



Statement on Transesophageal Echocardiography

Committee of Origin: Economics

(Approved by the ASA House of Delegates on October 17, 2001, and last amended on December 13, 2020)

Patients with known, occult, or iatrogenic cardiovascular disease undergoing anesthesia for a variety of surgical procedures may require precise assessment and prompt treatment of physiological abnormalities occurring in the perioperative period. Transesophageal echocardiography (TEE) is a sophisticated imaging technique that can provide specific and unique information about cardiovascular structure and function. Much of the data acquired by TEE may not be obtained from other perioperative monitoring and diagnostic techniques. The position of the American Society of Anesthesiologists (ASA) is that the placement of the TEE probe and the acquisition and interpretation of TEE data are discrete medical services provided by anesthesiologists or other qualified physicians that are not incorporated within the base or time units of the ASA Relative Value Guide[®].

The House of Delegates of the American Society of Anesthesiologists first approved the “Practice Guidelines for Perioperative Transesophageal Echocardiography” in 1996 and the latest revision of this document was adopted in 2015. These evidence-based guidelines describe the circumstances in which TEE offers important advantages over other monitoring and diagnostic techniques during the perioperative management of surgical patients.

As per the guidelines, the indication for TEE may be based on an individual patient’s condition rather than the specific surgical procedure to be performed, or may be individually requested by a surgeon or cardiologist to help guide a structural cardiac intervention. Because of this fact, neither the work value nor practice expense of a TEE examination has been considered when developing the base unit values for anesthesia services by surgical procedure.

TEE is an invasive procedure with a small risk of physical injury, primarily related to placement of the TEE probe. Interpretation of TEE images is critical to both the diagnosis and management of clinical conditions during the course of anesthesia and perioperative care. As a result, the ASA recommends specific benchmarks for TEE competency to ensure that each examination is complete and accurate.

The full scope of practice for TEE includes a determination of medical necessity, identification of relevant contraindications, an understanding of the technical aspects of probe placement and manipulation, image generation, interpretation of the data generated, integration of diagnostic imaging information into the clinical decision-making process, appropriate storage of images and data, and generation of a report.

The acquisition and interpretation of TEE data is the practice of medicine and cannot be delegated to non-physicians. A number of professional societies have differentiated the performance of basic perioperative TEE from advanced perioperative TEE. “Basic Perioperative TEE” refers to the use of TEE to diagnose those physiological abnormalities common to the perioperative period and to guide medical management. “Advanced Perioperative TEE” refers to the use of TEE for the definitive diagnosis of structural or functional cardiovascular abnormalities and to guide perioperative surgical decision-making aimed at correcting the abnormalities detected. Only



physicians with appropriate training or comparable experience in perioperative TEE and who have been credentialed for perioperative TEE by their institution should perform this service.

CODING FOR TRANSESOPHAGEAL ECHOCARDIOGRAPHY

93312 - Echocardiography, transesophageal, real-time with image documentation (2D) (with or without M-mode recording); including probe placement, image acquisition, interpretation, and report

Requires placement of the transesophageal probe, acquisition of the appropriate images and critical analysis of the data. Images should be archived to allow for later review and a report of findings should be entered in the patient's permanent medical record.

93313 - Echocardiography, transesophageal, real-time with image documentation (2D) (with or without M-mode recording); placement of transesophageal probe only

Requires placement of the transesophageal probe only. This code is reported by the physician placing the probe if another physician acquires and interprets the images and issues a report of the findings (reported as code 93314).

93314 - Echocardiography, transesophageal, real-time with image documentation (2D) (with or without M-mode recording); image acquisition, interpretation and report only

Requires acquisition and interpretation of the images and creation of a report. This code is used when another physician places the TEE probe (reported as code 93313).

93315 - Transesophageal echocardiography for congenital cardiac anomalies; including probe placement, image acquisition, interpretation and report

Requires placement of the transesophageal probe, acquisition of the appropriate images and critical analysis of the data in a patient with congenital structural cardiac anomalies. Images should be archived to allow for later review and a report of findings should be entered in the patient's permanent medical record.

93316 - Transesophageal echocardiography for congenital cardiac anomalies; placement of transesophageal probe only

Requires placement of the transesophageal probe only in a patient with congenital structural cardiac anomalies. This code is reported by the physician placing the probe if another physician acquires and interprets the images and issues a report of the findings (reported as code 93317).

93317 - Transesophageal echocardiography for congenital cardiac anomalies; image acquisition, interpretation and report only

Requires acquisition and interpretation of the images and creation of a report in a patient with congenital structural cardiac anomalies. This code is used when another physician places the TEE probe (reported as code 93316).



