FIRST COAST SERVICE OPTIONS
MAC - PART A/B
LOCAL COVERAGE DETERMINATION

LCD Database ID Number

L33768

Contractor Name

First Coast Service Options, Inc.

Contractor Number

09101 – Florida
09201 – Puerto Rico/Virgin Islands
09102 – Florida
09202 – Puerto Rico
09302 – Virgin Islands

Contractor Type

MAC – Part A and B

LCD Title

Transthoracic Echocardiography (TTE)

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Unless otherwise specified, italicized text represents quotation from one or more of the following CMS sources:

CMS Manual System, Pub. 100-03, Medicare National Determinations Manual, Chapter 1, Section 220.5
CMS Manual System, Pub. 100-04, Medicare Claims Processing Manual, Chapter 4, Section 20.2, Section 30.7.6
CMS Manual System, Pub. 100-04, Medicare Claims Processing Manual, Chapter 12, Section 30.5
CMS Manual System, Pub. 100-04, Medicare Claims Processing Manual Chapter 13, Sections 140-140.3
Transthoracic Echocardiography (TTE) AB

Program Memorandum, Transmittal AB-02-085 (CR 2194)
Program Memorandum, Transmittal AB-03-091 (CR 2763)

Primary Geographic Jurisdiction

Florida
Puerto Rico/Virgin Islands

Oversight Region

Region I

Original Determination Effective Date

10/01/2015

Original Determination Ending Date

N/A

Revision Effective Date

11/21/2016

Revision Ending Date

11/20/16

Indications and Limitations of Coverage and/or Medical Necessity

Echocardiography is an ultrasonic examination of the heart. It is a widely used noninvasive technology to assess cardiac anatomy and function. A Doppler examination is a valuable adjunct to a complete echocardiographic examination, and allows for the evaluation of the presence and severity of valvular stenosis, valvular regurgitation, and ventricular dysfunction of cardiac output, intracardiac pressures and intracardiac shunts.

This local coverage determination (LCD) addresses the medical necessity and appropriate application of transthoracic echocardiography (TTE). Echocardiography is indicated in the evaluation of derangements of valvular, myocardial and pericardial function. The general applications for coverage can be summarized by the following clinical settings:

1. Native Valvular Heart Disease

Detection of mitral stenosis was among the first practical clinical applications of Transthoracic Echocardiography. TTE is well established as a technique of primary choice for the evaluation of valvular pathology and its effect upon global myocardial function. The relative severity of valvular pathologies can be quantified. Visualization of the valve and valvular apparatus facilitates therapeutic decisions when competing therapeutic options exist. For example, Noninvasive TTE remains the study of choice for monitoring chronic aortic pathology and other valvular lesions when images suitable for serial quantitation can be obtained. In the absence of acute intervention or a change in stable clinical signs and symptoms, TTE in chronic valvular disease is used to document course over time. Generally, it is not medically reasonable and necessary to repeat these examinations more frequently than annually.
2. **Prosthetic Heart Valves (Mechanical and Bio-prostheses)**

TTE assessment soon after prosthetic valve implant is important in establishing a baseline structural and hemodynamic profile unique to the individual and the prosthesis. Size, position, underlying ventricular function and concomitant valve pathologies all impact this unique profile. Subsequent studies are appropriate when clinical signs or symptoms suggest prosthetic valve malfunction, or when the natural history of the implanted prosthesis suggests a high risk of developing prosthetic malfunction. TTE assessment soon after prosthetic valve implant is important in establishing a baseline structural and hemodynamic profile unique to the individual and the prosthesis. Reassessment following convalescence (three to six months) is appropriate. Thereafter, with the absence defined clinical events or obvious change in physical examination findings, an annual stability assessment is considered medically reasonable and necessary.

3. **Endocarditis**

TTE can provide diagnostic information. Larger vegetations may be directly visualized, while valvular anatomy and ventricular function directly assessed. The complications or sequelae of acute infective endocarditis can be detected and monitored over time. Examination frequency in the acute phase of illness is dictated by the individual clinical course. When the acute process has been stabilized, the frequency of serial TTE evaluation will be determined by the residual pathophysiology and discrete clinical events, analogous to the serial assessment of chronic valvular dysfunction and/or normally functioning prosthetic valves. Thereafter, absent defined clinical events or obvious change in physical examination findings, annual stability assessment is considered medically reasonable and necessary.

