

Echocardiography

Medicare Advantage Medical Policy No.: MNG-026

The Health Plan reserves the right to amend this policy and procedure at any time. Exceptions to this policy and procedure will be made on a case-by-case basis at the total discretion of the Health Plan.

Effective Date: July 16, 2024

Instructions for use

This policy serves to provide guidance in determining coverage based on medical necessity. It also gives a list of resources used to create these guidelines. Medical necessity determinations will be made in accordance with generally accepted standards of medical practice, taking into account credible scientific evidence published in peer reviewed medical literature generally recognized by the relevant medical community, physician specialty society recommendations, and the views of the physicians practicing in relevant clinical areas, and other relevant factors, as they relate to the member's clinical circumstances.

Medicare Advantage Members

Coverage criteria for Medicare Advantage members can be found in Medicare coverage guidelines in statutes, regulations, National Coverage Determinations (NCD)s, and Local Coverage Determinations (LCD)s. To determine if a National or Local Coverage Determination addresses coverage for a specific service, refer to the Medicare Coverage Database at the following link: www.cms.gov/medicare-coverage-database/search.aspx. You may wish to review the Guide to the MCD Search here: www.cms.gov/medicare-coverage-database/help/mcd-bene-help.aspx.

When coverage criteria are not fully established in applicable Medicare statutes, regulations, NCDs or LCDs, internal coverage criteria will be developed. This policy is to serve as the summary of evidence, a list of resources and an explanation of the rationale that supports the adoption of the coverage criteria and is to be used by all plans and lines of business unless Federal or State law, contract language, including member or provider contracts, take precedence over the policy.

Basic Requirements for Clinical Appropriateness:

1. Before diagnostic or therapeutic intervention, a clinician must confirm the diagnosis or establish the likelihood based on a history and physical exam and, when appropriate, a review of laboratory studies, previous diagnostic testing and response to any prior interventions, specifically relevant to the clinical situation.
2. An alternative treatment or other appropriate intervention should not offer any greater benefit based on standards of medical practice and/or current literature.
3. The potential benefit to the patient should outweigh the risk of the diagnostic or therapeutic intervention.
4. A reasonable likelihood of the intervention changing management and/or leading to an improved outcome for the patient must exist, based on the clinical evaluation, current literature and standards of medical practice.

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If these requirements are not apparent in the request for authorization, including the clinical documentation provided, the determination of appropriateness will most likely require a peer-to-peer conversation to understand the individual and unique facts that would supersede the requirements set forth above. During the peer-to-peer conversation, factors such as patient acuity and setting of service may also be taken into account.

Simultaneous ordering of multiple diagnostic or therapeutic interventions and/or repeated diagnostic or therapeutic interventions in the same anatomic area may be denied, unless individual circumstances support the medical necessity of performing interventions simultaneously or repeatedly. This should be apparent in the clinical documentation or in peer-to-peer conversations.

Echocardiography

When Services May Be Eligible for Coverage

Coverage for eligible medical treatments or procedures, drugs, devices or biological products may be provided only if:

- *Benefits are available in the member's contract/certificate, and*
- *Medical necessity criteria and guidelines are met.*

Based on review of available data, the Health Plan may consider echocardiography to be eligible for coverage based on the following criteria.**

Patient Selection Criteria

The clinical use of contrast echocardiography (ECHO) is appropriate in selected patients to:

- Evaluate myocardial ischemia
- Measure myocardial perfusion during stress
- Identify area(s) of risk during acute myocardial infarction (AMI)
- Determine the success of reperfusion interventions
- Assess myocardial viability

Echocardiography is the ultrasonic examination of the heart. Two-dimensional (2D) imaging defines the dimensions of the chambers, cyclic variation in myocardial thickness, and valvular motions throughout the cardiac cycle. Use of noninvasive echocardiography has grown at an ever-increasing rate and may result in overutilization. This policy addresses medical necessity and appropriate application of TTE.

All echocardiography services require an order from a treating physician.

