**Clinical guidelines**

**STRESS ECHOCARDIOGRAPHY**

<table>
<thead>
<tr>
<th>CPT4 Codes: 93350, 93351, 93352</th>
<th>Last Effective Date: November 2015</th>
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<tr>
<td>LCD ID Number: L3448</td>
<td>Last Revised Date: February 2016</td>
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<tr>
<td>J-M (was J – 11) (NC, SC, VA, WV)</td>
<td>Implementation Date: February 2016</td>
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<td>Responsible Department: Clinical Operations</td>
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"FOR CMS (MEDICARE) MEMBERS ONLY"

**Coverage Indications, Limitations, and/or Medical Necessity**

The following may be medically necessary indications for stress echocardiography:

- To provide additional diagnostic information in patients with a previous non-diagnostic treadmill stress test who have signs or symptoms of suspected coronary artery disease;

  (Note: Stress testing (exercise tolerance testing) is not required prior to stress echocardiography.)

  - To provide additional diagnostic information in patients with known or suspected coronary artery disease who are in groups known to have a high false-positive rate for electrocardiographic (EKG) changes with stress tests: (Examples are women and patients who are undergoing drug therapy which may alter the EKG response.)

  - To provide additional diagnostic information in patients with conduction or repolarization abnormalities in whom the electrocardiographic diagnosis of stress-induced ischemia may be difficult;

  - To determine the extent and location of ischemic wall motion abnormalities in patients who have a positive stress test;

  - To observe the physiological significance of a lesion or to follow the changes after vascular intervention, before or after an acute invasive intervention;

  - To provide prognostic information following myocardial infarction: (Pharmacological stress is often used in this setting.)

  For an assessment of ischemic cause, and/or for evaluation of viability in patients who have reduced left ventricular ejection fraction (e.g., <45%) or congestive heart failure without obvious other reason and when coronary artery disease cannot be ruled out:

  - To assess the gradient during exercise or to assess the response to therapy initiated to limit the gradient during exercise in patients with hypertrophic cardiomyopathy and known or suspected left ventricular outflow tract obstruction;

  - To provide additional diagnostic information in patients with stenotic valvular heart disease (e.g., mitral stenosis and aortic stenosis) when results of a resting...
image or angiography are inadequate for diagnosing a valvular lesion causing symptomatic exercise intolerance;
- For evaluation of known or suspected post-cardiac transplant coronary artery disease;
- For risk stratification prior to surgery; and
- To obtain diagnostic information in patients with moderate coronary artery disease.

Pharmacological stress may be utilized in patients who are unable to exercise to the maximum heart rate.

The use of a computer-based digitized imaging technique is required for stress echocardiography interpretation.

Stress echocardiography and nuclear ventriculography procedures provide similar diagnostic information. Therefore, it may not be medically necessary for both procedures to be performed on a beneficiary during the same episode of illness unless there is documentation in the medical record indicating that the results of the initial test are technically suboptimal due to reasons other than equipment problems or technician error.

Limitations of the echocardiography technique may diminish its reliability in assessing myocardial disease. These limitations are particularly relevant in the following circumstances:
- When a poor acoustic window precludes adequate myocardial definition and the ability to evaluate ischemia with confidence (e.g., chest wall abnormalities, severe chronic obstructive pulmonary disease or obesity);
- When the sonographer does not have extensive training in the acquisition of images and in regional wall motion analysis (interpretation of stress echocardiograms has a larger inter-observer variability than the interpretation of nuclear studies);
- When the echocardiographic imaging is not done promptly after completion of exercise (regional wall abnormalities tend to resolve within the first 1 to 2 minutes after stress, especially in patients not achieving an adequate work load);
- In patients with left bundle branch block which produces dyssynergia of the septal wall;
- In patients who exhibit a hypertensive response to exercise there may be decreased exercise-induced contractility in the absence of underlying epicardial vessel stenosis; and,
- In patients with known left ventricular hypertrophy and reduced left-ventricular end-diastolic dimensions there may be reduced sensitivity and Dobutamine stress echo may produce suboptimal diagnostic information.

Note: When ultrasound contrast enhancement is used for visualizing the ventricular chambers and endocardial border, the supply is considered separate from the procedure for reimbursement from Medicare.
CPT/HCPCS Codes

Group 1 Paragraph: N/A

Group 1 Codes:

ECHOCARDIOGRAPHY, TRANSTHORACIC, REAL-TIME WITH IMAGE DOCUMENTATION (2D), INCLUDES M-MODE RECORDING, WHEN PERFORMED, DURING REST AND CARDIOVASCULAR STRESS TEST USING TREADMILL, BICYCLE EXERCISE AND/OR PHARMACOLOGICALLY INDUCED STRESS, WITH INTERPRETATION AND REPORT:

93350

ECHOCARDIOGRAPHY, TRANSTHORACIC, REAL-TIME WITH IMAGE DOCUMENTATION (2D), INCLUDES M-MODE RECORDING, WHEN PERFORMED, DURING REST AND CARDIOVASCULAR STRESS TEST USING TREADMILL, BICYCLE EXERCISE AND/OR PHARMACOLOGICALLY INDUCED STRESS, WITH INTERPRETATION AND REPORT: INCLUDING PERFORMANCE OF CONTINUOUS ELECTROCARDIOGRAPHIC MONITORING, WITH SUPERVISION BY A PHYSICIAN OR OTHER QUALIFIED HEALTH CARE PROFESSIONAL

93351

USE OF ECHOCARDIOGRAPHIC CONTRAST AGENT DURING STRESS ECHOCARDIOGRAPHY (LIST SEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)

93352

Please refer to the CMS website for the ICD-10 Codes that Support Medical Necessity.

Documentation Requirements

Appropriate diagnostic ICD-10 codes supporting the medical necessity of the services must be submitted with each claim. Claims submitted without such evidence will be denied as not being medically necessary. The patient record is expected to support the diagnosis should chart review become necessary. Medicare does not pay for procedures that are not medically necessary.

Documentation supporting medical necessity should be legible, maintained in the patient’s medical record, and made available to AB MAC upon request.

Documentation in the patient’s progress notes must exist to justify the medical necessity for the use of pharmacologic stress agents, and must be available if requested.