Myocardial positron emission tomography (PET) may be indicated for 1 or more of the following(1)(2):

- **Coronary artery disease assessment, [A]** as indicated by 1 or more of the following(4)(5)(6)(7):
  - Asymptomatic patient with elevated troponin level(8)
  - Asymptomatic patient with ischemic changes present on resting ECG(8)
  - Exercise treadmill test results equivocal or positive, requiring further evaluation or cannot be completed due to BMI equal to or greater than 40
  - Need for ischemic evaluation, as indicated by ALL of the following:
    - Coronary artery disease clinically significant, as indicated by 1 or more of the following:
      - Before revascularization (ie, percutaneous coronary intervention or coronary artery bypass grafting) to demonstrate ischemia
      - Coronary calcium Agatston score between 10 and 400 on cardiac CT scan, and high risk for coronary heart disease, as indicated by 1 or more of the following(9)(10)(11):
        - Calculated 10-year absolute coronary heart disease risk greater than 20% by global risk calculator(12)
        - Coronary heart disease risk equivalent (eg, peripheral arterial disease, carotid artery disease, or abdominal aortic aneurysm)
        - Diabetes mellitus in patient age 40 years or older
        - Prior stroke or transient ischemic attack(13)
    - Coronary calcium Agatston score of 400 or more on cardiac CT scan(14)
    - Detection of recurrent stenosis or progression of disease in asymptomatic patient who had silent ischemia prior to revascularization and 1 or more of the following(4)(15)(16):
      - Diabetes
      - Five years or more after coronary artery bypass grafting
      - History of prior cardiac arrest
      - Incomplete revascularization procedure (ie, persistent stenosis after percutaneous coronary intervention or coronary artery bypass grafting)
      - Involvement of proximal left anterior descending artery

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**Policy:**

Note: Commercial policies may not cover. Please refer to the member’s Evidence of Coverage.
- Left ventricular ejection fraction of 35% or less
- Two years or more after percutaneous coronary intervention (ie, angioplasty or stent)

- Following acute coronary syndrome and ALL of the following(4)(17):
  - Absence of current ischemic symptoms
  - No signs of heart failure or hemodynamic instability
  - Not planning to undergo early revascularization
- Following ST-segment elevation myocardial infarction
- History of Kawasaki disease with known coronary artery aneurysm, to demonstrate inducible ischemia(18)
- Increase in anginal frequency or severity
- New heart failure symptoms or increase in existing heart failure symptoms(19)
- New onset of ischemic symptoms without ECG changes
- New ST-segment changes on ECG at rest

  - Exercise treadmill testing alone is or would be unreliable or inconclusive due to 1 or more of the following(4)(20):
    - Atrial fibrillation or flutter
    - Electronically paced ventricular rhythm
    - Insufficient workload (ie, inability to achieve at least 85% of maximum age-sex predicted heart rate on Bruce protocol exercise treadmill testing)
    - Left bundle branch block
    - Left ventricular hypertrophy with repolarization abnormalities on baseline ECG
    - Patient taking digoxin
    - Pre-excitation syndrome (eg, Wolff-Parkinson-White syndrome)
    - ST segment on baseline ECG with 1 mm depression or greater
    - Typical angina induced by exercise in high-risk patient without any diagnostic ECG changes on previous exercise treadmill test
    - BMI equal to or greater than 40

  - Myocardial viability assessment, [B] as indicated by 1 or more of the following(21):
    - Chronic secondary mitral regurgitation, and patient is candidate for revascularization if viable myocardium identified(22)
    - Ischemic cardiomyopathy, known or suspected, with left ventricular ejection fraction 35% or less(23)
    - Preoperative or preprocedural planning needed for revascularization (ie, coronary artery bypass graft or percutaneous coronary intervention), if viable myocardium identified(24)(25)
    - SPECT myocardial perfusion scan or stress echocardiogram findings inconclusive, or no viable myocardium evident(26)

- Sarcoidosis with suspected cardiac involvement
- Repeat evaluation of specific area or structure with same imaging modality, as indicated by 1 or more of the following:
  - Change in clinical status (eg, worsening symptoms or new associated symptoms)
  - Need for interval reassessment that may impact treatment plan
  - Need for re-imaging either prior to or after performance of invasive procedure

**Documentation Required for Review:**

**Coding References:**

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Myocardial PET is a noninvasive nuclear medicine technique that uses positron-emitting radionuclides, such as F-18 fluorodeoxyglucose, rubidium-82, or ammonia N-13, to obtain images of myocardial viability, perfusion, and metabolism. It involves exposure to ionizing radiation, and research is under way to develop scanning techniques that can reliably reduce the radiation dose delivered in cardiac PET imaging.

**Coverage for Repeated Procedures:**
Coverage for a second or additional procedure will be allowed when there is evidence of medical necessity. This procedure limitation is in place whether or not the previous procedure was covered under the current benefit plan.

**Auth Requirement/RMD Review:**
Prior Authorization is required for all

**Exceptions:**
None.

**Regulatory / Literary References:**
1. MCG- A-0097
2. Hayes-
3. TMHP- 3.2.3 Positron Emission Tomography (PET) Scan Imaging
   The Alberto N Agreement (Section 8.1) states that all DME policies, guidelines, or provider manuals will prominently display the following statement when describing the scope of DME available to beneficiaries:
   Medicaid beneficiaries under the age of 21 years are entitled to all medically necessary DME. DME is medical necessary when it is required to correct or ameliorate disabilities or physical or mental illnesses or condition. Any numerical limit on the amount of a particular item of DME can be exceeded for Medicaid beneficiaries under the age of 21 years if medically necessary. Likewise time period for replacement of DME will not apply to Medicaid beneficiaries under the age of 21 years if the replacement is medically necessary. When prior authorization is required, the information submitted with the request must be sufficient to document the reasons why the requested DME item or quantity is medical necessary.
4. LCD- none
5. NCD- 220.6.1
6. Policy Reporter:
   a.

**Disclaimer:**
Contract language, including definitions and specific inclusions/exclusions, as well as state and federal law, take precedence over guidelines. Contract language, state and federal law must be considered first in determining eligibility for coverage. Coverage may also differ for Medicare and/or Medicaid members based on any applicable Centers for Medicare & Medicaid Services (CMS) coverage statements and/or Texas Medicaid Provider Procedures Manual. The member’s health plan benefits, in effect on the date services are rendered, must be used. Guidelines are not intended to preempt the judgment of the reviewing Medical Director or dictate to providers how to practice medicine. Providers are expected to exercise their medical judgment in rendering the most appropriate care.