Coverage Guidance

Coverage Indications, Limitations, and/or Medical Necessity

A. Ventricular Function and Cardiomyopathies

The extent of changes in myocardial thickness (hypertrophy and thinning), contractility, chamber volume and morphology, and therapeutic interventions can be monitored over time by TTE.

Recognition of the relative contributions of myocardial and valvular functional disturbances to a clinical presentation is facilitated, and TTE aids in recognition of myopathies into hypertrophic, dilated

and restrictive classifications. Unless clinical signs and symptoms indicate episodes of deterioration, it is usually not medically necessary to repeat TTE assessments more frequently than annually, unless done to evaluate the response to therapeutic intervention.

In individuals with signs and/or symptoms suggestive of ventricular dysfunction, the demonstration by TTE of normal systolic function and/or ventricular hypertrophy may suggest the presence of diastolic functional abnormalities. Because the TTE findings suggesting diastolic dysfunction are less well established, and is the primary indication for the test, it should be performed by examiners recognized as experts in assessment and treatment of ventricular diastolic dysfunction.

Evaluation of diastolic filling parameters by Doppler ECHO is being used to help establish the prognosis in patients with congestive heart failure (CHF) and systolic dysfunction as well as to evaluate appropriate parameters of medical treatment.

B. Hypertensive Cardiovascular (CV) Disease

Medicare covers TTE for evaluation of hypertension only when there is clinical evidence of heart disease. Left ventricular hypertrophy (LVH) correlates with prognosis in hypertensive CV disease. Certain anti-hypertensive medications have been reported to stabilize the progression of LVH. TTE may assist in the decision to treat certain individuals with gradually progressive borderline HTN and LVH with long-term anti-hypertensive therapy and a treatment program. Baseline TTE and serial annual assessments may be medically appropriate. Medical necessity documentation must support more frequent assessments.

C. AMI and Coronary Insufficiency

TTE can detect ischemic and infarcted myocardium. Regional motion, systolic thickening and ventricular wall thinning can be measured, and global functional responses assessed. The impact of right ventricular ischemia and/or infarction can be evaluated. Complications of acute infarction (e.g., mural thrombi, papillary muscle dysfunction and rupture, septal defects, true or false aneurysm and myocardial rupture) can be diagnosed and their impact to the overall clinical status placed in perspective. In the setting of acute infarction, repeat study will typically be dictated by the clinical course. If available, the use of contrast agents may improve diagnostic efficiency, and eliminate the need for additional radionuclide testing. Without clinical deterioration or unclear examination findings, repeat assessment is typically performed at discharge. Medical necessity must be documented for more frequent TTE assessments.

TTE in the emergency room (ER) assessment of individuals presenting with chest pain is not defined at this time. This use is not accepted as a standard-of-care, and for TTE to be covered, clinical findings supporting myocardial dysfunction must be present.

D. 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. Baseline assessment, bimonthly during and at 6 months following therapy, is generally considered medically appropriate for exposure to many cardiotoxic agents. Following accidental exposure to known myocardial toxic agents, without abrupt change in clinical signs and/or symptoms, and when cardiac damage has been identified, annual assessment may be considered reasonable and necessary.

E. Cardiac Transplant and Rejection Monitoring

TTE is an integral part of the cardiac donor-selection and donor-recipient matching process. Ventricular function and valvular integrity are analyzed. TTE is also incorporated into the management of allograft recipients, and may alert the clinician to a rejection episode, evidenced by myocardial thickness, refractile properties, contractile patterns, restrictive hemodynamics, and the late development of pericardial fluid. None of these findings has achieved diagnostic sensitivity or specificity. Typically, TTE is performed weekly for the first 4-8 weeks following transplant, with decreasing frequency over time. Approximately two TTE examinations are performed yearly in chronic transplant recipients without acute rejection episodes. TTE of cardiac allografts are performed at transplant centers by examiners with expertise in the management of cardiac allograft recipients. Appropriate medical necessity documentation must be provided for more frequent TTE examinations.

