

Quality ID #322: Cardiac Stress Imaging Not Meeting Appropriate Use Criteria: Preoperative Evaluation in Low-Risk Surgery Patients – National Quality Strategy Domain: Efficiency and Cost Reduction

2018 OPTIONS FOR INDIVIDUAL MEASURES:

REGISTRY ONLY

MEASURE TYPE:

Efficiency

DESCRIPTION:

Percentage of stress single-photon emission computed tomography (SPECT) myocardial perfusion imaging (MPI), stress echocardiogram (ECHO), cardiac computed tomography angiography (CCTA), or cardiac magnetic resonance (CMR) performed in low-risk surgery patients 18 years or older for preoperative evaluation during the 12-month submission period

INSTRUCTIONS:

This measure is to be submitted **once per procedure** of cardiac stress imaging (i.e., SPECT, MPI, ECHO, CCTA, CMR) for patients seen during the performance period. There is no diagnosis associated with this measure. It is anticipated that eligible clinicians who provide the professional component of diagnostic imaging studies for cardiac stress will submit this measure.

Measure Submission:

The listed denominator criteria is 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-based submissions; however, these codes may be submitted for those registries that utilize claims data.

DENOMINATOR:

All instances of stress single-photon emission computed tomography (SPECT) myocardial perfusion imaging (MPI), stress echocardiogram (ECHO), cardiac computed tomography angiography (CCTA), or cardiac magnetic resonance (CMR) performed on patients aged 18 years and older during the submission period

Denominator Criteria (Eligible Cases):

Patients aged ≥ 18 years on date of encounter

AND

Cardiac Stress Imaging Performed – Procedure Codes (CPT): 75559, 75563, 75571, 75572, 75573, 75574, 78451, 78452, 78453, 78454, 78491, 78492, 78494, 93350, 93351

NUMERATOR:

Number of stress SPECT MPI, stress echo, CCTA, or CMR primarily performed in low-risk surgery patients for preoperative evaluation within 30 days preceding low-risk non-cardiac surgery

Definition:

Low-Risk Surgery – Cardiac death or MI less than 1% including, but are not limited to, endoscopic procedures, superficial procedures, cataract surgery, and excisional breast surgery.

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 NOTE:

- A lower calculated performance rate for this measure indicates better clinical care or control. This measure is assessing overuse of cardiac stress imaging in low-risk surgery patients.
- Patients that did not have a surgery performed or had a surgery other than those defined as low-risk would submit G8962.
- Clinical quality outcome is cardiac stress imaging NOT performed on patient who is a low-risk surgery patient within 30 days preceding procedure.

Numerator Options:

Performance Met:

Cardiac Stress Imaging Test primarily performed on low-risk surgery patient for preoperative evaluation within 30 days preceding this surgery (**G8961**)

OR

Performance Not Met:

Cardiac Stress Imaging Test performed on patient for any reason including those who did not have low-risk surgery or test that was performed more than 30 days preceding low-risk surgery (**G8962**)

RATIONALE:

Cardiac imaging is a mainstay in medical decision-making for patients with known or suspected heart disease. However, expenditures related to imaging comprise a significant portion of the health care budget. Much scrutiny has been focused on cardiovascular imaging with regard to the potential for overuse, especially in view of substantial geographic variation in ordering patterns and the limited amount of evidence-based data supporting the use of imaging as it relates to patient outcomes. Given the significant contribution of heart disease to morbidity and mortality and the prevalence of cardiovascular disease, it is important to determine the appropriate use of diagnostic tests such as stress echocardiography, stress SPECT MPI, CCTA, and CMR.

CLINICAL RECOMMENDATION STATEMENTS:

Diagnostic testing, such as stress SPECT MPI, stress echocardiography, CCTA, and CMR is used to detect disease and provide risk assessment used to modify treatment strategies and approaches. Information provided by such testing can initiate, modify and stop further treatments for coronary heart disease (medications and revascularization) which have an impact on patient outcomes.

In addition, false positives and false negatives can adversely impact the patient and their treatment outcomes. Lastly, radiation from stress SPECT MPI and CCTA poses a minimal but still important consideration for patient safety.

