

MEDICARE REIMBURSEMENT FOR SPECT/CT FOR SELECTED TUMOR IMAGING AND LOCALIZATION¹

SPECT/CT technology enables both single photon emission computed tomography (SPECT) and computed tomography (CT) images to be taken in one imaging session. In addition, these images are inherently registered or fused. SPECT is nuclear imaging that provides functional data collected from multiple views and reconstruction of images. CT provides anatomical mapping, or localization. CT attenuation correction may also be used to correct the fused image to remove attenuation artifacts.

This advisory discusses Medicare coding, coverage and payment for parathyroid, prostate, thyroid and endocrine tumor imaging and localization with SPECT/CT² when performed in the hospital inpatient, hospital outpatient department, independent diagnostic testing facility (IDTF) and physician office settings.³ While it focuses on Medicare program policies, these policies may also be applicable to selected private payers throughout the country.

Coding

Medicare's reimbursement system relies mostly on Current Procedural Terminology (CPT) codes to consistently identify diagnostic imaging procedures provided to Medicare patients.⁴ The CPT coding system was developed and is maintained by the American Medical Association (AMA) and the codes are updated annually.

SPECT imaging for tumor localization is described by CPT code 78803, *Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); tomographic (SPECT)*. Per the Society of Nuclear Medicine (SNM) and the AMA, the SPECT imaging code contemplates the 3D reconstruction of the images; therefore, a separate 3D rendering code (i.e., CPT codes 76376 or 76377) should not be reported with the SPECT code.⁵ Specifically, in *CPT® 2008*, immediately under the listings of the 3D rendering codes, the AMA provides a list of codes that should not be reported in conjunction with these codes and CPT 78803 is included in this list.⁶

According to the American College of Radiology (ACR), it is appropriate to report separate codes for SPECT, CT and fusion localization only if each procedure is:⁷

- A complete study and
- Medically necessary (according to Medicare coverage policies) and
- Interpreted separately

The ACR further advises that if a complete **CT scan** is not specifically ordered, and the CT is performed for localization purposes only, it is not appropriate to code the CT study separately.⁸ Currently, there is no CPT code for the **fused procedure** resulting from SPECT/CT imaging. The SNM advises providers to report the fused procedure using the unlisted CPT code 78999,

*Unlisted miscellaneous procedure, diagnostic nuclear medicine.*⁹ Finally, even though **CT attenuation** correction may be performed with SPECT/CT imaging, it is not separately reported.¹⁰

Coding for Diagnostic Radiopharmaceuticals

Medicare may also reimburse providers for diagnostic radiopharmaceuticals used in conjunction with SPECT/CT procedures. Medicare relies on HCPCS (Healthcare Common Procedure Coding System) Level II codes to report radiopharmaceuticals. Some radiopharmaceuticals may be associated with more than one HCPCS code. Providers should carefully examine code descriptions to select the appropriate code for reporting a particular radiopharmaceutical. Providers should consult with local Medicare contractors for appropriate coding guidance for radiopharmaceuticals.

When submitting claims to Medicare, procedural CPT codes are reported with diagnosis codes describing the patient's documented medical conditions. These diagnoses are reported using the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM).

The preceding coding guidance has been provided by authoritative sources; however, individual circumstances can be an important factor in appropriate coding for imaging procedures. It is the provider's responsibility to consult an authoritative coding resource to determine and submit appropriate codes. The existence of a code does not mean the procedure is covered and payable.

Reimbursement

Medicare reimbursement for diagnostic imaging procedures is comprised of a **professional component**, the amount paid for the physician's interpretation and report, and a **technical component**, the amount paid for all other services (including staffing and equipment costs). When combined and paid to the same individual or entity, this amount is often referred to as the **global** or **total reimbursement**.

Currently, Medicare reimburses diagnostic imaging procedures differently based on the site of care. The technical (facility) component payment in a **hospital inpatient** site of care is subsumed within the payment to the hospital that is determined based on the Diagnosis Related Group (DRG) to which the patient is assigned. In a **hospital outpatient department**, the technical component of a procedure is reimbursed under an Ambulatory Payment Classification (APC) under Medicare's hospital outpatient department prospective payment system (HOPPS). The technical component of procedures performed in an **independent diagnostic testing facility (IDTF) or a physician's office** is reimbursed under the Medicare physician fee schedule (MPFS). Since "unlisted miscellaneous codes" do not have national payment rates assigned to them in the Medicare physician fee schedule, these codes are carrier-priced, as listed in this table. Carrier-priced means the local Medicare contractors will establish, for their region, payment

amounts for the services. The professional component is reimbursed under the MPFS regardless of the setting.

