RADIOLOGY
Los Al Coders Network
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Radiology Subsections
- Diagnostic Radiology
- Diagnostic Ultrasound
- Radiologic Guidance
- Breast Mammography
- Bone/Joint Studies
- Radiation Oncology
- Nuclear Medicine

Component Coding
- Three component terms
  - Professional
  - Technical
  - Global

Professional Component
- Physician portion of service, includes
  - Supervision of technician
  - Interpretation of results, including written report

Technical Component
- Technologist’s services
- Equipment, film, and supplies

Global Procedure
- Both professional and technical portions of radiology service
- If facility where procedure was performed owns the equipment and has a radiologist on staff who reads the report global service
  - No- C, No- B
Component Modifiers

• If only professional component of radiology service provided append -26 to code

Component Modifiers

• If only technical component of radiology service provided append -TC to code

Global Procedure

• If both professional and technical components of radiology service provided, use no modifier

Procedures

• Fluoroscopy views inside of body, projects onto television screen
• Live images by which physician can view function and structure of organ
  – Example: 71034, Chest x-ray with fluoroscopy

Magnetic Resonance Imaging

• MRI uses magnetic energy to view soft tissue structures
  – Example: 72148, MRI of lumbar spine canal

(Mcont’d…)
Tomography or CT

• Tomography used to view single plane of body
  – Example: 70450, Tomographic scan of head or brain

(Cont’d…)

Position and Projection

• Position: Way in which patient placed
• Projection: Path x-ray beam travels

CT Scan of Lung Carcinoma

(…Cont’d)

For Example: Chest X-Ray

• Professional component:
  – 71030 $ (Supervision and final report)
• Technical component:
  – 71030 \( \text{C} \) (Technician, supplies, equipment)
• Global procedure: 71030 (both professional and technical)

Planes of Body

Global Procedure

• Third-party payers usually reimburse
  – 40% professional component
  – 60% technical component
  – 100% global procedure
Contrast Material

- Notes indicate codes for components
  - Example: 75801, Lymphangiography; see 38790 (Injection procedure)
- Oral or rectal contrast does not qualify for "with contrast"

Diagnostic Radiology

- Most standard radiographic procedures
- Codes often divided on whether contrast material used
- Codes further divided on number views

Diagnostic Radiology

- Used to:
  - Diagnose disease
  - Monitor disease process—progression or remission
  - Therapeutic procedures and guidance

Diagnostic Procedures Include

- X-ray
- Computerized axial tomography (CAT or CT scan)
- Magnetic resonance imaging (MRI)
- Angiography

Computerized Axial Tomography

- X-ray image taken in sections
- Computer reconstructs and enhances image

Magnetic Resonance Imaging

- Uses magnetic fields to produce an image displayed on computer screen
- Codes of same area (e.g., spine) divided on whether or not contrast material used
Angiography
- Used to view vessel obstructions
- Dye injected into vessel

Special Note:
- If fewer than total number of views specified in code provided:
  - Use - 2, Reduced Service

A-Mode
- A = Amplitude
- Technique used to map structure outline
- Displays one-dimensional image

M-Mode
- M = Motion
- Technique used to display movement of structure
- Displays one-dimensional image

B-Scan
- B = Brightness
- Technique used to display movement of tissues and organs
- Known as gray scale ultrasound
- Displays two-dimensional image

Diagnostic Ultrasound
- Uses high-frequency sound waves to image anatomic structures
Subheadings

• Nine subheadings of Diagnostic Ultrasound
• Primarily based on anatomy

Angiography

• Radiologist uses angiography to diagnose vascular conditions
• Examples:
  – Malformations
  – Strokes
  – Myocardial infarctions

Ultrasound Modes and Scans

• A-mode
• M-mode
• B-scan
• Real-time scan

Real-Time Scan

• Technique used to display both structure and motion with time of organ and tissues
• Displays two-dimensional image

Extent of Study

• Codes often divided on extent of study
• Example: Extent of scan as follows

Extent of Study

• Complete: Scans entire body
• Limited: Scans part of body, i.e., one organ
• Follow-up/repeat: Limited study of part of body that was scanned previously
Three Locations For Ultrasound Services

- 76506-76999: Radiology codes for diagnostic ultrasound services
- 93875-93990: Medicine codes for vascular studies
- 93303-93350: Medicine codes for echocardiography

Radiologic Guidance, Breast, Mammography, Bone/Joint Studies

- Radiologic Guidance (77001-77032)
  - Fluoroscopic, computed tomography, magnetic resonance guidance, and other
- Breast Mammography (77051-77059)
  - Such as screening, and computer aided detection
- Bone/Joint Studies (77071-77084)
  - Such as bone density and joint survey

Nuclear Medicine

- Placement of radioactive material into body and measurement of emissions
- Used both for diagnosis and treatment
  - Example: Stress test

Nuclear Medicine

- Codes divided primarily on organ system
  - Exception: "Therapeutic," for radiopharmaceutical therapies

Positron Emission Tomography (PET)

