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Introduction

All coding examples, unless otherwise stated, assume that billing is occurring only for the professional (-26) component of the services, so when modifiers have been assigned, modifier -26 has not been included.

If billing globally for the service, the specific CPT code for the exam performed is again not assigned either the -26 or -TC modifiers as global billing already inherently includes separate payment for both the technical (-TC) and professional (-26) portions. In example questions and answers, oftentimes modifiers are not stated, but instead, the statement is made “charge times two” or “submit twice.” This statement is not meant to imply that all payers will allow/accept this method of charging instead of submitting -50 or -RT/-LT modifiers. As always, verify state-specific, third-party payer requirements/directives when charging/coding for bilateral services. This rationale applies to the omission of right (-RT) and left-sided (-LT) modifiers as well.

From a Medicare billing perspective, when coding for multiple procedures on the same patient on the same date of service (DOS), be certain to verify that the codes submitted are separately reportable as stated in the most current version of the correct coding initiative (CCI) edits. As always, verify state-specific, third-party payer requirements/directives when charging/coding for multiple procedures performed at the same clinical setting.

Coding answers are based upon the most current recommendations/directives (when available) from the Centers for Medicare & Medicaid Services (CMS), local Medicare carriers/Part B Medicare administrative contractors (MACs), the American Medical Association (AMA), the American College of Radiology (ACR) and the Society of Interventional Radiology (SIR).
Introduction
CHAPTer 1

Radiological Terminology and Anatomy

1. Anterior is defined as the:
   a. Front of the body
   b. Side of the body
   c. Back of the body
   d. Top of the head

2. Posterior is defined as the:
   a. Front of the body
   b. Side of the body
   c. Back of the body
   d. Top of the head

3. Lateral is defined as the:
   a. Front of the body
   b. Side of the body
   c. Back of the body
   d. Top of the head

4. Cephalad refers to:
   a. In the abdomen
   b. Toward the feet
   c. Toward the side
   d. Toward the head

5. Caudal refers to:
   a. Toward the tail, feet or distal end
   b. Toward the head
   c. Toward the front
   d. Toward the back

6. Dorsal refers to:
   a. Toward the tail or distal end
   b. Toward the head
   c. Toward the front
   d. Toward the back
7. Oblique refers to:
   a. Straight on
   b. Angled or slanted
   c. Toward the top
   d. Toward the bottom

8. AP refers to:
   a. From front to back
   b. From back to front
   c. From side to side
   d. From top to bottom

9. PA refers to:
   a. From front to back
   b. From back to front
   c. From side to side
   d. From top to bottom

10. The Sagittal Plane refers to:
    a. A sectional image from top to bottom
    b. A sectional image from side to side
    c. A sectional image from front to back
    d. A sectional oblique image from top to bottom

11. The Coronal Plane refers to:
    a. A sectional image from top to bottom
    b. A sectional image from side to side
    c. A sectional image from front to back
    d. A sectional oblique image from top to bottom

12. The Axial or Transverse Plane refers to:
    a. A sectional image from top to bottom
    b. A sectional image from side to side
    c. A sectional image from front to back
    d. A sectional oblique image from top to bottom

13. Proximal refers to:
    a. Close to the reference point
    b. Far away from the reference point
    c. On the right side of the body
    d. On the left side of the body
14. Distal refers to:
   a. Close to the reference point
   b. Far away from the reference point
   c. On the right side of the body
   d. On the left side of the body

15. Plantar refers to:
   a. Toward the palm of the hand
   b. Toward the sole of the foot
   c. Toward the top of the head
   d. Toward the side of the body

16. Palmar refers to:
   a. Toward the palm of the hand
   b. Toward the sole of the foot
   c. Toward the top of the head
   d. Toward the side of the body

17. Ventral refers to:
   a. Toward the tail or distal end
   b. Toward the head
   c. Toward the front
   d. Toward the back

18. Supine refers to:
   a. Lying on your back, face up
   b. Lying on your stomach, face down
   c. Lying on your left side
   d. Lying on your right side

19. Prone refers to:
   a. Lying on your back, face up
   b. Lying on your stomach, face down
   c. Lying on your left side
   d. Lying on your right side

20. CT is an abbreviation for:
   a. Cranial tilt
   b. Computed tomography
   c. Caudal tilt
   d. Central tomography
21. US is an abbreviation for:
   a. Unable to stand
   b. Unable to sit
   c. Ultrasound
   d. Unable to speak

22. MR is an abbreviation for:
   a. Mental recall
   b. Magnetic resonance imaging
   c. Metallic refraction
   d. Magnetic recording

23. NM is an abbreviation for:
   a. Nuclear medicine
   b. Nuclear malfunction
   c. Nuclear melanoma
   d. Nuclear modeling

24. Mammography refers to:
   a. Imaging of the mammary glands
   b. Imaging of the breast(s)
   c. Diagnostic and screening studies of the breast(s)
   d. All of the above

25. A radiograph is:
   a. An x-ray of an area of the body
   b. A picture of radio waves
   c. An x-ray of statistical information
   d. A picture or film from the exposure to beta radiation

26. An RT is:
   a. A registered individual who takes x-rays
   b. A registered individual who works in radiation therapy
   c. Both A and B
   d. None of the above

27. Conformal refers to:
   a. Radiation therapy in which the beam is directed to a single, simple target area
   b. Radiation therapy in which the beam is directed to a single, complex target area
   c. Radiation therapy in which the beam is directed to a multiple, simple target area
   d. Radiation therapy in which the beam is directed to a 3 dimensional reconstructed target area
28. Diagnostic refers to:
   a. The performance of tests to determine the nature or cause of a disease
   b. Dictated reports from an exam
   c. A hospital reimbursement system
   d. Treating a problem

29. Therapeutic refers to:
   a. Defining
   b. Diagnosing
   c. Treating
   d. Testing

30. Invasive refers to:
   a. A puncture or incision of the skin with placement of a device into the body
   b. Placement of a needle into a vein
   c. Both A and B
   d. None of the above

31. Interventional Radiology refers to:
   a. Procedures done to diagnose a patient
   b. Procedures done to treat a patient
   c. Procedures done on foreign patients
   d. Both A & B

32. Intussusception means:
   a. Part of a structure “falling down” into another
   b. Part of a structure “going up” into another
   c. Within a sheath
   d. Within a tube

33. IVP refers to:
   a. In-vitro path
   b. In-vivo path
   c. Intravenous pyelography
   d. Intraventricular portal

34. SPECT imaging is used in:
   a. CT
   b. NM
   c. US
   d. MR
35. In nuclear medicine, planar imaging refers to:
   a. An image representing one dimension
   b. An image representing two dimensions
   c. An image representing three dimensions
   d. An image representing four dimensions

36. Stereotactic localization refers to:
   a. Guidance for exact positioning for a procedure
   b. Guidance for general positioning for a procedure
   c. An oversimplified belief
   d. A tracking mechanism using FM signals

37. Millicuries and microcuries refer to:
   a. The amount of contrast material used for angiography
   b. The amount of contrast material used for venography
   c. The amount of radioactive material used for nuclear medicine study
   d. The measurements made in US biophysical (BFP) studies

38. Angiography refers to:
   a. The study of veins following the injection of contrast material
   b. The study of arteries following the injection of contrast material
   c. Both A and B
   d. None of the above

39. Decubitus refers to:
   a. Laying down
   b. Standing up
   c. Slithering
   d. Bending

40. LCD is an acronym for _____ and defines state specific guidelines when billing/coding for services for Medicare and other third party payers:
   a. Liquid crystal display
   b. Local coverage determination
   c. Limited coverage denials
   d. Local coverage department

41. When words such as “nephritis” or “phlebitis” appear in a dictated radiology report, the suffix “itis” means:
   a. Pain
   b. Hemorrhage
   c. Inflammation
   d. Growth
42. When reference is made to the peritoneum, anatomically, this is:
   a. The pelvic floor
   b. The membrane lining the walls of the abdominal and pelvic cavities
   c. The space between chest, wall, and the heart
   d. The space between the kidneys

43. When reference is made to the retroperitoneum, anatomically, this refers to:
   a. The pelvis floor and posteriorly situated organs
   b. The membrane lining the walls of the abdominal and pelvic cavities
   c. The space between the peritoneum and the posterior abdominal wall
   d. The hollow cavity and lining between the right and left lungs

44. When describing a localized collection of pus in a cavity tissue, you are referring to a(n):
   a. Cyst
   b. Tumor
   c. Abscess
   d. Acinus

45. When reference is made to an abnormal sac containing gas, fluid, or a semisolid material, with a
   membranous lining, this is defining a(n):
   a. Cyst
   b. Tumor
   c. Abscess
   d. Deflavium

46. When living tissue is removed from the body to determine whether this tissue is malignant or
   benign, this is described as:
   a. Biota
   b. Drainage
   c. Biopsy
   d. Abscess

47. If a device is put into and left in the body to provide support for a tubular structure, we are
   describing a(n):
   a. Angioplasty
   b. Stent
   c. Guidewire
   d. Sheath

48. When reference is made to a procedure in which surgical repair is made to sclerosed, occluded or
   stenotic arteries or veins with the use of inflatable balloon-tipped catheters, we are describing an:
   a. Angioscopy
   b. Angioplasty
   c. Angiogram
   d. Angiorraphy
49. Orthogonal refers to:
   a. Views taken at right angles to one another
   b. AP and lateral views
   c. Both A and B
   d. Neither A nor B

50. Morphology refers to:
   a. The form and structure of a particular organ or part
   b. The method in which a bone metabolizes red blood cells
   c. The breaking down of fats in the digestive system
   d. Any type of cancer

51. Leiomyomata refers to:
   a. A lion-maned, irregular shaped tumor
   b. A malignant neoplasm of the uterus
   c. A benign tumor derived from smooth muscle
   e. A medical condition and resultant surgical correction that occurs in the astrological cycle of Leo (the months of July and August)

52. PET is an acronym for:
   a. Positron Emitting Therapy
   b. Positron Emission Tomography
   c. Possible Extra Test
   d. Positive Emission Test

53. IMRT is an acronym for:
   a. Invasive Metabolic Radiation Therapy
   b. Intensive Macro Radiation Therapy
   c. Intensive Massive Radiation Therapy
   d. Intensity Modulated Radiation Therapy

54. Information abounds related to specific rules regarding coding and billing of services for Medicare and other third-party payers. One of the most important pieces of information at a local level is the:
   a. ABN
   b. LCD
   c. PET
   d. SPECT
CHAPTER 1 — ANSWERS

1. (a) Anterior is defined as the front of the body.
2. (c) Posterior is defined as the back of the body.
3. (b) Lateral is defined as the side of the body.
4. (d) Cephalad refers to toward the head.
5. (a) Caudal refers to toward the tail, feet or distal end.
6. (d) Dorsal refers to toward the back.
7. (b) Oblique refers to angled or slanted.
8. (a) AP refers to from front to back, (anterior to posterior).
9. (b) PA refers to from back to front, (posterior to anterior).
10. (b) The Sagittal Plane refers to a sectional image from side to side.
11. (c) The Coronal Plane refers to a sectional image from front to back.
12. (a) The Axial or Transverse Plane refers to a sectional image from top to bottom.
13. (a) Proximal refers to close to the reference point.
14. (b) Distal refers to far away from the reference point.
15. (b) Plantar refers to toward the sole of the foot.
16. (a) Palmar refers to toward the palm of the hand.
17. (c) Ventral refers to toward the front.
18. (a) Supine refers to lying on your back, face up.
19. (b) Prone refers to lying on your stomach, face down.
20. (b) CT is an abbreviation for computed tomography.
21. (c) US is an abbreviation for ultrasound.
22. (b) MR is an abbreviation for magnetic resonance imaging.
23. (a) NM is an abbreviation for nuclear medicine.

24. (d) Mammography refers to imaging of the mammary glands, imaging of the breast(s) and diagnostic and screening studies of the breast(s).

25. (a) A radiograph is an x-ray of an area of the body.

26. (c) An RT is both a registered individual who takes x-rays and a registered individual who works in radiation therapy.

27. (d) Conformal refers to radiation therapy in which the beam is directed to a three-dimensional reconstructed target area.

28. (a) Diagnostic refers to the performance of tests to determine the nature or cause of a disease.

29. (c) Therapeutic refers to treating.

30. (c) Invasive refers to either a puncture or incision of the skin with placement of a device into the body and placement of a needle into a vein.

31. (d) Interventional Radiology refers to procedures done to diagnose and treat a patient.

32. (a) Intussusception means part of a structure “falling down” into another (i.e., enfolding of one structure into the other).

33. (c) IVP refers to intravenous pyelography.

34. (b) SPECT imaging is used in NM.

35. (b) In nuclear medicine, planar imaging refers to an image representing two dimensions.

36. (a) Stereotactic localization refers to guidance for exact positioning for a procedure.

37. (c) Millicuries and microcuries refer to the amount of radioactive material used for nuclear medicine study.

38. (c) Angiography refers to both the study of veins following the injection of contrast material and the study of arteries following the injection of contrast material.

39. (a) Decubitus refers to laying down. In radiology, the common definition used is lateral decubitus, which refers to laying down on one's side.

40. (b) LCD is an acronym for Local Coverage Determination and defines state specific guidelines when billing/coding for services for Medicare and other third party payers.

41. (c) When words such as “nephritis” or “phlebitis” appear in a dictated radiology report, the suffix “itis” means inflammation.
42. (b) When reference is made to the peritoneum, anatomically, this is the membrane lining the walls of the abdominal and pelvic cavities.

43. (c) When reference is made to the retroperitoneum, anatomically, this refers to the space between the peritoneum and the posterior abdominal wall.

44. (c) When describing a localized collection of pus in a cavity tissue, you are referring to an abscess.

45. (a) When reference is made to an abnormal sac containing gas, fluid, or a semisolid material, with a membranous lining, this is defining a cyst.

46. (c) When living tissue is removed from the body to determine whether this tissue is malignant or benign, this is described as a biopsy.

47. (b) If a device is put into and left in the body to provide support for a tubular structure, we are describing a stent.

48. (b) When reference is made to a procedure in which surgical repair is made to sclerosed, occluded or stenotic arteries or veins with the use of inflatable balloon-tipped catheters, we are describing an angioplasty.

49. (c) When orthogonal is mentioned in a dictated report, this means that the views have been acquired in planes that are 90 degrees opposed to one another. When AP and lateral studies are performed (or sagittal and tranverse, etc), these are by definition, orthogonal views.

50. (a) Morphology is defined as the science of the forms and structures of organisms; the form and structure of a particular organism, organ or part.

51. (c) A leiomyoma is a benign tumor derived from smooth muscle, most commonly the uterus. This is also called a fibroid or fibroid tumor.

52. (b) PET is an acronym for positron emission tomography.

53. (d) IMRT is an acronym for intensity modulated radiation therapy.

54. (b) Information abounds related to specific rules for coding and billing of services for Medicare and other third-party payers. One of the most important pieces of information at a local level is the local coverage determination.
1. The GI system refers to:
   a. Gastro–internal system
   b. Gastro–intestinal system
   c. Gastro–ileal system
   d. Gastro–inguinal system

2. A gastro or gastric procedure involves imaging of the:
   a. Abdomen
   b. Colon
   c. Stomach
   d. Throat

3. Intestinal (bowel) imaging procedures refer to studies of the:
   a. Abdomen
   b. Colon
   c. Stomach
   d. Throat

4. Imaging studies of the esophagus involve filming from the:
   a. Stomach to colon
   b. Colon to anus
   c. Pharynx to anus
   d. Pharynx to stomach

5. The pharynx is another name for:
   a. The mouth
   b. The throat
   c. The stomach
   d. The intestine (bowel)

6. The small intestine (bowel) comprises the following portions:
   a. Ascending, duodenum and sigmoid
   b. Duodenum, transverse and descending
   c. Ascending, transverse, descending and sigmoid
   d. Duodenum, jejunum and ileum
7. The colon is comprised of the following portions:
   a. Ascending, duodenum and sigmoid
   b. Duodenum, transverse and descending
   c. Ascending, transverse, descending, sigmoid and rectum
   d. Duodenum, jejunum and ileum

8. Biliary studies refer to studies of:
   a. Liver, pancreas and gallbladder
   b. Liver, kidneys and gallbladder
   c. Liver, gallbladder and ducts
   d. Kidneys, ureters and bladder

9. GB imaging refers to imaging studies of:
   a. Gastric-bypass
   b. Great Britain
   c. Gallbladder
   d. Genito-bowel

10. The gallbladder:
    a. Stores and secretes bile to aid in the digestion of food
    b. Stores and secretes sweat to cool the body off
    c. Produces and secretes insulin to moderate blood sugar
    d. None of the above

11. The gallbladder is normally located:
    a. In the right upper quadrant (RUQ)
    b. Beneath the liver
    c. On the right side of the body
    d. All of the above

12. When the sphincter of oddi is defined, it is referring to imaging studies of the:
    a. Anus
    b. Eye
    c. Hepatobiliary
    d. Urinary tract

13. The stomach is normally located on the _____ side and contains the following anatomy:
    a. Left, ileum, jejunum, duodenum
    b. Right, antrum, body, duodenum
    c. Left, fundus, body, pylorus
    d. Right, fundus, jejunum, pylorus
14. Imaging studies of the upper GI tract can be performed:
   a. Without air-contrast
   b. With air contrast
   c. With a small bowel (i.e., small intestine) follow-through
   d. All of the above

15. Situs inversus is when organs (such as the stomach) are switched from their normal location in
    the abdomen or thorax to the opposite side of the body.
   a. True
   b. False
CHAPTER 2—ANSWERS

1. (b) The GI system refers to gastro-intestinal system.

