2018 Radiology
Essential links from CPT® codes to ICD-10-CM and HCPCS

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Introduction

Optum360 is pleased to present the 2017 Radiology Cross Coder. The popularity of similar publications, such as Surgical Cross Coder, indicates that a one-stop reference for radiology codes is valuable to coders. Fully comprehensive, Radiology Cross Coder links more than 600 CPT® radiology codes to corresponding ICD-10-CM diagnosis, CPT surgery, and HCPCS Level II codes. Optum360 believes that professional coders working in physician offices, clinical outpatient, hospital, as well as payer settings will embrace this reference.

Radiology Cross Coder is based on the radiology section of Current Procedural Terminology (CPT). Up-to-date CPT radiology codes link to the following related medical coding systems:

- International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM)
- Healthcare Common Procedure Coding System (HCPCS)

All coding relationships in Radiology Cross Coder start with the radiology section of the CPT book presenting a general clinical picture of each code. Pertinent radiology-related coding relationships were carefully reviewed and screened for appropriate information.

Certain radiology procedures such as chest x-rays are performed for almost any diagnosis and are simply too numerous to list. In such instances, the associated diagnoses do not appear in Radiology Cross Coder. For a discussion on secondary diagnosis codes, see the ICD-10-CM section later in this introduction.

Some CPT codes are omitted from the listing because consistent and reliable cross-links are almost impossible to establish. Unlisted procedure codes are an obvious example. Certain types of add-on codes are also treated somewhat differently. These codes are discussed in greater detail under the CPT Codes section later in this introduction.

As a coding reference, Radiology Cross Coder presents “most likely” scenarios as derived from clinical information sources. However, Radiology Cross Coder is not a substitute for ICD-10-CM, or any other medical coding reference, and users are urged to regularly consult all available sources. The absence of any specific code does not necessarily indicate that its association to the base procedure code is inappropriate. Assuming all rules of radiology coding are followed, excepted diagnosis codes may prove appropriate to a specific code scenario.

Radiology Cross Coder does not include coding rules or guidelines. Once again, the user is urged to consult the original coding reference (e.g., CPT, ICD-10-CM, HCPCS Level II, etc.) or one of several reputable medical coding instruction manuals.

Format

An understanding of this book’s format allows users to easily navigate its content. Information within the main section ties to the CPT book and the codes are presented in the same numeric order as the radiology section.

Sections

Radiology Cross Coder provides linked information to the CPT code range 70010 to 79999. The codes are divided into the same sections and subsections as the radiology section of the CPT book. For example, the diagnostic radiology section is further divided into anatomical subsections, such as head and neck, spine and pelvis, and abdomen. There are also sections for diagnostic ultrasound, radiographical guidance, breast mammography, bone/joint studies, radiation oncology, and nuclear medicine.

Codes and Code Ranges

The data within each CPT code set of Radiology Cross Coder is presented as follows:

- CPT code or code range
- CPT codes and descriptions
- Associated CPT codes and descriptions
- ICD-10-CM diagnostic codes and descriptions
- HCPCS Level II codes and descriptions

For example:

74190
74190 Peritoneogram (eg, after injection of air contrast), radiological supervision and interpretation

Associated CPT Codes

49400 Injection of air or contrast into peritoneal cavity (separate procedure)

ICD-10-CM Diagnostic Codes

C48.0 Malignant neoplasm of retroperitoneum
C78.6 Secondary malignant neoplasm of retroperitoneum and peritoneum
D19.1 Benign neoplasm of mesothelial tissue of peritoneum
D20.0 Benign neoplasm of soft tissue of retroperitoneum
D20.1 Benign neoplasm of soft tissue of peritoneum
D48.3 Neoplasm of uncertain behavior of retroperitoneum
D48.4 Neoplasm of uncertain behavior of peritoneum

HCPCS Level II Supplies & Services

A4641 Radiopharmaceutical, diagnostic, not otherwise classified
Q9951 Low osmolar contrast material, 400 or greater mg/ml iodine concentration, per ml
Q9958 High osmolar contrast material, up to 149 mg/ml iodine concentration, per ml
Q9959 High osmolar contrast material, 150-199 mg/ml iodine concentration, per ml
Q9960 High osmolar contrast material, 200-249 mg/ml iodine concentration, per ml
Q9961 High osmolar contrast material, 250-299 mg/ml iodine concentration, per ml
Q9962 High osmolar contrast material, 300-349 mg/ml iodine concentration, per ml
Q9963 High osmolar contrast material, 350-399 mg/ml iodine concentration, per ml
Q9964 High osmolar contrast material, 400 or greater mg/ml iodine concentration, per ml
# Diagnostic Radiology (Diagnostic Imaging)

