

**Quality ID#164 (NQF 0129): Coronary Artery Bypass Graft (CABG): Prolonged Intubation**  
– National Quality Strategy Domain: Effective Clinical Care  
– Meaningful Measure Area: Preventable Healthcare Harm

**2019 COLLECTION TYPE:**  
**MIPS CLINICAL QUALITY MEASURES (CQMS)**

**MEASURE TYPE:**  
Outcome – High Priority

**DESCRIPTION:**  
Percentage of patients aged 18 years and older undergoing isolated CABG surgery who require postoperative intubation > 24 hours

**INSTRUCTIONS:**  
This measure is to be submitted **each time** an isolated CABG procedure is performed during the performance period. It is anticipated that Merit-based Incentive Payment System (MIPS) eligible clinicians who provide services for isolated CABG will submit this measure. This measure is intended to reflect the quality of surgical services provided for isolated CABG or isolated reoperation CABG patients. Isolated CABG refers to CABG using arterial and/or venous grafts only.

**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 surgery

**Denominator Criteria (Eligible Cases):**  
Patients aged ≥ 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:**  
Patients undergoing isolated CABG who require intubation > 24 hours following exit from the operating room

**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:***

Prolonged postoperative intubation (> 24 hrs.) required  
**(G8569)**

**OR**

***Performance Not Met:***

Prolonged postoperative intubation (> 24 hrs.) not  
required **(G8570)**

**RATIONALE:**

Based on the STS coronary artery bypass graft (CABG) study population, the morbidity rate associated with prolonged intubation following CABG is 5.96%. Also, prolonged ventilation (defined as > 24 hours) was an independent predictor for readmission to the ICU following CABG surgery (OR=10.53; CI: 6.18 to 17.91). Shorter ventilation times are linked to high quality of care (i.e., reduced in-hospital and operative mortality, as well as better long-term outcomes as compared to prolonged ventilation).

**CLINICAL RECOMMENDATION STATEMENTS:**

Extubation greater than (>) 24 hours postoperatively is considered a “pulmonary complication”. Patients who were extubated more than 24 hours after surgery had a longer duration of hospital stay and a greater incidence of postoperative complications.

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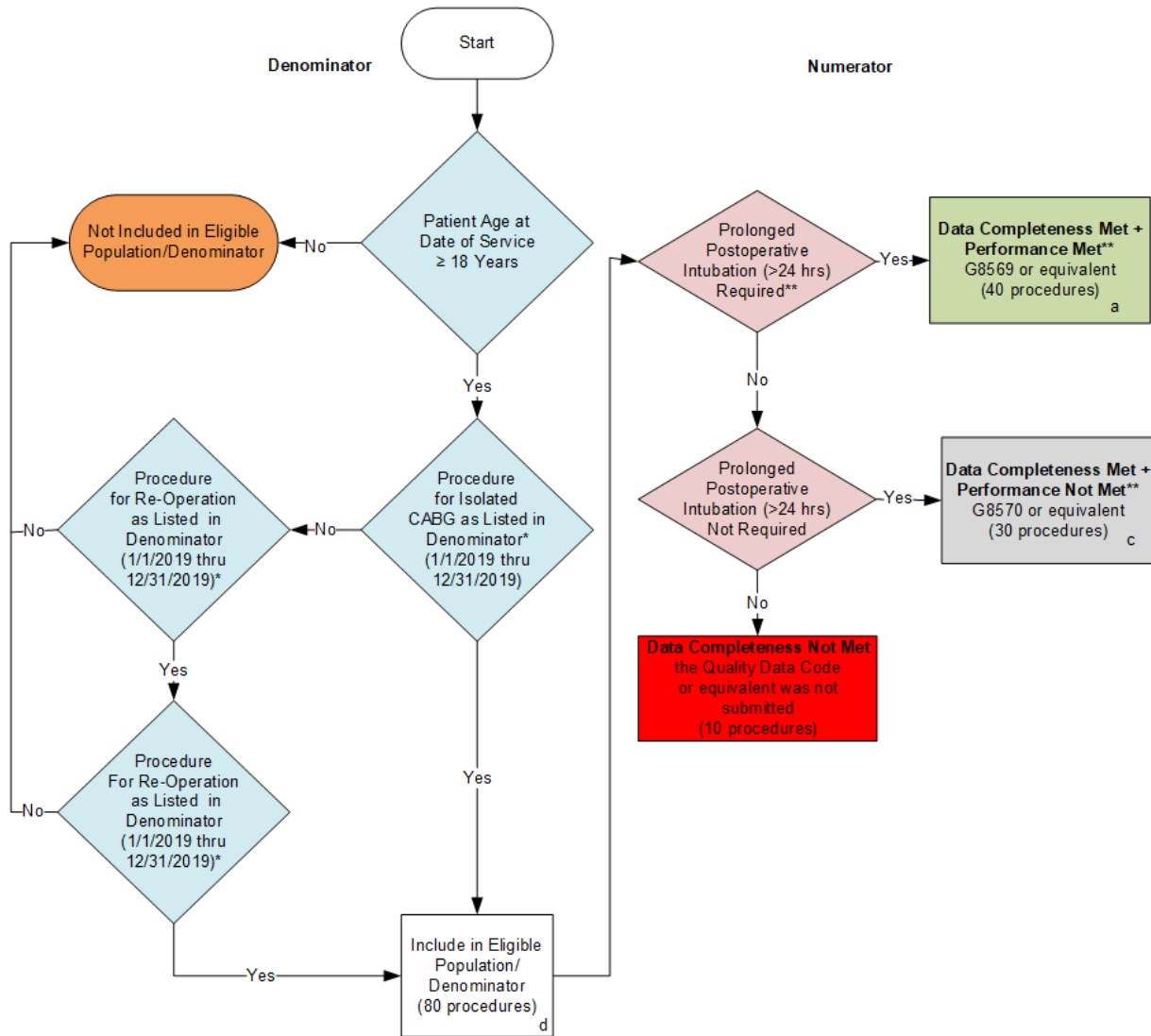
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**2019 Clinical Quality Measure Flow for Quality ID #164 NQF #0129:  
Coronary Artery Bypass Graft (CABG): Prolonged Intubation**



