG" refers to CABG using arterial and/or venous grafts only. This measure may be submitted by Merit-based Incentive Payment System (MIPS) eligible clinicians who perform the quality actions as defined by the numerator based on the services provided and the measure-specific denominator coding.

Measure Strata and Performance Rates:
This measure contains one strata defined by a single submission criteria.
This measure produces a single performance rate.

Implementation Considerations:
For the purposes of MIPS implementation, this patient-process measure is submitted a minimum of once per patient during the performance period. The most advantageous quality data code will be used if the measure is submitted more than once.

This is an inverse measure which means 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.

Telehealth:
NOT TELEHEALTH ELIGIBLE: This measure <u>is not appropriate for nor applicable to the telehealth setting</u>. This measure is procedure based and therefore doesn't allow for the denominator criteria to be conducted via telehealth. It would be appropriate to remove these patients from the denominator eligible patient population. Telehealth eligibility is at the measure level for inclusion within the denominator eligible patient population and based on the measure specification definitions which are independent of changes to coding and/or billing practices.

Measure Submission:
The quality data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this collection type for submissions; however, these codes may be submitted for those third

party intermediaries that utilize Medicare Part B claims data. The coding provided to identify the measure criteria: Denominator or Numerator, may be an example of coding that could be used to identify patients that meet the intent of this clinical topic. When implementing this measure, please refer to the 'Reference Coding' section to determine if other codes or code languages that meet the intent of the criteria may also be used within the medical record to identify and/or assess patients. 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 ≥ 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
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

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 Options:
Performance Not Met: Patient did not die within 30 days of the procedure or during the index hospitalization **(G9813)**

OR

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)**

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.

REFERENCES:
There are no sources in the current document.

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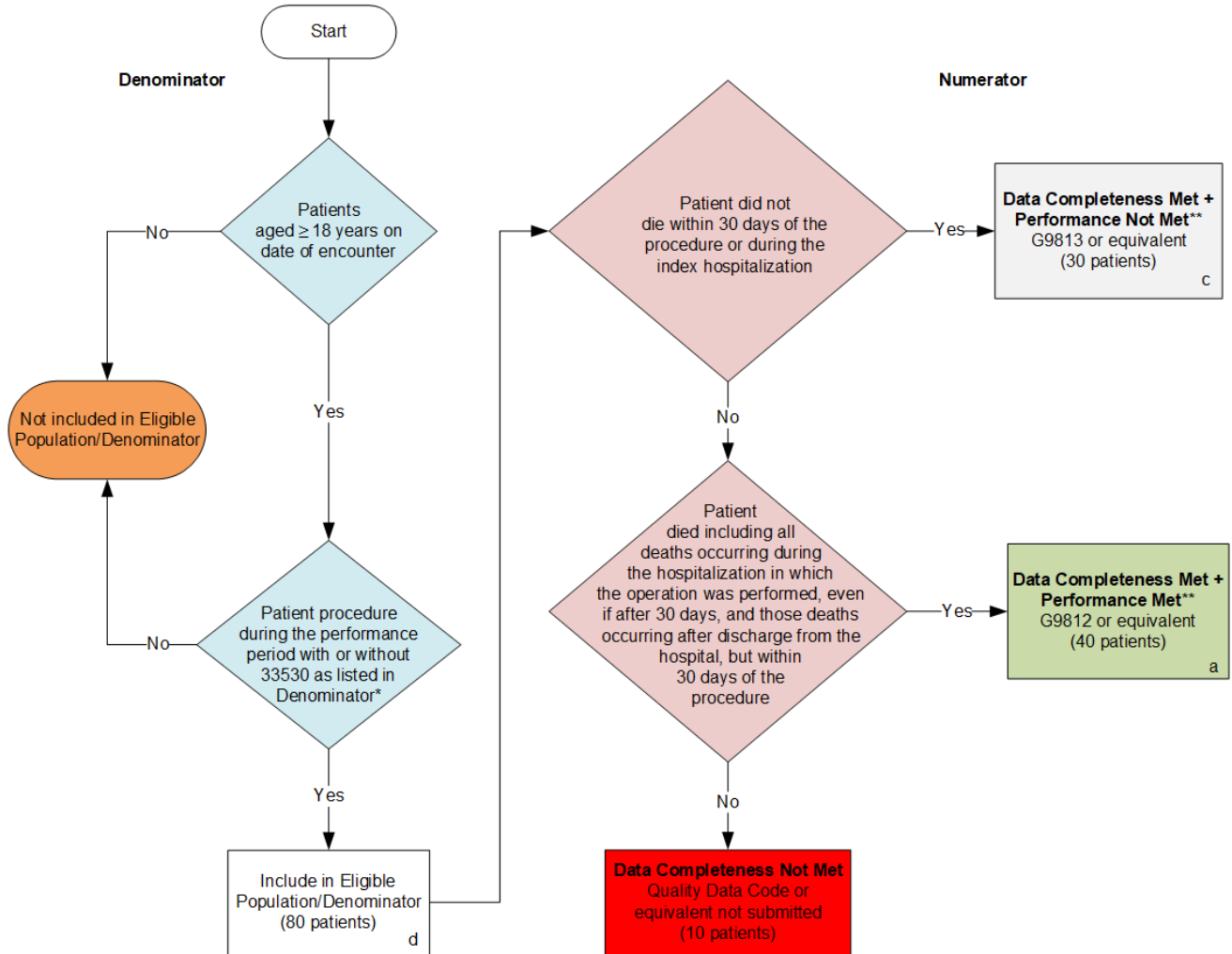
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2026 Clinical Quality Measure Flow for Quality ID #445:
Risk-Adjusted Operative Mortality for Coronary Artery Bypass Graft (CABG)
INVERSE MEASURE: LOWER SCORE - BETTER

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

Denominator

- Start
- Patients aged ≥ 18 years on date of encounter
  - No → Not included in Eligible Population/Denominator
  - Yes
- Patient procedure during the performance period with or without 33530 as listed in Denominator*
  - No → Not included in Eligible Population/Denominator
  - Yes
- Include in Eligible Population/Denominator (80 patients) — d

Numerator

- Patient did not die within 30 days of the procedure or during the index hospitalization
  - Yes → **Data Completeness Met + Performance Not Met**** G9813 or equivalent (30 patients) — c
  - No
- 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
  - Yes → **Data Completeness Met + Performance Met**** G9812 or equivalent (40 patients) — a
  - No → **Data Completeness Not Met** Quality Data Code or equivalent not submitted (10 patients)

SAMPLE CALCULATIONS

Data Completeness=

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

Performance Rate**=

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

*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

Risk-Adjusted Operative Mortality for Coronary Artery Bypass Graft (CABG)
INVERSE MEASURE: LOWER SCORE - BETTER

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, include in *Eligible Population/Denominator*.

4. 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.

5. Start Numerator

6. 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 *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*.

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 *Data Completeness Not Met*.

8. 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.