Payment for Diagnostic Radiopharmaceuticals

In a **hospital inpatient** site of care, payment for radiopharmaceuticals is subsumed within the payment to the hospital that is determined based on the DRG to which the patient is assigned. In the **hospital outpatient department**, payment for diagnostic radiopharmaceuticals is made in one of two ways. Some new diagnostic radiopharmaceuticals may receive “pass-through” payment, the amount of which is established according to Medicare regulations. For diagnostic radiopharmaceuticals that do not qualify for pass-through payment, payment is packaged into the APC payment rate for the base imaging procedure. In **IDTFs and physician offices**, radiopharmaceuticals are paid at 95% of the average wholesale price (AWP) or are carrier-priced (the local contractors determine an allowance).¹¹

Refer to Table 1 for Medicare national payment amounts for CPT codes 78803 and 78999 for relevant sites of service. For information on Medicare payment rates for SPECT and CT procedures based on your specific locality, consult your local Medicare contractor.

Table 1: 2008 Medicare Reimbursement for SPECT/CT for Selected Tumor Imaging and Localization
(Reflects National Rates, Unadjusted for Locality)

CPT Code	Reimbursement Component	Hospital Inpatient Department¹²	Hospital Outpatient Department¹³	IDTF and Physician Office^{14, 15}
CPT 78803 Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); tomographic (SPECT)	Technical	Included in DRG	\$981.10	\$293.65
	Professional	\$52.94	\$52.94	\$52.94
	Total	DRG + \$52.94	\$1034.04	\$346.59
CPT 78999 Unlisted miscellaneous procedure, diagnostic nuclear medicine	Technical	Included in DRG	\$115.86	Carrier Priced
	Professional	Carrier Priced	Carrier Priced	Carrier Priced
	Total	DRG + Carrier Priced	\$115.86 + Carrier Priced	Carrier Priced

Coverage

Medicare’s National Coverage Determination (NCD) for SPECT is limited to certain indications, including selected tumors. It does not address specific coverage requirements for SPECT in the

diagnosis, staging, treatment monitoring, or restaging of tumors. In addition, the NCD does not address SPECT/CT fusion imaging. The NCD is described in the Internet Manual for Medicare National Coverage Determinations at http://www.cms.hhs.gov/manuals/downloads/ncd103c1_Part4.pdf (scroll to Section 220.12).

In the absence of specific national coverage guidelines, coverage decisions are at the discretion of local Medicare contractors (referred to as carriers and fiscal intermediaries). Some Medicare local contractors have developed Local Coverage Determinations (LCDs) that address specific applications of SPECT imaging. These policies may include coverage for some, but not all tumor localizations. Additionally, local coverage may vary for the diagnosis, staging, treatment monitoring, and restaging of tumors. To confirm coverage, consult with your local Medicare contractor. A directory of local Medicare contractors can be accessed at http://www.cms.hhs.gov/ContractingGeneralInformation/Downloads/02_ICdirectory.pdf. To access specific LCDs, refer to <http://www.cms.hhs.gov/mcd/search.asp> or the individual contractor's website.

As noted above, if a complete CT scan is not specifically ordered, and the CT is performed for localization purposes only, it is not appropriate to code the CT study.¹⁶ In this case, separate coverage for CT localization is not required.

Alternatively, if a complete CT study is ordered, medically necessary (according to Medicare coverage determinations) and given a separate interpretation, coverage must be addressed. Medicare's national coverage determination (NCD) for CT states that CT scans may be covered as diagnostic services if reasonable and necessary, and if performed on an FDA-approved model of CT equipment. The NCD indicates that local Medicare contractors have discretion to determine the circumstances under which a CT scan is covered. The NCD does not address CT localization for SPECT/CT fusion imaging or CT attenuation correction. The NCD for CT is described in the Internet Manual for Medicare National Coverage Determinations at http://www.cms.hhs.gov/manuals/downloads/ncd103c1_Part4.pdf (scroll to Section 220.1).

With respect to private payers, some may rely on Medicare reimbursement determinations, while others consider alternative information. Therefore, it is important to consult with individual private payers regarding coverage for these procedures as well.

Coverage for Diagnostic Radiopharmaceuticals

There is no Medicare national coverage determination on diagnostic radiopharmaceuticals. Some Medicare local contractors have developed LCDs that address coverage for diagnostic radiopharmaceuticals. LCDs may restrict coverage to specific indications and patient conditions. Absence of a local determination does not imply non-coverage. The local contractors may review medical necessity on a case-by-case basis. To access LCDs, refer to the link noted above.

¹ Information presented in this document is current as of January 15, 2008. Any subsequent changes which may occur in coding, coverage and payment are not reflected herein.

² The Food and Drug Administration (FDA) approved labeling for a particular item of GEHC equipment may not specifically cover all of the procedures discussed in this customer advisory. Some payers may in some instances treat a procedure which is not specifically covered by the equipment's FDA-approved labeling as a non-covered service.

