

**The Society of Nuclear Medicine Coding and Reimbursement working group approved the following Coding Frequently Asked Questions & SNM Comments/Guidelines for PET/CT with Integrated Systems, July 2005.**

**INTRODUCTION**

In 2005 the coding and coverage for Positron Emission Tomography (PET) changed. This began on January 1st when the American Medical Association (AMA) Current Procedural Terminology (CPT®) published the revised and updated codes for oncology PET and for PET/CT with an integrated system, (see table below for details.) This was a major change to keep current with the evolving technology and clinical practice of PET.

In March and April, the Centers for Medicare and Medicaid Services (CMS) announced the discontinuation of numerous G series PET codes and their acceptance of all PET AMA CPT codes. These changes were effective for date of service (DOS) claims January 28, 2005 and implemented in April. CMS clarified and expanded certain coverage criteria for PET, and introduced a new coverage process referred to as, Coverage with Evidence Development (CED) for FDG tumor imaging on indications where CMS did not find sufficient evidence for a positive or negative coverage determination. At this time, we are waiting for more details from CMS regarding instructions on the CED process, which is expected late in the Fall of 2005.

With so many changes, the SNM working group created this consensus FAQ & A. This is an evolving process. We encourage you to check back frequently. We will update our FAQ & A's as new coding coverage and payment information becomes available.

**NEW/REVISED & DELETED 2005 CPT® CODES NUCLEAR MEDICINE SECTION, JANUARY 1, 2005**

2005 CPT® Code	Change	Comments	Long Description
<b>Radiology/ Nuclear Medicine / Other Procedures</b>			
78810	DELETED	See codes 78811-78816	<del>Tumor imaging, positron emission tomography (PET); metabolic evaluation</del>
78811	New	These new PET codes similar to other nuclear medicine CPT codes are by body area(s).	Tumor imaging, positron emission tomography (PET); <b>limited area</b> (eg, chest, head/neck)
78812	New		Tumor imaging, positron emission tomography (PET); <b>skull base to mid-thigh</b>
78813	New		Tumor imaging, positron emission tomography (PET); <b>whole body</b>
78814	New	These codes are used for the new PET/CT Integrated system.	Tumor imaging, positron emission tomography (PET); with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization; <b>limited area</b> (eg, chest, head/neck)
78815	New	A cross-reference in CPT® specifies that	Tumor imaging, positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization); <b>skull base to mid-thigh</b>

78816	New	a separate <u>diagnostic</u> CT, if medically necessary, ordered and performed on the same day, can be billed in addition to these codes with a - 59 modifier,	<i>Tumor imaging, positron emission tomography (PET with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization); <b>whole body</b></i>
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### SNM PET and PET/CT Questions

**Question: What is the difference between a PET and the PET/CT for anatomic localization procedure CPT® code? Specifically, what is the CT part of the PET/CT used for?**

**SNM comment:**

Good question—this is confusing even to some physicians ordering these studies. To clarify, the new 2005 CPT® PET/CT codes were developed to report a study performed concurrently (same imaging session) on a PET/CT integrated system. These integrated imaging systems are a single piece of equipment containing two different imaging technologies. In this case positron emission tomography (PET) and computed tomography (CT).

The AMA PET/CT CPT® codes specifically describe the use of the CT portion of the PET/CT scan for attenuation correction (AC) and anatomic localization (AL) ONLY. To clarify, all PET (PET or PET/CT) procedures require attenuation correction; this is done with an external gamma source on non-integrated PET systems, and with CT on integrated PET/CT systems. Using CT for AC is faster and, from a patient perspective, easier. A second advantage of PET/CT is that the CT image data may also be used for anatomical correlation. Thus, the CT data may be used for the purposes of fusing or co-registering the *functional* PET study with the *anatomical* CT portion of the study.

**Question: We have a PET/CT Integrated System and the referring physician’s initial order states PET study. Can we perform and bill a PET/CT?**

**SNM comment:**

The short answer is “no”, with a follow up comment. Providers should perform tests that are specifically ordered by the referring physician as well as clinically necessary.

PET/CT is a recently developed technology and its role in clinical oncology is evolving. This is somewhat similar to the initial implementation and adoption of Single Photon Emission Tomography (SPECT) for many now well established uses in medicine. Education and discussion with referring physicians regarding PET/CT technology is necessary and strongly advised for the best care of referred patients.

