Echocardiogram and Stress Echocardiography

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<td>Prior Authorization Required:</td>
<td>No</td>
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<td>Additional Information:</td>
<td>An appropriate diagnosis code must appear on the claim. Claims will deny in the absence of an appropriate diagnosis code.</td>
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Prevea360 Health Plan Medical Policy:

1.0 Transthoracic Echocardiography (TTE) is considered medically necessary for the evaluation of ANY of the following in the appropriate clinical scenario: (not an all-inclusive list):

1.1 Initial evaluation of cardiac structure and function in an asymptomatic patient for ANY of the following:

1.1.1 Evaluation of known systemic, congenital, or acquired disease that could be associated with a structural heart disease including ANY of the following:

1.1.1.1 Native or prosthetic valvular heart disease and further evaluation is indicated

1.1.1.2 Anomalies of the great vessels requiring TTE for evaluation (e.g. ascending aortic dissection or aneurysm known or suspected)

1.1.1.3 Congenital heart disease, known or suspected

1.1.1.4 Abnormal cardiac testing or finding requires TTE for evaluation (e.g. elevated troponin, new or worsening murmur, and cardiomegaly on chest x-ray, or left ventricular hypertrophy on electrocardiogram)Screening evaluation for structure and function in first-degree relatives of a patient with an inherited cardiomyopathy

1.1.2 Initial evaluation prior to exposure to medications/radiation that could result in cardiotoxicity/heart failure

1.1.3 Evaluation of the ascending aorta in the setting of known or suspected connective tissue disease or genetic condition that predisposes to aortic aneurysm (e.g. Ehlers Danlos or Marfan syndrome)

1.1.4 Screening evaluation in a relative of a patient with known aortic aneurysm or dissection

1.1.5 Preparticipation physical assessment of an asymptomatic athlete with one (1) or more of the following: abnormal exam (e.g. new or worsening murmur), abnormal ECG, or definite family history of inheritable heart disease
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1.1.6 Evaluation of suspected pulmonary arterial hypertension or other pulmonary condition requiring TTE for evaluation such as pulmonary embolism or hypoxemia

1.2 Initial evaluation of a patient with clinical signs and symptoms of heart disease for ANY of the following:

1.2.1 Worsening ventricular function, new, suspected, or worsening cardiomyopathies or heart failure suspected based on clinical findings (e.g. worsening dyspnea)

1.2.2 Endocarditis, known or suspected

1.2.3 Arrhythmias or conduction disorders when ANY of the following criteria are met:

1.2.3.1 Newly diagnosed left bundle branch block (LBBB)
1.2.3.2 Newly diagnosed right bundle branch block (RBBB)
1.2.3.3 Frequent PVC’s without evidence of heart disease
1.2.3.4 Nonsustained ventricular tachycardia (VT)
1.2.3.5 Sustained VT or ventricular fibrillation (VF)
1.2.3.6 Supraventricular tachycardia without other evidence of heart disease and further evaluation or management (e.g. ablation) is required
1.2.3.7 Atrial fibrillation/flutter

1.2.4 Palpitations/Presyncope/Syncope when ANY of the following criteria are met:

1.2.4.1 Clinical symptoms or signs consistent with a cardiac diagnosis known to cause presyncope/syncope (e.g. hypertrophic cardiomyopathy and heart failure)

1.2.4.2 Palpitations without other signs or symptoms of cardiovascular disease

1.2.4.3 Syncope without other signs or symptoms of cardiovascular disease

1.2.4.4 Hypotension or hemodynamic instability of uncertain or suspected cardiac etiology

1.2.4.5 Assessment of volume status in a critically ill patient

1.2.5 Initial evaluation of hypertensive heart disease

1.2.6 Acute coronary syndrome for EITHER of the following:

1.2.6.1 Evaluation of left ventricular function during initial presentation with acute coronary syndrome

1.2.6.2 Suspected complication of myocardial ischemia/infarction, including but not limited to acute mitral regurgitation, ventricular septal defect,
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free-wall rupture/tamponade, shock, right ventricular involvement, heart failure, or intraventricular thrombus

