2018 OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

MEASURE TYPE:
Outcome

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 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 are 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 submissions; however, these codes may be submitted for those registries that utilize claims data.

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): 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536

OR

Patient procedure during the performance period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 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 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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2018 Registry Flow for Quality ID #445 NQF #0119: Risk-Adjusted Operative Mortality for CABG (Coronary Artery Bypass Graft)

**SAMPLE CALCULATIONS:**

Data Completeness=
Performance Met (a=40 patients) + Performance Not Met (c=20 patients) = 70 patients = 87.50%
Eligible Population / Denominator (d=80 patients) = 60 patients

Performance Rate=
Performance Met (a=40 patients) = 40 patients = 57.14%
Data Completeness Numerator (70 patients) = 70 patients

*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
2018 Registry Flow For Quality ID
#445 NQF #0119: Risk-Adjusted Operative Mortality for Coronary Artery Bypass Graft (CABG)

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. Start with Denominator.

1. Check Patient Age:
   a. If Patient age is greater than or equal to 18 years equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Patient age is greater than or equal to 18 years equals Yes, proceed to check Encounter for Isolated CABG.

2. Check Encounter for Isolated CABG:
   a. If Encounter for Isolated CABG as Listed in the Denominator equals Yes, include in Eligible Patient Population.
   b. If Encounter for Isolated CABG as Listed in the Denominator equals No, proceed to Encounter for Re-Operation.

3. Check Encounter for Re-Operation:
   a. If Encounter for Re-Operation as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Process.
   b. If Encounter for Re-Operation as Listed in the Denominator equals Yes, proceed to Encounter Code.

4. Check Encounter Code:
   a. If Encounter Code as Listed in Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Encounter Code as Listed in Denominator equals Yes, include in Eligible Patient 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 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.
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 40 patients in Sample Calculation.

c. 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 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.

   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 30 patients in the Sample Calculation.

   c. If Patient did not Die within 30 Days of the Procedure or During the Index Hospitalization equals No, proceed to Data Completeness Not Met.

9. Check Data Completeness Not Met:

   a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not submitted. 10 patients have been subtracted from the Data Completeness Numerator in the Sample Calculation.

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**SAMPLE CALCULATIONS:**

Data Completeness:

\[
\text{Data Completeness} = \frac{\text{Performance Met (a=40 patients)} + \text{Performance Not Met (c=20 patients)}}{\text{Eligible Population / Denominator (d=80 patients)}} = \frac{70 \text{ patients}}{80 \text{ patients}} = 87.50\%
\]

Performance Rate:

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