4. **Ventricular Function and Cardiomyopathies**

Changes in myocardial thickness (hypertrophy and thinning), chamber volume and morphology as well as derived parameters of contractility can be quantified and charted over time by TTE. Cardiac responses to volume perturbations, chronic pressure excess and therapeutic interventions can be monitored. Recognition of the relative contributions of myocardial and valvular functional perturbations to a clinical presentation is facilitated. TTE aids the recognition of myopathies and their classification into hypertrophic, dilated and restrictive types. There is increasing data to support the prognostic value of diastolic function parameters in patients with systolic dysfunction. Absent clinically documented, discrete (abrupt change in signs and symptoms) episodes of deterioration, it is not generally medically necessary to augment clinical assessments with TTE measurements at more-frequent-than-annual examinations.

5. **Acute Myocardial Infarction and Coronary Insufficiency**

TTE can detect ischemic and infarcted myocardium. Regional motion, systolic thickening perturbations and mural thinning can be quantified and global functional adaptation assessed. The relative contributions of right ventricular ischemia and/or infarction can be evaluated. Complications of acute infarction (mural thrombi, papillary muscle dysfunction and rupture, septal defects, true or false aneurysm and myocardial rupture) can be diagnosed and their contribution to the overall clinical status placed in perspective. Following an initial TTE in the setting of acute infarction, utilization frequency will typically be dictated by the acute clinical course. The role for TTE in the emergency room assessment of individuals who present with chest pain is in evolution. This application may be used as part of a detailed clinical evaluation, especially as a triage for patients with chest pain syndrome. If absent clinical deterioration or unclear examination findings, repeat assessment typically includes an evaluation at discharge. Convalescent evaluation at approximately six months and annually thereafter generally provides adequate supplemental data for a clinical evaluation. The medical record should document the medical necessity of more frequent TTE assessment.

6. **Hypertensive Cardiovascular Disease**

Left ventricular hypertrophy correlates with prognosis in hypertensive cardiovascular disease. Certain antihypertensive medications have been reported to stabilize and possibly contribute to the regression of left ventricular hypertrophy and the insidiously progressive development of left ventricular dysfunction and dilatation. In young individuals and in individuals with borderline hypertension, the decision to commit to long-term antihypertensive therapy may be determined by the presence of left ventricular hypertrophy and/or left ventricular mass calculation. TTE (CPT code 93308) may assist the decision to treat and the formulation of a treatment program. Baseline TTE (CPT code 93308) and periodic assessment (no more frequently than annually) would be medically reasonable and necessary.
7. Cardiac Transplant and Rejection Monitoring

TTE is an integral part of the cardiac donor selection and donor recipient matching process. Evaluations focus on analysis of ventricular function and the integrity of valvular performance. TTE is also incorporated into the management of allograft recipients. Myocardial thickness, refractile properties, contractile patterns and indices, restrictive hemodynamics and the late development of pericardial fluid may alert to a rejection episode. None of these findings has achieved diagnostic sensitivity or specificity. TTE is performed weekly for the first four to eight weeks following transplant with subsequent decreasing frequency. In the absence of an acute rejection episode, approximately three TTE examinations are typically performed yearly in chronic transplant recipients.

8. Exposure to Cardiotoxic Agents (Chemotherapeutic and External)

Measures of myocardial contractility, thinning and dilatation are important in the titration of therapeutic agents with known myocardial toxicity. When echocardiography is used to monitor cardiac toxicity of chemotherapeutic agents, an initial complete TTE may be performed prior to first administration of the agent. Also, bimonthly TTE during therapy and follow up TTE at six months following therapy are generally considered medically appropriate. Following accidental exposure to known myocardial toxic agents, absent of an abrupt change in clinical signs and/or symptoms, annual assessment would be considered medically reasonable and necessary.