1.2.7 Respiratory failure/exertional shortness of breath/dyspnea or hypoxemia of uncertain etiology

1.2.8 Heart failure/cardiomyopathy for ANY of the following:

1.2.8.1 Initial evaluation of known or suspected heart failure based on symptoms, signs or abnormal test results to assess systolic or diastolic function and to assess for possible etiology

1.2.8.2 Suspected inherited or acquired cardiomyopathy

1.2.8.3 Evaluation of left ventricular function in patients who are scheduled for or have received chemotherapy

1.2.9 Evaluation of suspected pulmonary hypertension including evaluation of right ventricular function and estimated pulmonary artery pressure

1.3 Device Therapy: Implantable Cardioverter Defibrillator (ICD), Cardiac Resynchronization Therapy (CRT) or Left Ventricular Assist Device (LVAD) when ANY of the following criteria are met:

1.3.1 Evaluation after appropriate time following revascularization and/or optimal medical therapy to determine candidacy for ICD/CRT and/or to determine optimal choice of device

1.3.2 Initial evaluation for CRT device optimization after implantation

1.3.3 Known implanted pacing/ICD/CRT device with symptoms possibly due to suboptimal device settings

1.3.4 To determine candidacy for LVAD

1.3.5 Optimization of LVAD settings

1.4 Cardiac transplant when EITHER of the following criteria are met:

1.4.1 Monitoring for rejection or coronary arteriography in a cardiac transplant recipient

1.4.2 Cardiac structure and function evaluation in a potential heart donor

1.5 Other suspected conditions including ANY of the following:

1.5.1 Pericardial disease

1.5.2 Initial evaluation of a cardiac mass, suspected tumor or thrombus, or cardiac source of an emboli

1.5.3 Suspected acute aortic pathology including acute aortic syndrome

1.6 Sequential or follow-up testing: asymptomatic or stable symptoms requiring re-evaluation for ANY of the following:
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1.6.1 Re-evaluation (< 1 year) in a patient previously or currently undergoing therapy with potentially cardiotoxic agents

1.6.2 Re-evaluation (≥ 1 year) of known moderate or greater pulmonary hypertension without change in clinical status or cardiac exam

1.6.3 Re-evaluation of chronic asymptomatic pericardial effusion when findings would potentially alter therapy

1.6.4 Re-evaluation of intracardiac mass when findings would potentially alter therapy

1.7 Sequential or follow-up testing: new or worsening symptoms are present or there is a need to guide therapy and ANY of the following:

1.7.1 Structural heart disease with change in clinical status or cardiac examination (e.g. new or worsening murmur) or to guide therapy

1.7.2 Known cardiomyopathy with a change in clinical status or cardiac examination (e.g. new or worsening murmur), or to guide therapy

1.7.3 Known heart failure (systolic or diastolic) with a change in clinical status or cardiac examination without a clear or precipitating change in medication or diet

1.7.4 Periodic re-evaluation in a patient undergoing therapy with cardiotoxic agents and worsening symptoms

1.7.5 After revascularization and/or optimal medical therapy to determine candidacy for device therapy and/or to determine optimal choice of device

1.7.6 Re-evaluation for CRT device optimization in a patient with worsening heart failure

1.7.7 Re-evaluation for ventricular assist device related complications or infection is suspected

1.7.8 Progression of pericardial effusion size or development of tamponade

1.7.9 Progression of pericardial constriction

1.7.10 Patient with pericardial mass and symptoms suggestive of expansion

1.7.11 Re-evaluation of known ascending aortic dilatation or history of aortic dissection with a change in clinical status

1.7.12 Known pulmonary hypertension with change in clinical status or cardiac examination or to guide therapy

1.8 Evaluation of TIA or ischemic stroke and ANY of the following criteria are met:

1.8.1 Initial evaluation of patient to exclude cardiac origin of TIA or ischemic stroke (e.g. intracardiac masses or valvular pathology)
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1.8.2 To assess for the presence of right-to-left intracardiac shunt (e.g. with provocative maneuvers, Valsalva cough)