If an order for a PET (not a PET/CT) is obtained, and your facility has a PET/CT, or both PET and PET/CT, we recommend you contact the referring physician to clarify the order and to discuss any advantages to the patient for a PET/CT study. Verbal orders, e-mail or faxed orders may be taken with appropriate follow-up, should the referring physician wish to change the order.

**Question: We have a PET/CT Integrated System. A referring physician has ordered a diagnostic CT & a PET/CT for anatomic localization on the same day. Our current PET/CT integrated system is capable of performing diagnostic CTs. How are these studies coded?**

**SNM comment:**

Imaging technology and acquisition protocols for a diagnostic CT in addition to a PET/CT are under rapid evolution. The SNM recognizes that there are various protocols and techniques available today, which include acquisition of the diagnostic CT data at the same time as that for attenuation correction and anatomical localization, as well as before or after the completion of the PET/CT. Regardless of the technique and protocol, we recommend adhering to the AMA CPT guidelines as specified in the June 2005 CPT Assistant clarification on page 10 Volume 15 Issue 6, which states, "providers should use the appropriate code from the 78814-78816 codes series to report the PET/CT procedure and also report separately for the diagnostic CT scan with Modifier 59, *Distinct Procedural Service* appended to the CT code for the appropriate anatomical area."

We also recommend (1) that there be a separate report for any diagnostic CT performed on the same day of service (SDOS), and (2) that the imaging protocol used for the acquisition of the CT data be included in the report, and (3) that the indication for any separate diagnostic CT on the SDOS be specifically stated in the report.

**Question: Do the Medicare PET Coverage Guidelines from Transmittal 527 allow for a PET/CT and a diagnostic CT to be performed on the same day?**

The current Medicare coverage guidelines for PET state, "PET studies should either replace conventional imaging procedures or complement inconclusive conventional procedures." The Medicare guideline assumes the ordering physician has an opportunity for informed, sequential electivity.

In certain cases, based on medical necessity, it is clearly appropriate for a referring physician to order a diagnostic CT in addition to a PET/CT on the SDOS. For example, for trauma in the evening following a PET/CT in the morning for lymphoma restaging. However, diagnostic CT is not always required on the SDOS each time a PET or PET/CT is done. Obviously, reporting of a diagnostic CT when not requested or not medically indicated would not be appropriate.

The following, below and in quotes, is from CMS Transmittal 527 on PET coverage in tumor patients. The indications for a diagnostic CT study on the SDOS as a tumor PET study are not specifically described, but the underlying coverage concepts for PET differ for diagnosis, staging, restaging and monitoring purposes. We recommend that providers clearly describe the clinical indication for any diagnostic CT that is done in addition to a PET/CT on the SDOS. This should not be the exact same indication for the PET or PET/CT study, or if it is, the reason for the two studies should be explained.

From CMS Transmittal 527

"A. Definition:

For all uses of PET, excluding Rubidium 82 for perfusion of the heart, myocardial viability and refractory seizures, the following definitions apply:

- **Diagnosis:** PET is covered only in clinical situations in which the PET results may assist in avoiding an invasive diagnostic procedure, or in which the PET results may assist in determining the optimal anatomical location to perform an invasive diagnostic procedure. In general, for most solid tumors, a tissue diagnosis is

made prior to the performance of PET scanning. PET scans following a tissue diagnosis are generally performed for the purpose of staging, rather than diagnosis. Therefore, the use of PET in the diagnosis of lymphoma, esophageal and colorectal cancers, as well as in melanoma, should be rare. PET is not covered for other diagnostic uses, and is not covered for screening (testing of patients without specific signs and symptoms of disease).

- **Staging:** PET is covered in clinical situations in which (1) (a) the stage of the cancer remains in doubt after completion of a standard diagnostic workup, including conventional imaging (computed tomography, magnetic resonance imaging, or ultrasound) or, (b) the use of PET would also be considered reasonable and necessary if it 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, (2) clinical management of the patient would differ depending on the stage of the cancer identified.
- **Restaging:** PET will be covered for restaging: (1) after the completion of treatment for the purpose of detecting residual disease, (2) for detecting suspected recurrence, or metastasis, (3) to determine the extent of a known recurrence, or (4) if it could potentially replace one or more conventional imaging studies when it is expected that conventional study information is to determine the extent of a known recurrence, or if study information is insufficient for the clinical management of the patient. Restaging applies to testing after a course of treatment is completed and is covered subject to the conditions above.
- **Monitoring:** Use of PET to monitor tumor response to treatment during the planned course of therapy (i.e., when a change in therapy is anticipated).