Ensuring proper patient selection can avoid using resources in patients not expected to benefit from the testings and for which the associated risks would be unnecessary.

AUC Indication

2013 ACCF/AHA/ASE/ASNC/HFSA/HRS/SCAI/SCCT/SCMR/STS multimodality appropriate use criteria for the detection and risk assessment of stable ischemic heart disease (J Am Coll Cardiol. 2014 Feb 4;63(4):380-406)

Indication 71: Pre-Operative Evaluation for Noncardiac Surgery: Moderate-to-Good Functional Capacity (greater than or equal to 4 METs) OR No Clinical Risk Factors: Any surgery – Rarely Appropriate Indication 73: Pre-Operative Evaluation for Noncardiac Surgery: Poor or Unknown Functional Capacity (less than 4 METs): Low-risk surgery: Greater than or equal to 1 clinical risk factor – Rarely Appropriate

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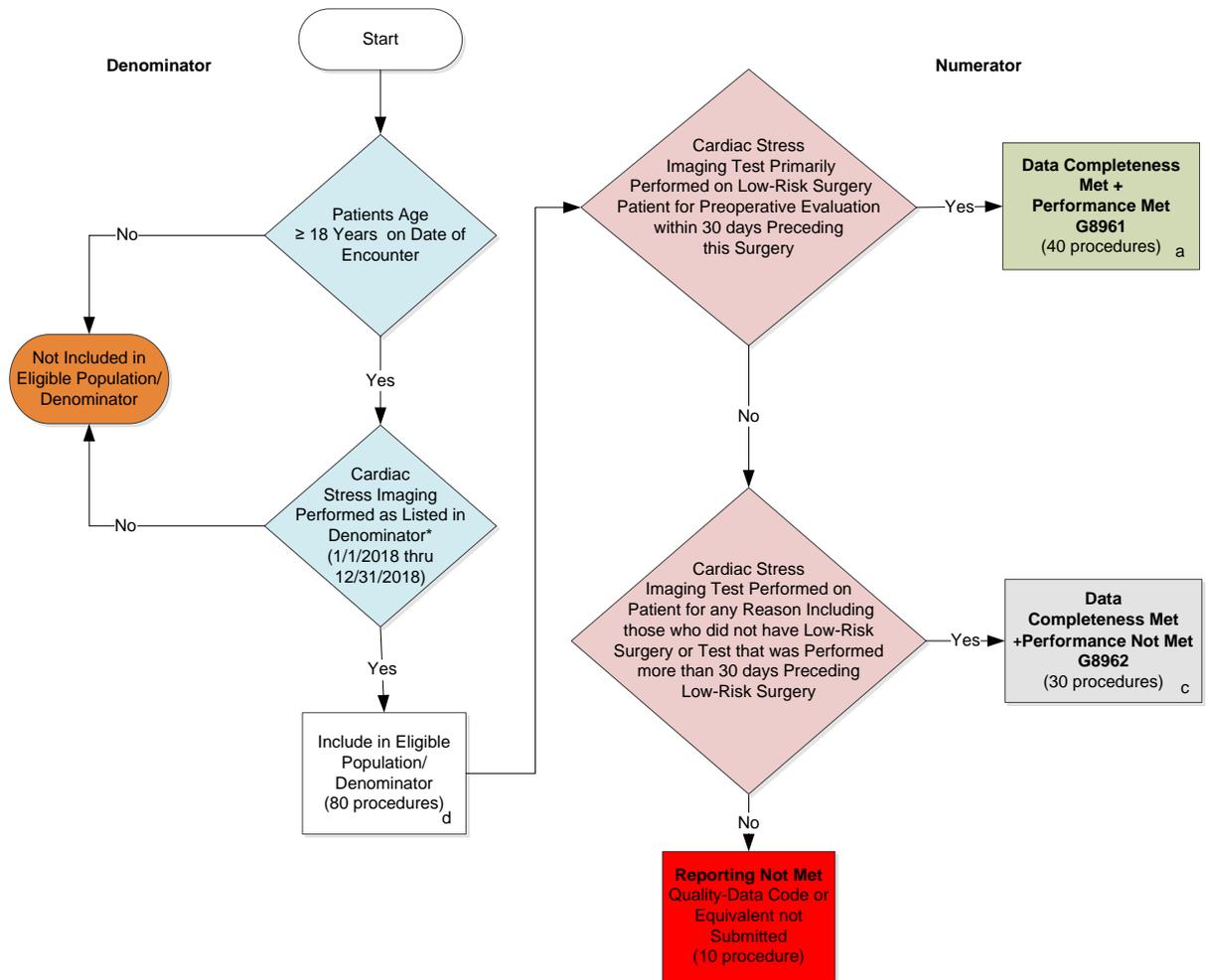
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**2018 Registry Flow For Quality ID #322:
Cardiac Stress Imaging Not Meeting Appropriate Use Criteria: Preoperative Evaluation in Low-Risk Surgery Patients**



