



Stress Echocardiography (Codes 93015-93018, and 93350-93352)

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Coding Clarification: Stress Echocardiography (Codes 93015-93018, and 93350-93352)

A cardiovascular stress test (codes 93015-93018) is a study that seeks to indirectly evaluate the adequacy of blood flow to the heart muscle by recording the electrocardiogram at rest and during staged physical exercise or drug infusion. Electrocardiographic changes noted may reflect ischemic or arrhythmia changes. A cardiovascular stress test includes continuous electrocardiographic monitoring, and physician supervision interpretation, and reporting. This study may be identified in the medical record in multiple ways (i.e. cardiac stress test, cardiovascular stress test, exercise stress test, exercise treadmill test, exercise tolerance test, stress test, exercise ECG test, pharmacologic stress test, or drug infusion stress test).

To improve the sensitivity and specificity of the cardiovascular stress test, a cardiovascular stress test may be coupled with an image modality such as echocardiography or nuclear perfusion imaging. When a stress echo is performed in conjunction with the cardiovascular stress test, echocardiographic images of the wall of the left heart are recorded before, after, and sometimes during the stress test to evaluate pump function (motion and thickening) of specific walls. A stress echocardiogram (with images acquired from multiple cardiac windows), specifically describes the acquisition of cardiac images at rest and immediately after stress testing has ended.

There are two CPT codes for stress echocardiography (93350, 93351) and choosing which code to report depends on the site at which the study is performed and by whom, as discussed below.

To enhance the stress echocardiography test, other echocardiography procedures may also be performed and reported, which could include the use of a contrast agent (code 93352), spectral Doppler (codes 93320 and 93321), and Doppler color flow (code 93325). In addition, under certain circumstances, a resting transthoracic (TTE) echocardiogram (codes 93303, 93304, 93306, 93307, and 93308) may also be performed and reported on the same date of service, as a stress echocardiogram. Therefore, the use of these codes in combination with the cardiovascular stress test and stress echocardiography procedures are discussed here as well.

Stress Test (Codes 93015-93018)



Codes 93015-93018 are used to report cardiovascular stress testing procedures.

93015 Cardiovascular stress test using maximal or submaximal treadmill or a bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; with physician supervision, with interpretation and report

93016 physician supervision only, without interpretation and report

93017 tracing only, without interpretation and report

93018 interpretation and report only

After the ECG electrodes and lead wires have been applied to the patient, the physician initiates stress according to established protocols by (1) having the patient walk on a treadmill; (2) having the patient ride a stationary bicycle (supine or upright); or (3) administering pharmacological agents that either simulate exercise (by increasing heart rate, blood pressure or myocardial contractility) or alter coronary flow (by vasodilation). The patient's ECG, heart rate, blood pressure, and clinical assessment are monitored and recorded at baseline throughout the procedure and during the recovery phase. The patient is monitored both for abnormality in heart function as well as for any other symptomatic responses that would require cessation of the stress test; for example, (1) severe symptoms; (2) significant ventricular arrhythmia; and (3) hypotension, to ensure the safety of the patient during the testing and to obtain pertinent information regarding possible pathology. When the desired results are achieved, the patient is monitored to ensure safe return of the heart to a nonstressed state. The physician reviews and analyzes the stress test, which includes starting and ending hemodynamics, arrhythmias, symptoms (especially chest pain), ST segment changes, functional capacity, and any other elements that are relevant to the interpretation of a cardiac stress test.

Coding Tip

Setting up the equipment and applying the electrodes for monitoring are inherent in cardiac stress testing and therefore are not separately reported additionally by any CPT codes.

The CPT coding for the stress test consists of three components:

- Physician supervision of the test (code 93016),
- ECG Tracing, the technical component (code 93017), and
- Physician interpretation and report (code 93018).

Code 93015 is used to report the complete cardiac stress test procedure, which includes all three components. Because code 93015 includes the technical component, supervision,



and interpretation, this code is rightfully reportable only by a physician in a nonfacility setting (eg, office, clinic, or diagnostic testing center).