#### B - Limitations

For staging and restaging: PET is covered in either/or both of the following circumstances:

- The stage of the cancer remains in doubt after completion of a standard diagnostic workup, including conventional imaging (computed tomography, magnetic resonance imaging, or ultrasound); and/or
- The clinical management of the patient would differ depending on the stage of the cancer identified.
- PET will be covered for restaging after the completion of treatment for the purpose of detecting residual disease, for detecting suspected recurrence, or to determine the extent of a known recurrence.
- Use of PET would also be considered reasonable and necessary if it 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.
- The PET is not covered for other diagnostic uses, and is not covered for screening (testing of patients without specific symptoms). Use of PET to monitor tumor response during the planned course of therapy (i.e. when no change in therapy is being contemplated) is not covered."

Clinical necessity as evidenced by the referring physician order will help determine if a diagnostic CT is indicated with a PET/CT procedure. There should be ongoing communication with referring physicians regarding PET/CT technology for the best care of the patients referred.

#### **Question: What are the clinical indications covered for PET by Medicare.**

Please refer to the Medicare National Coverage Determinations Manual Section 220.6 for specific coverage language and limitations for each indication at:

[http://www.cms.hhs.gov/manuals/103\\_cov\\_determ/ncd103c1\\_Part4.pdf](http://www.cms.hhs.gov/manuals/103_cov_determ/ncd103c1_Part4.pdf)

**Question: Where can I find the Medicare coding guidelines for PET?**

Please refer to the Medicare Claims Processing Manual, Chapter 13, and Section 60 at:  
[http://www.cms.hhs.gov/manuals/104\\_claims/clm104c13.pdf](http://www.cms.hhs.gov/manuals/104_claims/clm104c13.pdf)

**Question: Can I report 3D rendering in addition to a PET and PET/CT for anatomic localization procedure if the report documents this was completed?**

**SNM comment:**

No, CPT® code 76375 (*coronal, sagittal, multiplanar, oblique, 3-D and or holographic reconstruction of computed tomography, MRI, or other tomographic modality*) or any other 3-D CPT code should NOT be reported with PET, PET/CT or for any nuclear medicine procedures including SPECT nuclear medicine procedures. The reason is that a PET, PET/CT and SPECT nuclear medicine procedures already have this value accounted for in the base code. Therefore coding a 3-D code and a PET, PET/CT and SPECT would be considered redundant.

**Question: Is a modifier required for either a PET or PET/CT for anatomic localization performed on the same day as a diagnostic CT procedure(s), and where do I place the modifier?**

**SNM comment:**

Yes, as stated in a CPT® parenthetical, located below CPT® 78816, “(*Computed Tomography (CT) performed for other than attenuation and anatomical localization is reported using the appropriate site-specific CT code with modifier 59*).” We recognize this CPT® guideline specifically applies to CPT® codes 78814-78816. However, National Correct Coding Initiative (NCCI) edits will be implemented October 1, 2005 for reporting of diagnostic CT with either PET or PET/CT performed on Medicare patients on the same day. Therefore we recommend use of this modifier applied to the diagnostic CT(s) performed on the SDOS of either a PET or a PET/CT. The modifier 59 *Distinct Procedural Service* is appended to the diagnostic CT code for the appropriate anatomical area and not to the PET or PET/CT for anatomic localization CPT® code.

**Question: Do I code and bill separately using CPT® or HCPCS Level II codes for the PET radiopharmaceuticals?**

**SNM comment:**

The SNM Coding and Reimbursement Committee has a long-standing consensus opinion that all facilities should code and bill separately for all radiopharmaceuticals and other drugs used with any nuclear medicine procedure. The consensus opinion holds true whether or not the payment for the radiopharmaceutical has been bundled by the third party payer into the procedure or is paid separately.

For Medicare hospital outpatients, coding and billing for the PET radiopharmaceutical will yield a separate additional payment. For Medicare patients in the physician office or independent diagnostic testing facility (IDTF), carriers have discretion to set a bundled procedure payment or set payments separately. At present, there is a mix across the country in how carriers and other private payers are handling the payments; some

separately and others bundled. We recommend that you check with your payer regarding payment. However, we continue to recommend you code and bill separately for both PET and other radiopharmaceuticals to sustain a nation wide record of the costs for those products.

We call to your attention the introductory paragraph in the Nuclear Medicine CPT® 78 000 series Section, which specifically states that the radiopharmaceutical is not part of the CPT® code, and that providers should code separately for these in addition to the CPT® procedure code.

