TO: Medicaid Providers

SUBJECT: Coverage of Positron Emission Tomography (PET) Scans

Effective with dates of service on or after February 1, 2007, the South Carolina Department of Health and Human Services (SCDHHS) will reimburse for certain Positron Emission Tomography (PET) scans. PET scans are a nuclear imaging technique that measures the location and concentration of physiologically active compounds in the human body. They provide three-dimensional images of the brain, the heart and other internal organs.

PET scan reimbursement is limited to one per twelve (12) months. PET scans will be covered only for the staging and restaging of cancer malignances. They should not be utilized for screening purposes. The use of PET scans to monitor tumor response during a planned course of therapy is not covered. Restaging only occurs after a course of treatment is completed. The clinical applications for coverage include services relating to Brain Cancer, Breast Cancer, Colorectal Cancer, Esophageal Cancer, Head and Neck Cancers, Lung Cancer, Lymphoma, Melanoma, Refractory Seizures, Solitary Pulmonary Nodule, and Thyroid Cancer.

PET scans will be subject to retrospective review to include paid inpatient/outpatient hospital claims and physician claims. Documentation must be maintained in the beneficiary’s medical records to support the medical necessity of the procedure.

PET scans are covered in the following circumstances:

Staging:
- The stage of the cancer remains in doubt after completion of a standard diagnostic workup, including conventional imaging (computed tomography [CT], magnetic resonance imaging [MRI], or ultrasound); or
- The use of a PET scan could potentially replace one or more conventional imaging studies when it is expected that conventional study information is insufficient for the clinical management of the patient; and
- Clinical management of the patient would differ depending on the stage of the cancer identified.
Restaging:

- Detecting residual disease
- Detecting suspected recurrence or metastasis
- Determining the extent of a known recurrence
- Potentially replacing one or more conventional imaging studies when it is expected that conventional study information is insufficient for the clinical management of the patient

Medicaid Approved Indications of PET Scans:

1. **Brain Cancer**
   MEDICALLY NECESSARY when used to differentiate between treatment-induced tumor necrosis and tumor recurrence when the results may potentially alter patient management.

2. **Breast Cancer**
   MEDICALLY APPROPRIATE for any one of the following:
   - Detection of primary lesion
   - Detection of bone metastasis
   - Staging of axillary lymph nodes
   - Performed on a NEWLY diagnosed, early-staged breast cancer for the purpose of ruling out metastasis if any of the following indications apply: primary tumor is greater than 5 centimeters (cm) in diameter; or axillary lymphadenopathy is present on physical examination; or other documented symptoms and/or physical exam findings are indicative of metastatic disease

3. **Colorectal Cancer**
   MEDICALLY APPROPRIATE when ALL of the following apply:
   - Patient is suspected to have recurrent colorectal cancer, or hepatic or extrahepatic metastases, indicated by rising CEA levels.
   - Results may potentially alter patient management (e.g., warranted surgical intervention or resectability of hepatic or extrahepatic metastases).

4. **Esophageal Cancer**
   Fluorodeoxyglucose (FDG) PET IS COVERED for the staging and restaging of esophageal carcinoma.

5. **Head and Neck Cancer**
   MEDICALLY APPROPRIATE for the following:
   - Initial staging of cervical lymph node metastases of head and neck and assessing resectability of the tumor
   - Detection of recurrent or residual head and neck cancer following previous treatment

6. **Lung Cancer**
   FDG PET imaging is MEDICALLY APPROPRIATE for the following:
   - Staging of lung cancer for patients who may be candidate for surgical intervention

   FDG PET imaging is considered NOT MEDICALLY APPROPRIATE for determining lymph node involvement. Invasive nodal sampling, depending on location, is considered a more accurate indicator than a PET of lymph node involvement.
7. **Lymphoma/Non-Hodgkin’s Lymphoma**
MEDICALLY APPROPRIATE for the following:

- Initial staging
- Follow up treatment for lymphoma, when results may alter patient management

8. **Melanoma**
FDG PET imaging is considered MEDICALLY APPROPRIATE for the following indications ONLY when the results may potentially alter the patient’s management:

- Detection of extranodal metastasis at initial staging
- Detection of extranodal metastasis following treatment

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

10. **Solitary Pulmonary Nodules (SPNs)**
There must be evidence of a primary tumor. Documentation for regional PET chest scans for characterizing SPNs should include evidence of the initial detection of a primary lung tumor, usually by computed tomography (CT). This should include, but is not restricted to, a report on the results of such CT or other detection method, indicating an indeterminate or possible malignant lesion, not exceeding 4 cm in diameter.