9. Pericardial Disease

Detection and quantitation of the amount of pericardial effusion were among the first and remain an important application of TTE. Pericardial fluid accumulations of as little as twenty (20) milliliters have been reliably diagnosed by TTE. Cardiac motion and blood flow patterns demonstrated by TTE characterize the hemodynamic consequences of pericardial fluid accumulation. A collage of TTE findings have been found to be reliable indices of cardiac tamponade. TTE can be a valuable adjunct during the removal of pericardial fluid and creation of pericardial windows. The acute clinical status will dictate examination frequency. TTE and Doppler techniques are quite helpful in identifying pericardial constriction and differentiating it from restrictive myocardial disease. Absent acute pathophysiology, serial assessment of chronic stable pericardial effusion by TTE is not usually considered medically reasonable and necessary. TTE is less reliable in the detection of chronic pericardial constriction. Current echocardiographic findings in constrictive pericarditis lack the necessary specificity and sensitivity to be reliable diagnostic aids.

10. Congenital Heart Disease

In children and young adults, TTE provides accurate anatomic definition of most congenital heart diseases. Coupled with Doppler hemodynamic measurements, TTE usually provides accurate diagnosis and noninvasive serial assessment. A technically adequate TTE can obviate the need for preoperative catheterization in select individuals. When the disease process and therapy are stable, serial assessment by TTE requires contemporaneous medical necessity documentation if the frequency exceeds an annual evaluation.

11. Cardiac Tumors and Masses

Infiltrative and ventricular tumors and masses can be visualized, their extent quantified and their hemodynamic consequences assessed by TTE. Right atrial space occupying masses are usually well visualized by TTE. Transesophageal echocardiography (TEE) provides a more detailed view of the left atrium and is more sensitive in quantifying mass characteristics (solid, cystic, etc.) extensions and attachments. These acute pathologies are not typically followed serially.
12. Critically Ill and Trauma Patients

There is a role for echocardiography in the management of critically ill patients and trauma victims. The cause of a persistent fever may be elucidated. The diagnosis of suspected aortic or central pulmonary pathology, cardiac contusion, or a pericardial effusion may be confirmed. Perturbations of volume status may be more completely defined and management strategies modified.

13. Suspected Cardiac Thrombi and Embolic Sources

TTE is particularly sensitive in the detection of ventricular thrombi and potentially embolic material. Limited visualization of atrial appendages and the more peripheral and superior portions of the atria render TTE less sensitive than TEE in the detection of atrial thrombus and potentially embolic material. In individuals with cardiac pathology associated with a high incidence of thromboemboli (valvular heart disease, arrhythmias such as atrial fibrillation, cardiomyopathies and ventricular dysfunction), TTE usually provides adequate supplemental therapeutic decisional data. In those instances where the precise diagnosis and localization of potentially embolic material is of paramount therapeutic importance and the information so obtained will potentially and substantively alter therapy, or the risk of anticoagulants is inordinately high, consideration should be given to TEE. Absent the definition of a serial assessment for regression of potentially embolic material, repeat examinations are not generally medically required to direct clinical decisions.

Contrast echocardiography

Contrast echocardiography is indicated when a conventional study has failed to provide adequate and critically needed information on left ventricular function. A contrast agent is considered medically necessary when it is used to improve the delineation of the left ventricular endocardial borders in a patient whose non-contrast study is inadequate or suboptimal, and for whom the LV function information is essential to the management of the patient.

14. Diseases of Aorta

TTE can be of great value in demonstrating aneurismal enlargement of the ascending and descending portions of the thoracic aorta, in detecting aortic dissection, and in evaluating the size of the aorta in patients with aortic valve diseases or certain conditions associated with aortic pathology (i.e., Marfan’s syndrome or connective tissue disorders). Aortic coarctations can also be demonstrated when clinical features suggest this entity.

Limitations

Echocardiographic studies that are not reasonable and necessary to obtain clinically significant diagnostic or monitoring information are not indicated. The carrier will utilize the American College of Cardiology/American Heart Association (ACC/AHA) Practice Guidelines (Class III) indications as a reference for such determinations.

