Article Title
Coding and Billing Guidelines for Radiopharmaceutical Agents (RAD-026)

Article Revision Effective Date
01/01/2010

National Coverage
Title XVIII of the Social Security Act section 1862(a) (1) (A). This section allows coverage and payment of those services that are considered medically reasonable and necessary.

Title XVIII of the Social Security Act section 1862(a) (7). This section excludes routine physical examinations and services.

Title XVIII of the Social Security Act section 1833(e). This section prohibits Medicare payment for any claim which lacks the necessary information to process the claim.

Article Text
The Benefit Improvement Protection Act (BIPA) §522 created Local Coverage Determinations (LCD) that consist only of reasonable and necessary information. LCDs will replace the Local Medical Review Policies (LMRP).

Radiopharmaceutical Agents (RAD-026) has been converted to a LCD. In compliance with the regulations, coding guidelines and other information from the former LMRP has been moved to this document. This document should be utilized in combination with the LCD.

Medicare Regulation Excerpts:

Pub. 100-4 Medicare Claims Processing Manual- Chapter 12 - Physicians/Nonphysician Practitioners 20.4.4 - Supplies (Rev. 1, 10-01-03) B3-15900.2

Carriers make a separate payment for supplies furnished in connection with a procedure only when one of the two following conditions exists:

The supply is a pharmaceutical or radiopharmaceutical diagnostic imaging agent (including codes A4641 through A4647); pharmacologic stressing agent (code J1245); or therapeutic radionuclide (CPT code 79900). Other agents may be used which do not have an assigned HCPCS code. The procedures performed are:

- *Diagnostic radiologic procedures (including diagnostic nuclear medicine) requiring pharmaceutical or radiopharmaceutical contrast media and/or pharmacologic stressing agent;*
- *Other diagnostic tests requiring a pharmacologic stressing agent;*
- *Clinical brachytherapy procedures (other than remote after-loading high intensity brachytherapy procedures (CPT codes 77781 through 77784) for which the expendable source is included in the TC RVUs); or*
- *Therapeutic nuclear medicine procedures.*

Drugs are not supplies, and may be paid incidental to physicians' services as described in Chapter 17.

Coding Guidelines:

1. The radiopharmaceutical HCPCS codes listed below should be filed on the same claim as the procedure code that utilized the radiopharmaceutical. If both codes are not reported on the same claim, it could result in payment delays or unnecessary denials.

2. The ordering or referring physician's name and UPIN must be indicated in item 17 and 17a of the CMS 1500 form, respectively or 2310A or 2420F loop NM1 & REF segments for EMC.

3. Codes 78000-79999 can be billed with the modifiers -26 and -TC. Neither the total nor the TC portion will be paid in the in- or outpatient hospital setting; this is a Part A service, and should be billed to the Intermediary.

4. Similarly, agent codes (e.g., A4641, A4642, A9500-A9507, A9600) will not be paid in either the in- or outpatient hospital setting; this also should be billed to the Part A Intermediary.

5. 78804 may only be reported once, no matter how many scans are reported. This code represents the administration of radiopharmaceutical and performance and interpretation of all scans.

6. Rituximab prior to the administration of Zevalin is separately payable.

7. **Coding radiopharmaceuticals**
Check the radiopharmaceuticals current HCPC's code description. The codes description defines **one** unit of service.

   A. Most radiopharmaceuticals that have their own code include in the code's description "per study dose" **and** include a range of mCi's. These radiopharmaceutical agents should be billed as **one** unit of service per study. It is **not** appropriate to bill per mCi for the codes that include per study dose in its HCPC's description. It would be unusual to have more than 2 units of service for most of the agents with a per study dose or per treatment in its description.

      Example: A9503 is defined as Technetium Tc 99m, Medronate, (MDP), diagnostic, **per study dose, up to 30 mCi's).** Per study dose, up to 30 millicuries is **one unit of service.** If the provider administers **one to 30mCi** of this agent for a study, it should be billed as **one** unit of service.

   B. Some radiopharmaceutical code descriptions are defined as **per millicurie** (mCi). These agents should be billed per millicurie. The number of mCi's that were administered to the patient should be the same as the number of services listed in the unit field on the claim.