- The PET scan documentation must include the results of concurrent thoracic CT, which is necessary for anatomic information, in order to ensure that the PET scan is properly coordinated with other diagnostic modalities.

11. **Thyroid Cancer**
MEDICALLY APPROPRIATE for detection of recurrent thyroid cancer or suspected metastasis and/or differentiation between benign and malignant disease when ALL of the following apply:

- Thyroglobulin (Tg) value and 131 Iodine whole body scan are non-diagnostic
- Results may potentially alter patient management (e.g., warranted surgical intervention)

To bill for a PET Scan procedure on a CMS-1500 claim form, use a Current Procedural Terminology (CPT) code with the appropriate TC or 26 modifier:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>78811</td>
<td>Tumor imaging, positron emission tomography (PET); limited area (e.g., chest, head/neck)</td>
</tr>
<tr>
<td>78812</td>
<td>Tumor imaging, positron emission tomography (PET), limited area (e.g. skull base to mid-thigh)</td>
</tr>
<tr>
<td>78813</td>
<td>Tumor imaging, positron emission tomography (PET), whole body</td>
</tr>
<tr>
<td>78814</td>
<td>Tumor imaging, positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization; limited area (e.g., chest, head/neck)</td>
</tr>
<tr>
<td>78815</td>
<td>Tumor imaging, positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization; limited area (e.g., skull base to mid-thigh)</td>
</tr>
<tr>
<td>78816</td>
<td>Tumor imaging, positron emission tomography, (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization; whole body</td>
</tr>
<tr>
<td>78608</td>
<td>Brain imaging, positron emission tomography (PET); metabolic evaluation</td>
</tr>
<tr>
<td>78609</td>
<td>Brain imaging, positron emission tomography (PET), perfusion evaluation</td>
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</tbody>
</table>
To bill for radiopharmaceutical diagnostic imaging agents on a CMS-1500 claim form, use Health Care Procedure Coding System (HCPCS) code:

| A9552 | Fluorodeoxyglucose F-18 FDG, diagnostic, per study dose, up to 45 Millicuries |

To bill for a PET Scan procedure on a UB claim form in an outpatient setting:

- Use revenue code 404 (Positron Emission Tomography/PET Scan) with one of the
- This service will fall into the Treatment/Therapy/Testing Services – Reimbursement Type 4 when the service does not meet the criteria for Outpatient Surgical Services – Reimbursement Type 1, or Outpatient Non-Surgical Services – Reimbursement Type 5.
- This service would be reimbursed at a rate based on the CPT/HCPCS code. A list of the CPT/HCPCS codes and the SCDHHS reimbursement can be found on the SCDHHS Web site at [www.scdhhs.gov](http://www.scdhhs.gov).

If you have any questions regarding this bulletin or any other Medicaid billing or policy questions, please contact your program representative at either the Division of Physician Services at (803) 898-2660, or Hospital Services at (803) 898-2665. Thank you for your continued support and participation in the South Carolina Medicaid program.

/s/

Robert M. Kerr
Director

RMK/bgwd

**NOTE:** To receive Medicaid bulletins by email, please send an email to bulletin@scdhhs.gov indicating your email address and contact information. To sign up for Electronic Funds Transfer of your Medicaid payment, please go to the following link for instructions: [http://www.scdhhs.gov/dhhsnew/serviceproviders/eft.asp](http://www.scdhhs.gov/dhhsnew/serviceproviders/eft.asp)