1.9 Preprocedural evaluation for closure of patent foramen ovale (PFO) or atrial septal defect (ASD) and ANY of the following:

1.9.1 Preprocedural evaluation of the following: atrial appendage thrombus, spontaneous echo contrast, cardiac masses or vegetations

1.9.2 Preprocedural assessment of atrial septum anatomy or atrial septal aneurysm is required, or to evaluate suitability for percutaneous device closure

1.9.3 TTE needed following closure of PFO or ASD for ANY of the following:

1.9.3.1 Six (6)-month routine scheduled follow-up after device closure for position of device and integrity

1.9.3.2 Non-routine follow-up of device closure and clinical concern for infection, malposition, embolization or persistent shunt

1.10 Preprocedural evaluation for closure of Left Atrial Appendage (LAA) for EITHER of the following:

1.10.1 Pre-procedural evaluation of the following: all cardiac chambers, LV function, interatrial septum, and valve function

1.10.2 Intra-procedural guidance to screen for procedural complications

1.11 Non-contrast echocardiography has been performed and TTE is required for additional evaluation

2.0 Transesophageal Echocardiography (TEE) is considered medically necessary for ANY of the following, in the appropriate clinical scenario (not an all-inclusive list):

2.1 Suspected complication of myocardial ischemia/infarction, including mitral regurgitation

2.2 Initial evaluation of cardiac mass, suspected tumor or thrombus, or potential cardiac source of emboli (e.g. endocarditis)

2.3 Suspected acute aortic pathology including acute aortic syndrome, dissection or transection

2.4 Comprehensive evaluation of dilated aortic sinuses or ascending aorta identified on TTE

2.5 Evaluation of the aortic sinuses, sinotubular junction, or ascending aorta in patient with bicuspid aortic valve when morphology can't be assessed accurately by TTE

2.6 Re-evaluation of intracardiac mass when findings would potentially alter therapy

2.7 Re-evaluation of prior TEE findings for interval change (e.g. reduction or resolution of atrial thrombus after anticoagulation, or intracardiac evaluation of a cardiac mass)
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2.8 Re-evaluation for ventricular assist device-related complication or when infection is suspected

2.9 Re-evaluation of known ascending aortic dilatation or history of aortic dissection with a change in clinical status or cardiac examination

2.10 Evaluation of TIA or ischemic stroke for EITHER of the following:
   2.10.1 Initial evaluation of patient to exclude cardiac origin of TIA or ischemic stroke, such as intracardiac masses or valvular pathology
   2.10.2 To assess for the presence of right-to-left intracardiac shunt such as with provocative maneuvers (e.g. Valsalva cough)

2.11 Preprocedural evaluation for closure of patent foramen ovale (PFO) or atrial septal defect (ASD) and ANY of the following criteria are met:
   2.11.1 Preprocedural evaluation for ANY of the following: atrial appendage thrombus, spontaneous echo contrast, cardiac masses or vegetations
   2.11.2 Preprocedural assessment of atrial septum anatomy or atrial septal aneurysm is required, or to evaluate suitability for percutaneous device closure
   2.11.3 Intra procedural guidance for closure device of PFO or ASD
   2.11.4 Non routine follow-up of PFO or ASD device closure and concern for infection, malposition, embolization or persistent shunt

2.12 Preprocedural evaluation for closure of Left Atrial Appendage (LAA) for ANY of the following:
   2.12.1 Pre-procedural evaluation of cardiac structures and valve function
   2.12.2 To select or guide delivery and deployment of LAA closure device
   2.12.3 To screen for procedural complications and assess adequacy of LAA occlusion
   2.12.4 Following LAA occlusion surveillance at 45 days or as per FDA guidance/guidelines for follow-up to assess stability: exclude migration, displacement, or erosion; assess device leak

2.13 Valvular heart disease as indicated by mitral regurgitation (chronic and primary) to guide the choice between a valve repair or replacement

