

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

2021 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 surgery

AND

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

OR

Patient procedure during the performance period (CPT): 33510, 33511, 33512, 33513, 33514, 33516, 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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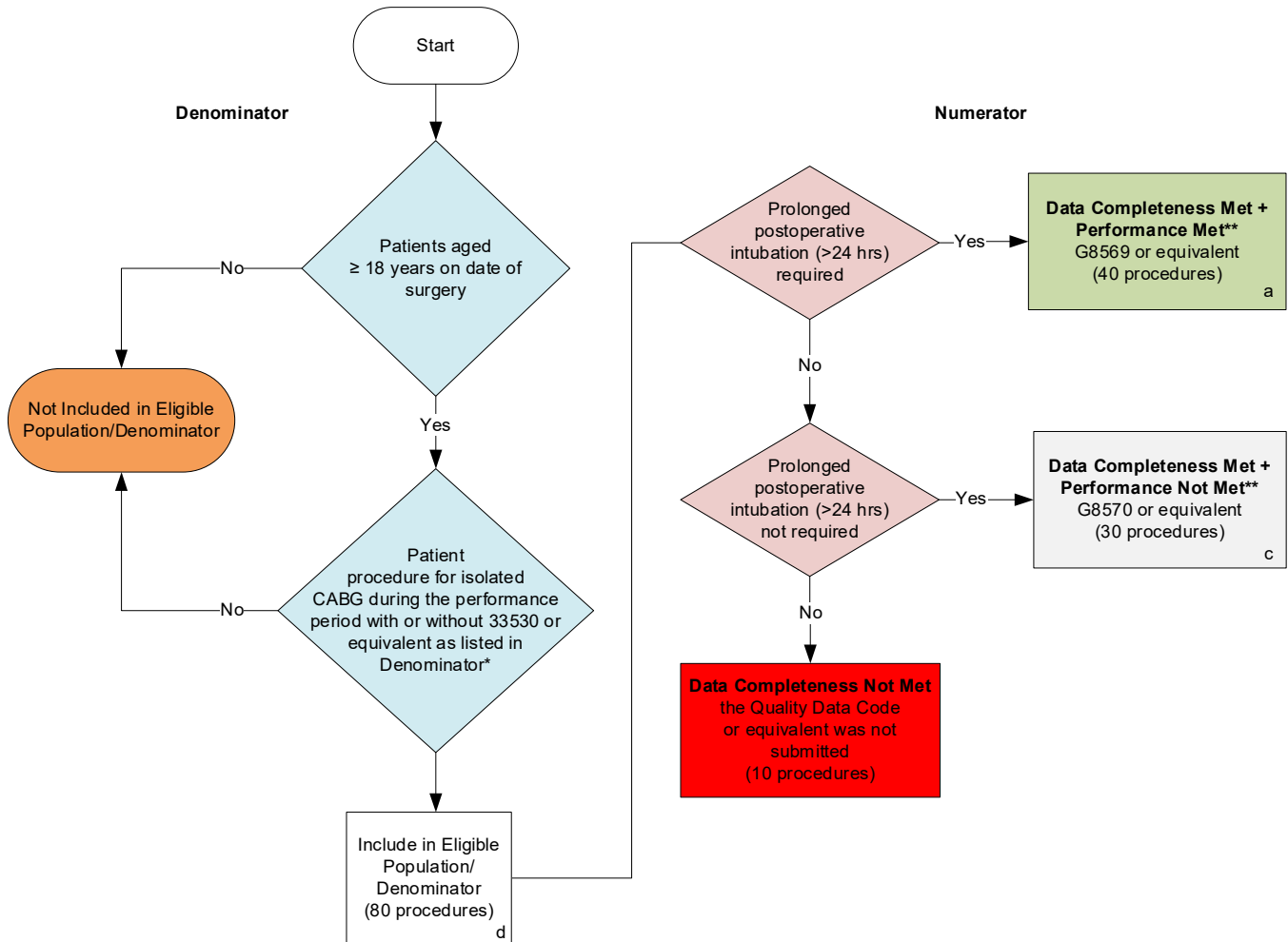
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**2021 Clinical Quality Measure Flow for Quality ID #164 (NQF 0129):
Coronary Artery Bypass Graft (CABG): Prolonged Intubation**

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



SAMPLE CALCULATIONS

Data Completeness

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

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

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**2021 Clinical Quality Measure Flow Narrative for Quality ID #164 (NQF 0129):
Coronary Artery Bypass Graft (CABG): Prolonged Intubation**

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 surgery*:
 - a. If *Patients aged greater than or equal to 18 years on date of surgery* 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 surgery* equals Yes, proceed to check *Patient procedure for isolated CABG during the performance period as listed in Denominator**.
3. Check *Patient procedure for isolated CABG during the performance period as listed in Denominator**:
 - a. If *Patient procedure for isolated CABG during the performance period as listed in Denominator** equals No, do not include in *Eligible Population/Denominator*. Stop processing.
 - b. If *Patient procedure for isolated CABG during the performance period as listed in Denominator** equals Yes, include in *Eligible Population/Denominator*.
4. Denominator Population:
 - 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.
5. Start Numerator
6. Check *Prolonged postoperative intubation (greater than 24 hours) required*:
 - a. If *Prolonged postoperative intubation (greater than 24 hours) required* 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 procedures in the Sample Calculation.
 - b. If *Prolonged postoperative intubation (greater than 24 hours) required* equals No, proceed to check *Prolonged postoperative intubation (greater than 24 hours) not required*.
7. Check *Prolonged postoperative intubation (greater than 24 hours) not required*:
 - a. If *Prolonged postoperative intubation (greater than 24 hours) not required* 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 procedures in the Sample Calculation.
 - b. If *Prolonged postoperative intubation (greater than 24 hours) not required* 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 procedures have been subtracted from the Data Completeness Numerator in the Sample Calculation.

Sample Calculations

Data Completeness equals Performance Met (a equals 40 procedures) plus Performance Not Met (c equals 30 procedures) divided by Eligible Population / Denominator (d equals 80 procedures). All equals 70 procedures divided by 80 procedures. All equals 87.5 percent.

Performance Rate** equals Performance Met (a equals 40 procedures) divided by Data Completeness Numerator (70 procedures). All equals 40 procedures divided by 70 procedures. 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 care or control.

NOTE: Submission Frequency: Procedure

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.