Measure #324 (NQF 0672): Cardiac Stress Imaging Not Meeting Appropriate Use Criteria: Testing in Asymptomatic, Low-Risk Patients

2014 PQRS OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

DESCRIPTION:
Percentage of all stress single-photon emission computed tomography (SPECT) myocardial perfusion imaging (MPI), stress echocardiogram (ECHO), cardiac computed tomography angiography (CCTA), and cardiovascular magnetic resonance (CMR) performed in asymptomatic, low coronary heart disease (CHD) risk patients 18 years and older for initial detection and risk assessment.

INSTRUCTIONS:
This measure is to be reported once per procedure of cardiac stress imaging (i.e., SPECT, MPI, CCTA, and CMR) for patients seen during the reporting period. There is no diagnosis associated with this measure. It is anticipated that clinicians who provide the physician component of diagnostic imaging studies for cardiac stress will submit this measure.

Measure Reporting via Registry:
CPT codes and patient demographics are used to identify patients who are included in the measure’s denominator. The listed numerator options are used to report the numerator of 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. There are no allowable performance exclusions for this measure.

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 reporting 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 for asymptomatic, low CHD risk patients for initial detection and risk assessment.

Definition:
Low CHD risk - clinicians should consider the maximum number of available patient factors used to estimate risk based on Framingham (ATP III criteria), typically age, gender, diabetes, smoking status, and use of blood pressure medication, and integrate age appropriate estimates for missing elements, such as LDL or standard blood pressure.

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 CHD patients. Clinical
**quality outcome is cardiac stress imaging NOT performed on patient who is asymptomatic or low CHD risk.**

**Numerator Options:**
Cardiac Stress Imaging Test primarily performed on low CHD risk patient for initial detection and risk assessment *(G8965)*

OR
Cardiac Stress Imaging Test performed on symptomatic or higher than low CHD risk patient or for any reason other than initial detection and risk assessment *(G8966)*

**RATIONALE:**
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 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.

**CLINICAL RECOMMENDATION STATEMENTS:**

2002 Stable Angina Guideline
“Asymptomatic patients with abnormal findings on ambulatory ECG or EBCT who are able to exercise can be evaluated with exercise ECG testing, although the efficacy of exercise ECG testing in asymptomatic patients is not well established. Stress imaging procedures (i.e., either stress myocardial perfusion imaging or stress echocardiography) are generally not indicated in most such patients.”

AUC Indications
2008 Appropriateness Criteria for Stress Echocardiography Indication 11: Detection of CAD and Risk Assessment: Asymptomatic (without Chest Pain Syndrome or Anginal Equivalent): Low CHD risk (Framingham risk criteria) - Inappropriate (1)

2009 Appropriate Use Criteria for Cardiac Radionuclide Imaging Indication 12: Detection of CAD/Risk Assessment Without Ischemic Equivalent: Asymptomatic: Low CHD risk (ATP III risk criteria) - Inappropriate (1)

2006 Appropriateness Criteria for CCT and CMR Indication 10 - Detection of CAD: Asymptomatic (Use of CCTA) (Without Chest Pain Syndrome): Asymptomatic: Low CHD risk (Framingham risk criteria) - Inappropriate (1)

2002 Chronic Stable Angina Guideline
Class III
Recommendations for Cardiac Stress Imaging as the Initial Test for Diagnosis in Asymptomatic Patients
1. Exercise or dobutamine echocardiography in asymptomatic patients with left bundle-branch block. (Level of Evidence: C)
2. Exercise myocardial perfusion imaging, exercise echocardiography, adenosine or dipyridamole myocardial perfusion imaging, or dobutamine echocardiography as the initial stress test in an asymptomatic patient with a normal rest ECG who is not taking digoxin. (Level of Evidence: C)
3. Adenosine or dipyridamole myocardial perfusion imaging or dobutamine echocardiography in asymptomatic patients who are able to exercise and do not have left bundle-branch block or electronically paced ventricular rhythm. (Level of Evidence: C)