2. (c) A gastro or gastric procedure involves imaging of the stomach.

3. (b) Bowel imaging procedures refer to studies of the colon.

4. (d) Imaging studies of the esophagus involve filming from the pharynx to stomach.

5. (b) The pharynx is another name for the throat.

6. (d) The small intestine (bowel) is composed of the duodenum, jejunum, and ileum.

7. (c) The colon comprises the following portions ascending, transverse, descending, sigmoid, and rectum.

8. (c) Biliary studies refer to studies of liver, gallbladder and ducts.

9. (c) GB imaging refers to imaging studies of gallbladder.

10. (a) The gallbladder stores and secretes bile to aid in the digestion of food.

11. (d) The gallbladder is normally located in the right upper quadrant (RUQ), beneath the liver and is on the right side of the body.

12. (c) When the sphincter of oddi is referenced, it is generally in relation to imaging studies of the hepatobiliary.

13. (c) The stomach is normally located on the left side and contains the following anatomy: fundus, body, and pylorus.

14. (d) Imaging studies of the upper GI tract can be performed without air-contrast, with air contrast and with a small bowel (i.e., small intestine) follow-through.

15. (a) True. Situs inversus is when organs (such as the stomach) are switched from their normal location in the abdomen or thorax to the opposite side of the body.
1. By definition, when reference is made to the endocrine system, this refers to:
   a. Ductless organs or groups of cells that secrete substances and release them directly into the circulation denoting a gland that furnishes an internal secretion.
   b. Organs and related processes of the skin
   c. The bodily system that pertains to the intake and expulsion of food stuffs
   d. The system that deals with the intake and outtake of oxygen

2. Common glands found in the endocrine system include:
   a. Thyroid, pituitary, and pineal
   b. Parathyroid and thymus
   c. Adrenals, pancreas, ovaries, and testis
   d. All of the above

3. Which of the following three glands are located in the head/neck:
   a. Adrenal, thyroid and pineal
   b. Thyroid, pituitary, and pineal
   c. Parathyroid, thyroid, and thymus
   d. Pancreas, ovaries, and thyroid

4. The pancreas produces (in addition to others) two important hormones, insulin and glucagon.
   a. True
   b. False

5. Adrenal glands are also referred to as:
   a. Apocrine glands
   b. Ciacco’s glands
   c. Suprarenal glands
   d. Bartholin's glands

6. Typically, there are how many parathyroid glands:
   a. 2
   b. 3
   c. 4
   d. 6
7. Which of the following are not regulated by glands in the endocrine system?
   a. Sexual development
   b. Respiration
   c. Growth
   d. Metabolism
CHAPTER 3—ANSWERS

1. (a) By definition, when reference is made to the endocrine system, this refers to ductless organs or groups of cells that secrete substances and release them directly into the circulation.

2. (d) Common glands found in the endocrine system are thyroid, pituitary, pineal, parathyroid, thymus, adrenals, pancreas, ovaries, and testis.

3. (b) The following three glands are located in the head/neck: thyroid, pituitary, and pineal.

4. (a) True. The pancreas produces (in addition to others) two important hormones, insulin and glucagon. They work together to maintain a steady level of glucose, or sugar, in the blood and to keep the body supplied with fuel to produce and maintain stores of energy.

5. (c) Adrenal glands are also known as suprarenal glands.

6. (c) There are typically four parathyroid glands: Two on the left and two on the right, but some anatomical variants will show some people with more or less than this number.

7. (b) Respiration is not regulated by glands in the endocrine system.
1. By definition, the cardiovascular system refers to the:
   a. Arteries, veins and lymphatic vessels
   b. Arteries, veins and nerves
   c. Arteries, veins and heart
   d. Heart and lungs

2. In the cardiovascular system, the (choose only one):
   a. Arteries carry oxygen-rich blood to the heart
   b. Veins carry oxygen-rich blood to the heart
   c. Veins carry oxygen-deprived blood back to the heart
   d. Veins carry lymph back into the main bloodstream

3. In the cardiovascular system, the (choose only one):
   a. Arteries carry lymph back into the main bloodstream
   b. Veins carry oxygen-rich blood away from the heart
   c. Arteries carry oxygen-rich blood away from the heart
   d. Veins carry oxygen-deprived blood back to the liver

4. The largest vessel in the arterial system is the:
   a. Aorta
   b. Vena cava
   c. Azygos
   d. Artane

5. The major vessel in the venous system is the:
   a. Cardinal vein
   b. Aorta
   c. Vena cava
   d. Thebesian vein

6. Anatomically, both the previously defined major arterial and venous structures are found in the:
   a. Head and neck
   b. Arms and legs
   c. Abdomen and legs
   d. Chest and abdomen
Chapter 4 | Cardiovascular System and Organs

7. The normal heart contains four chambers. These are referred to as:
   a. EF and wall motion
   b. Systole and diastole
   c. Atria and ventricles
   d. Ventricle and septae

8. In the resting or filling state, the heart is known to be in:
   a. Sinus rhythm
   b. Systole
   c. Diastole
   d. Atrophy

9. In the pumping or contracting state, the heart is known to be in:
   a. End diastolic volume
   b. Sinus rhythm
   c. Diastole
   d. Systole

10. When reference is made to “the great vessels of the arch,” one is describing:
    a. The innominate, internal and external jugular veins
    b. The celiac, SMA, and DNA
    c. The aorta, vena cava, and pulmonary system
    d. The left subclavian, left common carotid and innominate arteries

11. When reference is made to a bovine arch, this means that:
    a. The arch of the aorta is shaped like a cow
    b. The arch of the cava gives rise to extra vessels
    c. The aortic arch does not give rise to a separate left common carotid
    d. The aortic arch, when listened to under a stethoscope, makes a mooing sound

12. The adult aorta is comprised of the following main sections:
    a. Ascending, transverse, dorsal, and abdominal
    b. Ascending, arch, descending, abdominal
    c. Root, upper, middle, and lower
    d. Base arch, medial, abdominal

13. The vena cava is separated into superior and inferior portions by what structure:
    a. The heart
    b. The diaphragm
    c. The lungs
    d. The porta hepatis
14. When arterial blood is flowing away from the heart, it is referred to as flowing:
   a. Retrograde
   b. Antegrade
   c. Ipsilaterally
   d. Contralaterally

15. When venous blood is flowing from the toes or fingers back towards the heart and lungs, it is said to be moving in a(n) _____ fashion:
   a. Retrograde
   b. Antegrade
   c. Ipsilateral
   d. Contralateral

16. Blood is made up of the following:
   a. Red cells
   b. White cells
   c. Platelets
   d. All of the above
CHAPTER 4—ANSWERS

1. (c) By definition, the cardiovascular system refers to the arteries, veins and heart.

2. (c) In the cardiovascular system, veins carry oxygen-deprived blood back to the heart.

3. (c) In the cardiovascular system, arteries carry oxygen-rich blood away from the heart.

4. (a) The largest vessel in the arterial system is the aorta.

5. (c) The major vessel in the venous system is the vena cava.

6. (d) Anatomically, both the previously defined major arterial and venous structures are found in the chest and abdomen.

7. (c) The normal heart contains four chambers. These are referred to as the atria and ventricle.

8. (c) In the resting or filling state, the heart is known to be in diastole.

9. (d) In the pumping or contracting state, the heart is known to be in systole.

10. (d) When reference is made to “the great vessels of the arch,” one is describing the left subclavian, left common carotid and innominate arteries.

11. (c) When reference is made to a bovine arch, this means that the aortic arch does not give rise to a separate left common carotid.

12. (b) The aorta comprises the following main sections: ascending, arch, descending, and abdominal.

13. (a) The vena cava is separated into superior and inferior portions by the heart.

14. (b) When arterial blood is flowing away from the heart, it is referred to as flowing antegrade.

15. (b) When venous blood is flowing back towards the heart, it is referred to as flowing in an antegrade fashion.

16. (d) Blood is composed of red cells, white cells, platelets and plasma.
1. By definition, the respiratory system refers to:
   a. Ductless organs or groups of cells that secrete substances and release them directly into circulation
   b. The group of organs whose specific function is to provide for the transfer of oxygen from the air to the blood and of waste carbon dioxide from the blood to the air
   c. The organs system which correlates the adjustments of reactions of an organism to internal and environmental conditions
   d. The framework of the body of which there are 206 discrete components

2. Components of the respiratory system are:
   a. Nose, lungs and pharynx
   b. Lungs, trachea and larynx
   c. Trachea and bronchi
   d. All of the above

3. The lungs contain:
   a. Alveoli
   b. Bronchioles
   c. Both A and B
   d. None of the above

4. The most common way to visualize the lungs is via a(n):
   a. Lung scan
   b. Ultrasound
   c. Chest x-ray
   d. CT scan

5. Chest x-rays are routinely done in which two views:
   a. AP and oblique
   b. PA and lateral
   c. Inspiration and expiration
   d. AP and lordotic

6. When referring to “inspiration” or “inspiratory” chest films, this means that:
   a. The patient has exhaled completely with the film being taken
   b. The patient has inhaled completely with the film being taken
   c. The patient has rolled their shoulders forward with the film being taken
   d. The patient has turned to the side with the film being taken
7. When referring to “expiration” or “expiratory” chest films, this means that:
   a. The patient has exhaled completely with the film being taken
   b. The patient has inhaled completely with the film being taken
   c. The patient has rolled their shoulders forward with the film being taken
   d. The patient has turned to the side with the film being taken

8. Occasionally, a patient may develop blood clots that then move upward through the vascular system. Eventually, these clots will lodge themselves into vessels that are too small for them to fit through. One of the more common spots for these to lodge is:
   a. The pelvis
   b. The leg
   c. The lungs
   d. The brain

9. When reference is made to a bronchoscopy, this refers to:
   a. An internal exam of the tracheobronchial tree via an externally placed device
   b. An injection of contrast into the bronchus with x-rays subsequently taken
   c. The study and treatment of diseases of the bronchus
   d. Bleeding of the bronchial wall

10. Chest x-rays can be taken in:
    a. The emergency room
    b. The x-ray department
    c. The patients’ hospital room
    d. All of the above

11. The most common way for a chest x-ray to be taken is in:
    a. Expiration
    b. Valsalva maneuver
    c. Inspiration
    d. While speaking

12. When reference is made to a pneumothorax, this refers to:
    a. Inflammation of the lung tissue
    b. Air or gas in a joint
    c. Air or gas in skin or tissue
    d. Air or gas in the pleural cavity

13. Dyspnea refers to:
    a. Rapid breathing
    b. Labored or difficult breathing
    c. Cessation of breathing
    d. Staccato breathing
14. Biopsy of the lung or pleura can be performed under which type of guidance:
   a. Fluoro and MR
   b. CT and fluoro
   c. CT and US
   d. All of the above

15. Another name for the “windpipe” is the:
   a. Pharynx
   b. Larynx
   c. Trachea
   d. Oro-pharynx
CHAPTER 5—ANSWERS

1. (b) By definition, the respiratory system refers to the group of organs whose specific function is to provide for the transfer of oxygen from the air to the blood and of waste carbon dioxide from the blood to the air.

2. (d) Components of the respiratory system are the nose, lungs, pharynx, trachea, larynx, and bronchi.

3. (c) The lungs contain both alveoli and bronchioles.

4. (c) The most common way to visualize the lungs is via a chest x-ray.

5. (b) Chest x-rays are routinely done in PA and lateral views.

6. (b) When referring to “inspiration” or “inspiratory” chest films, this means that the patient has inhaled completely with the film being taken.

7. (a) When referring to “expiration” or “expiratory” chest films, this means that the patient has exhaled completely with the film being taken.

8. (c) Occasionally, a patient may develop blood clots that then move upward through the vascular system. Eventually, these clots will lodge themselves into vessels that are too small for them to fit through. One of the more common spots for these to lodge is the lung.

9. (a) When reference is made to a bronchoscopy, this refers to an internal exam of the tracheobronchial tree via an externally placed device.

10. (d) Chest x-rays can be taken in the emergency room, the x-ray department, and the patients’ hospital room.

11. (c) The most common way for a chest x-ray to be taken is in inspiration.

12. (d) When reference is made to a pneumothorax, this refers to air or gas in the pleural cavity.

13. (b) Dyspnea refers to labored or difficult breathing.

14. (d) Biopsy of the lung or pleura can be performed with the guidance of fluoro, MR, CT, and US.

15. (c) Another name for the “windpipe” is the trachea.
CHAPTER 6

Genitourinary System and Organs

1. By definition, the genitourinary (GU) system refers to:
   a. The system through which nutrient fluids of the body flow
   b. The organs concerned with the production and excretion of urine
   c. The organs concerned with reproduction
   d. The organs concerned with production and excretion of urine and reproduction

2. Which of the following terms may be used to describe the kidney:
   a. Cortex and medulla
   b. Calyx and pelvis
   c. Both A and B
   d. None of the above

3. The kidneys and ureters lie:
   a. Peritoneally
   b. Retroperitoneally
   c. In the pelvis
   d. In the thorax

4. KUB refers to:
   a. Kidneys, urethra and bladder
   b. Kidneys, urethra and intestine (bowel)
   c. Kidneys, ureters and bladder
   d. Kidneys, urinary and bladder

5. A common exam performed via an intravenous injection of contrast to assess GU function is:
   a. An IVC
   b. An IVP
   c. An IVT
   d. An IUD

6. When antegrade pyelography is performed, this refers to:
   a. An injection through a direct stick into the renal pelvis
   b. An intravenous injection of contrast with subsequent films of the GU system
   c. An injection of contrast through a catheter placed into the urethra
   d. An injection of contrast into the bladder
7. A percutaneous nephrostomy (PCN) refers to:
   a. Creation of the passage from the kidney to the bladder
   b. Insertion of catheter through the skin into the renal pelvis
   c. Insertion of a stent from the renal pelvis into the bladder
   d. Insertion of a catheter through the urethra into the bladder

8. Nephrolithiasis refers to:
   a. Kidney sludge
   b. Kidney
   c. Kidney stones
   d. Blood in the kidneys

9. A ureterostomy is a:
   a. Stone in the ureter
   b. Double-ureter
   c. Creation of a new outlet for a ureter
   d. None of the above

10. When a radiology GU report refers to a “double-J” or “J-J” stent, this is most commonly referring to a device that has been placed:
    a. Through the body into the renal pelvis
    b. Through the body into the ureter
    c. Into the ureter, through the renal pelvis into the bladder
    d. None of the above

11. The urethra:
    a. Conveys urine from the kidneys to the bladder
    b. Conveys urine from the bladder to the exterior of the body
    c. Both A and B
    d. None of the above

12. A cystogram is an imaging procedure of the:
    a. Kidneys
    b. Ureters
    c. Bladder
    d. All of the above

13. A VCUU is an acronym for _____:
    a. Very Critical Urethrography
    b. Voiding Calculated Urethrogram
    c. Voiding Cysto-urethrogram
    d. Validated and Calculated Uncomplicated Cystogram
14. A VCUG can be performed in:
   a. Ultrasound or nuclear medicine
   b. X-ray and ultrasound
   c. X-ray and nuclear medicine
   d. CT only

15. A nephrostogram is accomplished by:
   a. Injecting contrast through a tube/catheter that has been previously placed in the bladder
   b. Injecting contrast through a tube/catheter that has been previously placed in the renal pelvis
   c. Via an intravenous injection of contrast to opacify the renal pelvis and ureter
   d. All of the above
CHAPTER 6—ANSWERS

1. (d) By definition, the genitourinary (GU) system refers to the organs concerned with production and excretion of urine and reproduction.

2. (c) Cortex, medulla, calyx, and pelvis are the terms that may be used to describe the kidney.

3. (b) The kidneys and ureters lie retroperitoneally.

4. (c) KUB refers to kidneys, ureters and bladder.

5. (b) A common exam performed via an intravenous injection of contrast to assess GU function is an IVP.

6. (a) When antegrade pyelography is performed, this refers to an injection through a direct stick into the renal pelvis.

7. (b) A percutaneous nephrostomy (PCN) refers to insertion of catheter through the skin into the renal pelvis.