Limited Capability Ultrasound Scanners

Some cardiac ultrasound machines have become increasingly compact and portable. Certain “hand carried” scanners are “full featured” and permit a skilled examiner to image and record permanent records of all of the tomographic images and Doppler data (Both color and spectral) needed to perform a complete transthoracic echocardiographic examination that may be quite comparable, in diagnostic value, to that obtained with a larger, “state of the art” instrument. In order to qualify as a valid echocardiographic service, the study must be done for an accepted clinical indication by a properly trained examiner and must include a permanent record of the findings, data sufficient to support the conclusions and an appropriate interpretation and written report. Such a study would meet the standards required for a complete echocardiographic examination, regardless of the size of the instrument used to perform the study.

Some small scanners have more limited capabilities and lack either the permanent recording capabilities or some of the functional capabilities needed to perform a complete examination. Such a study may be quite useful as an extension of the physical examination. However, an examination that does not meet the standards required for a complete diagnostic
echocardiographic examination – whether performed with a “conventional” scanner or a limited capability ultrasound scanner – will not be recognized as a valid echocardiographic service and will be non-covered.

**Training Requirements:**

While it is not the Carrier’s intention or jurisdiction to credential providers, a satisfactory level of competence is expected from providers who submit claims for services rendered. It is well known that substandard studies often lead to preventable repetition of studies and overutilization of services.

The acceptable levels of competence are outlined as follows:

For the technical portion, an acceptable level of competence is fulfilled when the image acquisition is obtained under any one of the following conditions:

a. The service is performed by a physician; or
b. The service is performed by a technician who is credentialed as either a Registered Diagnostic Cardiac Sonographer (RDACS) through the American Registry of Diagnostic Medical Sonographers or as a Registered Cardiac Sonographer (RCS) through the Cardiovascular Credentialing International; or
c. The service is performed at a laboratory (e.g. office, IDTF), credentialed by the Intersocietal Commission for the Accreditation of Echocardiography Laboratories (ICAEL).

For the professional portion, an acceptable level of competence is fulfilled when the interpretation is performed by a physician meeting any one of the following requirements:

a. The physician is board certified in Cardiovascular Diseases; or
b. The physician has Level II training in transthoracic echocardiography, as defined by the American College of Cardiology/American Heart Association/ American College of Physicians Task Force on Clinical Competence in Echocardiography, or the equivalent of Level II training as set forth in that document; or
c. The physician provides the interpretation in conjunction with a study that is performed at a laboratory that is accredited by the Intersocietal Commission for the Accreditation of Echocardiography Laboratories and that is subject to such laboratory’s quality assurance policies and procedures; or
d. The physician has staff privileges to interpret echocardiograms at a hospital that participates in the Medicare program.

The submission of claims for echocardiography will be considered an attestation that both the technical and professional components of the service were provided within the context of the above stated credentials. However, a grace period of two years will be allowed for providers to acquire the necessary training.

All echocardiography services require a referring or an ordering physician.

However, if the facility has a documented process for grand-fathering experienced technicians who have performed the services referenced in this LCD (a process addressing years of service and experience with number of supervised cases), this documentation should be available upon request; otherwise the provider must have documentation available upon request which indicates that the technician meets the credentialing requirements as stated above or is in the process of obtaining this credentialing.

**Type of Bill Code**

Hospital – 12x, 13x, 14x
Skilled Nursing Facility – 21x, 22x, 23x
Critical Access Hospital – 85x
### Revenue Codes

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<tr>
<th>Code</th>
<th>Description</th>
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<tr>
<td>480</td>
<td>Cardiology, General Classification</td>
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<tr>
<td>483</td>
<td>Cardiology, echocardiology</td>
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### CPT/HCPCS Codes