## Head and Neck

### 70010

70010  
Myelography, posterior fossa, radiological supervision and interpretation

### Associated CPT Codes

61055  
Cisternal or lateral cervical (C1-C2) puncture; with injection of medication or other substance for diagnosis or treatment

### ICD-10-CM Diagnostic Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C71.5</td>
<td>Malignant neoplasm of cerebral ventricle</td>
</tr>
<tr>
<td>C71.6</td>
<td>Malignant neoplasm of cerebellum</td>
</tr>
<tr>
<td>C71.7</td>
<td>Malignant neoplasm of brain stem</td>
</tr>
<tr>
<td>C71.8</td>
<td>Malignant neoplasm of overlapping sites of brain</td>
</tr>
<tr>
<td>C79.31</td>
<td>Secondary malignant neoplasm of brain</td>
</tr>
<tr>
<td>C79.32</td>
<td>Secondary malignant neoplasm of cerebral meninges</td>
</tr>
<tr>
<td>C79.49</td>
<td>Secondary malignant neoplasm of other parts of nervous system</td>
</tr>
<tr>
<td>C7A.098</td>
<td>Malignant carcinoid tumors of other sites</td>
</tr>
<tr>
<td>C7A.1</td>
<td>Malignant poorly differentiated neuroendocrine tumors</td>
</tr>
<tr>
<td>C7A.8</td>
<td>Other malignant neuroendocrine tumors</td>
</tr>
<tr>
<td>D33.1</td>
<td>Benign neoplasm of brain, infratentorial</td>
</tr>
<tr>
<td>D33.7</td>
<td>Benign neoplasm of other specified parts of central nervous system</td>
</tr>
<tr>
<td>D42.0</td>
<td>Neoplasm of uncertain behavior of cerebellum</td>
</tr>
<tr>
<td>D43.0</td>
<td>Neoplasm of uncertain behavior of brain, supratentorial</td>
</tr>
<tr>
<td>D43.1</td>
<td>Neoplasm of uncertain behavior of brain, infratentorial</td>
</tr>
<tr>
<td>G83.0</td>
<td>Nonpyogenic meningitis</td>
</tr>
<tr>
<td>G83.1</td>
<td>Chronic meningitis</td>
</tr>
<tr>
<td>G83.2</td>
<td>Benign recurrent meningitis [Mollaret]</td>
</tr>
<tr>
<td>G83.8</td>
<td>Meningitis due to other specified causes</td>
</tr>
<tr>
<td>G86.0</td>
<td>Intracranial abscess and granuloma</td>
</tr>
<tr>
<td>G91.0</td>
<td>Communicating hydrocephalus</td>
</tr>
<tr>
<td>G91.1</td>
<td>Obstructive hydrocephalus</td>
</tr>
<tr>
<td>G91.2</td>
<td>(Idiopathic) normal pressure hydrocephalus</td>
</tr>
<tr>
<td>G91.8</td>
<td>Other hydrocephalus</td>
</tr>
<tr>
<td>G93.5</td>
<td>Compression of brain</td>
</tr>
<tr>
<td>G96.0</td>
<td>Cerebrospinal fluid leak</td>
</tr>
<tr>
<td>G96.12</td>
<td>Meningeal adhesions (cerebral) (spinal)</td>
</tr>
<tr>
<td>G96.19</td>
<td>Other disorders of meninges, not elsewhere classified</td>
</tr>
<tr>
<td>G97.0</td>
<td>Cerebrospinal fluid leak from spinal puncture</td>
</tr>
<tr>
<td>G97.48</td>
<td>Accidental puncture and laceration of other nervous system organ or structure during a nervous system procedure</td>
</tr>
<tr>
<td>G97.49</td>
<td>Accidental puncture and laceration of other nervous system organ or structure during other procedure</td>
</tr>
<tr>
<td>G98.8</td>
<td>Other disorders of nervous system</td>
</tr>
<tr>
<td>Q04.3</td>
<td>Other reduction deformities of brain</td>
</tr>
<tr>
<td>Q04.5</td>
<td>Megalencephaly</td>
</tr>
<tr>
<td>Q04.6</td>
<td>Congenital cerebral cysts</td>
</tr>
<tr>
<td>Q04.8</td>
<td>Other specified congenital malformations of brain</td>
</tr>
<tr>
<td>Q05.0</td>
<td>Cervical spina bifida with hydrocephalus</td>
</tr>
<tr>
<td>Q05.1</td>
<td>Thoracic spina bifida with hydrocephalus</td>
</tr>
<tr>
<td>Q05.2</td>
<td>Lumbar spina bifida with hydrocephalus</td>
</tr>
<tr>
<td>Q05.3</td>
<td>Sacral spina bifida with hydrocephalus</td>
</tr>
<tr>
<td>Q07.00</td>
<td>Arnold-Chiari syndrome without spina bifida or hydrocephalus</td>
</tr>
<tr>
<td>Q07.01</td>
<td>Arnold-Chiari syndrome with spina bifida</td>
</tr>
<tr>
<td>Q07.02</td>
<td>Arnold-Chiari syndrome with hydrocephalus</td>
</tr>
<tr>
<td>Q07.03</td>
<td>Arnold-Chiari syndrome with spina bifida and hydrocephalus</td>
</tr>
<tr>
<td>Q07.8</td>
<td>Other specified congenital malformations of nervous system</td>
</tr>
<tr>
<td>Q08.01</td>
<td>Neurofibromatosis, type 1</td>
</tr>
<tr>
<td>Q08.02</td>
<td>Neurofibromatosis, type 2</td>
</tr>
<tr>
<td>Q08.09</td>
<td>Other neurofibromatosis</td>
</tr>
<tr>
<td>T85.01XA</td>
<td>Breakdown (mechanical) of ventricular intracranial (communicating) shunt, initial encounter</td>
</tr>
<tr>
<td>T85.02XA</td>
<td>Displacement of ventricular intracranial (communicating) shunt, initial encounter</td>
</tr>
<tr>
<td>T85.03XA</td>
<td>Leakage of ventricular intracranial (communicating) shunt, initial encounter</td>
</tr>
<tr>
<td>T85.09XA</td>
<td>Other mechanical complication of ventricular intracranial (communicating) shunt, initial encounter</td>
</tr>
<tr>
<td>T85.79XA</td>
<td>Infection and inflammatory reaction due to other internal prosthetic devices, implants and grafts, initial encounter</td>
</tr>
<tr>
<td>T88.8XXA</td>
<td>Other specified complications of surgical and medical care, not elsewhere classified, initial encounter</td>
</tr>
<tr>
<td>Z08</td>
<td>Encounter for follow-up examination after completed treatment for malignant neoplasm</td>
</tr>
<tr>
<td>Z09</td>
<td>Encounter for follow-up examination after completed treatment for conditions other than malignant neoplasm</td>
</tr>
<tr>
<td>Z09.0</td>
<td>Presence of cerebrospinal fluid drainage device</td>
</tr>
</tbody>
</table>