- 78814 78816
- Based on location (such as, skull base or chest)

![PET lesion in the liver](image)

Vascular Interventional Radiology

- medicinal specialty involving the use of catheters and imaging to assist in performing diagnostic and therapeutic procedures within certain areas of the human body.
  - "vascular": interventions into the arteries and vessels
  - "interventional": these procedures are invasive as opposed to the typical x rays or CT scans, etc. that are noninvasive.
  - minimally invasive when compared to open surgical procedures.
Surgical component
[procedure code]:

- from the surgery section of coding manual that describe the main procedure that is being performed with the assistance of radiological technology.
- represent the work of inserting the catheter and/or injecting the radiopharmaceutical agent or contrast for diagnostic imaging procedures or the codes describe the specifics of the work for therapeutic procedures.

Radiological component
[Supervision and Interpretation (S&I) codes]:

- from the radiology section of the coding manual that represent the radiological component work that supports each diagnostic or therapeutic service.
  - imaging guidance or supervision to assist in visualizing the area or region of the body and in performing the details of any additional therapeutic procedures.
  - include the physician work of producing a report describing his interpretation of his findings after visualizing a certain region for diagnostic purposes.
- radiological component is not always called the “S&I” code.
  - some radiological procedures are just performed to provide guidance and visualization to the surgeon performing the procedure and are referred to as only guidance procedure codes.
  - for selective vascular interventional radiology (IR), S&I is the term that is used almost all of the time in CPT in describing the radiological component code.

Interventional Radiologist

- Combination radiologist and surgeon
- Provides total procedure for cystography with contrast
  - Report 74430, X ray portion and
  - 51600 for injection procedure,
  - Plus code for supply of contrast material (e.g., 99070)

Interventional Radiology

- Procedure name: Hysterosalpingography (HSG)
- Surgical component [procedure] code: 58340 Catheterization and introduction of saline or contrast for saline infusion sonohysterography (SIS) or hysterosalpingography
- Radiological component [S&I] code: 74740 Hysterosalpingography, radiological supervision and interpretation
- Explanation: an HSG is a diagnostic procedure and the work of catheterization and contrast introduction is represented by the procedure code, while the work of visualizing the uterus and fallopian tubes and providing an interpretation of what was seen is represented by the S&I code

Arthrography (elbow)

- Surgical component code: 24220 Injection procedure for elbow arthrography
- Radiological component code: 70385 Radiologic examination, elbow, arthrography, radiological supervision and interpretation
- Explanation: diagnostic procedure: joint is visualized and examined for any abnormalities; the work of injection is reflected in the surgical component code and the work of visualization and interpreting and reporting what was visualized is reflected in the radiological component code.
**Balloon dilation of esophagus for achalasia**

- Surgical component code: 43458 Dilation of esophagus with balloon (30 mm diameter or larger) for achalasia
- Radiological component code: 74360 Intraluminal dilation of strictures and/or obstructions (e.g., esophagus), radiological supervision and interpretation
- Explanation: therapeutic procedure and here we see the surgical component code representing the specific surgical procedure done and the radiological component code representing the work of providing visual guidance for the procedure and producing a report of the therapeutic procedure done.

**Percutaneous aspiration of spinal cord cyst under ultrasound guidance**

- Surgical component code: 62268 Percutaneous aspiration, spinal cord cyst or syrinx
- Radiological component: 76942 Ultrasonic guidance for needle placement (e.g., biopsy, aspiration, injection, localization device), imaging supervision and interpretation
- Explanation: the surgical work in carrying out the procedure is represented by the surgical component code and the radiological guidance and reporting work is presented by the S&I or radiological component code

**Vascular IR Procedures: Terms to know**

- Vessels: veins and arteries
  - diagnostic vascular and
  - therapeutic vascular procedures.
- Nonselective vascular procedures: insertion of a catheter directly into the single vessel that is visualized and/or treated
- Selective vascular procedures: involve the catheters being passed selectively through one or more vessels with the goal of reaching the one vessel that is desired for visualization and/or definitive treatment
- Commonly used codes are in the following range:
  - 34001-37216 with codes for S&I (75600-75996)

**Frequently used codes**

- Selective and a few nonselective vascular procedures:
  - 36000-36248
  - S&I 75600-75790

**Nonselective vascular procedures: diagnostic**

Surgical and radiological component codes for nonselective vascular diagnostic procedures

