Objectives

• Diagnostic coding
• Terminology
• Guidelines
• Modifiers specific to radiology
• Materials and equipment

Diagnosis Coding

• Code the definitive diagnosis
• Code signs and symptoms if no definitive diagnosis is available
• Diagnostic tests
  – Code sign or symptom that prompted the test
  – Do not code questionable, rule out, or probably diagnoses.
• Routine radiology
  – V72.5 Radiological examination, NEC
Terminology

• Position – how the patient is placed
• Projection – the path of the X-ray beam

Body Planes

• Frontal (Coronal) – divides body into front (anterior) and back (posterior) portions
• Sagittal – divides the body into right and left portions
• Midsagittal (Medial) – sagittal plane passing through the midline to have equal portions in right and left
• Transverse (Horizontal) – divides the body into top (superior) and bottom (inferior) sections
Body Directions

- Frontal – anterior/ventral (front) portion of the body (e.g., 71010)
- Dorsal – posterior (back) portion of the body
- Superior – above, or at the top
- Inferior – below, or at the bottom
- Lateral – to the side (e.g., 72010)
- Medial – at the middle
- Supine – Face up or palm up (e.g., 72090)
- Prone – Face down or palm down
- Erect – Standing up (e.g., 72090)
- Decubitus – Lying down (e.g., 74020)

Radiologic Projections

- Oblique – slanting, neither frontal or lateral (e.g., 71022)
- Lateral – side view, X-ray beam travels through the side of the body (e.g., 71035)
- Anteroposterior – X-ray beam enters the body through the front and exits through the back (e.g., 73520)
- Posteroanterior – X-ray beam enters the body through the back and exits through the front (e.g., 71101)
- Cone – focused or spot view (e.g., 74010)
Additional Terms

- Proximal – closer to the point of attachment to the body
- Distal – away from the point of attachment to the body
- Flexion – bending (e.g., 72052)
- Extension – straightening (e.g., 72052)

Subsections

- Diagnostic Radiology (Diagnostic Imaging) (70010-76499)
- Diagnostic Ultrasound (76506-76999)
- Radiologic Guidance (77001-77032)
- Breast, Mammography (77051-77059)
- Bone/Joint Studies (77071-77084)
- Radiation Oncology (77261-77799)
- Nuclear Medicine (78000-79999)
Guidelines

• Separate procedures – integral part of another procedure unless carried out separately
  – Example: 76000 & 76873

• Unlisted procedures
  – Check Category III codes
  – Special Report

Guidelines

• Supervision and Interpretation (S & I)
  – Interventional radiologic procedures
  – Report two codes:
    • Surgical code from the surgery section; or service code from the medicine section
    • Radiologic supervision and interpretation code from the radiology section.
Guidelines

• Administration of Contrast Material
  – Contrast material administered intravascularly, intrarticularly or intrathecally
    • With contrast
  – Oral and/or rectal contrast does not qualify
    • Without contrast
  – Supply of contrast material is not included in radiologic procedure (e.g., A4641, A4642, etc.)

• Written Report(s)

Modifiers

• Technical Component (TC)
  – Equipment
  – Overhead
    • Supplies
    • Room
    • Gowns

• Professional Component (26)
  – Reading and interpretation
Number of Views

• More than # views
  – Additional views are taken, above the number in the code
  – No other more specific code is reported
  – Only that services should be reported.