When a complete procedure (code 93015) is not performed, codes 93016-93018 are reported by the various providers according to the specific procedures that are actually performed.

Coding Tip

Code 93015 should be used if all three components of this procedure are performed by a single physician in a nonfacility setting.

In a facility setting (eg, hospital), the facility reports the technical component of the service and the physician(s) report the applicable component codes (eg, codes 93016 and 93018). Each physician should take care to report only those components of the stress test that he or she has actually provided, as defined above.

Stress Echocardiography (Code 93350, 93351)

When a physician performs the complete service of a stress echocardiogram combined with a complete cardiovascular stress test (continuous electrocardiographic monitoring, physician supervision, interpretation, and report) in a nonfacility setting, code 93351 is the appropriate code to report.

93351 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 physician supervision

Codes 93015-93018 and 93350 are **not** reported in conjunction with code 93351, as the services described by these codes are considered inherent in code 93351. Code 93351 represents a stress echocardiogram combined with a complete cardiac stress test and, therefore, the use of the CPT code 93351 is limited to this circumstance.

Code 93350 is used to report the performance and interpretation of a stress echocardiogram without all components of the stress testing (93015).

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;

CPT code 93350 reflects the performance and interpretation of a pre-stress echocardiogram and the subsequent images acquired during and/or post exercise/stress. To capture the necessary exercise stress test portion, providers must also report the applicable cardiovascular stress test code(s) from the 93016-93018 series.

CPT code 93350 may be reported in a nonfacility or in a facility setting.

- In a nonfacility setting, when the services of the stress test and stress echocardiogram are performed by different physicians, CPT code 93350 is reported by one physician and the stress test is reported using the appropriate stress test code(s) (93016-93018) by the other physician.
- In the facility setting, CPT code 93350 is always used to report the performance and interpretation of a stress echocardiogram since the alternative stress echocardiography code 93351 is reportable only in the nonfacility setting. The appropriate stress test code(s) (93016-93018) are also reported either by the same physician or a different physician, as appropriate.

Other Echocardiography Procedures Reportable with Stress Echocardiography Contrast Administration

93352 Use of echocardiographic contrast agent during stress echocardiography (List separately in addition to code for primary procedure)

A contrast agent may be administered with a stress echocardiogram to improve the delineation of the left ventricular endocardial borders in a patient whose noncontrast echocardiography study is inadequate or suboptimal, and for whom the LV function information is essential to the management of the patient. Neither the CPT code 93350 nor 93351 includes the administration of a contrast agent. If the physician performs intravenous administration of an echocardiographic contrast agent in conjunction with a stress echocardiogram (code 93350 or 93351), report the add-on code 93352, which is reportable only on a global basis.

To further clarify, contrast material may be used during performance of resting echocardiography (codes 93306, 93307, and 93308). In this circumstance, the injection of contrast media for imaging code 96374, *Therapeutic, prophylactic, or diagnostic injection (specify substance or drug); intravenous push, single or initial substance/drug*, may be reported.

Doppler Procedures

Spectral Doppler and color flow Doppler exams provide information regarding intracardiac blood flow and hemodynamics. When Doppler echocardiography procedures are performed in conjunction with stress echocardiography, the Doppler services are separately reported. Specifically, pulsed wave and/or continuous wave with spectral display Doppler [code 93320 (complete) or 93321 (limited)] and color flow Doppler (code 93325) may be added to a stress echocardiography procedure (code 93350 or 93351), when clinically indicated.

Doppler codes (93320, 93321, and 93325) are designated as add-on codes and must be reported with a primary echocardiography procedure code.