#### Part A

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>93303</td>
<td>Transthoracic echocardiography for congenital cardiac anomalies; complete</td>
</tr>
<tr>
<td>93304</td>
<td>Transthoracic echocardiography for congenital cardiac anomalies; follow-up or limited study</td>
</tr>
<tr>
<td>93306</td>
<td>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</td>
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<tr>
<td>93307</td>
<td>Echocardiography, transthoracic, real-time with image documentation (2D), includes M-mode recording, when performed, complete, without spectral or color Doppler echocardiography</td>
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<tr>
<td>93308</td>
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<tr>
<td>93320</td>
<td>Doppler echocardiography, pulsed wave and/or continuous wave with spectral display (List separately in addition to codes for echocardiographic imaging); complete</td>
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<tr>
<td>93321</td>
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<tr>
<td>93325</td>
<td>Doppler echocardiography color flow velocity mapping (List separately in addition to codes for echocardiographic imaging)</td>
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<tr>
<td>C8921</td>
<td>Transthoracic echocardiography with contrast, or without contrast followed by with contrast, for congenital cardiac anomalies; complete</td>
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<td>C8922</td>
<td>Transthoracic echocardiography with contrast, or without contrast followed by with contrast, for congenital cardiac anomalies; follow-up or limited study</td>
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<td>C8923</td>
<td>Transthoracic echocardiography with contrast, or without contrast followed by with contrast, real-time with image documentation (2D) with or without M-Mode recording; complete</td>
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<tr>
<td>C8924</td>
<td>Transthoracic echocardiography with contrast, or without contrast followed by with contrast, real-time with image documentation (2D) with or without M-Mode recording; follow-up or limited study</td>
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#### Part B

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### ICD-10 Codes that Support Medical Necessity
Part A

For Procedure codes 93306, 93307, 93308 (with or without Doppler), C8923 and C8924

Part B

For Procedure codes 93306, 93307 and 93308 (with or without Doppler)

A18.84 Tuberculosis of heart
A40.0–A41.9 Other bacterial diseases
A42.7 Actinomycotic sepsis
A52.01 Syphilitic aneurysm of aorta
A52.02 Syphilitic aortitis
A52.03 Syphilitic endocarditis
A52.06 Other syphilitic heart involvement
A54.83 Gonococcal heart infection
A69.20–A69.29 Lyme disease
B33.21-B33.23 Viral carditis
B37.6 Candidal endocarditis
B39.4 Histoplasmosis capsulati, unspecified
B39.5 Histoplasmosis duboisi
B57.0 Acute Chagas' disease with heart involvement
B57.2 Chagas' disease (chronic) with heart involvement
B58.81 Toxoplasma myocarditis
C38.0 Malignant neoplasm of heart
C45.2 Mesothelioma of pericardium
D15.1 Benign neoplasm of heart
D86.0-D86.9 Sarcoidosis
E03.5 Myxedema coma
E08.51-E08.52 Diabetes mellitus due to underlying condition with circulatory complications
E09.51-E09.52 Drug or chemical induced diabetes mellitus with circulatory complications
E10.51-E10.52 Type 1 diabetes mellitus with circulatory complications
E11.51-E11.52 Type 2 diabetes mellitus with circulatory complications
E13.51-E13.52 Other specified diabetes mellitus with circulatory complications
E83.10-E83.19 Disorders of iron metabolism
E85.1-E86.9 Metabolic disorders
G06.0 Intracranial abscess and granuloma
G06.1 Intraspinal abscess and granuloma
G45.0-G45.3 Transient cerebral ischemic attacks and related syndromes
G45.8 Other transient cerebral ischemic attacks and related syndromes
G45.9 Transient cerebral ischemic attack, unspecified
G46.0-G46.2 Vascular syndromes of brain in cerebrovascular diseases
G47.30 Sleep apnea, unspecified
H34.00-H34.03 Transient retinal artery occlusion
I01.0-I01.9 Rheumatic fever with heart involvement
I02.0 Rheumatic chorea with heart involvement
I05.0–I09.9 Acute rheumatic fever
I10 Essential (primary) hypertension
I11.0-I11.9 Hypertensive heart disease
I13.0-I13.2 Hypertensive heart and chronic kidney disease
I15.0 Renovascular hypertension
I20.0 Unstable angina
I20.1-I24.9 Ischemic heart diseases
I25.10 Atherosclerotic heart disease of native coronary artery
I25.110-I25.119 Atherosclerotic heart disease of native coronary artery with angina pectoris
I25.2-I25.812 Chronic ischemic heart disease
Transthoracic Echocardiography (TTE) AB