F. Native Valvular Heart Disease

Detection of mitral stenosis was among the first practical clinical applications of TTE and is the technique of choice for the evaluation of valvular pathology and its effect upon global myocardial function. The relative severity of multi-valve pathologies can be quantified, and visualization of the valve and valvular apparatus may simplify therapeutic options and decisions, especially interventions for mitral stenosis. Absent acute intervention, or a change in otherwise stable clinical signs and symptoms, TTE is used annually in follow-up of chronic valvular disease. Generally, it is not medically necessary to repeat these examinations more frequently than annually. When the patient's plan of care includes imminent valvular surgery, more frequent exams may be necessary.

G. Prosthetic Heart Valves (Mechanical & 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. Reassessment following convalescence (3-6 months) is appropriate. Thereafter, unless there are discretely defined clinical events or obvious change in physical examination findings, annual assessment is considered medically reasonable and appropriate. For certain indications, transesophageal echocardiography (TEE) may be preferred for evaluation.

H. Acute Endocarditis

TEE has a high degree of sensitivity for endocarditis evaluation and is typically the diagnostic test of choice. TTE can provide diagnostic information, pathophysiologic causes may be directly visualized, and valvular anatomy and ventricular function directly assessed. The complications of acute infective endocarditis can be detected and monitored over time. Acutely, examination frequency is dictated by the individual clinical course. When the acute process has been stabilized, the frequency of serial TTE evaluation will depend on the residual pathophysiology and discrete clinical events, similar to the serial assessment of chronic valvular dysfunction and/or normally functioning prosthetic valves.

I. Pericardial Disease

Detection and measurement of the amount of pericardial effusion was among the first, and remains an important application of TTE, with accumulations as small as 20 milliliters 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 has been found to be a reliable indication of cardiac tamponade. TTE can be a valuable adjunct during the removal of pericardial fluid and creation of pericardial windows by balloon techniques. Clinical status will dictate

examination frequency. TTE for assessment of chronic stable pericardial effusion in the absence of acute pathophysiology is not usually medically necessary. In a patient with evolving pericardial pathology, a limited focused TTE exam may be appropriate. TTE/Doppler findings have moderate specificity and sensitivity and can be useful in the differential diagnosis of chronic pericardial constriction.

J. Aortic Pathology

TTE can provide valuable information when acute or chronic aortic pathology is present; however, TEE, is a more definitive study. Noninvasive TTE remains the study of choice for chronic aortic pathology when images suitable for serial quantitation can be obtained. Pathology will guide the frequency of repeat studies. In some individuals, such as those with Marfan's disease or atherosclerotic aneurysms, a focused limited follow-up exam to serially measure aortic diameters and arch diameters may be appropriate.

K. Suspected Cardiac Thrombi and Embolic Sources

TTE can detect ventricular thrombi and potentially embolic material. Limited visualization of atrial interstices 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 - especially atrial fibrillation, cardiomyopathies and ventricular dysfunction), TTE usually provides adequate supplemental data for therapeutic decision making. It merits emphasis that a negative examination (TTE or TEE) does not exclude a cardiac embolus and the findings of thrombus or vegetation does not establish a cardiac embolic source. Repeat examinations are not generally medically required in the absence of finding potentially embolic material.

L. Cardiac Tumors and Masses

TTE can visualize infiltrative and ventricular tumors and masses, and assess their extent and hemodynamic consequences. Right atrial space-occupying masses are also well visualized by TTE. In specific situations, such as when a tumor is not removed at surgery, and when the patient has had a cardiac myxoma removed, serial TTEs may be medically necessary to monitor for tumor size or recurrence.

M. Critically Ill and Trauma Patients

Echo plays a role in the management of critically ill patients and trauma victims. The diagnosis of suspect aortic or central pulmonary pathology, cardiac contusion, or pericardial effusion may be confirmed and management strategies modified. Frequency of these typically acute studies will depend on the clinical situation.

N. Arrhythmias and Palpitations

TTE is useful in defining cardiac function in which arrhythmias occur and may be useful in the management of cardiac arrhythmias. Some arrhythmias are frequently associated with underlying organic heart disease or may predispose the patient to hemodynamic deterioration. Atrial fibrillation and atrial flutter are examples of arrhythmias in which ECHO may be appropriate to assess the underlying disorder. ECHO studies are appropriate only when there is evidence of heart disease. Palpitations without clinical suspicion of arrhythmia, or evidence of heart disease, is not a covered indication for TTE.