• Example
  – 71030 Radiologic examination, chest, complete, minimum of 4 views
  – If 5 views are taken, this would still be the appropriate CPT code®

Diagnostic Radiology
(Diagnostic Imaging)

• Anatomical organization

• Radiologic procedures include:
  – Standard X-rays
  – MRIs
  – CTs
Diagnostic Radiology
(Diagnostic Imaging)

• Code Selection:
  – Anatomical location
  – Type of procedure
  – Number of views
  – Type of view (AP, PA, etc)
  – Laterality (unilateral, bilateral)
  – Contrast material

Examples

• Procedure: X-ray of the foot
• Index
  – X-ray
    • Foot........................73620-73630
• Radiology Section
  – 73620 Radiologic examination, foot; 2 views
  – 73630 complete; minimum of 3 views
Examples

- Procedure: CT abdomen, with contrast

Index
- Computed Tomography (CT)
  See CT Scan; specific Anatomic Site
- CT Scan
  with Contrast
  Abdomen..........................74160

Radiology Section
- 74160 Computed tomography, abdomen; with contrast material(s)

Examples

CT
- 74150 Computed tomography, abdomen; without contrast material(s)
- 74160 with contrast material(s)
- 74170 without contrast material, followed by contrast material(s) and further sections

MRI
- 74181 Magnetic resonance (e.g., proton) imaging, abdomen; without contrast material(s)
- 74182 with contrast material(s)
- 74183 without contrast material, followed by contrast material(s) and further sequences
Heart

- Heart
  - Stress
    - Cause the heart to work harder
  - Cardiac MRI
    - Physiologic evaluation of the cardiac function
    - Velocity flow mapping
  - Cardiac CT
    - Coronary calcium
    - Congenital heart disease

Vascular Procedures

- Aorta and arteries
  - Aortography – imaging of aorta and branches
  - Angiography – imaging of arteries

- Veins and lymphatics
  - Lymphangiography – visualization of lymphatics
  - Splenoportography – injection of contrast into the spleen to visualize the port vessel of the portal circulation
  - Venography – imaging of veins
Vascular Procedures

• Transcatheter procedures
  – Supervision and interpretation codes
  – Code with codes from:
    • Cardiovascular section
    • Medicine section

Other Procedures

76000  Fluoroscopy (separate procedure), up to one hour physician time, other than 71023 or 71034 (e.g., cardiac fluoroscopy)

76001  Fluoroscopy, physician time more than 1 hour, assisting a nonradiologic physician (e.g., nephrolithotomy, ERCP, bronchoscopy, transbronchial biopsy)
Diagnostic Ultrasound

- High frequency sound waves to look at organs and other structures inside the body
- Used to view:
  - Heart
  - Blood vessels
  - Kidneys
  - Other organs
  - Fetus (during pregnancy)

Diagnostic Ultrasound

- Required:
  - Permanently recorded images with measurements
  - Final written report for the patient’s medical record
  - Exception – biometric measure
Diagnostic Ultrasound

- Anatomic regions
  - Complete – each element listed in parenthesis within the code description
  - Limited – reported if less than complete is performed.
  - Not reported together

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

Ophthalmic Ultrasound

- A-scan – look straight ahead
- B-scan – look in many directions
- Biomicroscopy – slit lamp exam
  - Cataracts
  - Macular degeneration
  - Retinal detachment
- Corneal Pachymetry – determine corneal thickness
Abdominal Ultrasound

• Complete; abdomen (76700):
  – Liver, gall bladder, common bile duct, pancreas, spleen, kidneys, and the upper abdominal aorta and inferior vena cava.

• Complete; retroperitoneal (76770):
  – Kidneys, abdominal aorta, common iliac artery origins, and inferior vena cava; or
  – For urinary tract pathology – complete evaluation of the kidneys and urinary bladder.

Pelvis Ultrasound

• Obstetrical
  – Pregnant uterus
    • 76801 – 76817
    • Review definitions in guidelines
  – Fetal
    • 76818 – 76828
    • Look for what specifically is being looked at (e.g., umbilical artery in 76820)

• Nonobstetrical
Ultrasonic Guidance

Includes guidance for:
– Pericardiocentesis
– Endomyocardial biopsy
– Vascular access
– Parenchymal tissue ablation
– Intrauterine fetal transfusion or cordocentesis
– Needle placement
– Chorionic villus sampling
– Amniocentesis
– Aspiration of ova
– Placement of radiation therapy fields