93318 - Echocardiography, transesophageal (TEE) for monitoring purposes, including probe placement, real time 2-dimensional image acquisition and interpretation leading to ongoing (continuous) assessment of (dynamically changing) cardiac pumping function and to therapeutic measures on an immediate time basis

Requires placement of the transesophageal probe, acquisition of the appropriate images, and repetitive evaluation of cardiac function in order to guide ongoing management. Images should be archived to allow for later review and a report of findings should be entered in the patient's permanent medical record.

93355 - Echocardiography, transesophageal (TEE) for guidance of a transcatheter intracardiac or great vessel(s) structural intervention(s) (eg, TAVR, transcatheter pulmonary valve replacement, mitral valve repair, paravalvular regurgitation repair, left atrial appendage occlusion/closure, ventricular septal defect closure) (peri-and intra-procedural), real-time image acquisition and documentation, guidance with quantitative measurements, probe manipulation, interpretation, and report, including diagnostic transesophageal echocardiography and, when performed, administration of ultrasound contrast, Doppler, color flow, and 3D

Requires placement of the TEE probe, acquisition of the appropriate images and critical analysis of the data for patients undergoing major transcatheter intracardiac or major vascular intervention. Diagnostic interpretation of the TEE data guides selection and positioning of implanted devices, determines successful deployment, and identifies any resulting complications. Images should be archived to allow for later review and a report of findings should be entered in the patient's permanent medical record. This code is comprehensive for all echocardiographic modalities required to guide the interventional procedure and should not be reported with other TEE component codes (76376, 76377, or 93312 through 93325).

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

Requires the use of Doppler echocardiography to measure precise blood flow velocities and determine the associated cardiac structure and function. This is an add-on code which should be reported in conjunction with a core TEE code (93312, 93314, 93315, 93317).

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

Requires the use of Doppler echocardiography to assess color flow velocity mapping and determine the associated cardiac structure and function. This is an add-on code which should be reported in conjunction with a base TEE code (93312, 93314, 93315, 93317).

76376 - 3D rendering with interpretation and reporting of computed tomography, magnetic resonance imaging, ultrasound, or other tomographic modality with image postprocessing under concurrent supervision; not requiring image postprocessing on an independent workstation.

Requires creation of a 3D reconstruction from TEE data using postprocessing but no separate equipment. Physicians requesting 3D services should generate a written request



indicating the clinical need for the additional 3-D imaging. The interpreting physician's report should address those specific clinical needs. This service may be considered medically unnecessary and payment denied if equivalent information has already been provided by two-dimensional ultrasound. Should be reported in conjunction with a base TEE code (93312, 93314, 93315, 93317).

76377 - 3D rendering with interpretation and reporting of computed tomography, magnetic resonance imaging, ultrasound, or other tomographic modality with image postprocessing under concurrent supervision; requiring image postprocessing on an independent workstation.

Requires creation of a 3D reconstruction from TEE data using postprocessing on an independent workstation. Physicians requesting 3D services should generate a written request indicating the clinical need for the additional 3-D imaging. The interpreting physician's report should address those specific clinical needs. This service may be considered medically unnecessary and payment denied if equivalent information has already been provided by two-dimensional ultrasound. Should be reported in conjunction with a base TEE code (93312, 93314, 93315, 93317).

USE OF MODIFIERS

If a TEE examination is performed for diagnostic purposes by the same anesthesiologist who is providing anesthesia, modifier 59 should be appended to the TEE code to note that it is distinct and independent from the anesthesia service. If the anesthesiologist does not own the TEE equipment, s/he should report only the professional component of the TEE service by appending modifier 26 (Professional Component) to the TEE code, along with modifier 59.

BUNDLING ISSUES

Perioperative use of TEE is distinct from routine anesthetic care and therefore should be reported separately from, and paid in addition to, any other services delivered concurrently by an anesthesiologist. Facts supporting this position include:

1. TEE is not a standard intraoperative technique and performance of a TEE examination is a service that extends beyond the scope of standard perioperative care.
2. Acquisition and interpretation of TEE images is a medical service offered by physicians with specialized training and institutional credentialing. Any duly qualified consultant physician providing such service should be compensated according to established payment guidelines regardless of medical specialty.
3. Establishment of the ASA Relative Value Guide base units for anesthesia services predates the widespread availability and application of perioperative TEE. Thus, the increased work associated with a TEE examination cannot be considered to have been included in these base unit values.
4. The ASA Relative Value Guide base units associated with specific surgical procedures reflect the typical anesthesia work effort associated with surgical technique. Many of the indications for perioperative TEE are specific to a patient's baseline disease state or acquired pathophysiology, not the associated surgical procedure. Thus, the increased work associated with a TEE examination cannot be considered to be included in these base unit values.