O. Syncope

The etiology of syncopal episodes can be difficult to determine. The origin may be cardiac, neurological, or due to other causes. Cardiac origin for syncope is most commonly related to vasodepressor reflexes, bradyarrhythmias, or tachyarrhythmias, but less commonly caused by cardiac structural disorders. Patients with structurally normal hearts generally have a more benign prognosis than those with underlying structural coronary artery disease (CAD) or cardiomyopathic disease. ECHO is only appropriate as the initial evaluation, when other findings are suggestive of valvular heart disease or obstructive cardiomyopathy.

P. Pulmonary

Right heart failure manifesting as edema or ascites may be due to pulmonary HTN. Pulmonary heart disease may result from acute changes in the pulmonary circulation (e.g., pulmonary embolus (PE)) or chronic changes produced by chronic hypoxia that may cause significant right ventricular dysfunction and hypertrophy. ECHO may assess right ventricular size and performance and quantify the severity of pulmonary HTN using Doppler interrogation of valvular flow signals. Indications include unexplained pulmonary HTN and PE with suspected clots in the right atrium or ventricle.

Q. Follow-up Studies or Limited Studies

A complete study includes a full evaluation of all aspects of the heart, including the cardiac chambers, valves, blood flow, and great vessels. The images are reviewed, analyzed, and interpreted by the physician. A report is prepared for the patient's record.

R. Doppler Color Flow Velocity Mapping

Doppler color flow-velocity mapping is an appropriate addition to an ECHO when the examination is expected to contribute significant information relative to the patient's condition or treatment plan. Typically, color flow-velocity mapping is indicated in the evaluation of the symptoms of syncope and dyspnea, some heart murmurs, valvular problems, suspected CHD, complications of myocardial infarction (MI), or cardiomyopathy. Medicare does not cover this service when performed routinely with all ECHO exams (i.e., without a clinical indication). This is true even when the results of the test reveal abnormalities. If an unsuspected finding on TTE indicates medical necessity for additional study with Doppler color flow velocity mapping, it can be covered.

S. Stress ECHO

Stress ECHO may be necessary when the evaluation could contribute significant information to the patient's condition or treatment plan or to provide additional diagnostic information in patients with a previous non-diagnostic treadmill stress test who have signs or symptoms of suspected CAD.

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

Indications and limitations for stress ECHO:

1. AMI

Stress ECHO is not typically performed during the acute phase of a MI when a diagnosis has been established by other methods. In selected patients, stress ECHO may be necessary when the evaluation could contribute significant information to the patient's condition or treatment plan. Pharmacological stress is often used to provide prognostic information following MI.

2. Unstable Angina

Stress ECHO may be useful as an adjunct to other tests in the diagnosis or treatment of unstable angina only when the combination of history and other tests are not diagnostic. In selected patients, stress ECHO may be necessary when the evaluation could contribute significant information (e.g., assessment of left ventricular (LV) function) to the patient's condition or treatment plan.

3. Chronic Ischemic Heart Disease

Stress ECHO may be useful as an adjunct to other tests in the diagnosis or treatment of chronic ischemic heart disease only when the combination of history and other tests are not contributory. In selected patients (e.g., assessment of post-coronary artery bypass grafting (CABG) symptoms for ischemia, follow-up of patients with symptomatic ischemic heart disease, or asymptomatic patients requiring follow-up that is customized to their condition and disease process) stress ECHO may be necessary when the evaluation is expected to contribute significant additional information relating to the patient's condition or treatment plan.

Patients with conduction or repolarization abnormalities, in whom the electrocardiographic (EKG) diagnosis of stress-induced ischemia may be difficult, may require additional diagnostic information.

Patients who have a positive stress test may require stress ECHO to determine the extent and location of ischemic wall motion abnormalities.