8. (c) Nephrolithiasis refers to kidney stones.

9. (c) A ureterostomy is a creation of a new outlet for a ureter.

10. (c) When a radiology GU report refers to a “double-J” or “J-J” stent, this is referring to a device that has been placed into the ureter, through the renal pelvis into the bladder. Can also be placed through the urethra into the bladder, into the ureter and finally into the renal pelvis.

11. (b) The urethra conveys urine from the bladder to the exterior of the body.

12. (c) A cystogram is an imaging procedure of the bladder.

13. (c) A VCUG is an acronym for voiding cysto-urethrogram

14. (c) A VCUG can be performed in X-ray and nuclear medicine.

15. (b) A nephrostogram is accomplished by injecting contrast through a tube/catheter that has been previously placed in the renal pelvis.
1. By definition, the musculoskeletal system is defined as:
   a. The organs concerned with production and excretion of urine and reproduction
   b. The group of organs whose specific function is to provide for the transfer of oxygen from the air to the blood and of waste carbon dioxide from the blood to the air
   c. Ductless organs or groups of cells that secrete substances and release them directly into the circulation
   d. The body’s framework of bones and muscles

2. From a coding perspective, the skeletal system is often referred to in two main groups. They are:
   a. Proximal and distal
   b. Axial and appendicular
   c. Internal and external
   d. Minor and major

3. When a radiology report states that “plain films” were taken of a specific area, they are referring to:
   a. A bone scan
   b. Routine x-rays
   c. A CT scan
   d. An MR scan

4. When a report refers to an “AP and lateral study,” this means that the exam was done in:
   a. Two different views
   b. Two different times
   c. Two different rooms
   d. By two different physicians

5. The main reason for doing x-ray studies in multiple projections (views) is to:
   a. Demonstrate the anatomy in question from different angles or projections
   b. Account for the possibility of one structure overlying another by positioning the patient such that this error does not occur
   c. Both A and B
   d. None of the above
6. When reference is made to the radiographs of the calvarium, cranial vault or cranium, this refers to:
   a. The face
   b. The skull
   c. The neck
   d. The sinuses

7. When reference is made to the sphenoid, ethmoid and frontals, this is referring to:
   a. Arteries
   b. Sinuses
   c. Glands
   d. Ligaments

8. A break of a bone or fracture may also be further classified as which of the following types:
   a. Pathologic, simple and transverse
   b. Spiral, longitudinal and oblique
   c. Greenstick, comminuted and compound
   d. All of the above

9. The tarsals, metatarsals and phalanges refer to bones in the:
   a. Hand
   b. Foot
   c. Fingers
   d. Toes

10. The carpals, metacarpals and phalanges refer to bones in the:
    a. Hand
    b. Foot
    c. Fingers
    d. Toes

11. The os calcis or calcaneus are both names for which bone(s):
    a. Ankle
    b. Heel
    c. Foot
    d. Toes

12. The talus or astragulus are both names commonly associated with this region:
    a. Foot
    b. Ankle
    c. Hand
    d. Wrist
13. The largest sesamoid bone in the body is the:
   a. Skull
   b. Femur
   c. Patella
   d. Humerus

14. The zygoma refers to the bones of the:
   a. Skull
   b. Face
   c. Cheek
   d. Mouth

15. The breast bone is also referred to as the:
   a. Chest
   b. Sternum
   c. Xiphoid
   d. Manubrium

16. The three main parts of the sternum are:
   a. Hammer, anvil and stirrup
   b. Maxilla, mandible and xiphoid
   c. Manubrium, body and xiphoid process
   d. Acromium, clavicular and pterygoid process

17. The socket into which the head of the femur fits into is called the:
   a. Acromium
   b. Acetabulum
   c. Axilla
   d. Antrum

18. Another name for the collar bone is:
   a. Clavicle
   b. Pedicle
   c. Pedestal
   d. Axial

19. Another name for shoulder blade is:
   a. Clavicle
   b. Pedicle
   c. Scapula
   d. Navicular
20. The thoracic spine is comprised of ____ bones and also known as the ____ spine:
   a. 10, ventral
   b. 10, dorsal
   c. 12, ventral
   d. 12, dorsal

21. SI joints are also known as ____ joints:
   a. Sino-ileal
   b. Sacro-iliac
   c. Septal-infero
   d. Single-integral

22. The pelvis is comprised of these three bones:
   a. Cervical, thoracic and lumbar
   b. Sacrum, coccyx and dorsal
   c. Ilium, ischium and pubis
   d. Sacrum, coccyx and acetabulum

23. From “top to bottom”, the spine is comprised of what levels:
   a. Cervical, lumbar, thoracic and sacrum
   b. Thoracic, lumbar, sacrum and cervical
   c. Cervical, thoracic, lumbar and sacrum
   d. Sacrum, lumbar, thoracic

24. The odontoid process is located where:
   a. Cervical spine
   b. Thoracic spine
   c. Lumbar spine
   d. None of the above

25. When a radiologist refers to the medial and lateral malleolus, they are referring to which structure:
   a. Radius
   b. Ulna
   c. Ankle
   d. Knee

26. The “ASIS” and “PSIS” are located in which region of the skeletal system:
   a. Skull
   b. Cervical spine
   c. Lumbar spine
   d. Pelvis
27. A “Judet” view is a(an) _______ view of the _____ and useful for visualizing ______________.
   a. Lateral, skull, the sella turcica
   b. Posterior, spine, the vertebral bodies
   c. Oblique, pelvis, non-displaced acetabular fractures
   d. Cone-down, pelvis, the sacrum

28. A vertebra is made up of:
   a. Facet joints, lamina, transverse and spinous processes, and pedicles
   b. Hinge joints, condyles, protuberances, and epicondyles
   c. Tarsals, metatarsals, and phalanges
   d. None of the above
CHAPTER 7—ANSWERS

1. (d) By definition, the musculoskeletal system is defined as the body’s framework of bones and muscles.

2. (b) The skeletal system is often referred to in two main groups. They are axial and appendicular.

3. (b) When a radiology report states that “plain films” were taken of a specific area, they are referring to routine x-rays.

4. (a) When a report refers to an “AP and lateral study,” this means that the exam was done in two different views.

5. (c) The main reason for doing x-ray studies in multiple projections (views) is to demonstrate the anatomy in question from different angles or projections and account for the possibility of one structure overlying another by positioning the patient such that this error does not occur.

6. (b) When reference is made to the radiographs of the calvarium, cranial vault or cranium, this refers to the skull.

7. (b) When reference is made to the sphenoid, ethmoid, and frontals, this is referring to sinuses.

8. (d) A break of a bone or fracture may also be further classified as pathologic, simple, transverse, spiral, longitudinal, oblique, greenstick, comminuted and compound.

9. (b) The tarsals, metatarsals and phalanges refer to bones in the foot.

10. (a) The carpals, metacarpals and phalanges refer to bones in the hand.

11. (b) The os calcis or calcaneus are both names for the heel bone.

12. (b) The talus or astragulus are both names commonly associated with the ankle region.

13. (c) The largest sesamoid bone in the body is the patella.

14. (c) The zygoma refers to the bones of the cheek.

15. (b) The breastbone is also referred to as the sternum.

16. (c) The three main parts of the sternum are manubrium, body and xiphoid process.

17. (b) The socket into which the head of the femur fits into is called the acetabulum.

18. (a) Another name for the collarbone is the clavicle.
19. (c) Another name for shoulder blade is a scapula.

20. (d) The thoracic spine is comprised of 12 bones and also known as the dorsal spine.

21. (b) SI joints are also known as sacro-iliac joints.

22. (c) The pelvis is comprised of these three bones: ilium, ischium and pubis.

23. (c) From “top to bottom,” the spine is comprised of the cervical, thoracic, lumbar and sacral levels.

24. (a) The odontoid process is located in the cervical spine.

25. (c) When a radiologist refers to the medial and lateral malleolus, they are referring to the ankle.

26. (d) The anterior superior iliac spine (ASIS) and posterior superior iliac spine (PSIS) are located in pelvic region of the skeletal system.

27. (c) A “Judet” view is an oblique view of the pelvis and useful for visualizing non-displaced acetabular fractures.

28. (a) A vertebra is made up of facet joints, lamina, transverse and spinous processes and pedicles.
1. By definition, the central nervous system (CNS) is composed of:
   a. Nerves, arteries and ligaments
   b. The brain and spinal cord
   c. The skull, brain, and meninges
   d. All of the above

2. The brain may be imaged via:
   a. CT
   b. MRI
   c. NM
   d. All of the above

3. The dura mater is the:
   a. Outer-most membrane covering the brain and spinal cord
   b. Middle-most membrane covering the brain and spinal cord
   c. Inner-most membrane covering the brain and spinal cord
   d. None of the above

4. When reference is made to the meninges, this is referring to:
   a. The single membrane covering the brain and spinal cord
   b. The two membranes covering the brain and spinal cord
   c. The three membranes covering the brain and spinal cord
   d. None of the above

5. The dura mater, arachnoid and pia mater are:
   a. Membranes covering the brain and spinal cord
   b. Constituents of a cell
   c. Portions of a kidney
   d. Vessels found in the arterial blood supply to the skull and brain

6. Epidurography refers to an injection performed:
   a. Into a nerve
   b. Into the thecal sac
   c. Into the spinal canal
   d. Into the epidural space
7. A type of service a radiologist may provide involving injections of anesthetics, steroids or mixtures of the two to alleviate chronic pain that a patient may have may be referred to as:
   a. Neuroradiology
   b. Pain management
   c. Drug therapy
   d. Hormone therapy

8. The thecal space is defined as a:
   a. Tube
   b. Sheath
   c. Cavity
   d. Waste area

9. Myelography refers to a radiologic study in which:
   a. Contrast is injected into the epidural space and films are taken
   b. Contrast is injected into the intravertebral disk space and films are taken
   c. Contrast is injected into the subarachnoid space of the spinal canal and films are taken
   d. Contrast is injected into the joint space and films are taken

10. Cisternography refers to an exam in which:
   a. Contrast is injected into the subarachnoid space with films taken of the basal cistern
   b. A radioactive material is injected into the subarachnoid space with films taken of the basal cistern
   c. Both A and B
   d. None of the above

11. A cistern is defined as:
   a. A hollow area in which the abdominal organs lie
   b. A lobulated body section, such as the lungs
   c. A closed space which serves as a reservoir for body fluids such as lymph or cerebrospinal fluid
   d. None of the above

12. Pia mater is the:
   a. Outermost membrane covering the brain and spinal cord
   b. Middle-most membrane covering the brain and spinal cord
   c. Inner-most membrane covering the brain and spinal cord
   d. None of the above
CHAPTER 8—ANSWERS

1. (b) By definition, the central nervous system (CNS) is composed of the brain and spinal cord.

2. (d) The brain may be imaged via CT, MRI and NM.

3. (a) The dura mater is the outer-most membrane covering the brain and spinal cord.

4. (c) When reference is made to the meninges, this is referring to the three membranes covering the brain and spinal cord.

5. (a) The dura mater, arachnoid, and pia mater are membranes covering the brain and spinal cord.

6. (d) Epidurography refers to an injection performed into the epidural space.

7. (b) A type of service a radiologist may provide involving injections of anesthetics, steroids or mixtures of the two to alleviate chronic pain that a patient may have may be referred to as pain management.

8. (b) The thecal space is defined as a sheath.

9. (c) Myelography refers to a radiologic study in which contrast is injected into the subarachnoid space of the spinal canal and films are taken.

10. (c) Cisternography refers to an exam in which contrast is injected into the subarachnoid space with films taken of the basal cistern and a radioactive material is injected into the subarachnoid space with films taken of the basal cistern.

11. (c) A cistern is defined as a closed space, which serves as a reservoir for body fluids such as lymph or cerebrospinal fluid.

12. (c) Pia mater is the innermost membrane covering the brain and spinal cord.
CHAPTER 9

Institutional/Practice Code of Ethics

(Some questions may have more than one correct answer.)

1. Professionals who work with patient health information (PHI) are expected to adhere to a code of ethics. Which of the following statements apply to this set of principles?
   a. Promote and protect the confidentiality and security of health records and health information as mandated by law, professional standards, and employers’ policies.
   b. Demonstrate a commitment by employees and others to comply with all laws, regulations, and standards related to claims submission.
   c. Help employees to identify decisions with ethical implications, and resolve such decisions in adherence to practice or organizational policy.
   d. All of the above

2. Which of the following do compliance experts recommend be included in written policies and procedures?
   a. Broad statements consistent with the organization’s or practice’s mission and goals
   b. Specific policies and procedures that address the areas of risks that have been identified through ongoing claims’ audits
   c. A detailed list of personal behaviors, including dress codes
   d. All of the above

3. “Standards of conduct” must be included in every compliance plan. Are these standards different from a “code of ethics”?
   a. No, they do not differ.
   b. Yes, they are totally different. The standards relate to personal behavior and the code of ethics relates to professional actions.
   c. The Department of Health and Human Services Office of Inspector General (OIG) does not define whether there is a difference between the two.
   d. None of the above

4. Which of the following does not describe the goals of standards of conduct?
   a. Demonstrate the organization’s ethics attitude.
   b. Confirm an overall commitment to comply with applicable laws and regulations.
   c. Concentrate mainly on decisions made by coding and billing staff.
   d. Focus on the organization’s cultural, business and corporate identity.
5. How often must organizations give fraud and abuse training to employees?
   a. When an infringement occurs
   b. Every three months
   c. Every six months
   d. Annually

6. A compliance plan must include training, education, and effective lines of communication between the compliance officer and the organization’s employees.
   a. True
   b. False
CHAPTER 9—ANSWERS

1. (d) A code of ethics (also known as code of conduct), along with written policies and procedures, form the core of a compliance plan. It presents guidelines for employees to follow in everyday practice with a focus on acceptable values and standards.

2. (a) and (b) Broad statements should include a commitment to compliance from the highest levels of management. All employees and affiliates should receive this document. Risk-specific policies and procedures also should be developed for certain job descriptions (e.g., coders and billers) with areas of weakness or vulnerability outlined.

3. (a) There is no specific difference between standards of conduct and a code of ethics. According to the OIG, there are several ways to identify a code of ethics, and the term “standards of conduct” is one of those ways. Another way to identify them is as a “code of conduct.” No matter what the provider chooses to call them, the bottom line is that guidelines for business decision-making and behavior should be established. All employees should receive, read, understand and follow them.

4. (c) All employees and affiliates of the organization should receive these guidelines, not just those actively involved in compliance issues (such as coding and billing). Some compliance experts recommend that vendors, suppliers, independent contractors, boards, and volunteers also receive, read, and understand the organization’s code.

5. (d) Organizations must give fraud and abuse training to employees annually.

6. (a) True. A compliance plan must include all of the items listed: training, education, and effective lines of communication.
1. Which of the following poses the biggest threat to the privacy and confidentiality of a patient’s medical record?
   a. The increasing number of people with the ability to tamper with (or “hack”) their way into the information systems of providers and payers
   b. Physical exchange of paper records
   c. Shift from paper to electronic records
   d. Verbal exchange of information about a patient’s health care

2. The Health Insurance Portability and Accountability Act (HIPAA) privacy rule establishes the highest level of protection for individuals’ rights with respect to individually identifiable health information held by covered entities.
   a. True
   b. False

3. Why are radiology records and films particularly vulnerable to breaches of patient privacy?
   a. The volume of cases reviewed by radiologists is higher than that of other physicians
   b. All the information eventually becomes electronic
   c. Radiology films and reports “move” more often than other parts of the medical record
   d. All of the above

4. Which of the following must be protected to comply with the HIPAA privacy standard?
   a. Radiographs and other images produced during a radiological exam if they are electronically transmitted
   b. Hospital radiology records, including copies of reports, films, scans and other images
   c. Microfilmed and digital images
   d. All of the above

5. The HIPAA privacy rule provides two methods by which health information can be de-identified. Which of the following are the approved methods?
   a. Hiring a qualified expert to make a formal determination that the patient’s identity cannot be revealed
   b. Creating an internal board of experts who review medical records on a random basis to assure compliance with the privacy rule
   c. Removing patient number, social security number, and medical record number
   d. Removing a list of 20 individual identifiers and having no actual knowledge that the remaining information could be used alone or in combination with other information to identify the individual
6. De-identified data can *never* be linked back to the identity of the patient to which it corresponds.
   a. True
   b. False
CHAPTER 10—ANSWERS

1. (c) In the final privacy standard, the Department of Health and Human Services states “the shift from paper to electronic records, with the accompanying greater flow of sensitive health information, … strengthens the arguments for giving legal protection to the right to privacy in health information.” The disclosure of information now only requires a push of a button.

2. (b) False. The HIPPA privacy rule establishes a floor of federal privacy protections and individual rights with respect to individually identifiable health information (IIHI) held by covered entities and their business associates. Covered entities may provide greater privacy rights to individuals and greater protections on such information. In addition, covered entities may comply with state laws that provide greater protections for IIHI and greater privacy rights for individuals.