I25.84- I27.9 Chronic ischemic heart disease
I30.0-I43 Other forms of heart disease
I44.1 Atrioventricular block, second degree
I44.2 Atrioventricular block, complete
I44.7 Left bundle-branch block, unspecified
I45.6 Pre-excitation syndrome
I45.81 Long QT syndrome
I45.9 Conduction disorder, unspecified
I46.2-151.7 Other forms of heart disease
I51.9 Heart disease, unspecified
I52 Other heart disorders in diseases classified elsewhere
I63.30-I63.9 Cerebral infarction
I64.01-I66.9 Occlusion and stenosis of cerebral arteries, not resulting in cerebral infarction
I67.0 Dissection of cerebral arteries, nonruptured
I67.841-167.848 Cerebral vasospasm and vasoconstriction
I67.89 Other cerebrovascular disease
I70.0 Atherosclerosis of aorta
I71.00-I73.1 Diseases of arteries, arterioles and capillaries
I73.81-I73.9 Other peripheral vascular diseases
I74.01-I75.89 Diseases of arteries, arterioles and capillaries
I77.70-I77.79 Other arterial dissection
I78.0-I79.8 Disorders of arteries, arterioles and capillaries in diseases classified elsewhere
I95.1-195.9 Hypotension
I97.0-I97.191 Intraoperative and postprocedural complications and disorders of circulatory system, not elsewhere classified
I97.710-I97.791 Intraoperative cardiac functional disturbances (4 codes)
I97.88-I97.89 Other intraoperative and postprocedural complications and disorders of the circulatory system, not elsewhere classified
J80 Acute respiratory distress syndrome
J81.0 Acute pulmonary edema
K68.11 Postprocedural retroperitoneal abscess
M30.3 Mucocutaneous lymph node syndrome [Kawasaki]
M31.4 Aortic arch syndrome [Takayasu]
M32.0-M32.9 Systemic lupus erythematosus (SLE)
P22.8 Other respiratory distress of newborn
P22.9 Respiratory distress of newborn, unspecified
P28.3 Primary sleep apnea of newborn
P28.4 Other apnea of newborn
P28.89 Other specified respiratory conditions of newborn
P29.0 Neonatal cardiac failure
P29.2 Neonatal hypertension
P29.4 Transient myocardial ischemia in newborn
P29.11-P29.12 Neonatal cardiac dysrhythmia
P29.89-P29.9 Cardiovascular disorders originating in the perinatal period
P84 Other problems with newborn
P94.1-P94.9 Disorders of muscle tone of newborn
P96.0 Congenital renal failure
P96.3-P96.5 Other conditions originating in the perinatal period
P96.89 Other specified conditions originating in the perinatal period
Q20.0-Q25.29 Congenital malformations of the circulatory system
Q28.9 Congenital malformation of circulatory system, unspecified
Q87.40-Q87.43 Marfan's syndrome
Q89.3 Situs inversus
R00.1-R01.2 Symptoms and signs involving the circulatory and respiratory systems
R06.00 Dyspnea, unspecified
R06.02-R06.09 Dyspnea
R06.2-R06.3 Abnormalities of breathing
R06.81-R06.89  Other abnormalities of breathing
R07.2  Precordial pain
R07.82-R07.9  Pain in throat and chest
R23.0  Cyanosis
R40.20-R40.2124  Coma
R40.2210-R40.2224  Coma scale, best verbal response
R40.2310-R40.2324  Coma scale, best motor response
R40.2340-R40.2344  Coma scale, best motor response, flexion withdrawal
R40.4  Transient alteration of awareness