**SAMPLE CALCULATIONS:**

**Data Completeness=**

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

**Performance Rate\*\*=**

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

\*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 care or control.

NOTE: Submission Frequency: Procedure

**2019 Clinical Quality Measure Flow Narrative for Quality ID #164 NQF #0129:  
Coronary Artery Bypass Graft (CABG): Prolonged Intubation**

Please refer to the specific section of the Specification to identify the denominator and numerator information for use in submitting this Individual Specification. A lower calculated performance rate for this measure indicates better clinical care or control.

1. Start with Denominator
2. Check Patient Age:
  - a. If Patient Age at Date of Service is greater than or equal to 18 Years equals No, do not include in Eligible Population. Stop Processing.
  - b. If Patient Age at Date of Service is greater than or equal to 18 Years equals Yes, proceed to check Procedure Performed.
3. Check Procedure Performed:
  - a. If Procedure for Isolated CABG as Listed in the Denominator equals No, proceed to check Procedure for Re-Operation.
  - b. If Procedure for CABG as Listed in Denominator equals Yes, include in Eligible Population.
4. Check Procedure for Re-Operation:
  - a. If Procedure for Re-Operation as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
  - b. If Procedure for Re-Operation as Listed in the Denominator equals Yes, proceed to check Procedure for Re-Operation.
5. Check Procedure for Re-Operation:
  - a. If Procedure for Re-Operation as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Procedure for Re-Operation as Listed in the Denominator equals Yes, include in Eligible Population.
6. Denominator Population:
  - a. Denominator Population is all Eligible Procedures 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.
7. Start Numerator
8. Check Prolonged Postoperative Intubation (>24 Hours) Required:
  - a. If Prolonged Postoperative Intubation (>24 Hours) Required 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 procedures in the Sample Calculation.

- c. If Prolonged Postoperative Intubation (>24 Hours) Required equals No, proceed to check Prolonged Postoperative Intubation (>24 Hours) Not Required.
9. Check Prolonged Postoperative Intubation (>24 Hours) Not Required:
- a. If Prolonged Postoperative Intubation (>24 Hours) Not Required 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 procedures in the Sample Calculation.
  - c. If Prolonged Postoperative Intubation (>24 Hours) Not Required equals No, proceed to check Data Completeness Not Met.
10. Check Data Completeness Not Met:
- a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 10 procedures have been subtracted from the Data Completeness Numerator in the Sample Calculation.

**SAMPLE CALCULATIONS:**

**Data Completeness=**  

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

**Performance Rate\*\*=**  

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