3. (c) There also are other reasons including the following. Radiologists are frequently called to do consults, which necessitate transfer of patient medical information and/or films. Radiology reports often move from the site of service to an outside billing office, which may be located in the hospital or elsewhere. Outside couriers carry records to and from radiology offices.

4. (d) To ensure confidentiality of all of those listed, providers must remove or conceal anything that could identify the patient.

5. The correct answers are (a) and (d).

   HHS defines a “qualified expert” as a person with appropriate knowledge of and experience with generally accepted statistical and scientific principles and methods for rendering information not individually identifiable. This expert applies these methods to determine that the risk is very small for identification.

   HHS refers to answer (d) as the “safe harbor method.” The document “Guidance Regarding Methods for De-identification of Protected Health Information in Accordance with the HIPAA Privacy Rule” lists 18 individual identifiers that must be removed and explains that no residual information should remain.

6. (b) The de-identifying methods included in the privacy rule, according to HHS’s guidance, retain “some risk of identification” even when properly applied. HHS states, “Although the risk is very small, it is not zero…”

CHAPTER 11

Accurate/Sufficient Documentation

1. Which of the following is true about medical record documentation?
   a. Quality coding (accurate) depends upon quality (comprehensive) documentation
   b. Incomplete documentation adversely affects coding quality and reimbursement
   c. Assigning a code without supporting documentation can be considered fraud
   d. All of the above

2. Medicare agencies and payers use the medical record to validate certain factors they consider key indicators of possible fraud or abuse. Which of the following do they not use?
   a. Site of service and caregiver’s identity
   b. Appropriateness of the services provided
   c. Advance beneficiary notice
   d. Accuracy of the billing

3. Before assigning a code, staff must read the source documents and extract which of the following:
   a. Indication for the procedure (diagnosis or symptom)
   b. Procedure performed
   c. Whether the procedure was completed
   d. All of the above

4. Documentation is best described as any written notation into the patient’s medical record, and it includes a number of different types of entries.
   a. True
   b. False

5. It is not necessary to document negative findings (such as in review of systems or exam) in a workup prior to a procedure.
   a. True
   b. False
CHAPTER 11 — ANSWERS

1. (d) Documentation is the key instrument in assigning correct CPT codes. If the medical record doesn't include the appropriate documentation, codes will not accurately reflect the services provided. In many cases, this negatively impacts payment received. You may know that a radiologist performed a certain procedure, but assigning a code without written proof may likely be considered fraudulent.

2. (c) If a Medicare payer identifies a pattern of errors in any of the other three options above, the Department of Health & Human Services Office of Inspector General (OIG) may be called in to investigate. One reason for this special interest is that these are the leading causes of improper payments.

3. (d) When reading the source documentation, all of the above should be identified. All components of the service or procedure must be identified, including diagnostic or therapeutic procedure or service, approach, component of the procedures and level of key component (for evaluation and management codes).

4. (a) True.

5. (b) False. The importance of documentation of negative findings is critical. Among other uses, it will be used by treating physicians in the future and is a major piece of evidence in cases involving malpractice suits.
1. How does the federal government classify the practice of intentionally billing for services and supplies not actually provided:
   a. A billing error
   b. Fraud
   c. Abuse
   d. An oversight

2. When billing Medicare for services provided, the services charged must be for:
   a. Any and all studies done
   b. Services that are reasonable and necessary for the diagnosis and treatment of the patient
   c. Only radiology series CPT codes
   d. All of the above

3. If the medical services provided are not covered by Medicare, but the secondary or supplemental insurer requires a Medicare rejection in order to cover the services:
   a. The claim should not be submitted at all because no payment will be made.
   b. The claim should not be submitted to Medicare, but only to the other payer stating that it is already known that Medicare will not reimburse for this.
   c. The claim should still be submitted to Medicare with a modifier in order to receive a denial. The Medicare denial is then resubmitted to the supplemental or secondary payer with a new claim. The denied claims are Medicare’s “written explanations of benefits,” which are sometimes needed to receive payment from other (non-Medicare) payers.
   d. None of the above

4. It is necessary to document an individual link between each procedure (CPT code) performed and the reason why it was done (ICD-9-CM code) in order to be properly reimbursed for services rendered.
   a. True
   b. False
CHAPTER 12—ANSWERS

1. (b) Fraudulent billing practices can be found in many disguises, including the one mentioned above. The OIG defines fraud as intentionally misrepresenting billing information on a claim and doing so repeatedly to get paid. This could be a federal crime.

2. (b) The services charged must be for services that are reasonable and necessary as defined in the OIG Compliance Program Guidance for individual and small group practices.

3. (c) This information is often needed by other third party payers. When billed to Medicare, it is best to alert the contractor on the claim that it is being submitted for the purpose of receiving a denial in order to bill the secondary payer. Modifier -GY is typically assigned to assist in billing.

4. (a) True. Each diagnosis or series of diagnoses must provide medical necessity for each procedure performed.
CHAPTER 13

Upcoding/Unbundling

1. One of your radiologists has performed magnetic resonance imaging (MRI) of the brain without contrast followed by with contrast. You assign code 70551 (MRI without contrast) and 70552 (MRI with contrast). Why would the claim for this procedure be rejected?
   a. It doesn’t include a modifier.
   b. It is an example of mutually exclusive coding.
   c. It is missing a code.
   d. None of the above.

2. Which of the following best describes the term “unbundling”?
   a. Assigning multiple procedure codes for a service that can be identified by one comprehensive code
   b. Manipulating code assignment to optimize payment
   c. Billing multiple components of a service that must be included in a single fee
   d. All of the above

3. Dr. X visits a new patient in the hospital and he knowingly bills for a higher evaluation and management (E&M) code level than the service he actually rendered to the patient. How would a payer view this practice?
   a. Inaccurate code assignment
   b. Down-coding
   c. Unbundling
   d. Fraud

4. One of the statements below about the CCI is true. Which one?
   a. When appropriate, Column 2 codes may be listed separately when a Column 1 code is billed and an appropriate modifier is assigned.
   b. Column 2 codes should be listed separately when the Column 1 code is billed.
   c. Only physicians are subject to the CCI edits.
   d. It is never appropriate to bill mutually exclusive code pairs together.

5. When processing claims against CCI edits, from a claims submission perspective, Part B claims are:
   a. Processed against the same version of CCI as hospitals (Part A)
   b. Processed against state-specific CCI edits
   c. Processed against CCI edits, but overridden by state-specific CCI edits if provided
   d. Processed against the most recent CCI edits which are one version higher (i.e., more recent) than those used to review claims containing Part A information—Answers
CHAPTER 13—ANSWERS

1. (d) This is actually an example of a comprehensive-component code edit. To avoid this example of unbundling, code 70553 (MRI of the brain without contrast followed by contrast material and further sequences) would be assigned.

2. (d) The second option above is known as intentional unbundling, which constitutes fraud. Genuine misunderstanding of coding and billing guidelines, which may occur in answers “a” and “c,” is known as unintentional unbundling.

3. (d) A physician who repeatedly and knowingly upcodes, or assigns a higher-level code than warranted by the service provided, is showing a pattern of errors. Patterns involving rule-breaking often constitute fraud.

4. (a) When appropriate, Column 2 codes may be listed separately when a Column 1 code is billed. Physicians and hospitals are subject to CCI edits. Mutually exclusive procedures are those that cannot occur during the same session and, therefore, cannot be billed together.

5. (d) Per CMS instructions, hospital outpatient Medicare claims are processed against CCI edits that are one version behind those used for Part B claims processing.
1. How do Medicare payers and other third-party payers identify medically necessary services?
   a. By CPT codes assigned
   b. By ICD-9-CM codes assigned
   c. By procedure and diagnosis codes assigned
   d. None of the above

2. When there is a question concerning the medical necessity of a procedure for a Medicare patient, you should first:
   a. Submit the claim and wait for the Medicare response
   b. Consult your carrier’s local coverage determinations (LCDs)
   c. Have the patient sign an advance beneficiary notice (ABN)
   d. None of the above

3. A patient presents for routine preoperative services for upcoming hernia surgery. The patient has no other chronic conditions. Your hospital’s policy necessitates a chest x-ray for all surgical candidates. This is considered a medically necessary service according to Medicare guidelines.
   a. True
   b. False

4. A Medicare service may be denied even if it is deemed medically necessary by the local coverage determination. The aforementioned statement is:
   a. True
   b. False
CHAPTER 14—ANSWERS

1. (c) Payers have lists of ICD-9-CM diagnosis codes that support the medical necessity for individual procedures (CPT codes) or diagnostic tests. Compliance plans should include processes for ensuring that claims are submitted for payment only when they meet these standards.

2. (b) Your organization should consult all pertinent LCDs prior to submission of a claim. These policies will also bring your attention to the national coverage determinations (NCDs) for these services. Only after the information is obtained should you obtain an ABN or submit a claim.

3. (b) False. Even though it is the hospital policy and part of a good treatment process, there is no medical necessity of the service provided.

4. (a) True. Some Medicare services also have frequency limitations. These guidelines state that once a predetermined number of a type of service is reached, no further payment will be made. These services need to be tracked as well, and it would be appropriate to have an ABN signed prior to performing the service.
CHAPTER 15

Institutional/Practice Compliance Plan

(Some questions may have more than one correct answer.)

1. The Department of Health & Human Services Office of Inspector General (OIG) mandates that physician offices establish compliance plans.
   a. True
   b. False

2. Which of the following is not a goal of a well-designed compliance plan?
   a. Quicker payment of claims
   b. The total elimination of billing mistakes
   c. To reduce the chances of an audit by CMS or the OIG
   d. To avoid conflicts with the self-referral and anti-kickback statutes

3. Which of the following is not considered an element of a compliance plan?
   a. The designation of a chief compliance officer and a corporate compliance committee
   b. Regular, effective education and training programs for all employees
   c. An annual review of Medicare, Medicaid and CHIP billing practices
   d. The use of audits and/or other evaluation techniques to monitor compliance and assist in problem reduction

4. The OIG’s compliance plan requirements published in the Federal Register include information about how the federal government plans to enforce the rules related to the mandatory compliance plan for providers.
   a. True
   b. False
CHAPTER 15—ANSWERS

1. (b) False. Compliance plans for physician offices and all other healthcare providers were mandated by the Patient Protection and Affordable Care Act of 2010 (PPACA). Prior to that the OIG did publish guidance for voluntary compliance plans.

2. (b) One goal that may be incorporated into a compliance plan is to reduce billing mistakes, not to eliminate them.

3. (c) An annual review of Medicare, Medicaid and CHIP billing practices is not one of the seven core elements required to be included in compliance plans. The seven elements of an effective compliance and ethics program can be found on pages 31–35 in Chapter 8 of the U.S. Federal Sentencing Guidelines Manual at http://www.usdoj.gov/ussc/guidelines/index.cfm.

4. (b) False. In that final rule, the OIG states that it did not “intend to finalize compliance plan requirements” but that it would “do further rulemaking … and advance specific proposals at some point in the future.”
1. The Medicare program’s national correct coding initiative (CCI) includes edits for which of the following?
   a. Services of physicians and other practitioners
   b. Outpatient hospital services
   c. Mutually exclusive procedures
   d. All of the above

2. Medicare’s multiple procedure payment reduction (MPPR) policy affects which of the following services:
   a. All radiology services
   b. Computed tomography (CT), magnetic resonance imaging (MRI), and ultrasound
   c. In addition to the services listed in (b) above, diagnostic ophthalmology services, diagnostic cardiovascular services, and some nuclear medicine codes
   d. Advanced diagnostic imaging services when provided with surgical services

3. Medicare regulations mandate that all organizations make a formal decision to follow either the 1995 or 1997 evaluation and management guidelines for all patient encounters. This statement is:
   a. True
   b. False

4. All radiologists are classified as the same specialty according to Medicare regulations. This statement is:
   a. True
   b. False
CHAPTER 16—ANSWERS

1. (d) The purpose of the NCCI edits is to prevent improper payment when incorrect code combinations are reported. The NCCI contains one table of edits for physicians and practitioners and one table of edits for outpatient hospital services. The column one/column two correct coding edits table and the mutually exclusive edits table have been combined into one table and include code pairs that should not be reported together for a number of reasons explained in the NCCI Coding Policy Manual for Medicare Services.

2. (c) A complete list of codes affected by the MPPR policy can be found in Addendum F of the 2013 Medicare physician fee schedule (MPFS) final rule. For this list, go to http://cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/index.html. On the left side of the page, click on PFS Federal Regulation Notices; scroll down to Regulation # CMS-1590-FC. Under the Downloads section; click on CY 2013 PFS Addenda; and choose Addendum F.

3. (b) False. Organizations may use either the 1995 or 1997 guidelines, not a combination of the two.

4. (b) False. Each of the radiology-related modalities, including radiation oncology, interventional radiology, nuclear medicine and diagnostic radiology are considered separately identified specialties within the overall definition of radiology and each has its own specialty code.
1. Which of the following is considered to be the Department of Health and Human Services’ (DHHS) primary enforcement tool?
   a. The federal sentencing guidelines
   b. Civil Monetary Penalties Law
   c. The False Claims Act
   d. The OIG’s special fraud alerts

2. Physicians are supposed to bill the federal health care programs only for items and services that are medically necessary. Where can they find this information?
   a. From Medicare national coverage determinations (NCDs)
   b. From local coverage determinations (LCDs) issued by local Medicare contractors
   c. From the coverage section of CMS’s web site
   d. All of the above

3. Radiology and certain other imaging services are not included in the physician “self-referral” law.
   a. True
   b. False
CHAPTER 17 — ANSWERS

1. (c) The government’s primary enforcement tool is the civil False Claims Act (FCA). The FCA covers only offenses that are committed with actual knowledge, reckless disregard or deliberate ignorance of the claim’s falsity. The OIG’s law-enforcement efforts are not directed toward erroneous claims (innocent errors and negligence) but toward fraudulent claims (“reckless or intentional conduct submitted with intent or knowledge”).

2. (d) Most Medicare coverage information is provided in local coverage determinations (LCDs) developed by clinicians at the contractors that pay Medicare claims. However, in certain cases, Medicare deems it appropriate to develop a national coverage determination (NCD) for an item or service to be applied on a national basis for all Medicare beneficiaries meeting the criteria for coverage. At the following CMS website link, you will find a Medicare coverage database and other related information: http://cms.gov/Medicare/Coverage/CoverageGenInfo/index.html.

3. (b) Radiology and certain other imaging services are included in the list of designated health services (DHS) covered by the physician self-referral law, which also includes 13 other types of services, including inpatient and outpatient hospital services as well as radiation therapy services and supplies. This law prohibits physicians from making referrals for certain DHS payable by Medicare to an entity with which he or she (or an immediate family member) has a financial relationship. It also prohibits the entity from “presenting or causing to be presented” claims to Medicare (or billing another individual, entity, or third party payer) for those referred services. However, certain exceptions do apply.
1. A physician finds out that a diagnosis code for a certain procedure is not included in a payer’s LCD. What action should the physician take?
   a. Perform the procedure, submit the claim and see whether it is paid
   b. Inform the patient verbally that Medicare might not pay for the service
   c. Ask the patient to sign an advance beneficiary notice (ABN) before performing the procedure
   d. Ask the patient to sign the ABN before he or she leaves the building or office
   e. Both B and C

2. Local coverage determinations (LCDs) are used for the following:
   a. To clarify national coverage policies
   b. To develop policies that are not commented on by national coverage policies
   c. To better enforce a local policy that is more stringent than the national policy
   d. Both A and B
   e. All of the above

3. In the absence of an LCD, the service will be always be covered and reimbursed. This statement is:
   a. True
   b. False

4. There are LCDs for all services. This statement is:
   a. True
   b. False

5. All local medical review policies (LMRPs) were retired in 2005. This statement is:
   a. True
   b. False
CHAPTER 18—ANSWERS

1. (e) Providers must explain to the patient that Medicare may not cover the service. Once the patient is informed, the provider must give the ABN to the patient before the procedure in order to obtain payment from the patient if Medicare does deny the service.

2. (e) All of the above. The reasons that CMS developed the LCDs are stated in a, b, and c of the question. An LCD may NOT conflict with a national coverage determination (NCD) once it is effective. The contractor must change a previously developed LCD, so there is no conflict with an NCD.

3. (b) False. In the absence of an LCD, the NCD should be consulted. These are national guidelines for payment for services that lend additional guidance for topics not covered by local carriers.

4. (b) False. Only certain services have LCDs that lend guidance on medical necessity.