   Example: A9512 is defined as Technetium Tc-99m-Pertechnetate, Diagnostic, **per mCi.** If you administer 5 mCi of this agent to your patient then 5 would be listed in the units' field of the claim.

   C. NOC radiopharmaceutical codes (A4641, A9699) should be billed with one unit of service. The claim must include the name and total dosage of the agent in item 19 of the CMS 1500 form, or the electronic equivalent for EMC.

8. There are several kits that can be used for both myocardial infarct imaging and blood pool imaging tests. Examples of these kits include CIS-PRO, Technescan, Phosphotec. The kits are

prepared/mixed differently depending on the test that is performed. The radiopharmaceutical code billed should correspond to the test performed.

9. **Cardiac blood pool imaging,**
There are two types of studies: first pass studies and equilibrium studies.

A. First pass Studies (CPT codes 78481 and 78483)
First pass studies utilize rapidly acquired images of a bolus of a radiopharmaceutical agent as it moves through the heart. The first pass technique only views the initial flow of the radiopharmaceutical as it moves through the heart.

78481 is a single first pass study at rest **or** stress, requiring a single injection. The radiopharmaceutical may be any product that has enough photons packed into the bolus to provide adequate counting statistics from which assessment and measurements of ejection fraction and wall motion can be derived.

78483 is a multiple first pass study at rest and stress, and requires two injections of appropriate radiopharmaceutical agent(s).

The radiopharmaceuticals used for these studies are A9512 and A9539.
A9512 Technetium Tc-99m-Pertechnetate, Diagnostic, per mCi
A9539 Technetium Tc-99m Pentetate, Diagnostic, per study dose, up to 25 mCi's

B. Gated Equilibrium studies (78472, 78473, 78494, and 78496).
Unlike the first pass technique, gated blood pool imaging studies are assessed over multiple cardiac cycles. This procedure involves binding /tagging the red blood cells with Technetium tc99m.

A9560 Technetium Tc-99m Labeled Red Blood Cell's (RBC's), Diagnostic, per study dose, up to 30 mCi's,

A9560 is the radiopharmaceutical code that should be used for tagging red blood cells. It should be used for both the invitro (Ultratag) and invivo (non-radioactive "cold"pyrophosphate (PYP) followed by an injection of 99m technetium) methods. Regardless of the method used to tag the red blood cells, invitro or invivo, the correct code to use is A9560.

Invitro-whole blood is withdrawn from the patient and transferred to a sterile Ultratag bag or vial. Tc 99m Pertechnetate is added to the bag or vial and incubated at room temperature for approximately 25 minutes. The patient is then injected with labeled RBCs.

invivo- Pt is injected with "non-radioactive" "cold" Pyrophosphate (PYP) reconstituted with normal saline followed 20 minutes later by an injection of Tc 99m Pertechnetate.

Note: Pertechnetate is a commonly used radiopharmaceutical given during a nuclear scan to allow imaging with specialized equipment. The cost for the pertechnetate, in this instance, is considered part of the payment for A9560 and thus not separately payable. The individual components of preparing tagged red blood cells will not be paid for separately. A9512 will not be paid when billed with A9560. Invoices will not be necessary for reimbursement of A9560.

10. **Myocardial Infarct Imaging - CPT codes 78466-78469.**

A9538 Technetium Tc-99m pyrophosphate, diagnostic, per study dose up to 25 mCi's is used for these procedures. This code is used for Pyrophosphate (PYP) compounded /prepared with technetium Tc99m pertechnetate. It is prepared external to the patient and is then administered intravenously for cardiac "hot spot" imaging.

Do not use HCPCS A9538 when administering "non-radioactive" Pyrophosphate with saline followed by a second administration of Tc99m pertechnetate. A9512 will not be paid separately when billed with A9538. Invoices will not be necessary for reimbursement of A9538.

11. **Myocardial Perfusion imaging studies (78451-78454)**
Radiopharmaceuticals commonly used for these studies include A9500 and A9502.
A9500 Technetium Tc-99m, Sestamibi, diagnostic, per study dose,
A9502 Technetium Tc 99m tetrofosmin, diagnostic, per study dose

If two (2) per study doses of these agents are used, one for rest and one for the stress portion of the study, it would be billed as two (2) units.