Patients who have reduced LV ejection fraction (EF) (e.g., <45%) or CHF without an obvious other reason and when CAD cannot be ruled out, may require stress ECHO for an assessment of ischemic cause, and/or for evaluation of viability.

4. Dilated Cardiomyopathies or Hypertrophic Cardiomyopathy

Stress ECHO may be useful in the evaluation of cardiomyopathy when the evaluation could reasonably be expected to contribute significant information to the patient's condition or treatment plan.

5. Post-Transplant Cardiac Disease

Stress ECHO may be useful in the evaluation of ventricular dysfunction with post-transplant rejection when the evaluation could reasonably be expected to contribute significant information to the patient's condition or treatment plan and for evaluation of known or suspected post-cardiac transplant CAD.

6. CAD

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

7. Lesions

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 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.

8. Surgery

Stress ECHO may be useful for risk stratification prior to surgery.

Pharmacological Stress Agents

For those patients who are unable to obtain 75-100% of their age-predicted maximum heart rate through physiologic exercise, vasodilation can be achieved with the use of either dipyridamole or adenosine. Dobutamine may be used to effect myocardial stress via its inotropic effect.

Limitations

Limitations of the ECHO 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 ECHOs has a larger inter-observer variability than the interpretation of nuclear studies);
- When the ECHO 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 workload);
- In patients with left bundle branch block (LBBB) 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 LV hypertrophy and reduced LV end-diastolic dimensions, there may be reduced sensitivity and Dobutamine stress echo may produce suboptimal diagnostic information.

T. Physician Supervision Requirements

The technical component of TTE must be done under the general supervision of a qualified physician, appropriately trained and skilled in the performance and interpretation of ECHO. Stress ECHO is Medicare-covered only when performed under the direct supervision of a qualified physician who provides:

- Medical expertise required for the performance of the test;
- Medical treatment for complications and side effects of the test;
- Medical services required as part of the test, for example, injections or the administration of medications;
- Medical expertise in the interpretation of the test, some of which has to be provided during the test and before the patient is discharged from the testing suite.

U. Noncovered

Medicare does not cover ECHOs performed with equipment that provides limited evaluations. Such evaluations typically do not provide a permanent image and complete interpretation is not performed. These tests have demonstrated value in screening-type evaluations, although they are then considered part of the physician's exam, similar to a BP measurement.

ECHO performed for screening purposes is not covered. Screening includes testing performed on patients who present with risk factors (including the risk factor such as having a positive family history, e.g., familial history of Marfan's disease). Screening service for high-risk patients is considered good medical practice but is not covered by Medicare. Symptoms or an existing condition must be present to meet medical necessity.

V. Transesophageal Echocardiography (TEE)

TEE is accomplished with an ultrasound (US) generator, which can be positioned in the esophagus. TEE provides imaging information that is complementary to that obtained by TTE recording. The instrument used is a modified endoscope attached to a transducer that is capable of high-resolution 2-dimensional (2D) imaging, including color-flow, pulse-wave, and continuous-wave doppler. The TEE instrument is placed in a manner similar to the placement of a flexible esophagoscope with the same potential for serious complications. Significant esophageal pathology (e.g., tumor, stenosis, varices, diverticula) is a relative contraindication. The anticipated benefits must clearly exceed the potential risks.

The physician trained to interpret the data in real time performs the study. TEE is medically necessary under the following situations:

- TTE is not technically adequate,
- TTE demonstrates pathology but does not provide adequate data for clinical decision making,
- TEE is expected to provide information not available with TTE or is expected to provide a better view of a structure seen on TTE, and/or
- TEE is expected to contribute significant additional information useful in the patient's management.

This policy defines the clinical pathophysiologic states for which TEE is covered based on authoritative support in the medical literature.

TEE is indicated when TTE has not provided the information required to manage the patient's condition or when TTE is not expected to provide that information. Examples are extreme obesity, severe chronic obstructive pulmonary disease (COPD), chest deformity, incomplete visualization of the left atrium and appendage in patients with prostheses, and inadequate visualization of the atrial septum for suspected patent foramen ovale.