5. (a) True. The final rule establishing LCDs became effective December 7, 2003. Between that date and December 31, 2005, contractors converted all existing LMRPs into LCDs and articles.
ChapTer 19

Modifiers

1. According to the American Medical Association, a modifier should be:
   a. Used instead of a CPT code
   b. Used in addition to a CPT code
   c. Used for all payers the same way
   d. None of the Above

2. Modifiers can be assigned to:
   a. Only radiology codes (i.e., 7XXXX series)
   b. Only surgical codes (i.e., 10XXX-69XXX series)
   c. Only medicine codes (i.e., 9XXXX series)
   d. All CPT codes

3. CPT codes are:
   a. Created, published and maintained by the Centers for Medicare and Medicaid Services (CMS)
   b. Created, published and maintained by the American Medical Association (AMA)
   c. Created, published and maintained by the local insurance payers
   d. Created, published and maintained by the Office of Inspector General (OIG)

4. The most common codes used by physician offices from a billing perspective are:
   a. CPT codes
   b. HCPCS codes
   c. Both A and B
   d. None of the above

5. The most common modifier used on a hospital based practice radiology claim is:
   a. -26
   b. -76
   c. -51
   d. -59

6. Modifier -26 means:
   a. Reduced services
   b. Multiple procedures
   c. Professional component
   d. Repeat procedure
7. The single most important modifier when dealing with correct coding initiative (CCI) edits is:
   a. -51
   b. -52
   c. -53
   d. -59

8. Per CPT guidelines, modifier -59 should be used:
   a. When a staged procedure is done
   b. Whenever multiple procedures are performed
   c. Whenever a repeat procedure is performed on the same date of service
   d. Whenever a distinct procedural service is performed in which another modifier does not
      more appropriately define the study done

9. Assignment of the -22 modifier usually:
   a. Results in additional reimbursement with no additional information needing to be filed
   b. Is not processed without additional reimbursement information being submitted to
      substantiate why this modifier was used
   c. Is universally accepted by all payers
   d. All of the above

10. When performing bilateral procedures:
    a. The modifier -50, where appropriate, may be used
    b. The third party payer may accept multiple units of the same code
    c. The third party payer may accept modifiers -LT and -RT on the claim
    d. All of the above

11. The numeric codes and modifiers found within the CPT code book are also known as:
    a. Level I codes and modifiers
    b. Category I codes and modifiers
    c. CPT-4 codes and modifiers
    d. All of the above

12. Codes and modifiers that are listed as alpha or alpha-numeric information from the A-V section
    of the alphabet are also known as:
    a. Level I codes and modifiers
    b. Level II codes and modifiers
    c. Level III codes and modifiers
    d. All of the above

13. Level II codes and modifiers are also known as:
    a. Local level II codes
    b. Regional level II codes
    c. National level II codes
    d. All of the above
14. Modifiers that may be assigned to evaluation and management (E&M) codes are as follows:
   a. -25 + -53
   b. -25 + -57
   c. -57 + -76
   d. -57 + -26

15. When an initial surgical procedure was performed and during this encounter it was planned to perform additional surgical procedures within the global period, the modifier that most appropriately defines the subsequent services and should be assigned to the subsequent code(s) is:
   a. -57
   b. -58
   c. -59
   d. -60

16. If after the placement of a percutaneous gastrostomy tube (10 day global period), on day 7 the patient pulls their tube out requiring the placement of another gastrostomy tube, the most appropriate modifier to use would be:
   a. -58
   b. -78
   c. -59
   d. -79

17. If following the placement of an external biliary drainage catheter (90 day global period) the patient returns on day 73 for an abscess drainage of the left kidney, the most appropriate modifier to be used would be:
   a. -58
   b. -78
   c. -59
   d. -79

18. Provided the surgical code in question allows modifier assignment, if two physicians participate in the surgical component of an invasive procedure, common modifiers that may be used by both physicians are:
   a. -62
   b. -80
   c. Either A or B
   d. None of the above
19. On the same date of service (DOS), if an AP chest x-ray is performed at 7:00 am and read by Dr. A and at 10:30 am another AP chest x-ray is performed and read by Dr. A, the correct modifier(s) to be assigned to these codes to describe the physicians reading of these studies in a hospital-based setting are (is):
   a. 71010 -26 and 71010 -26
   b. 71010 and -76 and 71010 -76
   c. 71010 -26 and 71010 -26, -76
   d. 71010 -26 and 71010 -26, -77

20. On the same DOS, if an AP chest x-ray is performed at 7:00 am and read by Dr. A and at 10:30 am another AP chest is performed and read by Dr. B, the correct modifier(s) to be assigned to these codes to describe the physicians reading of these studies in a hospital-based setting are (is):
   a. 71010 -26 and 71010 -26
   b. 71010 and -76 and 71010 -76
   c. 71010 -26 and 71010 -26, -76
   d. 71010 -26 and 71010 -26, -77

21. On the same DOS, if an AP chest x-ray is performed at 7:00 am and read by Dr. A and at 10:30 am an AP and lateral chest x-ray is read by Dr. B, the correct modifier(s) to be assigned to these codes to describe the physicians reading of these studies in a hospital-based setting are (is):
   a. 71010 -26 and 71010 -26, -76
   b. 71010 -26 and 71010 -26, -77
   c. 71020 -26 and 71010 -59
   d. 71010 -26, -59 and 71020 -26
CHAPTER 19—ANSWERS

1. (b) According to the American Medical Association, a modifier should be used in addition to a CPT code.

2. (d) Modifiers can be assigned to all CPT codes.

3. (b) CPT codes are created, published and maintained by the American Medical Association (AMA).

4. (c) The most common codes used by physician offices from a billing perspective are CPT and HCPCS codes.

5. (a) The most common modifier used on a hospital based practice radiology claim is -26.

6. (c) Modifier -26 means professional component.

7. (d) The single most important modifier when dealing with correct coding initiative (CCI) edits is -59.

8. (d) Per CPT guidelines, modifier -59 should be used whenever a distinct procedural service is performed in which another modifier does not more appropriately define the study done.

9. (b) Assignment of the -22 modifier usually is not processed without additional reimbursement information being submitted to substantiate why this modifier was used.

10. (d) When performing bilateral procedures, the modifier -50, where appropriate, may be used, the third party payer may accept multiple units of the same code and the third party payer may accept modifiers -LT and -RT on the claim.

11. (d) Both numeric CPT codes and modifiers may be known as Level I, Category I or CPT-4 codes/modifiers.

12. (b) Codes and modifiers that are listed as alpha or alpha-numeric information from the A-V section of the alphabet are also known as level II codes and modifiers.

13. (c) Level II codes and modifiers are also known as national level II codes.

14. (b) Modifiers that may be assigned to evaluation and management (E&M) codes are as follows, -25 + -57.

15. (b) When an initial surgical procedure was performed and at that time frame it was planned to perform additional surgical procedures within the global period, the modifier that most appropriately defines and should be assigned to the subsequent service(s) is -58.
16. (b) If after the placement of a percutaneous gastrostomy tube (10 day global period), on day 7 the patient pulls their tube out requiring the placement of another gastrostomy tube, the most appropriate modifier to use would be -78.

17. (d) If following the placement of an external biliary drainage catheter (90 day global period) the patient returns on day 73 for an abscess drainage of the left kidney, the most appropriate modifier to be used would be -79.

18. (c) Provided the surgical code in question allows modifier assignment, if two physicians participate in the surgical component of an invasive procedure, common modifiers that may be used by both physicians are either -62 or -80.

19. (c) On the same DOS, if an AP chest x-ray is performed at 7:00 am and read by Dr. A and at 10:30 am another AP chest x-ray is performed and read by Dr. A, the correct modifier(s) to be assigned to these codes to describe the physicians’ reading of these studies in a hospital-based setting are 71010-26 and 71010-26, -76.

20. (d) On the same DOS, if an AP chest x-ray is performed at 7:00 am and read by Dr. A and at 10:30 am another AP chest is performed and read by Dr. B, the correct modifier(s) to be assigned to these codes to describe the physicians’ reading of these studies in a hospital-based setting are 71010-26 and 71010-26, -77.

21. (d) On the same DOS, if an AP chest x-ray is performed at 7:00 am and read by Dr. A and at 10:30 am an AP and lateral chest x-ray is read by Dr. B, the correct modifier(s) to be assigned to these codes to describe the physicians’ readings of these studies in a hospital-based setting are 71010-26, -59 and 71020-26.
CHAPTER 20

Radiological Supervision and Interpretation Codes

1. Radiological supervision and interpretation codes are:
   a. Only for the 7XXXX series of CPT codes
   b. Also referred to as “S&I” or “RS&I” codes
   c. Are part of a system known as component coding
   d. All of the above

2. If a physician in a hospital-based practice only performs a portion of a study, that is, only the supervision or only the interpretation part of the procedure:
   a. The CPT code should be submitted with no modifier
   b. The CPT code should be submitted with modifiers -26, -52
   c. The CPT code should be submitted with modifier -26
   d. The CPT code should be submitted with modifier -52

3. For radiological services, RS&I codes can be used only by:
   a. The radiologist
   b. The hospital
   c. Any physician actually performing the service
   d. All of the above

4. For component coded services, S&I codes include the work of:
   a. Non-selective catheter placement
   b. Injections
   c. Selective catheter placement
   d. None of the above

5. When performing an angiogram, the S&I code includes all fluoroscopy used during the procedure. S&I codes include the work of supervising and interpreting the procedure only.
   a. True
   b. False

6. When cardiologists or vascular surgeons perform a radiographic study (diagnostic or therapeutic), they cannot submit S&I codes as these codes are only for radiologists.
   a. True
   b. False
CHAPTER 20—ANSWERS

1. (d) Radiological supervision and interpretation codes are only for the 7XXXX series of CPT codes also referred to as “S&I” or “RS&I” codes and are part of a system known as component coding.

2. (b) If a physician in a hospital-based practice only performs a portion of a study—that is, only the supervision or only the interpretation part of the procedure—the CPT code should be submitted with the modifiers -26, -52. (Source: Medicare Claims Processing Manual, Chapter 13, §80.1)

3. (d) For radiological services, RS&I codes can be used by the radiologist, the hospital and any physician actually performing the service.

4. (d) For component coded services, S&I codes do not include the work of any type of the surgical portion of an invasive procedure. S&I codes include the work of supervising and interpreting the procedure only.

5. (a) True. Fluoroscopy is an inherent part of the angiographic procedure and should not be charged separately as this would be constitute unbundling.

6. (b) False. CPT codes may be assigned by any provider as long as the provider is licensed, trained and approved to provide the service and has performed the study(s) in question.
CHAPTER 21

Evaluation and Management Services Codes

1. Evaluation and management (E&M) services codes (99XXX) may be assigned by:
   a. All physicians
   b. Radiologists
   c. Hospitals
   d. All of the above

2. E&M services pertain to services provided to which types of patients:
   a. New patients (in- and outpatients)
   b. Established patients (in- and outpatients)
   c. Inpatients, outpatients or observation patients
   d. All of the above

3. Currently, E&M services are primarily assigned by radiologists in conjunction with what types of services:
   a. All exams
   b. Those procedures that are of a more invasive or complex nature
   c. All breast studies
   d. For routine pre- or post-op services

4. With minor exception (follow-up care and time based services), to correctly bill for E&M services, the medical encounter should contain documentation of the following:
   a. Medical decision making
   b. History
   c. Examination
   d. All of the above
CHAPTER 21 — ANSWERS

1. (d) Evaluation and management (E&M) services codes (99XXX) may be assigned by all physicians, radiologists and hospitals.

2. (d) E&M services pertain to services provided to new patients (in- and outpatients), established patients (in- and outpatients) and in-, out- or observation patients.

3. (b) Currently, E&M services are primarily assigned by radiologists for those procedures that are of a more invasive or complex nature.

4. (d) With minor exception (routine follow-up care and time-based services), to correctly bill for E&M services, the medical encounter should contain documentation of, medical decision-making, history and examination, or at least two of the three for established patients.
1. Component coding, by definition, refers to:
   a. The assignment of diagnosis codes for internal and external diseases
   b. The assignment of modifiers, CPT and diagnosis codes
   c. The assignment of surgical (procedural) and RS&I codes
   d. All of the above

2. Component codes, from the RS&I code perspective are found:
   a. In the diagnostic radiology and surgical code sections of CPT
   b. In the ultrasound section of CPT
   c. In the CT and MRI sections of CPT codes
   d. All of the above

3. When assigning CPT codes for a diagnostic angiogram performed by a radiologist, there will:
   a. Be codes from only the 7XXXX series
   b. Be codes from only the 10XX-69XXX series
   c. Be codes from both the 7XXXX and 10XXX-69XXX series
   d. None of the above

4. Component coding allows for:
   a. Correct and complete coding for each discrete portion of the actual service performed by each physician
   b. Correct coding for all portions of the study done including diagnosis codes
   c. Correct coding for each discrete portion of the actual service performed by each physician including high cost supplies.
   d. None of the above

5. When coding for diagnostic angiography performed in its entirety by a radiologist, it is safe to say that:
   a. There will always be one RS&I code and one surgical code
   b. There may be more RS&I than surgical codes or vice-versa
   c. Both A and B
   d. None of the above

6. When a catheter is placed in the aorta by any approach, this is known as:
   a. A selective catheter placement
   b. A non-selective catheter placement
   c. An ipsilateral catheter placement
   d. A contralateral catheter placement
7. When a needle or catheter is placed directly into a vessel with no further advancement of the device outside of the vessel punctured, this is known as:
   a. A selective catheter placement
   b. A non-selective catheter placement
   c. An ipsilateral catheter placement
   d. A contralateral catheter placement

8. Which of the following is not an example of a non-selective arterial catheter placement:
   a. Catheter placed into abdominal aorta via direct puncture of aorta
   b. Catheter placed into thoracic aorta via common femoral artery puncture
   c. Catheter placed into aortic arch via brachial artery puncture
   d. None of the above

9. When a catheter is placed into the vena cava by any approach, this is known as:
   a. A selective catheter placement
   b. A non-selective catheter placement
   c. An ipsilateral catheter placement
   d. A contralateral catheter placement

10. When performing procedures in which a catheter must be moved, negotiated, guided or placed into a vessel other than the aorta, vena cava or vessel punctured, this is known as:
    a. Non-selective catheter placement
    b. Selective catheter placement
    c. Cut-down procedure
    d. IVUS procedure

11. From a CPT coding perspective, there are how many orders of selectivity for arterial vessels studied above the diaphragm or below the diaphragm:
    a. One
    b. Two
    c. Three
    d. Four

12. When an ipsilateral catheter placement is performed, this refers to:
    a. Final placement of a catheter in a vessel opposite to the side of the body where initial vascular access was gained
    b. Final catheter placement in a vessel on the same side of the body where initial vascular access was gained
    c. Placement of the catheter in the aorta
    d. Placement of the catheter in the vena cava
13. When a contralateral catheter placement is performed, this refers to:
   a. Final placement of a catheter in a vessel opposite to the side of the body where initial vascular access was gained
   b. Final catheter placement in a vessel on the same side of the body where initial vascular access was gained
   c. Placement of the catheter in the aorta
   d. Placement of the catheter in the vena cava

14. When reference is made to a vascular family, this refers to:
   a. Any group of vessels fed by a primary branch off of the aorta or the initial vessel punctured
   b. Any group of vessels fed by a primary branch off of the vena cava or the initial vessel punctured
   c. Both A and B
   d. None of the above

15. By definition, there are how many vascular systems:
   a. One
   b. Two
   c. Four
   d. Five

16. In relation to current CMS regulations and guidance, which of the following is true:
   a. Both non-selective and selective catheter placement codes may be assigned from a single vascular access point
   b. Codes 36140 or 36120 may be used in addition to selective arterial catheterization codes from a single vascular access point
   c. Both A and B
   d. None of the above

17. In order to correctly assign selective catheter placement codes you must know:
   a. Was the exam diagnostic or therapeutic
   b. Was the exam performed on the GI or GU system
   c. Where the initial vascular access point was and where the final catheter placement(s) were
   d. None of the above

18. When performed by a radiologist, if the catheter is placed into the right and left jugular veins with subsequent imaging, these would be:
   a. Coded separately
   b. Coded to the highest degree of selectivity achieved
   c. Coded in addition to the RS&I code
   d. All of the above
19. By definition, an arterial, pulmonary, or venous order of selectivity refers to:
   a. How many primary, secondary or tertiary vessels there are in the same vascular family
   b. How many branches there are off a single main branch of the aorta, vena cava, or vessel accessed
   c. How many separate, discrete bifurcations were crossed with the catheter
   d. All of the above

20. From a single vascular access point, when a radiologist placed a catheter in both the aorta or vena cava and a vessel(s) that originate off of these structures, it is appropriate to:
   a. Code only for the non-selective placement
   b. Code for only the selective placement
   c. Code for both the non-selective and selective placement
   d. None of the above

21. Assuming that full and complete diagnostic and therapeutic procedures are performed by a radiologist during the same setting and a bundled code does not exist:
   a. Code for the RS&I codes for the diagnostic studies and catheter placements
   b. Code for the therapeutic studies and catheter placements
   c. Both A and B
   d. None of the above