In 2005, CPT® deleted codes 78990 and 79900 *provision for diagnostic and therapeutic radiopharmaceuticals*. In 2005, CMS published seventy HCPCS Level II codes that describe many of the available radiopharmaceuticals including some PET radiopharmaceuticals. Additionally, two codes A4641 and A9699 are for *not otherwise classified* (NOC) radiopharmaceutical codes, one each for diagnostic and therapeutic. These NOC codes can be used when there is no specific radiopharmaceutical listed code.

With the exception of the HCPCS Level II C Series codes (which are for the Hospital Out-Patient Prospective Payment System exclusively), we expect that most third party payers will accept the A and Q HCPCS Level II code series in place of the deleted CPT 78990 and CPT 79900 codes. We encourage you to work with your payers to determine the proper choice of HCPCS level II supply codes for your radiopharmaceuticals.

**Question: We have a PET only system, but we acquire a CT for fusion following the PET scan. Can we use the PET/CT CPT codes 78814-78816? Additionally, we are fusing PET scans with both CT and MRI studies NOT acquired concurrently with integrated systems, how do we code for these studies including the fused images?**

**SNM comment:**

You may NOT use the CPT codes 78814-78816 for PET studies performed on separate pieces of equipment. These CPT codes are only to be used when a procedure is performed on a PET/CT integrated system. They do NOT apply to software-fused studies on separate equipment.

However, if ordered, clinically indicated and if separate interpretations are given, it may be appropriate to code for the PET, CT, or MRI and fused anatomic localization studies separately. The PET, CT or MRI study are coded and charged for separately from the fusion anatomic localization procedure. Check the payer for coding and payment criteria for each fusion procedure.

Currently, Medicare has no policy regarding software fusion for anatomical localization. Since there currently is no CPT® code that accurately describes the software fusion of PET with non-concurrently acquired modalities such as CT, SPECT or MRI, separately code the fusion imaging study using the "unlisted nuclear medicine procedure" code. The 2005 CPT® code 78999 is *Unlisted miscellaneous procedure, diagnostic nuclear medicine*.

**Question: What are the current payments for Medicare patients including the new “coverage with evidence development” (CED) for PET and PET/CT studies?**

**SNM comment:**

The Society of Nuclear Medicine publishes the current Medicare National payments on their web site. Additionally CMS published this information at [www.cms.hhs.gov](http://www.cms.hhs.gov) or on your local carrier or fiscal intermediary web site. You can locate the SNM educational materials at [www.snm.org](http://www.snm.org), select **practice management** and go to either the **hospital educational** or **physician office educational** web pages for the pertinent national payment information.

At present, the technical and global components in the physician office and independent diagnostic testing facility setting for PET and PET/CT studies are established by the individual carriers. Contact your local carrier for your specific rates.

While there will be CED (formerly referred to as “PET Data Registry”) through a clinical trial or registry for certain PET indications, payment has not yet been implemented by Medicare. Facilities will not be reimbursed for the various PET services that specify "coverage with evidence development" until CMS publishes instructions, informing the contractors of the implementation date and advising them how to reimburse this service. CMS indicated that this coverage decision will not be fully implemented until the clinical study and registry are operational and ready to accept enrollments. The SNM will post updates at [www.snm.org](http://www.snm.org) regarding the process of CED reimbursement as it becomes available (or check ACRIN web site at <http://www.acrin.org/>). However, this is not anticipated until late Fall 2005.

**Question: What qualifications are required to read a PET/CT procedure?**

**SNM comment:**

Training qualifications to read a PET and or PET/CT vs. CT study have been addressed by the, Society of Nuclear Medicine, American College of Radiology and the Society of Computed Body Tomography and Magnetic Resonance in a white paper published in the July 2005 Journal of Nuclear Medicine ( J Nucl Med 2005; 46:1225-1239). The purpose of the white paper was to define the issues surrounding implementation and use of PET/CT and to use the paper as a framework for expanding relevant discussion.

**Disclaimer**

The opinions referenced are those of the members of the SNM Coding and Reimbursement Working Group and their consultants based on their coding experience and they are provided without charge to the profession. They are based on the commonly used codes in Nuclear Medicine, which are not all inclusive. Always check with your local insurance carriers as policies vary by region. The final decision for the coding of a procedure must be made by the physician considering regulations of insurance carriers and any local, state or federal laws that apply to the physician’s practice. The SNM and its representatives disclaim any liability arising from the use of these opinions.