SAMPLE CALCULATIONS:

Reporting Rate=

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

Performance Rate=

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

*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 control and care
 NOTE: Submission Frequency: Procedure

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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.

2018 Registry Flow for Quality ID

#322: Cardiac Stress Imaging Not Meeting Appropriate Use Criteria: Preoperative Evaluation in Low-Risk Surgery Patients

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in submitting this Individual Specification. This flow is for registry-data submission.

NOTE: A lower calculated performance rate for this measure indicates better clinical care or control.

1. Start with Denominator
2. Check Patient Age:
 - a. If the Age is greater than or equal to 18 years of age on Date of Encounter and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
 - b. If the Age is greater than or equal to 18 years of age on Date of Encounter and equals Yes during the measurement period, proceed to check Cardiac Stress Imaging Performed as Listed in Denominator.
3. Check Cardiac Stress Imaging Performed as Listed in Denominator:
 - a. If Cardiac Stress Imaging Performed as Listed in Denominator equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
 - b. If Cardiac Stress Imaging Performed as Listed in Denominator equals Yes during the measurement period, proceed to include in Eligible Population.
4. 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 procedures in the Sample Calculation.
5. Start Numerator
6. Check Cardiac Stress Imaging Test Primarily Performed on Low-Risk Surgery Patient for Preoperative Evaluation within 30 days Preceding this Surgery:
 - a. If Cardiac Stress Imaging Test Primarily Performed on Low-Risk Surgery Patient for Preoperative Evaluation within 30 days Preceding this Surgery equals Yes, include in Data Completeness Met and Performance Met.
 - b. Data Completeness Met and Performance Met letter is represented in the Reporting Rate 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 Cardiac Stress Imaging Test Primarily Performed on Low-Risk Surgery Patient for Preoperative Evaluation within 30 days Preceding this Surgery equals No, proceed to Cardiac Stress Imaging Test Performed on Patient for Any Reason Including Those Who did Not Have Low-Risk Surgery or Test that was Performed More than 30 days Preceding Low-Risk Surgery.
7. Check Cardiac Stress Imaging Test Performed on Patient for Any Reason Including Those Who did Not Have Low-Risk Surgery or Test that was Performed More than 30 days Preceding Low-Risk Surgery:

- a. If Cardiac Stress Imaging Test Performed on Patient for Any Reason Including Those Who did Not Have Low-Risk Surgery or Test that was Performed More than 30 days Preceding Low-Risk Surgery equals Yes, include in Reporting Met and Performance Not Met.
 - b. Data Completeness Met and Performance Not Met is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter c equals 30 procedures in the Sample Calculation.
 - c. If Cardiac Stress Imaging Test Performed on Patient for Any Reason Including Those Who did Not Have Low-Risk Surgery or Test that was Performed More than 30 days Preceding Low-Risk Surgery equals No, proceed to Data Completeness Not Met.
8. Check Data Completeness Not Met:
- a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not submitted. 10 procedures have been subtracted from the Data Completeness Numerator in the Sample Calculation.

SAMPLE CALCULATIONS:

Reporting Rate=

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

Performance Rate=

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