22. When more than one second or third order vessel is selectively catheterized and studied by a radiologist in the same vascular family, coding rules state:
   a. You may code for all selective catheter placements made
   b. You may code for the highest degree of selectivity reached per vascular family
   c. You may only assign one second or third order selective code per family
   d. Both B and C

23. Coding rules state that:
   a. If multiple non-selective placements in the same structure are made from a solitary vascular access point, all may be separately coded
   b. If multiple non-selective placements in the same structure are made from multiple vascular access points, all may be separately coded
   c. If both a non-selective and selective study are done from the same access, code only the non-selective
   d. None of the above

24. Catheter placements into the aorta from a femoral, brachial or axillary approach are defined by code(s)
   a. 36140
   b. 36160
   c. 36200
   d. 36160 and 36200
25. Catheter placement for a TLA (translumbar aortogram) is defined by code:
   a. 36140
   b. 36160
   c. 36200
   d. 36160 and 36200

26. Initial placement of a catheter into the arterial or venous side of an AV-fistula followed by imaging is defined by codes:
   a. 36147, 75791
   b. 36148
   c. 36147
   d. 36140

27. Disregarding whether separate payment will be received, when a physician separately punctures and places catheters into both the arterial and venous sides of a dialysis fistula for diagnostic and therapeutic procedures, which code(s) may be reported to define vascular access:
   a. 36147 only
   b. 36147 (x2)
   c. 36147 and 36148
   d. 36148 only

28. Selective arterial catheter placements above the diaphragm are most commonly defined by which codes:
   a. 36013-36015
   b. 36011-36012
   c. 36215-36218
   d. 36245-36248

29. Selective arterial catheter placements below the diaphragm are most commonly defined by which codes:
   a. 36013-36015
   b. 36011-36012
   c. 36215-36218
   d. 36245-36248

30. Selective venous catheter placements above the diaphragm are most commonly defined by which codes:
   a. 36013-36015
   b. 36011-36012
   c. 36215-36218
   d. 36245-36248
31. Selective venous catheter placements below the diaphragm are most commonly defined by which codes:
   a. 36013-36015
   b. 36011-36012
   c. 36215-36218
   d. 36245-36248

32. Selective catheter placement into either the right or left pulmonary artery is defined by which code:
   a. 36013
   b. 36014
   c. 36015
   d. 75774

33. Selective segmental or sub-segmental catheter placement in the pulmonary vasculature is defined by which code:
   a. 36013
   b. 36014
   c. 36015
   d. 75774

34. When performing both bilateral selective pulmonary angiography and an IVC study, the catheter placement code(s) used is (are):
   a. 36010 only
   b. 36014 (x2)
   c. 36015 (x2)
   d. 36010 and 36014 (x2)

35. At the minimum, if Portography is performed, (i.e., percutaneous or via hepatic venous approach) which code is used to define this vascular access?
   a. 36013
   b. 36000
   c. 36481
   d. None of the above

36. When billing for a percutaneous radiofrequency (RF) ablation of a liver tumor, the appropriate surgical code is:
   a. 47370
   b. 47382
   c. 47380
   d. Any of the above based upon the imaging modality used
37. When billing for a percutaneous radiofrequency ablation of a liver tumor, the appropriate S&I code is:
   a. 77013
   b. 77022
   c. 76940
   d. Any of the above, based upon the imaging modality used

38. When billing for US guided RF ablation of sites other than the liver, kidney or lung, which codes should be assigned?
   a. 76940 and 32998
   b. 76940 and 47382
   c. 76940 and 50592
   d. 76940 and xxx99

39. When defining RF ablation and cryotherapy of renal tumors, these are the same type of clinical procedure:
   a. True
   b. False

40. Percutaneous RF ablation of a renal tumor is defined by CPT code (surgical):
   a. 50250
   b. 50592
   c. 50593
   d. 49200

41. Percutaneous cryotherapy of a renal tumor is defined by code (surgical):
   a. 50250
   b. 50592
   c. 50593
   d. 49200

42. Percutaneous cryotherapy of a renal tumor is performed by a ______________ technique:
   a. radiofrequency
   b. rapid freezing and thawing
   c. pulse MRI
   d. radiopharmaceutical

43. Under fluoroscopic guidance, if removing and replacing an externally accessible ureteral stent (through the renal pelvis), the following surgical code should be assigned:
   a. 50382
   b. 50385
   c. 50387
   d. 50688
44. Under fluoroscopic guidance, if removing and replacing an indwelling ureteral stent via an endoscopic approach, the following surgical code should be assigned:
   a. 50382
   b. 50385
   c. 50387
   d. None of the above

45. Under fluoroscopic guidance, if removing and replacing an indwelling ureteral stent via a percutaneous approach (through the renal pelvis), the following surgical code should be assigned:
   a. 50382
   b. 50385
   c. 50387
   d. 50688

46. If removing only an indwelling ureteral stent, and no fluoroscopic guidance is used, the following code should be assigned:
   a. 50382
   b. 50386
   c. 50389
   d. A low-level E&M code

47. If under imaging guidance a ureteral stent is exchanged through an ileal conduit, the correct codes are:
   a. 76942 and 50688
   b. 77002 and 50688
   c. 75984 and 50688
   d. A low-level E&M code

48. If performing RF ablation of a pulmonary tumor of the right or left lung under CT guidance, this should be coded as:
   a. 77013 and 32999
   b. 77013 and 32998
   c. 77014 and 32405
   d. None of the above

49. If three discrete pulmonary tumors are treated with radiofrequency ablation in a single lung under US guidance, this should be coded as:
   a. 76940 and 32998 (x3)
   b. 76940 (x3) and 32998 (x3)
   c. 76940 (x3) and 32998
   d. 76940 and 32998
50. If three discrete pulmonary tumors are treated by RF ablation under CT guidance, two in the right lung and one in the left lung, this should be coded as:

a. 77013(x3) and 32998(x3)
b. 77013(x2) and 32998(x3)
c. 77013(x2) and 32998(x2)
d. 77013(x3) and 32998(x2)
CHAPTER 22—ANSWERS

1. (c) Component coding, by definition, refers to the assignment of surgical (procedural) and RS&I codes.

2. (d) Component codes, from the RS&I code perspective are found in the diagnostic radiology and surgical code sections of CPT, in the ultrasound section of CPT and in the CT and MRI sections of CPT codes.

3. (c) When assigning CPT codes for a diagnostic angiogram performed by a radiologist, there will be codes from both the 7XXXX and 10XXX-69XXX series.

4. (a) Component coding allows for correct and complete coding for each discrete portion of the actual service performed by each physician.

5. (c) When coding for diagnostic angiography performed in its entirety by a radiologist, it is safe to say that there will always be one RS&I code and one surgical code and there may be more RS&I than surgical codes or vice-versa.

6. (b) When a catheter is placed in the aorta by any approach, this is known as a non-selective catheter placement.

7. (b) When a needle or catheter is placed directly into a vessel with no further advancement of the device outside of the vessel punctured, this is known as a non-selective catheter placement.

8. (d) Catheter placed into abdominal aorta via direct puncture of aorta, catheter placed into thoracic aorta via common femoral artery puncture and catheter placed into aortic arch via brachial artery puncture are all examples of non-selective arterial catheter placement.

9. (b) When a catheter is placed into the vena cava by any approach, this is known as a non-selective catheter placement.

10. (b) When performing procedures in which a catheter must be moved, negotiated, guided or placed into a vessel other than the aorta, vena cava or vessel punctured, this is known as a selective catheter placement.

11. (c) From a CPT coding perspective, there are three orders of selectivity for arterial vessels studied above the diaphragm or below the diaphragm.

12. (b) When an ipsilateral catheter placement is performed, this refers to final catheter placement in a vessel on the same side of the body where initial vascular access was gained.

13. (a) When a contralateral catheter placement is performed, this refers to final placement of a catheter in a vessel opposite to the side of the body where initial vascular access was gained.
14. (c) When reference is made to a vascular family, this refers to any group of vessels fed by a primary branch off of the aorta or the initial vessel punctured as well as any group of vessels fed by a primary branch off of the vena cava or the initial vessel punctured.

15. (d) By definition, there are five vascular systems.

16. (d) CMS states they will not allow payment for ipsilateral and contralateral catheter placements from a singular vascular access at the same clinical setting.

17. (c) In order to correctly assign selective catheter placement codes you must know where the initial vascular access point was and where the final catheter placement(s) were.

18. (d) When performed by a radiologist, if the catheter is placed into the right and left jugular veins with subsequent imaging, these would be coded separately, coded to the highest degree of selectivity achieved and coded in addition to the RS&I code.

19. (d) By definition, an arterial, pulmonary or venous order of selectivity refers to how many primary, secondary or tertiary vessels there are in the same vascular family, how many branches there are off a single main branch off of the aorta, vena cava or vessel accessed and how many separate, discrete bifurcations were crossed with the catheter.

20. (b) From a single vascular access point, when a radiologist placed a catheter in both the aorta or vena cava and a vessel(s) that originate off of these structures, it is inappropriate to code for the non-selective placement. Code for only the selective placement.

21. (c) Assuming that full and complete diagnostic and therapeutic procedures are performed by a radiologist during the same setting and a bundled code does not exist, it is appropriate to code the RS&I codes for both the diagnostic and therapeutic studies as well as the catheter placements. Important introductory language is now present in CPT explaining the criteria that must be met to code/bill for each.

22. (d) When more than one second or third order vessel is selectively catheterized and studied by a radiologist in the same vascular family, coding rules state you may only assign one second or third order selective code (per family), as well as coding to the highest degree of selectivity reached in that family.

23. (b) Coding rules state that if multiple non-selective placements in the same structure are made from multiple vascular access points, all may be separately coded.

24. (c) Catheter placements into the aorta from a femoral, brachial or axillary approach are defined by code 36200.

25. (b) A TLA (translumbar aortogram) catheter placement is defined by code 36160.

26. (c) Initial placement of a catheter into the arterial or venous side of an AV-fistula followed by imaging is defined by code 36147.
27. (c) Disregarding whether separate payment will be received, when a physician separately punctures and places catheters into both the arterial and venous sides of a dialysis fistula for diagnostic and therapeutic procedures, codes 36147 and 36148 should be submitted to define these accesses.

28. (c) Selective arterial catheter placements above the diaphragm are most commonly defined by codes 36215-36218.

29. (d) Selective arterial catheter placements below the diaphragm are most commonly defined by codes 36245-36248.

30. (b) Selective venous catheter placements above the diaphragm are most commonly defined by codes 36011-36012.

31. (b) Selective venous catheter placements below the diaphragm are most commonly defined by which codes 36011-36012.

32. (b) Selective catheter placement into either the right or left pulmonary artery is defined by code 36014.

33. (c) Selective segmental or sub-segmental catheter placement in the pulmonary vasculature is defined by code 36015.

34. (d) When performing both bilateral selective pulmonary angiography and an IVC study, the catheter placement codes used are a single unit of 36010 and 36014 (x2).

35. (c) Regardless of how vascular access is gained into the portal system, (i.e., percutaneous, via hepatic venous approach) code 36481 is used to define this.

36. (b) Report code 47382 as this specifically states “percutaneous” in its definition. Also report the appropriate 7XXXX series guidance code based upon the modality utilized.

37. (d) Report one of the 76xxx or 77xxx guidance codes based upon the specific (i.e., CT, US or MRI) modality utilized. Also report the code 47382 as this specifically states “percutaneous” in its definition.

38. (d) Codes 76940 and xxx99 most appropriately define the performance of these services.

39. (b) False. When defining RF ablation and cryotherapy of renal tumors, these are not the same type, but 2 different types of interventional procedures. See code 50592 for RF ablation and 50593 for cryoablation procedures.

40. (b) Percutaneous RF ablation of a renal tumor is defined by CPT code (surgical) 50592.

41. (c) Percutaneous cryotherapy of a renal tumor is defined by code (surgical) 50593.

42. (b) Percutaneous cryotherapy of a renal tumor is performed by a rapid freezing and thawing technique.
43. (c) Under fluoroscopic guidance, if removing and replacing an externally accessible ureteral stent (through the renal pelvis), the correct surgical code to be assigned is 50387.

44. (d) Under fluoroscopic guidance, if removing and replacing an indwelling ureteral stent via an endoscopic approach, none of the codes listed are appropriate. The codes listed as answer choices represent percutaneous as opposed to endoscopic choices.

45. (a) Under fluoroscopic guidance, if removing and replacing an indwelling ureteral stent via a percutaneous approach (through the renal pelvis), surgical code 50382 should be assigned.

46. (d) If removing only an indwelling ureteral stent, and no fluoroscopic guidance is used, a low-level E&M code should be assigned.

47. (c) If under imaging guidance a ureteral stent is exchanged through an ileal conduit, the correct codes are 75984 and 50688.

48. (b) If performing RF ablation of a pulmonary tumor of the right or left lung under CT guidance, this should be coded as 77013 and 32998.

49. (d) If three discrete pulmonary tumors are treated in a single lung under US guidance, this should be coded with a single unit of 76940 and 32998 only.

50. (c) If three discrete pulmonary tumors are treated by RF ablation under CT guidance, two in the right lung and one in the left lung, this should be coded as 77013 (x2) and 32998 (x2). Each set of codes is only used once per organ.
1. The global surgical period refers to:
   a. All surgical procedures done in a 12 month calendar year
   b. All surgical procedures done in a particular inpatient stay
   c. All surgical procedures
   d. The time frame during which, either prior to or after the primary surgical procedure, other services are provided. These services may need to be assigned a modifier to alert the payer that this was known.

2. Typical global periods (in days) are:
   a. 0, 15, 30, 60 and 90
   b. 0, 30 and 90
   c. 0, 10 and 90
   d. 5, 10 and 15

3. The global surgery concept affects:
   a. RS&I codes
   b. Surgical/procedural codes
   c. Both A and B
   d. None of the above

4. Which of the following modifiers would be acceptable based upon the clinical scenario when billing for procedures performed within a global period:
   a. -58
   b. -78
   c. -79
   d. All of the above

5. If a complication arises from the original surgery that requires that an additional procedure be performed within the global surgical package, it is covered under the original payment and should not be reported separately?
   a. True
   b. False

6. Application of global surgery period rules are the same for billing of Part A (hospital) and Part B (professional) services:
   a. True
   b. False
   c. Not applicable
CHAPTER 23 — ANSWERS

1. (d) The global surgical period refers to the time frame during which, either prior to or after the primary surgical procedure, other services were provided. These services may need to be assigned a modifier to alert the payer that this was known.

2. (c) Typical global periods (in days) are 0, 10 and 90.

3. (b) The global surgery concept affects surgical/procedural codes.

4. (d) Any of the following modifiers (-58, -78, -79) would be acceptable based upon the clinical scenario when billing for procedures performed within a global period.

5. (b) False. Not all services that fall within a global period are considered part of the global surgical package. In this case, we are referring to a complication, which falls outside the scope of normal postoperative care when it requires a return to the operating room (including specials room). In order to indicate that a service or procedure is outside the global package, you must use the appropriate modifier, in this case, modifier -78.

6. (b) False. Per CMS directives, under the Outpatient Prospective Payment System (OPPS), the global period (for hospital billing only) is the day of service.
1. Plain film radiography examination refers to:
   a. Diagnostic US
   b. X-ray studies
   c. Diagnostic CT
   d. All of the above

2. The diagnostic radiology section of CPT contains code choice options for:
   a. CT
   b. MRI
   c. Diagnostic imaging
   d. All of the above

3. When trying to determine if a separate CPT code exists for a specific diagnostic radiology procedure, it is easiest to:
   a. Determine anatomically what film would be taken
   b. Scan each major modality specific section
   c. Check Appendix B of CPT to see if any new codes were added that might define the study in question
   d. None of the above

4. When a diagnostic radiology study is being performed that does not have a CPT code that truly defines what is being done, you should:
   a. Use a code that somewhat describes it
   b. Use a code that somewhat describes it and also assign the modifier -52
   c. Use a code that somewhat describes it and also assign the modifier -22
   d. Use the unlisted procedure code and provide specific information that defines what was done, why it was done and assign a charge representative of the work actually performed.