### HCPCS Level II Supplies & Services

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q9951</td>
<td>Low osmolar contrast material, 400 or greater mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9954</td>
<td>High osmolar contrast material, 350-399 mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9955</td>
<td>High osmolar contrast material, 250-299 mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9961</td>
<td>High osmolar contrast material, 200-249 mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9962</td>
<td>High osmolar contrast material, 150-199 mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9963</td>
<td>High osmolar contrast material, 100-199 mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9964</td>
<td>High osmolar contrast material, 50-99 mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9965</td>
<td>High osmolar contrast material, up to 49 mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9966</td>
<td>Low osmolar contrast material, 400 or greater mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9967</td>
<td>Low osmolar contrast material, 350-399 mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9968</td>
<td>Low osmolar contrast material, 250-299 mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9969</td>
<td>Low osmolar contrast material, 200-249 mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9970</td>
<td>Low osmolar contrast material, 150-199 mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9971</td>
<td>Low osmolar contrast material, 100-199 mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9972</td>
<td>Low osmolar contrast material, 50-99 mg/ml iodine concentration, per ml</td>
</tr>
<tr>
<td>Q9973</td>
<td>Low osmolar contrast material, up to 49 mg/ml iodine concentration, per ml</td>
</tr>
</tbody>
</table>

### 70015

70015  
Cisternography, positive contrast, radiological supervision and interpretation

### Associated CPT Codes

61055  
Cisternal or lateral cervical (C1-C2) puncture; with injection of medication or other substance for diagnosis or treatment

62284  
Injection procedure for myelography and/or computed tomography, lumbar
Diagnostic Ultrasound

Head and Neck

76506

76506  Echoencephalography, real time with image documentation (gray scale) (for determination of ventricular size, delineation of cerebral contents, and detection of fluid masses or other intracranial abnormalities), including A-mode encephalography as secondary component where indicated