TTE is usually able to adequately evaluate the following conditions, although in certain specific situations TEE is also necessary:

- Defining the source of embolism- Routine TEE to search for a cardiac source of embolization is not medically necessary. The key decisional factor should be whether TEE findings will substantively alter management or clinical outcome. Patients with cardiac pathology associated with an increased risk of thromboembolism may be candidates for TEE when the information obtained by the study has clinical relevance.
- Native valvular heart disease- In the absence of proven or suspected endocarditis, technically adequate TTE usually suffices. TEE may be useful in the perioperative evaluation of patients who are candidates for valvuloplasty.
- Prosthetic valves- TEE is not routinely indicated for follow up of patients with prosthetic valves since TTE is usually sufficient. TEE is appropriately considered when prosthetic valve dysfunction is

suspected, when therapeutic decisions rest on the data obtainable, and/or when the left atrium must be visualized.

- Bacterial endocarditis- TEE is considered the standard of care when the diagnosis of endocarditis is established or the index of suspicion is high, based on clinical features.
- Cardiac and pericardiac masses- TEE is no better than TTE in the evaluation of right heart masses. TEE, however, provides more detail of left atrial masses and may provide additional information useful in therapeutic decisions, and therefore can be an integral part of the evaluation and management strategy.
- Aortic pathology- TEE is an established tool in the diagnosis and definition of aortic dissection and aneurysm. When recurrent embolic episodes are thought to be due to aortic ulceration, atherosclerotic plaque and mural thrombotic material, and surgical intervention is contemplated, TEE may be appropriate to search for and characterize remediable aortic lesions.
- Critically ill patients- When TTE fails to provide adequate visualization or is contraindicated in the critically ill or injured patient, TEE may be useful to evaluate conditions such as complications of MI, hypotension, persistent hypoxemia in patients with suspected right to left shunt, and patients in shock.
- CHD- TEE may be appropriate to evaluate for complications of congenital heart surgery, visualization of shunt flow across atrial-septal defects, diagnosis of cor triatriatum, and detection of pulmonary valve abnormalities.

Intraoperative uses- TEE may be useful during percutaneous and open cardiac surgical interventions. TEE can provide guidance to the surgeon during the creation of shunts, repair of complex congenital defects, placement of septation devices, and performance of valvuloplasties when the surgical result cannot be adequately assessed by other means. In lung or heart-lung transplants TEE can assist in the evaluation of the integrity and structure of pulmonary vascular anastomoses.

When a surgeon specifically requests an intraoperative TEE service by the anesthesiologist, it will be determined to be reasonable and necessary only when the surgeon:

- o Makes a specific order/request for the anesthesiologist to perform the TEE service, and
 - o The findings from the TEE are communicated to the operating surgeon in real-time for use during the surgery, and
 - o The anesthesiologist makes a separate and complete written interpretation/report
- Ventricular function monitoring- TEE monitoring of ventricular function in selected high-risk patients can complement hemodynamic monitoring data, but its routine use, even in patients undergoing cardiopulmonary bypass and valvular surgeries cannot be supported.

TEE is not medically necessary for monitoring patients having non-cardiac, non-thoracic surgical procedures. Services for the interpretation of a TEE by a properly trained physician during surgery is allowed only when the surgeon or other physician requests the services for a specific reason. A covered service must include a complete interpretation/report by the performing physician. Coverage is not allowed for monitoring, technical troubleshooting, or any other consultation that does not meet medical necessity for a diagnostic test.

Documentation Requirements

The patient's medical record must document the medical necessity of services performed for each date of service submitted on a claim, be legible and must be available to the Health Plan upon request.

When pharmacologic stress is used, the record must show clinical evidence supporting the reason exercise was not possible.

The medical record must document when significant resting EKG abnormalities are present, or a medication that would interfere with interpretation of a stress EKG is being used and cannot be withdrawn, resulting in the selection of a stress ECHO.

When TTE is performed in the ER for assessment of a patient presenting with chest pain, clinical findings indicative of myocardial dysfunction must be present.

When TTE is performed to assess exposure to a cardiotoxic agent, the name of the cardiotoxic agent must be indicated.