5. When a plain film study of the head is done and the report says, “Towne and both laterals were performed,” the correct CPT code to use is:
   a. 70210
   b. 70220
   c. 70250
   d. 70260
6. If an ER patient has a portable AP and lateral skull series performed, the correct code(s) is/are:
   a. 70250
   b. 70260
   c. 70250 and R0070
   d. 70260 and R0070

7. In order to correctly assign the most specific CPT code(s) for the actual procedure(s) performed, the radiology report must stipulate:
   a. The anatomic site studied
   b. The side of the body studied
   c. The number of views taken
   d. All of the above

8. If the radiology report defines filming of the zygomatic arch, this may be defined by codes:
   a. 70100-70110
   b. 70120-70130
   c. 70140-70150
   d. 70210-70220

9. When an x-ray report defines films of the frontal, maxillary and sphenoid, this may be defined by which code set:
   a. 70100-70110
   b. 70120-70130
   c. 70140-70150
   d. 70210-70220

10. TMJ x-rays are defined by which codes:
    a. 70250-70260
    b. 70120-70130
    c. 70328-70330
    d. 70210-70220

11. If reference is made in the radiology report to a panoramic (panorex) study, the code that best describes this procedure is:
    a. 70350
    b. 70355
    c. 70310
    d. 70380
12. If an x-ray was performed to visualize the structure in which the pituitary “sits”, it would be defined by which code:
   a. 70350
   b. 70380
   c. 70240
   d. 70160

13. If an x-ray report defines a “stone in the sublingual, submandibular or parotid,” this is defined by code:
   a. 70350
   b. 70355
   c. 70380
   d. 70390

14. If the x-ray report states, “AP and lateral images taken at full inspiration demonstrate normal cardiac silhouette, apices and bases,” this is best defined by code:
   a. 71015
   b. 76499
   c. 71020
   d. 71100

15. If the radiology report states, “single, portable upright view demonstrates normal lungs,” the correct code is:
   a. 71010
   b. 71015
   c. 71035
   d. 71100

16. If only a lateral decubitus chest x-ray was done, the most appropriate code to define this study is:
   a. 71010
   b. 71015
   c. 71035
   d. 71100

17. If only an apical lordotic chest x-ray was done, the most appropriate code to define this study is:
   a. 71010
   b. 71015
   c. 71035
   d. 71100
18. If only an expiration chest x-ray was performed, the most appropriate code to define this study is:
   a. 71100
   b. 71035
   c. 71015
   d. 71010

19. If both a single view chest for rib detail and oblique rib x-ray were performed at the same time (a total of two views), the correct CPT code(s) to submit is (are):
   a. 71010 and 71100
   b. 71100
   c. 71101
   d. 71100 and 71035

20. If two discrete exams such as a two view chest and unilateral AP and oblique rib x-rays are performed at the same setting, the correct code(s) are:
   a. 71101
   b. 71020 and 71010
   c. 71020 and 71100
   d. 71021

21. If the radiology report defines, “following three views, the manubrium, body and xiphoid process appear normal,” this is defined by code:
   a. 71110
   b. 71130
   c. 71120
   d. 71035

22. If an x-ray report defines, “frontal and lateral films of the cervical, thoracic and lumbar spine,” this is defined by which choice:
   a. 72114
   b. 72069
   c. 72010
   d. 72040

23. If only a lateral view of T-8 was performed, which choice is correct:
   a. 72020
   b. 72070
   c. 72080
   d. 72090
24. Code 72020 can be used:
   a. When any single view is obtained of the cervical spine
   b. When any single view is obtained of the thoracic spine
   c. When any single view is obtained of the lumbar spine
   d. All of the above

25. When the report defines, “AP, lateral and odontoid views,” this is defined by which code:
   a. 72040
   b. 72072
   c. 72100
   d. 72120

26. When a “swimmer’s view” is performed, it is referencing what portion of the spine:
   a. Cervical and lumbar
   b. Cervical, thoracic and lumbar
   c. Cervical and thoracic
   d. Thoracic and lumbar

27. When after doing the AP, lateral and odontoid views, the physician is unable to clearly view the distal cervical vertebra as well as the proximal thoracic spine. The radiologist requests an additional swimmers view to clearly visualize this area. The correct CPT code(s) to submit is (are):
   a. 72052
   b. 72020 and 72040
   c. 72050
   d. 72040-22

28. Scoliosis studies may be performed:
   a. Upright
   b. Supine
   c. Upright and supine
   d. Any of the above

29. When a radiology report references, “dorsal spine,” this correlates to which code series:
   a. 72040-72052
   b. 72070-72080
   c. 72100-72120
   d. All of the above

30. When the radiology report defines, “AP, lateral and L5-S1 films were reviewed,” this is represented by which choice:
   a. 72100
   b. 72100 and 72020
   c. 72110
   d. 72120
31. The L5-S1 film is most typically:
   a. Done by itself
   b. Done with routine dorsal spine films
   c. A special view rarely done
   d. Done with a routine L-S spine series

32. If AP and lateral films are performed on the cervical, thoracic and lumbar spine as a single study, you should:
   a. Submit separate codes for each anatomic area studied
   b. Submit code 72010
   c. Submit separate codes for each anatomic area studied, but assign modifier -52 to each because they were all done at one setting
   d. None of the above

33. When a single AP or PA view of the pelvis is done, you should use code:
   a. 72170
   b. 72170-52
   c. 73500
   d. None of the above

34. If the x-ray report states, “films in the AP, LAO and RAO projections demonstrate normal iliac, ischial and pubic bones,” this is best defined by code:
   a. 72170
   b. 72190
   c. 73510
   d. 73520

35. There are how many SI joints:
   a. One
   b. Two
   c. Three
   d. Four

36. Anatomically, the sacrum and coccyx are located:
   a. In the lower abdomen
   b. In the upper chest
   c. At the distal spine
   d. In the lumbar spine

37. When reference is made to a, “three-view study of os coccygis,” this is referring to x-rays of the:
   a. Lumbar spine
   b. Coccyx
   c. Sacro-iliac area
   d. Cochlea
38. When reference is made to an x-ray study of the collarbone, this is defined by code:
   a. 73000
   b. 73010
   c. 72200
   d. 73050

39. When reference is made to an x-ray of the shoulder blade, this is defined by code:
   a. 73000
   b. 73010
   c. 72200
   d. 73050

40. When an x-ray report uses a phrase such as, “the fontanelles are incompletely ossified,” this refers to x-rays of the:
   a. Skull
   b. Pelvis
   c. Facial bones
   d. Sinuses

41. If an x-ray is performed in an AP, lateral and oblique fashion of where the head of the humerus joins the scapula, this is defined by code:
   a. 73020
   b. 73030
   c. 73050
   d. 73040

42. When the radiographs are performed of the A-C joints, this is anatomically where:
   a. The clavicle joins with the sternum
   b. The sternum joins with the ribs
   c. The clavicle joins with the scapula
   d. The scapula joins with the humerus

43. When a radiology report defines the filming of the joint of the humerus and radius/ulna, they are referring to which code set:
   a. 73100-73110
   b. 73070-73080
   c. 73120-73130
   d. 73500-73510

44. When the term, “olecranon process,” is mentioned, we commonly think of this as the:
   a. Wrist
   b. Hip
   c. Elbow
   d. Shoulder
45. Together, the radius and ulna make up this structure defined by this code:
   a. Shoulder, 73020-73030
   b. Humerus, 73060
   c. Forearm, 73090
   d. Lower leg, 73590

46. When a radiology report defines bones such as the hamate, triquetrium, lunate or pisiform, it is defining the:
   a. Ankle
   b. Hip socket
   c. Wrist
   d. Inner ear

47. When mention is made of the “carpus,” they are referring to the:
   a. Wrist
   b. Ankle
   c. Knee
   d. Elbow

48. The metacarpals and phalanges make up this structure:
   a. Wrist
   b. Hand
   c. Ankle
   d. Knee

49. When 3 view x-rays of the right and left hand are ordered, performed and reported, the correct way (excluding modifiers) to code for this study is:
   a. 73120 (x2)
   b. 73130 (x2)
   c. 73110 and 73130
   d. None of the above

50. When AP, lateral and oblique x-rays of the 3rd, 4th and 5th fingers are ordered and performed, the correct way to code for this study is:
   a. 73130
   b. 73140
   c. 73140 (x3)
   d. 73140-22
51. When an x-ray report defines, “A single AP view of the left femoral head and acetabulum,” the study being performed is:
   a. 73500
   b. 75310
   c. 73550
   d. 73590

52. When an x-ray report states that, “AP and lateral views were performed on the right hip” the correct CPT code is:
   a. 73500
   b. 73510
   c. 73550
   d. 73590

53. When a separate full and complete AP pelvis and single lateral view of one hip is ordered, performed and reported, the correct method in which to code for this service is:
   a. 72170
   b. 72190-52
   c. 72170 and 73500
   d. 73510

54. When a separate AP pelvis is performed followed by two separate views of each hip, the correct method to code for these studies is:
   a. 72170 and 73510 (x2)
   b. 72170 and 73520
   c. 73520
   d. 72190 and 73500 (x2)

55. If at first both an AP and lateral femur study are performed on an ER trauma patient, and following the reading of the initial films it is determined that there is a femoral fracture, so this is then reduced and re-studied (and read by the same radiologist), but this time in only the AP projection, how should this situation be coded:
   a. 73550 (x2)
   b. 73550-22
   c. 73550, 73550-76-52
   d. 73550, 73550-77

56. While an anatomic site-specific CPT code exists but the initial plain film study is performed in a fashion where less than the number of views stated in the verbal description are taken, how should the study be billed (all scenarios already include modifier -26)?
   a. Using the code CPT provides
   b. Using the code CPT provides, but also assigning the modifier -22
   c. Using the code CPT provides, but also assigning the modifier -52
   d. Using the code CPT provides, but also assigning the modifier -76
57. If an x-ray report describes a single “sunrise” view, which anatomical area are they defining and what code would be assigned:
   a. Ankle, 73600
   b. Hip, 73500
   c. Patella/knee, 73560
   d. Femur, 73550

58. When an AP, lateral and both obliques of both knees were performed, the most appropriate way to code for this study would be:
   a. 73564 (x2)
   b. 73564-50
   c. 73564-LT, 73564-RT
   d. Any of the above may be correct depending upon payer requirements

59. As a whole, recent changes in CPT descriptions for diagnostic radiology procedures have:
   a. Switched the emphasis from the name of the view(s) to the number of the view(s)
   b. Become more generic
   c. Provided greater latitude from a code selection perspective
   d. All of the above

60. If bilateral AP standing as well as bilateral lateral knee studies were ordered, performed and reported, the most appropriate manner in which to charge for this service would be:
   a. 73565-22
   b. 73562-50
   c. 73560-50
   d. 73564

61. When the radiology report states that “there were fractures in both the AP and lateral films of both the tibia and fibula,” this is defining a study of the:
   a. Lower back, 72100
   b. Lower femur, 73550
   c. Lower leg, 73590
   d. Lower forearm, 73090

62. When the radiologist states, “mortise views” were taken, anatomically, they are defining the:
   a. Wrist
   b. Knee
   c. Hip
   d. Ankle
63. When the radiology report uses phrases such as “external, lateral or outer malleolus” or “internal, medial or inner malleolus,” they are referring to films of the:
   a. Knee
   b. Ankle
   c. Hip
   d. Wrist

64. If the radiology report describes, “AP, lateral and oblique films of the left metatarsals and phalanges,” this is anatomically defining an x-ray of the:
   a. Ankle, 73610
   b. Foot, 73630
   c. Knee, 73562
   d. Hand, 73130

65. If a single view of the foot was performed, the correct way to code for this procedure is:
   a. 73620
   b. 73620-22
   c. 73630-52
   d. 73620-52

66. When the radiology report describes x-rays of the os calcis, they are referring to the:
   a. Heel, 73650
   b. Ankle, 73610
   c. Foot, 73620
   d. Wrist, 73100

67. If a single view was obtained of the left great toe, the correct method to code would be:
   a. 73660
   b. 73660-52
   c. 73620-52
   d. 73620

68. If a radiology report describes a “KUB” or “flat-plate” exam, they are defining:
   a. Chest, 71010
   b. Abdomen, 74000
   c. Ribs, 71100
   d. None of the above

69. When the terminology “flat and upright” or “flat and decub” is seen in a report, this is defining the:
   a. Chest, 71020
   b. Abdomen, 74020
   c. Ribs, 71100
   d. None of the above
70. If a “flat, upright and decub” x-ray series is performed, this refers to code:
   a. 71021
   b. 74010
   c. 74020
   d. 74022

71. When, at the same setting, a two view chest x-ray and a two view abdomen study is done, this is coded as:
   a. 74022-22
   b. 74022
   c. 74020 and 71020
   d. 74022 and 71035

72. Per American College of Radiology (ACR) and American Medical Association (AMA) instructions, if performing an AP and lateral view of the abdomen, the correct CPT code(s) to submit for this procedure is(are):
   a. 74000-22
   b. 74000 (x2)
   c. 74010-52
   d. 74000 and 76499

73. When, at the same setting, a single view chest x-ray and two view abdominal study is done, this is coded as:
   a. 71010 and 74020
   b. 71010 and 74010
   c. 74020-22
   d. 74022

74. Occasionally, different consistencies of food will be given to a patient, and while the patient chews this food and as it passes from the mouth into the stomach, films are taken and/or this is captured on videotape. This procedure is defined by the code:
   a. 70370
   b. 74230
   c. 70371
   d. 70373

75. After a patient has sipped barium, and this is observed as it flows down the esophagus into the stomach with subsequent “spot” films as well as overhead films of the stomach, this is defined by codes in the:
   a. 74210-74210 series
   b. 74240-74249 series
   c. 74250-74251 series
   d. 74270-74283 series
76. When oral contrast material is given and as the patient drinks and swallows this material, films are taken of the material as it flows down the throat into the stomach, this procedure is an exam of the:
   a. Larynx, 70373
   b. Pharynx, 70210
   c. Esophagus, 74220
   d. Stomach, 74240

77. When only the upper portion of the esophagus is studied, the correct CPT code for this procedure is:
   a. 74210
   b. 74220
   c. 74230
   d. 74235

78. When upper GI studies (UGI) are performed in addition to coding for the films taken, fluoroscopy should:
   a. Also be charged with code 76000
   b. Also be charged with code 76001
   c. Also be charged with code 77002
   d. Not be charged separately as it is inherent in this study

79. UGI studies are:
   a. Divided into six groups
   b. Divided into two main groups
   c. Not differentiated no matter how they are done
   d. None of the above

80. The two main methods in which upper GI’s may be performed are:
   a. With or without contrast
   b. With or without films
   c. With or without air
   d. None of the above

81. When charging for UGI studies, to correctly code for the procedure, you must know:
   a. What types of contrast were used
   b. Did the exam include a KUB
   c. Did the exam include films of the small intestine (bowel)
   d. All of the above
82. When the report describes, “SBFT”, this means:
   a. Should be finished today
   b. Should be finished tomorrow
   c. Small intestine (bowel) follow-through
   d. Small intestine (bowel) feces tarry

83. If both an air-contrast UGI and SBFT are performed on the same patient on the same DOS, the correct method to code for this study is:
   a. 74240 and 74245
   b. 74245
   c. 74249
   d. 74246 and 74249

84. When a patient has a small intestine (bowel) study, it is:
   a. Correct to code and charge for separate abdomen x-rays as this patient continues to return throughout the course of the day for multiple follow-up films.
   b. Correct to charge separately for both the fluoro and small intestine (bowel) study, but not the abdomen x-rays
   c. Appropriate to charge only for the small intestine (bowel) study as this includes all serial (delayed) films
   d. None of the above

85. When small intestine (bowel) studies are performed via a tube placed by the radiologist prior to the performance of the study, the charging should reflect:
   a. Only code 74251 as this includes tube placement
   b. Code 74251 and the appropriate RS&I and surgical code for placement of the tube
   c. Code 74250 only
   d. None of the above

86. When a radiology report defines a “BE” or “AC BE”, this is referring to codes:
   a. 74240-74245
   b. 74280-74283
   c. 74270-74280
   d. 74246-74249

87. When performing barium enema exams, if a film of the abdomen is also done, this should:
   a. Be charged separately as it is not included in the procedure
   b. Not be charged separately as it is included in the procedure
   c. Be done in two projection so as to provide the most clinical information
   d. Be charged only if done as a post-evac film
88. This study, sometimes referred to as an OCG, has been more or less replaced by US imaging or nuclear medicine imaging. OCG refers to:
   a. Obstructive colonography (colon study)
   b. Oral cystogram (bladder study)
   c. Oral cholecystogram (gallbladder study)
   d. None of the above

89. When ERCP studies are performed, the coding for this procedure may include separate components dependent on what is actually performed. If the radiologist both supervises and interprets the study, (but does not perform any of the surgical component of the procedure), they may:
   a. Bill the appropriate code from the 74328-74330 series
   b. Bill the appropriate code from the 74328-74330 series and 76000
   c. Bill the appropriate code from the 74328-74330 series and 76001
   d. None of the above

90. When a radiologist places a GI tube that extends into any portion of the small bowel, this is coded as:
   a. 74340
   b. 74340 and 44500
   c. 43752
   d. 76000 and 43752

91. When an intravenous pyelogram (IVP) is performed, the correct code for this procedure may be:
   a. 74400
   b. 74410
   c. 74415
   d. Any of the above depending upon the method performed

92. When performing an IVP, contrast is injected intravenously. This is:
   a. Coded separately with code 36005
   b. Coded separately with code 90784
   c. Coded separately with code 36000
   d. Not coded separately as this is an inherent part of the study