³ The federal statute known as the Stark Law (42 U.S.C. §1395nn) imposes certain requirements which must be met in order for physicians to bill Medicare patients for in-office radiology services. In some

states, similar laws cover billing for all patients. In addition, licensure, certificate of need, and other restrictions may be applicable.

- ⁴ CPT codes and descriptions only are copyright © 2007 American Medical Association. All rights reserved. No fee schedules are included in CPT. The American Medical Association assumes no liability for data contained or not contained herein.
- ⁵ Response to coding inquiry submitted to the Society of Nuclear Medicine, response dated December 7, 2004.
- ⁶ American Medical Association. CPT® 2008 Professional Edition.
- ⁷ ACR Radiology Coding Source, May/June 2003, Vol. 1, Issue 3.
- ⁸ Ibid.
- ⁹ Response to coding question posted on the Society of Nuclear Medicine website, response dated April 11 2007. <http://interactive.snm.org/index.cfm?PageID=5630&RRID=1995>
- ¹⁰ Effective January 1, 2005, existing CPT codes, 78464 and 78465, for SPECT myocardial perfusion imaging include a new phrase, "attenuation correction, when performed". (American Medical Association. *CPT Changes- An Insider's View 2005*) It can be concluded that the same scenario exists for attenuation correction when used with SPECT as reported by CPT code 78803.
- ¹¹ Federal Register, Vol. 69, No. 179, September 16, 2004 and the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, sec. 303(h).
- ¹² Third party reimbursement amounts and coverage policies for specific procedures will vary by payer and by locality. The technical component is paid pursuant to the hospital inpatient prospective payment system. The professional component is generally paid under the Medicare physician fee schedule (MPFS); however, for unlisted miscellaneous procedure codes, local Medicare contractors determine the payment rate. The MPFS payment is based on relative value units published in Federal Register, Vol. 72, No. 227, November 27, 2007 with revisions published in Federal Register, Vol. 73, No. 10, January 15, 2008 and an update to the conversion factor of 0.5%. Per the Medicare, Medicaid and SCHIP Extension Act of 2007, these professional payment amounts are applicable through June 30, 2008. Amounts do not necessarily reflect any subsequent changes in payment since publication. To confirm reimbursement rates for specific codes, consult with your local Medicare contractor.
- ¹³ Third party reimbursement amounts and coverage policies for specific procedures will vary by payer and by locality. The technical component is a payment amount assigned to an Ambulatory Payment Classification (APC) under the hospital outpatient prospective payment system, as published in Federal Register, Vol. 72, No. 227, November 27, 2007. The professional component is generally paid under the Medicare physician fee schedule (MPFS); however, for unlisted miscellaneous procedure codes, local Medicare contractors determine the payment rate. The MPFS payment is based on the relative value units as published in Federal Register, Vol. 72, No. 227, November 27, 2007 with revisions published in Federal Register, Vol. 73, No. 10, January 15, 2008 and an update to the conversion factor of 0.5%. Per the Medicare, Medicaid and SCHIP Extension Act of 2007, the professional payment amounts are applicable through June 30, 2008. Amounts do not necessarily reflect any subsequent changes in payment since publication. To confirm reimbursement rates for specific codes, please consult with your local Medicare contractor.
- ¹⁴ Third party reimbursement amounts and coverage policies for specific procedures will vary by payer and by locality. The technical and professional components are generally paid under the Medicare physician fee schedule; however, for unlisted miscellaneous procedure codes, local Medicare contractors determine the payment rate. The MPFS payment is based on relative value units published in Federal Register, Vol. 72, No. 227, November 27, 2007 with revisions published in Federal Register, Vol. 73, No. 10, January 15, 2008 and an update to the conversion factor of 0.5%. Per the Medicare, Medicaid and SCHIP Extension Act of 2007, these technical and professional payment amounts are applicable through June 30, 2008. The total reimbursement amount for the IDTF and physician office settings reflects the DRA cap adjustment when applicable. Amounts do not necessarily reflect any subsequent changes in payment since publication. To confirm reimbursement rates for specific codes, please consult with your local Medicare contractor.
- ¹⁵ Per the Deficit Reduction Act (DRA) of 2005, designated imaging services with a 2008 Medicare physician fee schedule technical payment (prior to geographic adjustment) that exceeds the comparable 2008 hospital outpatient prospective payment system (HOPPS) technical payment (prior to geographic adjustment), as published in Federal Register, Vol. 72, No. 227, November 27, 2007, will be capped at the 2008 HOPPS payment amount.
- ¹⁶ ACR Radiology Coding Source, May/June 2003, Vol. 1, Issue 3.