

| | | |
|---|---|--|
| Division of Medicaid State of Mississippi Provider Policy Manual | New: X Revised: X Current: | Date: 01/01/03 Date: 03/01/06 |
| Section: Radiology | Section: 46.03 | |
| Subject: Positron Emission Tomography (PET) Scans | Pages: 2 | Cross Reference: |

Positron Emission Tomography (PET) is a nuclear medicine technique that produces three-dimensional cross-section images from the distribution of radioactivity (through emission of positrons) in a region of the human body. It is a noninvasive diagnostic imaging procedure that assesses the level of metabolic activity and perfusion in various organ systems. Positron-emitting radioactive tracer substances (radiopharmaceuticals), such as 2-[F-18] Fluoro-D-Glucose (FDG), are administered intravenously to the patient. The radiopharmaceutical agent is incorporated into the tissues to be scanned. A positron scanner can detect, measure and display sugar metabolism of tissues, such as the heart, brain, and many types of tumors. The PET scanner images indicate whether the radiopharmaceutical is or is not being metabolized.

PET scans performed by an Independent Diagnostic Testing Facility (IDTF) or independent mobile diagnostic provider are reimbursed only as described in Section 37.02 of the Mississippi Medicaid Provider Policy Manual.

The policies in this section are applicable to both hospital and professional or physician charges.

CANCERS

Pet Scans are covered by the Division of Medicaid for diagnosing certain malignancies in these situations:

1. When replacing an invasive procedure, **OR**
2. For staging when there is documented evidence of a primary tumor by CT, MRI, X-ray, or tissue sample, **OR**
3. Restaging after course of therapy, **OR**
4. When used in lieu of other modalities such as CT, MRI, and X-ray.

PET scans are covered in the situations listed above for these diagnoses only:

- Characterization of solitary pulmonary nodules (SPN's)
- Lung cancer, non-small cell
- Colorectal cancer
- Melanoma
- Evaluating recurrence prior to surgery as an alternative to gallium scan (not covered for evaluating regional nodes)
- Lymphoma when used as an alternative to gallium scan
- Head and neck cancer (excluding thyroid and central nervous system)
- Esophageal cancer

BREAST CANCER

- Staging patients with distant metastasis or;
- Restaging patients with loco-regional recurrence or metastasis or;
- For monitoring tumor response to treatment for women with locally advanced and metastatic breast cancer when a change in therapy is anticipated.*

THYROID CANCER

- For staging of recurrent or residual thyroid cancers of follicular cell origin previously treated by thyroidectomy and radioiodine ablation and have a serum thyroglobulin >10ng/ml and negative I-131 whole body scan performed**

*PET Scans are not covered for the diagnosis of Breast Cancer.

** PET Scans are not covered for diagnosis or restaging of thyroid cancer.

MYOCARDIAL IMAGING

Perfusion of the Heart-Using Rubidium

PET scans performed at rest or with pharmacological stress used for noninvasive imaging of the perfusion of the heart for the diagnosis and management of patients with known or suspected coronary artery disease using the FDA-approved radiopharmaceutical Rubidium 82 (Rb 82) or ammonium N-13 tracer are covered, when these criteria are met:

- The PET scan, whether at rest alone or at rest with stress, is performed in place of, but not in addition to, a single photon emission computed tomography (SPECT), **OR**
- The PET scan, whether at rest alone or at rest with stress, is used following a SPECT that was found to be inconclusive. In these cases, the PET scan must have been considered necessary in order to determine what medical or surgical intervention is required to treat the patient. (For purposes of this requirement, an inconclusive test is a test(s) whose results are equivocal, technically uninterpretable, or discordant with a patient's other clinical data and must be documented in the beneficiary's file.)

Myocardial Viability

FDG-PET is covered for the determination of myocardial viability or following an inconclusive SPECT prior to revascularization. SPECT will not be covered following an inconclusive PET scan.

REFRACTORY SEIZURES

FDG-PET is covered only for pre-surgical evaluation for the purpose of localization of a focus of refractory seizure activity.

DOCUMENTATION

Providers must maintain documentation that meets the following criteria:

- Documentation to assure the PET scans performed were medically necessary, did not unnecessarily duplicate other covered diagnostic tests, **AND**

-
-
- Providers submitting claims must keep beneficiary records as Medicaid requires on file for each beneficiary for whom a PET scan claim is submitted, **AND**
 - Providers of the PET scan must maintain on file the doctor's referral and documentation that the procedure involved only FDA approved drugs and devices (and did not involve investigational drugs, as determined by the Food and Drug Administration), **AND**
 - The ordering physician is responsible for documenting the medical necessity of the PET scan and that it meets criteria as specified. The physician should have documentation in the beneficiary's medical record to support the referral to the PET scan provider.