Radiologic Guidance

• Fluoroscopic
• Computed Tomography (CT)
• Magnetic Resonance (MRI)
• Other
Breast, Mammography

- Computer aided detection (CAD)
- Mammary ductogram or galactogram
- Mammography
  - Screening
  - Diagnostic

Bone/Joint Studies

- Bone age studies
- Bone length studies
- Osseous survey
- Joint survey
- Bone mineral density studies
- Bone marrow blood supply
Radiation Oncology

- Consultation: Clinical Management
- Clinical Treatment Planning
- Medical Radiation Physics, Dosimetry, Treatment Devices, and Special Services
- Stereotactic Radiation Treatment Delivery
- Other Procedures
- Radiation Treatment Delivery
- Neutron Beam Treatment Delivery
- Radiation Treatment Management
- Proton Beam Treatment Delivery
- Hyperthermia
- Clinical Intracavitary Hyperthermia
- Clinical Brachytherapy

Clinical Treatment Planning

- Interpretation of special testing
- Tumor localization
- Treatment volume determination
- Treatment time/dosage determination
- Choice of treatment modality
- Determination of number and size of treatment ports
- Selection of appropriate treatment devices
- Other procedures
Clinical Treatment Planning

- Treatment ports – exact place on the body where the radiation will be aimed.
  - Single port
  - Simple parallel opposed ports
  - Converging ports
  - Tangential ports

- Blocks – pieces of lead to cover up normal tissue in the body

Clinical Treatment Planning

- Simulation
  - Simulation of delivering radiation therapy
  - Helps determine ports
  - Can use X-ray, CT, and/or MRI

- Simulation level determined by complexity:
  - Simple
  - Intermediate
  - Complex
  - Three-dimensional
Medical Radiation Physics, Dosimetry, Treatment Devices, and Special Services

- Treatment Devices
  - Beam modifying and shaping blocks
  - Patient immobilization devices
  - Beam modifiers (wedges, compensators)
- Dosimetrist
  - Determines the proper radiation dose
- Radiation Physicist
  - Makes sure the machine delivers the right amount of radiation to the correct site in the body

Treatment Delivery

- Reports technical component only
  - Stereotactic Radiation Treatment Delivery
    - Stereotactic Radiosurgery (SRS)
    - Stereotactic body radiation therapy
  - Radiation Treatment Delivery
    - Exception:
      - 77421 Stereoscopic X-ray guidance for localization of target volume for the delivery of radiation therapy
  - Neutron Beam Treatment Delivery
  - Proton Beam Treatment Delivery
Radiation Treatment Management

• Includes:
  – Review of port films
  – Review of dosimetry, dose delivery, and treatment parameters
  – Review of patient treatment set-up
  – Examination of patient for medical evaluation and management

• Reported:
  – Increments of 5
    • Two treatments per day = 2 fractions per day
    • 3 or 4 fractions beyond a multiple of 5 at end of course
  – If entire treatment consist of 1 or 2 fractions

Hyperthermia

• Use of heat in conjunction with radiation therapy

• Investigational
  – Some policies allow for deep hyperthermia with radiation therapy while considering superficial hyperthermia investigational
Brachytherapy

- Sealed radioactive material inserted into or around a tumor
  - Interstitial – inserted into tissue at or near the tumor site
    - Head and neck
    - Prostate
    - Cervix
    - Ovary
    - Breast
    - Perianal
    - Pelvic
  - Intracavitary – inserted into the body with an applicator
    - Uterus
    - Investigating other areas

Nuclear Medicine

- Diagnostic - Use of small amounts of radioactive material to examine organ function
  - Thyroid function (endocrine)
  - Renal (Gastrointestinal System)
  - Bone (Musculoskeletal System)
  - Heart (Cardiovascular system)
  - Brain (Nervous System)

- Therapeutic – uses radioactive material to treat cancer and other medical conditions affecting the thyroid gland
Radiology Coding