R47.01  Aphasia
R50.2-R50.82  Fever of other and unknown origin
R50.9  Fever, unspecified
R55  Syncope and collapse
R57.0-R57.9  Shock, not elsewhere classified
R60.0-R60.9  Edema, not elsewhere classified
R65.21  Severe sepsis with septic shock
R78.81  Bacteremia
R94.31  Abnormal electrocardiogram [ECG] [EKG]
S21.309A-S21.309S  Unspecified open wound of unspecified front wall of thorax with penetration into thoracic cavity
S22.5XXA-S22.5XXS  Flail chest
S25.00XA-S25.09XXS  Injury of thoracic aorta
S25.20XA-S25.29XXS  Injury of superior vena cava
S25.401A-S25.499S  Injury of pulmonary blood vessels
S26.01XA-S26.022S  Injury of heart with hemopericardium
S26.11XA-S26.12XS  Injury of heart without hemopericardium
S26.90XA-S26.999S  Injury of heart, unspecified with or without hemopericardium
T45.1X1A-T45.1X4S  Poisoning by, adverse effect of and underdosing of antineoplastic and immunosuppressive drugs
T50.905A-T50.905S  Adverse effect of unspecified drugs, medicaments and biological substances
T66.XXXA-T66.XXXS  Radiation sickness, unspecified
T79.0XXA-T79.1XXS  Certain early complications of trauma, not elsewhere classified
T79.4XXA-T79.4XXS  Traumatic shock
T80.211A-T80.29XS  Infections following infusion, transfusion and therapeutic injection
T81.10XA-T81.19XS  Postprocedural shock
T81.4XXA-T81.4XXS  Infection following a procedure
T82.01XA-T82.817S  Complications of cardiac and vascular prosthetic devices, implants and grafts
T82.827A-T82.827S  Fibrosis due to cardiac prosthetic devices, implants and grafts
T82.837A-T82.837S  Hemorrhage due to cardiac prosthetic devices, implants and grafts
T82.847A-T82.847S  Pain due to cardiac prosthetic devices, implants and grafts
T82.857A-T82.857S  Stenosis of other cardiac prosthetic devices, implants and grafts
T82.867A-T82.867S  Thrombosis due to cardiac prosthetic devices, implants and grafts
T82.897A-T82.897S  Other specified complication of cardiac prosthetic devices, implants and grafts
T82.9XXA-T82.9XXS  Unspecified complication of cardiac and vascular prosthetic device, implant and graft
T84.50XA-T84.59XS  Infection and inflammatory reaction due to unspecified internal joint prosthesis
T85.79XA-T85.79XS  Infection and inflammatory reaction due to other internal prosthetic devices, implants and grafts
T86.20-T86.39  Complications of transplanted organs and tissue
Z01.18  Encounter for other preprocedural examination
Z01.89  Encounter for other specified special examinations
Z08  Encounter for follow-up examination after completed treatment for malignant neoplasm
Z09  Encounter for follow-up examination after completed treatment for conditions other than malignant neoplasm
Z13.6  Encounter for screening for cardiovascular disorders
Z48.21  Encounter for aftercare following heart transplant
Z48.280  Encounter for aftercare following heart-lung transplant
Z51.81  Encounter for therapeutic drug level monitoring
Z94.1  Heart transplant status
Z94.  Heart and lungs transplant status
Z95.2  Presence of prosthetic heart valve
Diagnoses that Support Medical Necessity