2.14 Nondiagnostic TTE, or high likelihood of nondiagnostic TTE

2.15 Pericardial disease, known or suspected

3.0 **Fetal Echocardiogram** is considered medically necessary for ANY of the following in the appropriate clinical scenario: (not an all-inclusive list):

3.1 Abnormal or incomplete cardiac evaluation

3.2 Complex congenital heart disease
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3.3 Suspected fetal chromosomal abnormalities
3.4 Members with familial inherited disorders
3.5 Member’s mother has insulin dependent diabetes mellitus and fetal echocardiogram is clinically indicated

4.0 The use of TTE, TEE or fetal echocardiogram is considered not medically necessary and therefore not a covered service when criteria have not been met, or when performed for other indications, including but not limited to the following:

4.1 Unspecified chest pain, in the absence of a condition or finding which would indicate potential structural heart disease
4.2 Atherosclerotic heart disease of native coronary artery, without angina pectoris
4.3 Nonrheumatic mitral valve insufficiency
4.4 Patient ductus arteriosus
4.5 Supraventricular tachycardia, in the absence of a condition or finding which would indicate potential structural heart disease

5.0 **Stress Echocardiography** is considered medically necessary for **ANY** of the following, when the patient is able to exercise and in the appropriate clinical scenario (not an all-inclusive list):

5.1 Exertional SOB/dyspnea or hypoxemia of uncertain etiology
5.2 Initial evaluation of known or suspected heart failure based on signs or symptoms or abnormal test
5.3 Left ventricular systolic dysfunction in the absence of severe valvular disease
5.4 Excluding coronary artery disease in a patient with heart failure of left ventricular dysfunction without angina
5.5 Evaluation of suspected hypertrophic cardiomyopathy
5.6 Acute chest pain in the appropriate clinical scenario when **ALL** of the following criteria are met:
   5.6.1 Cardiac risk factors present (e.g. diabetes mellitus, history of heart failure, family history of coronary artery disease); **AND**
   5.6.2 Abnormal ECG non-diagnostic; **AND**
   5.6.3 Negative or minimally elevated cardiac biomarkers; **AND**
   5.6.4 No ongoing chest pain
5.7 Chest pain in members suspected of angina when exercise treadmill testing alone would be unreliable or inconclusive
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| 5.8 | Arrhythmia in need of evaluation, such as sustained or non-sustained ventricular tachycardia, or in new-onset atrial or supraventricular arrhythmia when the member is at moderate or high risk of coronary artery disease |
| 5.9 | Need for testing in the course of cardiac rehabilitation |
| 5.10 | Congenital heart disease |
| 5.11 | Coronary artery disease (CAD) in the appropriate clinical scenario (e.g. previous revascularization or medical treatment of CAD), when exercise treadmill testing alone would be unreliable |
| 5.12 | Cardiac evaluation of diabetic members in the appropriate clinical scenario |
| 5.13 | Cardiomyopathy in members with heart failure, ventricular dysfunction or cardiomyopathy |
| 5.14 | Preoperative cardiovascular evaluation in the appropriate clinical scenario |
| 5.15 | Syncope when exercise treadmill testing alone would be unreliable or inconclusive |
| 5.16 | Valvular heart disease evaluation is required and clinically appropriate |
| 5.17 | History of heart failure or worsening heart failure |
| 5.18 | Left ventricular hypertrophy or ventricular dysfunction |
| 5.19 | Hypertrophic cardiomyopathy, known, and need for dynamic assessment |
| 5.20 | Ventricular dysfunction as indicated by cardiomyopathy evaluation needed or patient unable to exercise |

6.0 The use of Stress Echocardiography is considered not medically necessary and therefore not a covered service when the criteria in (1.0) TTE has not been met, or when performed for other indications, including but not limited to the following:

| 6.1 | Unspecified chest pain, in the absence of a condition or finding which would indicate potential structural heart disease |
| 6.2 | Patent ductus arteriosus |

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Published/Effective: 03/01/2020