93320 Doppler echocardiography, pulsed wave and/or continuous wave with spectral display (List separately in addition to codes for echocardiographic imaging; complete)

93321 follow-up or limited study (List separately in addition to codes for echocardiographic imaging)

✘ 93325 Doppler echocardiography color flow velocity mapping (List separately in addition to codes for echocardiography)

As indicated in the *CPT 2010* codebook, the respective parenthetical notes for codes 93320, 93321 and 93325 instruct that:

- code 93320 may be reported with codes 93303, 93304, 93312, 93314, 93315, 93317, 93350, and 93351.
- code 93321 may be reported with codes 93303, 93304, 93308, 93312, 93314, 93315, 93317, 93350, and 93351.
- code 93325 may be reported with codes 76825, 76826, 76827, 76828, 93303, 93304, 93308, 93312, 93314, 93315, 93317, 93350, and 93351.

Transthoracic Echocardiography (Codes 93303, 93304, 93306, 93307, and 93308)

A transthoracic echocardiogram is performed through the chest wall to evaluate cardiac anatomy and function. Transthoracic echocardiography (code 93303, 93304, 93306, 93307 or 93308) may be reported on the same date of service as a stress echo (code 93350-93352) for a different clinical circumstance. Modifier-59, *Distinct Procedural Service*, should be appended to the applicable transthoracic echo code to indicate that a separate and distinct transthoracic echocardiography was performed on the same date of service as the stress echocardiography.

93303 Transthoracic echocardiography for congenital cardiac anomalies; complete

93304 Transthoracic echocardiography for congenital cardiac anomalies; follow-up or limited study

93306 Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, complete, with spectral Doppler echocardiography, and with color flow Doppler echocardiography

93307 Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, complete, without spectral or color Doppler echocardiography


93308 Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, follow-up or limited study

Follow-Up or Limited Studies (Codes 93304, 93308, and 93321)

Codes 93304 and 93308 are designated as follow-up or limited transthoracic echo studies. Code 93321 describes a follow-up or limited spectral Doppler exam. When clinically indicated, these codes may be reported on the same date of service as the stress echo (93350-93352). Modifier-59, *Distinct Procedural Service*, should be appended to codes 93304 and 93308 as applicable to indicate that a separate and distinct service was performed on the same date of service as the stress echocardiography. As an add-on code, code 93321 does not require Modifier-59.


93304 Transthoracic echocardiography for congenital cardiac anomalies; follow-up or limited study

93308 Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, follow-up or limited study

 93321 Doppler echocardiography, pulsed wave and/or continuous wave with spectral display (List separately in addition to codes for echocardiographic imaging); follow-up or limited study (List separately in addition to codes for echocardiographic imaging)

A follow-up or limited study is an examination that does not evaluate or document the attempt to evaluate all the structures that comprise the complete echocardiographic exam. It is usually for a focused clinical purpose (eg, recording of tricuspid regurgitant velocity for estimating pulmonary artery systolic pressure, sequential evaluation of the trans-mitral velocity profile in a patient with mitral stenosis in order to evaluate for a change in gradient or valve area, or the evaluation of progression or resolution of a pericardial effusion).

Transesophageal Echocardiography (Codes 93312, 93313, 93314, 93315, 93316, 93317, and 93318)

Transesophageal echocardiography (TEE) is obtained by placing the ultrasound transducer in the esophagus achieving closer proximity to the anatomical structures of the heart and great vessels for improved image quality. TEE (codes 93312, 93313, 93314, 93315, 93316, 93317, and 93318) may be reported on the same date of service as the stress echo (codes 93350-93352) for certain clinical circumstances. Modifier-59, *Distinct Procedural Service*, should be appended to the applicable TEE code to indicate that stress echo and TEE are not normally reported together, but are appropriate under the circumstances (eg, pacing TEE or poor surface echo image quality). Documentation in the medical record must support the use of the modifier. 

References

1. American Medical Association. *CPT Changes Archives 2008-2009: An Insiders View*. Chicago, IL:2009
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3. American Medical Association. *Principles of CPT Coding*, 5th Edition. Chicago, IL: 2008: pp 448 and 449.