- 36005 Extremity venography (75820-75822)
- 36010 Introduction of catheter, superior or inferior vena cava (75825-75827)
- 36011 Introduction of catheter, right heart or main pulmonary artery (75746; 75767)
- 36100 Introduction of needle or intracatheter; carotid or vertebral artery (75676-75685)
- 36125 Introduction of needle or intracatheter; retrograde brachial artery (75650)
- 36140 Introduction of needle or intracatheter; extremity artery (75710-75716; 75780)
- 36145 Introduction of needle or catheter, arteriovenous shunt created for dialysis (cannula, fistula, or graft) (75760)
- 36160 Introduction of needle or intracatheter, aortic, transiliac (75650)
- 36200 Introduction of catheter, aorta (75600-75650)
- 36481 Percutaneous portal vein catheterization by any method (75885-75889)
- 36500 Vascular catheterization for selective organ blood sampling (75893)
- 37200 Transcatheter biopsy (75970)
- 38200 Injection procedure for splenoportography (75810)
<table>
<thead>
<tr>
<th>Nonselective vascular IR example: Diagnostic procedure</th>
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<tbody>
<tr>
<td>• Procedure: Aortography of the abdominal aorta</td>
</tr>
<tr>
<td>• Surgical component: 36200 Introduction of catheter, aorta</td>
</tr>
<tr>
<td>• Radiological component: 75625 Aortography, abdominal, by serigraphy, radiological supervision and interpretation</td>
</tr>
<tr>
<td>• This is nonselective because the catheter is directed to the aorta only.</td>
</tr>
<tr>
<td>• Special note: if the lower extremity vessels are also visualized using the same injection of contrast that was done for the aortic visualization, only 75630 is necessary. This procedure is still considered nonselective because the catheter is not moved down into the lower vessels and another injection performed there.</td>
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<tr>
<td>• Procedure: Brachial arteriogram in left upper extremity</td>
</tr>
<tr>
<td>• Surgical component code: 36140 Introduction of needle or intracatheter; retrograde brachial artery</td>
</tr>
<tr>
<td>• Procedure component code: 75710-LT Angiography, extremity, unilateral, radiological supervision and interpretation</td>
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<th>Nonselective vascular IR diagnostic procedure</th>
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<tr>
<td>• Procedure: Venography of common femoral vein in right lower extremity</td>
</tr>
<tr>
<td>• Surgical component: 36005 Injection procedure for extremity venography (including introduction of needle or intracatheter)</td>
</tr>
<tr>
<td>• Radiological component: 75820-RT Venography, extremity, unilateral, radiological supervision and interpretation</td>
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<tr>
<td>• Procedure: Angiography of left common carotid artery</td>
</tr>
<tr>
<td>• Surgical component code: 36100 Introduction of needle or intracatheter, carotid or vertebral artery</td>
</tr>
<tr>
<td>• Radiological component code: 75676-LT Angiography, carotid, cervical, unilateral, radiological supervision and interpretation</td>
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<th>Nonselective vascular procedures Diagnostic for lymph vessels</th>
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<tr>
<td>• For imaging of the lymph vessels, the following codes are used.</td>
</tr>
<tr>
<td>• Surgical component code for all lymph angiographies: 38790 Injection procedure; lymphangiography</td>
</tr>
<tr>
<td>• Corresponding radiological component codes: 75801-75807</td>
</tr>
<tr>
<td>• These are all nonselective</td>
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<th>Nonselective vascular procedures Diagnostic for lymph vessels</th>
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<tr>
<td>terms specific to selective vascular diagnostic interventions (angiographies and venographies)</td>
</tr>
<tr>
<td>• Vascular family: a group of vessels that branch from one original main vessel</td>
</tr>
<tr>
<td>• First order vessels: those vessels whose origin arises directly from the aorta or the vena cavae</td>
</tr>
<tr>
<td>• Second order vessels: those vessels whose origin arises from 1st order vessels</td>
</tr>
<tr>
<td>• Third order vessels: those vessels whose origin arises from 2nd order vessels</td>
</tr>
<tr>
<td>• Retrograde: an approach that moves &quot;backward&quot; through a family of vessels; catheter is passed through a higher order vessel (than the 1st) and then manipulated into a first order vessel and beyond</td>
</tr>
<tr>
<td>• Antegrade: an approach that moves &quot;forward&quot; through a family of vessels starting from the first order vessels</td>
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<tr>
<td>• Ipsilateral: same side</td>
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<tr>
<td>• Contralateral: opposite side</td>
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First order arteries
(36215 for thoracic or brachiocephalic branch—
above diaphragm or
36245 abdominal, pelvic, or lower extremity
branch—below diaphragm)
1. Aorta (36230 with 75500-75590; this is
nonselective)
2. Common carotid artery (75570)
3. internal mammary artery (36229)
4. left subclavian (innominate) and subclavian artery (75710
unilateral extremity or 75716 bilateral extremity)
5. left carotid (innominate-extrapharyngeal, left bronchial
(bronchial) 75729 vascular)
6. subclavian, intercostal: 75703 spinal, left subclavian:
7. right and left main pulmonary arteries (75741 unilateral:
75743 bilateral)
8. celiac trunk (75720 vascular)
9. thoracic (75722 unilateral, 75727 bilateral)
10. thoracic (75726 anterior, 75728 posterior, 75729 vascular)
11. thoracic, abdominal: 75703, lumbar: 75710, middle
12. subclavian and inferior mesenteric, middle suprarenal:
13. internal iliac, ovarian, testicular: 75736
14. common iliac (75710 unilateral extremity or 75715
bilateral extremity.)

*Remember to view the diagram with the opposite
laterality (left vs. right) as you view.

References

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