ICD-10-CM Diagnostic Codes

A17.0  Tuberculous meningitis
A17.1  Meningeal tuberculosis
A17.81  Tuberculosis of brain and spinal cord
A17.82  Tuberculous meningoencephalitis
A17.83  Tuberculous neuritis
A17.89  Other tuberculosis of nervous system
G60.0  Intracranial abscess and granuloma
G31.01  Pick's disease
G31.09  Other frontotemporal dementia
G31.83  Dementia with Lewy bodies
G31.85  Corticobasal degeneration
G91.1  Obstructive hydrocephalus
G91.8  Other hydrocephalus
G93.41  Metabolic encephalopathy
G93.6  Cerebral edema
G93.82  Brain death
G93.89  Other specified disorders of brain
I60.01  Nontraumatic subarachnoid hemorrhage from right carotid siphon and bifurcation
I60.02  Nontraumatic subarachnoid hemorrhage from left carotid siphon and bifurcation
I60.11  Nontraumatic subarachnoid hemorrhage from right middle cerebral artery
I60.12  Nontraumatic subarachnoid hemorrhage from left middle cerebral artery
I60.2  Nontraumatic subarachnoid hemorrhage from anterior communicating artery
I60.31  Nontraumatic subarachnoid hemorrhage from right posterior communicating artery
I60.32  Nontraumatic subarachnoid hemorrhage from left posterior communicating artery
I60.4  Nontraumatic subarachnoid hemorrhage from basilar artery
I60.51  Nontraumatic subarachnoid hemorrhage from right vertebral artery
I60.52  Nontraumatic subarachnoid hemorrhage from left vertebral artery
I60.6  Nontraumatic subarachnoid hemorrhage from other intracranial arteries
I60.8  Other nontraumatic subarachnoid hemorrhage
I61.8  Nontraumatic intracerebral hemorrhage in hemisphere, subcortical
I61.9  Nontraumatic intracerebral hemorrhage in hemisphere, cortical
I61.13  Nontraumatic intracerebral hemorrhage in brain stem
I61.4  Nontraumatic intracerebral hemorrhage in cerebellum
I61.5  Nontraumatic intracerebral hemorrhage, intraventricular
I61.6  Nontraumatic intracerebral hemorrhage, multiple localized
I61.8  Other nontraumatic intracerebral hemorrhage
I62.1  Nontraumatic extradural hemorrhage
P87.02  Extremely low birth weight newborn, 580-749 grams
P87.03  Extremely low birth weight newborn, 750-999 grams
P87.14  Other low birth weight newborn, 1800-2499 grams
P87.15  Other low birth weight newborn, 1250-1499 grams
P87.16  Other low birth weight newborn, 1500-1749 grams
P87.17  Other low birth weight newborn, 1750-1999 grams
P87.18  Other low birth weight newborn, 2000-2499 grams
P10.0  Subdural hemorrhage due to birth injury
P10.1  Cerebral hemorrhage due to birth injury
P10.4  Tentorial tear due to birth injury
P10.8  Other intracranial lacerations and hemorrhages due to birth injury
P11.0  Cerebral edema due to birth injury
P11.1  Other specified brain damage due to birth injury
P52.4  Intracerebral (nontraumatic) hemorrhage of newborn
P52.6  Cerebellar (nontraumatic) and posterior fossa hemorrhage of newborn
P52.8  Other intracranial (nontraumatic) hemorrhages of newborn
Q84.4  Septo-optic dysplasia of brain
Q84.5  Megalencephaly
Q84.6  Congenital cerebral cysts
Q84.8  Other specified congenital malformations of brain
S06.1X0A  Traumatic cerebral edema without loss of consciousness, initial encounter
S06.1X1A  Traumatic cerebral edema with loss of consciousness of 30 minutes or less, initial encounter
S06.1X2A  Traumatic cerebral edema with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.1X3A  Traumatic cerebral edema with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.1X4A  Traumatic cerebral edema with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.1X5A  Traumatic cerebral edema with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.1X6A  Traumatic cerebral edema with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.1X7A  Traumatic cerebral edema with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.1X8A  Traumatic cerebral edema with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.4X0A  Epidural hemorrhage without loss of consciousness, initial encounter
S06.4X1A  Epidural hemorrhage with loss of consciousness of 30 minutes or less, initial encounter
S06.4X2A  Epidural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.4X3A  Epidural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.4X4A  Epidural hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.4X5A  Epidural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter
S06.4X6A  Epidural hemorrhage with loss of consciousness greater than 24 hours without return to pre-existing conscious level with patient surviving, initial encounter
S06.4X7A  Epidural hemorrhage with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter
S06.4X8A  Epidural hemorrhage with loss of consciousness of any duration with death due to other cause prior to regaining consciousness, initial encounter
S06.5X0A  Traumatic subdural hemorrhage without loss of consciousness, initial encounter
S06.5X1A  Traumatic subdural hemorrhage with loss of consciousness of 30 minutes or less, initial encounter
S06.5X2A  Traumatic subdural hemorrhage with loss of consciousness of 31 minutes to 59 minutes, initial encounter
S06.5X3A  Traumatic subdural hemorrhage with loss of consciousness of 1 hour to 5 hours 59 minutes, initial encounter
S06.5X4A  Traumatic subdural hemorrhage with loss of consciousness of 6 hours to 24 hours, initial encounter
S06.5X5A  Traumatic subdural hemorrhage with loss of consciousness greater than 24 hours with return to pre-existing conscious level, initial encounter

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