Example: A9500 is defined as Technetium Tc 99m sestamibi, diagnostic, **per study dose.** When multiple studies (rest and stress) nuclear medicine procedures are performed using this agent for two studies it would be appropriate to bill for 2 units.

12. Electronic submitters should indicate they have additional documentation or an **invoice**, which Medicare may require, by indicating "DOCUMENTATION AVAILABLE UPON REQUEST" in the electronic equivalent of item 19. If the additional documentation or an invoice you have is needed for Medicare to make its payment determination, a development letter will be sent requesting the information. If you do not indicate the availability of the additional documentation, or the information is not returned timely, the claim will be returned as unprocessable.

13 Invoices must clearly indicate the name of the radiopharmaceutical and the dosage billed must correspond to the HCPC's code description.

a. HCPC's descriptions with a specified unit of measure such as mCi :

A9512 is defined as Technetium Tc-99m-Pertechnetate, Diagnostic, **per mCi.** The invoice must indicate the number of mCi in a dose. The number of mCi's would match the number of units billed on the claim. If the invoice lists a dose price, you must indicate the number of mCi's in the dose. This can be added to the manufacturer's invoice and must be signed or initialed to indicate information was added.

b. HCPC's descriptions that state per study dose, up to a specified number of millicuries:

A9504 Technetium Tc 99m Apcitide (Acu Tect), diagnostic, **per study dose, up to 20 millicuries (mCi).** Per study dose, up to 20 millicuries is **one unit of service.** If the provider administers **one to 20mCi** of this agent for a study, it should be billed as **one** unit of service. The invoice should indicate the cost of the radiopharmaceutical dosage given for the study.

14. Electronic submitters should indicate they have additional documentation or an **invoice**, which Medicare may require, by indicating "DOCUMENTATION AVAILABLE UPON REQUEST" in the electronic equivalent of item 19. If the additional documentation or an invoice you have is

needed for Medicare to make its payment determination, a development letter will be sent requesting the information. If you do not indicate the availability of the additional documentation, or the information is not returned timely, the claim will be returned as unprocessable.

15. A9547 Indium-IN-111 Oxyquinoline, will not be paid when billed with A9570 Indium-111 labeled autologous white blood cells, or A9571 Indium in-111 labeled autologous platelets.

A9547 Indium-IN-111 Oxyquinoline, Diagnostic, per 0.5 mCi,
Leukocyte labeling (CPT 78805-78807, 78185)
Platelet labeling. (CPT 78190-78191, 78199)

A9570 Indium-111 labeled autologous white blood cells, diagnostic, per study dose
Leukocyte labeling (CPT 78805-78807, 78185)

A9571 Indium in-111 labeled autologous platelets, diagnostic, per study dose (A9571)
Platelet labeling. (CPT 78190-78191, 78199)

Source of Information:
Society of Nuclear Medicine (SNM):
Practice Management Coding Corner:

1. Cardiac Blood Pool Imaging Radiopharmaceutical Codes
http://interactive.snm.org/index.cfm?PageID=2437&RPID=1995

2. Gastrointestinal Bleed Imaging Radiopharmaceutical Codes

http://interactive.snm.org/index.cfm?PageID=5018&RPID=1995

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*01/01/2010-website article; 01/01/09 09 Code updates; 01/01/08; 11/01/2007; 08/01/2007

Date/Number/Explanation
*01/01/2010- Code description change A9500, #11 example updated to reflect this change; removed deleted codes **78460-78465, 78478, 78480 added 78451-78454,**

01/01/2009- 09 HCPC update-A9502-description change; 01/01/08- Added # 15 billing instruction due to new codes A9570, A9571; 11/01/2007-Coding guideline #9 clarified – A9512 allowed for first pass studies (78481 & 78483) and removed from coverage with A9560; 08/01/2007 –Added coding instructions for blood pool imaging &MI imaging and myocardial perfusion imaging. See #7-13 instructions, changed EMC instructions #2 and 7C -revision one