When TTE is performed as the initial test to evaluate syncope, clinical findings indicative of valvular heart disease or obstructive cardiomyopathy must be documented.

Services submitted for ECHO with stress tests performed as preoperative evaluations of patients without symptoms of CAD, who are deemed to be at moderate risk, must document 1 of the following at-risk conditions in the medical record: diabetes mellitus (DM) with complications, peripheral vascular disease (PVD), aortic aneurysm or cerebrovascular disease.

Utilization Guidelines

Services performed for excessive frequency are not medically necessary. Frequency is considered excessive when services are performed more frequently than generally accepted by peers and the reason for additional services is not justified by documentation.

Typically, 1 stress imaging study (stress ECHO or nuclear imaging) is adequate to accomplish the assessment. Pharmacologically induced stress testing is also subject to medical necessity.

References:

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Policy History

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Coding

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Codes used to identify services associated with this policy may include (but may not be limited to) the following:

Description	Code
Echo transthoracic	93303, 93304
TTE w/doppler complete	93306
TTE w/o doppler complete	93307
TTE f-up or lmtd	93308
Doppler echo exam heart	93320
Dopper echo exam heart	93321
Doppler color flow add-on	93325
Stress TTE only	93350
Stress TTE complete	93351
Admin ECG contrast agent	93352
Echocardiography contrast	A9700
Adenosine inj 1 mg	J0153
Aminophyllin 250 mg inj	J0280
Atropine sulfate injection	J0461
Dipyridamole injection	J1245
Inj dobutamine hcl/250 mg	J1250
Echo transesophageal	93312, 93313, 93314, 93315, 93316, 93317
Echo transesophageal inraop	93318
3d echo img cgen car anomal	93319
Echo transesophageal (tee)	93355

*Investigational – A medical treatment, procedure, drug, device, or biological product is Investigational if the effectiveness has not been clearly tested and it has not been incorporated into standard medical practice. Any determination we make that a medical treatment, procedure, drug, device, or biological product is Investigational will be based on a consideration of the following:

- A. Whether the medical treatment, procedure, drug, device, or biological product can be lawfully marketed without approval of the U.S. Food and Drug Administration (FDA) and whether such approval has been granted at the time the medical treatment, procedure, drug, device, or biological product is sought to be furnished; or
- B. Whether the medical treatment, procedure, drug, device, or biological product requires further studies or clinical trials to determine its maximum tolerated dose, toxicity, safety, effectiveness, or effectiveness as compared with the standard means of treatment or diagnosis, must improve health outcomes, according to the consensus of opinion among experts as shown by reliable evidence, including:
 - 1. Credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community; or
 - 2. Reference to federal regulations.

****Medically Necessary (or “Medical Necessity”)** - Health care services, treatment, procedures, equipment, drugs, devices, items or supplies that a Provider, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury, disease or its symptoms, and that are:

- A. In accordance with nationally accepted standards of medical practice;
- B. Clinically appropriate, in terms of type, frequency, extent, level of care, site and duration, and considered effective for the patient's illness, injury or disease; and
- C. Not primarily for the personal comfort or convenience of the patient, physician or other health care provider, and not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient's illness, injury or disease.

For these purposes, “nationally accepted standards of medical practice” means standards that are based on credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community, Physician Specialty Society recommendations and the views of Physicians practicing in relevant clinical areas and any other relevant factors.

‡Indicated trademarks are the registered trademarks of their respective owners.

NOTICE: If the Patient’s health insurance contract contains language that differs from the Health Plan Medical Policy definition noted above, the definition in the health insurance contract will be relied upon for specific coverage determinations.

NOTICE: Medical Policies are scientific based opinions, provided solely for coverage and informational purposes. Medical Policies should not be construed to suggest that the Health Plan recommends, advocates, requires, encourages, or discourages any particular treatment, procedure, or service, or any particular course of treatment, procedure, or service.

NOTICE: Federal and State law, as well as contract language, including definitions and specific contract provisions/exclusions, take precedence over Medical Policy and must be considered first in determining eligibility for coverage.