N/A

ICD-10 Codes that DO NOT Support Medical Necessity

N/A

Diagnoses that DO NOT Support Medical Necessity

N/A

Associated Information

Documentation Requirements

1. Each service requires a formal written report with interpretation. This report should be kept on file with copies of image documentation (paper or tape) for review if requested. The quality of images obtained on any given exam is dependent on the instrumentation, the operator and the patient.

2. At a minimum, a complete study should contain M mode and/or 2D measurements of LV end diastolic diameter, LV end systolic diameter, LV wall thickness, left atrial diameter, aortic valve excursion and a qualitative description of the LV function, whenever possible given any technical limitations in a particular case. Individual echocardiographic laboratories (providers) may choose valid substitutes for these parameters such as LV volumes, ejection fraction and mass measurements.

3. A Doppler interrogation should state the modes used and should give both qualitative and quantitative information where appropriate.

4. Claims for contrast echocardiography services must be supported by documentation that conventional studies were inconclusive and there was a need for the contrast enhancement.

5. Documentation must be available upon request.

Utilization Guidelines

It is expected that these services would be performed as indicated by current medical literature and/or standards of practice. When services are performed in excess of established parameters, they may be subject to review for medical necessity.

Sources of Information and Basis for Decision

FCSO reference LCD number(s) – L29029, L29296, L29402

ACC Carrier Advisory Committee


American College of Cardiology/American Heart Association (2003). Guideline update for clinical application of echocardiography. Circulation 108:1146-1162. This source was used to support indications/limitations of echocardiography.

Transthoracic Echocardiography (TTE) AB


Empire Medical Services LMRP


“Transthoracic Echocardiography (TTE),” Noridian Administrative Services, LLC LCD, (CO) L14929.

“Transthoracic Echocardiography (TTE),” Arkansas BlueCross BlueShield (Pinnacle) LCD, (NM, OK) L9767.

“Transthoracic Echocardiography (TTE),” Highmark Medicare Services LCD (12102), L27536.

**Start Date of Comment Period**

NA

**End Date of Comment Period**

NA

**Start Date of Notice Period**

04/01/2014

**Revision History**

**Revision History Number: R5**

Revision Number: 5
Publication: November 2016 Connection
LCR A/B2016-106

Explanation of Revision: The LCD was revised to comply with the indications and limitations section of this LCD. ICD-10-CM diagnosis code Z51.81 was added to the “ICD-10 Codes that Support Medical Necessity” section of the LCD. The effective date of this revision is for claims processed on or after 11/21/2016, for dates of service on or after 10/01/15.

**Revision History Number: R4**

Revision Number: 4
Publication: October 2016 Connection
LCR A/B2016-105

Explanation of Revision: This LCD was revised to add ICD-10 code Z01.89 to the “ICD-10 Codes that Support Medical Necessity” section of the LCD for Part A procedure codes 93306, 93307, 93308 (with or without Doppler), C8923 and C8924 and for Part B procedure codes 93306, 93307 and 93308 (with or without Doppler). The effective date of this revision is for claims processed on or after 10/20/2016, for dates of service on or after 10/01/15.

**Revision History Number: R3**
Transthoracic Echocardiography (TTE) AB

Revision Number: 3
Publication: October 2016 Connection
LCR A/B2016-097

Explanation of Revision: Based on CR 9677 (Annual 2017 ICD-10-CM Update) the LCD was revised. Revised diagnosis range I77.71-I77.79 to read I77.70-I77.79; revised diagnosis range Q20.0-Q25.2 to read Q20.0-Q25.29. Deleted diagnosis code Q25.2. Revised descriptors for diagnosis code ranges T82.827A-T82.827S, T82.837A-T82.837S, T82.847A-T82.847S, T82.857A-T82.857S, T82.867A-T82.867S. The effective date of this revision is based on date of service.

Revision History Number: R2

Revision Number: 2
Publication: N/A
LCR A/B2016-067

Explanation of revision: The LCD was revised to remove the asterisks from the following ICD-10-CM codes in the “ICD-10 Codes that Support Medical Necessity” section of the LCD: Z48.21, Z48.280, Z94.1, Z94.3, Z95.2, Z95.3, and Z95.4. Additionally, the accompanying note requiring a primary diagnosis for these codes was also removed. The effective date of this revision is for claims processed on or after 05/26/2016, for dates of service on or after 10/01/15.

Revision History Number: R1

Revision Number: 1
Publication: February 2016 Connection
LCR A/B2016-031

Explanation of revision: The LCD was revised to comply with the indications and limitations section of this LCD. ICD-10-CM diagnosis code Z08 was added to the “ICD-10 Codes that Support Medical Necessity” section of the LCD. The effective date of this revision is for claims processed on or after 01/27/2016, for dates of service on or after 10/01/15.

Revision Number: Original

This LCD replaces all previous LCD versions (refer to “Sources of Information and Basis for Decision” section of the LCD) and publications on this subject to comply with ICD-10-CM based on Change Request 8112. The effective date of this LCD is based on date of service.

Related Documents
N/A

LCD Attachments

Coding Guidelines

Document formatted: 11/15/2016 (RA/et)