93. Code 76000, fluoroscopy (separate procedure) up to one hour:
   a. Should be coded whenever used only by itself
   b. Should not be coded when used in conjunction with angiography, myelography, UGI or barium enema studies
   c. Is defined by the AMA as not to be separately billable when it is considered an integral component of the procedure
   d. All of the above
94. When using a plain film to radiographically evaluate a child to determine if there is an atypical material or substance inside of them, the correct code is:
   a. 76000
   b. 76001
   c. 76010
   d. 77074

95. When performing a single film to include both an AP chest and AP abdomen, the correct method to bill for the professional interpretation of this/these service(s) is/are:
   a. 71010
   b. 74000
   c. 74000 and 71010
   d. None of the above

96. When a single view of the hand and wrist are performed of a child to assess the physical development status of the child, the correct code is:
   a. 73120
   b. 73100
   c. 77072
   d. 77073

97. When contrast material is instilled into the bladder via a catheter with subsequent films taken to check the ureters and renal collecting system, this is described by code:
   a. 74430
   b. 74420
   c. 74425
   d. 74400

98. A complete bone survey will include films of the:
   a. Skull and chest
   b. Chest and extremities
   c. Skull and spine
   d. Skull, spine, pelvis and extremities

99. When dual energy x-ray absorptiometry (DXA) studies are performed, they may be of both the axial or appendicular skeleton. If sites are ordered, filmed and read from each area, they may both be coded if imaged using the same modality:
   a. No
   b. Yes, no additional modifier needed
   c. Yes, but assign modifier -76 to code 77080
   d. Yes, but assign modifier -59 to code 77080
100. When a galactogram is performed, this refers to a study of the:
   a. Intestine (bowel)
   b. Breast
   c. Bone
   d. Bile

101. Diagnostic mammography may be performed as many times annually as medically necessary.
   a. True
   b. False

102. Diagnostic mammography codes may be used for both male and female patients.
   a. True
   b. False

103. On a Monday, a patient presents from her doctor's office for her annual screening mammogram. Following the review of the films, the radiologist determines that additional special magnification films need to be done on the same day based upon results of the screening. The diagnostic study:
   a. May be billed along with the screening with the modifier -GG on the diagnostic code only
   b. May be billed along with the screening, but both should have the -GG modifier assigned
   c. May be billed instead of the screening
   d. May be billed instead of the screening with the -GH modifier assigned

104. As of January 1, 2004, direct digital mammography is defined by code:
   a. G0202
   b. G0204
   c. G0206
   d. All of the above

105. Screening mammography codes may be used for both male and female patients:
   a. True
   b. False

106. When performing bilateral retrograde pyelograms, it is correct coding to submit the code with any of the following: with two units, once with the -50 modifier, or twice (once with -LT and once with -RT).
   a. True
   b. False
CHAPTER 24—ANSWERS

1. (b) Plain film radiography examination refers to an X-ray study.

2. (d) The diagnostic radiology section of CPT contains code choice options for CT, MRI and diagnostic imaging.

3. (a) When trying to determine if a separate CPT code exists for a specific diagnostic radiology procedure, it is easiest to try and determine anatomically where the film would be taken and check that section of CPT first.

4. (d) When a diagnostic radiology study is being performed that does not have a CPT code that truly defines what is being done, you should use the unlisted procedure code and provide specific information that defines what was done, why it was done and assign a charge representative of the work actually performed.

5. (c) When a plain film study of the head is done and the report says, “Towne and both laterals were performed,” the correct CPT code to use is 70250.

6. (a) If an ER patient has a portable AP and lateral skull series performed, the correct code is 70250.

7. (d) In order to correctly assign the most specific CPT code(s) for the actual procedure(s) performed, the radiology report must stipulate the anatomic site studied, the side of the body studied and the number of views taken.

8. (c) If the radiology report defines filming of the zygomatic arch, this may be defined by codes 70140-70150.

9. (d) When an x-ray report defines films of the frontal, maxillary and sphenoid, this may be defined by codes 70210-70220.

10. (c) TMJ x-rays are defined by codes 70328-70330.

11. (b) If reference is made in the radiology report to a panorex study, the code that best describes this procedure is 70355.

12. (c) If an x-ray were performed to visualize the structure in which the pituitary “sits”, it would be defined by code 70240.

13. (c) If an x-ray report defines a, “stone in the sublingual, submandibular or parotid,” this is defined by code 70380.

14. (c) If the x-ray report states, “AP and lateral are done at full inspiration demonstrating a normal cardiac silhouette, apices and bases,” this is best defined by code 71020.
15. (a) If the radiology report states, “single, portable upright view demonstrates normal lungs,” the correct code is 71010.

16. (c) If only a lateral decubitus chest x-ray was done, the most appropriate code to define this study is 71035.

17. (c) If only an apical lordotic chest x-ray was done, the most appropriate code to define this study is 71035.

18. (b) If only an expiration chest x-ray was performed, the most appropriate code to define this study is 71035.

19. (b) If both a single view chest (for rib detail) and unilateral rib x-ray were performed at the same time (a total of two views), the correct CPT code to submit is 71100.

20. (c) If a two-view chest and a unilateral rib x-ray are performed at the same setting, the correct code(s) are 71020 and 71100.

21. (c) If the radiology report defines, “following three views, the Manubrium, body and xiphoid process appear normal,” this is defined by code 71120.

22. (c) If an x-ray report defines, “frontal and lateral films of the cervical, thoracic and lumbar spine,” this is defined by 72010.

23. (a) If only a lateral view of T-8 was performed, the correct choice is 72020.

24. (d) Code 72020 can be used when any single view is obtained of the cervical spine, when any single view is obtained of the thoracic spine and when any single view is obtained of the lumbar spine.

25. (a) When the report defines, “AP, lateral and odontoid views,” this is defined by code 72040.

26. (c) When a “swimmers view” is performed, it is referencing the cervical and thoracic portion of the spine.

27. (c) If after doing the AP, lateral and odontoid views, the physician is unable to clearly view the distal cervical vertebra as well as the proximal thoracic spine and the radiologist requests an additional swimmer’s view to clearly visualize this area, the correct CPT code to submit is 72050.

28. (d) Scoliosis studies may be performed upright and/or supine.

29. (b) When a radiology report references, “dorsal spine,” this correlates to codes 72070-72080.

30. (a) When the radiology report defines, “AP, lateral and L5-S1 films were reviewed,” this is represented by code 72100.

31. (d) The L5-S1 film is most typically done with a routine L-S spine series.
32. (b) If AP and lateral films are performed on the cervical, thoracic and lumbar spine, you should submit code 72010.

33. (a) When a single AP or PA view of the pelvis is done, you should use code 72170.

34. (b) If the x-ray report states, “films in the AP, LAO and RAO projections demonstrate normal iliac, ischial and pubic bones,” this is best defined by code 72190.

35. (b) There are two S&I joints.

36. (c) Anatomically, the sacrum and coccyx are located at the distal spine.

37. (b) When reference is made to a, “three-view study of os coccygis,” this is referring to x-rays of the coccyx.

38. (a) When reference is made to an x-ray study of the collarbone, this is defined by code 73000.

39. (b) When reference is made to an x-ray of the shoulder blade, this is defined by code 73010.

40. (a) When an x-ray report uses a phrase such as, “the fontanelles are incompletely ossified,” this refers to x-rays of the skull.

41. (b) If an x-ray is performed in an AP, lateral and oblique fashion of where the head of the humerus joins the scapula, this is defined by code 73030.

42. (c) When the radiographs are performed of the A-C joints, this is anatomically where the clavicle joins with the scapula.

43. (b) When a radiology report defines the filming of the joint of the humerus and radius/ulna, they are referring to codes 73070-73080.

44. (c) When the term, “olecranon process,” is mentioned, we commonly think of this as the elbow.

45. (c) Together, the radius and ulna make up the forearm defined by code 73090.

46. (c) When a radiology report defines bones such as the hamate, triquetrium, lunate or pisiform, they are defining the wrist.

47. (a) When mention is made of the “carpus,” they are referring to the wrist.

48. (b) The metacarpals and phalanges make up the hand.

49. (b) When 3 view x-rays of the right and left hand are ordered, performed and reported, the correct way (excluding modifiers) to code for this study is 73130 (x2).

50. (b) When AP, lateral and oblique x-rays of the 3rd, 4th and 5th fingers are ordered and performed, the correct way to code for this study is 73140.
51. (a) When an x-ray report defines, “A single AP view of the left femoral head and acetabulum,” the study being performed is 73500.

52. (b) When an x-ray report states that, “AP and lateral views were performed on the right hip” the correct CPT code is 73510.

53. (c) When a separate full and complete AP pelvis and single lateral view of one hip is ordered, performed and reported, the correct method in which to code for this service is 72170 and 73500.

54. (c) When a separate AP pelvis is performed followed by two separate views of each hip, the correct method to code for these studies is 73520.

55. (c) If at first both an AP and lateral femur study are performed on an ER trauma patient, and following the reading of the initial films it is determined that there is a femoral fracture, so this is then reduced and re-studied (and read by the same radiologist), but this time in only the AP projection, this situation should be coded with 73550, 73550-76-52.

56. (c) While an anatomic site-specific CPT code exists but the initial plain film study is performed in a fashion where less than the number of views stated in the verbal descriptions are taken, the study should be billed (all scenarios already include modifier -26) using the code CPT provides, but also assigning the modifier -52.

57. (c) If an x-ray report describes a single “sunrise” view, they are defining the patella/knee and code 73560 should be assigned.

58. (d) When an AP, lateral and both obliques of both knees were performed, the most appropriate way to code for this study would be 73564 (x2), 73564-50 or 73564-LT, 73564-RT, depending on payer requirements.

59. (d) As a whole, recent changes in CPT descriptions for diagnostic radiology procedures have switched the emphasis from the name of the view(s) to the number of the view(s), become more generic and provided greater latitude from a code selection perspective.

60. (c) If bilateral AP standing as well as bilateral lateral knee studies were ordered, performed and reported, the most appropriate manner in which to charge for this service would be 73560-50.

61. (c) When the radiology report states, “there were fractures in both the AP and lateral films of both the tibia and fibula,” this is defining a study of the lower leg, 73590.

62. (d) When the radiologist states “mortise views” were taken anatomically, they are defining the ankle.

63. (b) When the radiology report uses phrases such as “external, lateral or outer malleolus” or “internal, medial or inner malleolus,” they are referring to films of the ankle.
64. (b) If the radiology report describes, “AP, lateral and oblique films of the left metatarsals and phalanges,” this is anatomically defining an x-ray of the foot, 73630.

65. (d) If a single view of the foot was performed, the correct way to code for this procedure is 73620-52.

66. (a) When the radiology report describes x-rays of the os calcis, they are referring to the heel, 73650.

67. (b) If a single view were obtained of the left great toe, the correct method to code would be 73660-52.

68. (b) If a radiology report describes a “KUB” or “flat-plate” exam, they are defining abdomen, 74000.

69. (b) When the terminology “flat and upright” or “flat and decub” is seen in a report, this is defining the abdomen, 74020.

70. (c) If a “flat, upright and decub” x-ray series is performed, this refers to code 74020.

71. (c) When, at the same setting, a two-view chest x-ray and a two-view abdomen study are done, this is coded as 74020 and 71020.

72. (c) If performing an AP and lateral view of the abdomen, the correct CPT code to submit for this procedure is 74010-52, according to the AMA/ACR Clinical Examples in Radiology (Vol. 1, Issue 3, Summer 2005, page 11).

73. (d) When, at the same setting, a single view chest x-ray and two view abdominal study is done, this is coded as 74022.

74. (b) Occasionally, different consistencies of food will be given to a patient, and while the patient chews this food and as it passes from the mouth into the stomach, films are taken and/or this is captured on videotape. This procedure is defined by the code 74230.

75. (b) After a patient has sipped barium, and this is observed as it flows down the esophagus into the stomach with subsequent “spot” films as well as overhead films of the stomach, this is defined by codes in the 74240-74249 series.

76. (c) When oral contrast material is given and as the patient drinks and swallows this material, films are taken of the material as it flows down the throat into the stomach, this procedure is an exam of the esophagus, 74220.

77. (a) When only the upper portion of the esophagus is studied, the correct CPT code for this procedure is 74210.

78. (d) When upper GI studies (UGI) are performed in addition to coding for the films taken, fluoroscopy should not be charged separately as it is inherent in this study.
79. (b) UGI studies are divided into two main groups (i.e., those performed with air contrast and those performed without air contrast).

80. (c) The two main methods in which upper GI’s may be performed are with or without air.

81. (d) When charging for UGI studies, to correctly code for the procedure, you must know what types of contrast were used, did the exam include a KUB and did the exam include films of the small intestine (bowel).

82. (c) When the report describes, “SBFT”, this means small intestine (bowel) follow-through.

83. (c) If both an air-contrast UGI and SBFT are performed on the same patient on the same DOS, the correct method to code for this study is 74249.

84. (c) When a patient has a small intestine (bowel) study, it is appropriate to charge only for the small intestine (bowel) study as this includes all serial (delayed) films.

85. (b) When small intestine (bowel) studies are performed via a tube placed by the radiologist prior to the performance of the study, the charging should reflect code 74251 and the appropriate RS&I and surgical code for placement of the tube.

86. (c) When a radiology report defines a “BE” or “AC BE”, this is referring to codes 74270-74280.

87. (b) When performing barium enema exams, if a film of the abdomen is also done, this should not be charged separately as it is included in the procedure.

88. (c) This study, sometimes referred to as an OCG, has been more or less replaced by US imaging or nuclear medicine imaging. OCG refers to oral cholecystogram (gallbladder study).

89. (a) When ERCP studies are performed, the coding for this procedure may include separate components dependent on what is actually performed. If the radiologist both supervises and interprets the study, (but does not perform any of the surgical component of the procedure), they may bill the appropriate code from the 74328-74330 series.

90. (b) When a radiologist places a GI tube that extends into any portion of the small bowel, this is coded as 74340 and 44500.

91. (d) When an intravenous pyelogram (IVP) is performed, the correct code for this procedure may be 74400, 74410 or 74415 depending upon the method performed.

92. (d) When performing an IVP, contrast is injected intravenously. This is not coded separately as this is an inherent part of the study.

93. (d) Code 76000, fluoroscopy (separate procedure) up to one hour should be coded whenever used only by itself, should not be coded when used in conjunction with angiography, myelography, UGI or barium enemas studies and is defined by the AMA as not to be separately billable when it is considered an integral component of the procedure.
94. (c) When using a plain film to radiographically evaluate a child to determine if there is an atypical material or substance inside of them, the correct code is 76010.

95. (c) When performing a single film (both an AP chest and AP abdomen), with full and complete studies of each area, the correct method to bill for the professional interpretation of these services is 74000 and 71010.

96. (c) When a single view of the hand and wrist are performed of a child to assess the physical development status of the child, the correct code is 77072.

97. (b) When contrast material is instilled into the bladder via a catheter with subsequent films taken to check the ureters and renal collecting system, this is described by code 74420.

98. (d) A complete bone survey will include films of the skull, spine, pelvis and extremities.

99. (d) Yes. Because a single modality was used to image both areas, assign both codes, but assign modifier -59 to code 77080. When dual-energy x-ray absorptiometry (DXA) studies are performed, they may be of both the axial or appendicular skeleton. For Medicare claims, if sites are ordered, filmed and read from each area, assign codes for each anatomic area studied. You may not, however, have more than one code for either the peripheral or axial areas from more than one modality (i.e., one peripheral site from CT and one peripheral site from DXA).

Chapter 9 of the NCCI manual for radiology services includes the following: “Axial bone density studies may be reported with CPT codes 77078 or 77080. Peripheral site bone density studies may be reported with CPT codes 77081, 76977, or G0130. Although it may be medically reasonable and necessary to report both axial and peripheral bone density studies on the same date of service, NCCI edits prevent the reporting of multiple CPT codes for the axial bone density study or multiple CPT codes for the peripheral site bone density study on the same date of service.”

100. (b) When a galactogram is performed, this refers to a study of the breast.

101. (a) Diagnostic mammography may be performed as many times annually as medically necessary.

102. (a) Diagnostic mammography codes may be used for both male and female patients.

103. (a) If on Monday a patient presents from their doctor's office for their annual screening mammogram and following the review of the films, the radiologist determines that an additional diagnostic mammogram be done based upon results of the screening, the diagnostic study should be billed along with the screening study with the modifier -GG attached to the diagnostic mammography CPT code.

104. (d) As of January 1, 2004, direct digital mammography is defined by Level II HCPCS codes G0202, G0204 and G0206. Depending upon the actual study performed, any of these codes may be used for both Part A and Part B billing.
105. (b) False. Screening mammography codes may only be used for female patients.

106. (b) False. Retrograde pyelography, whether performed unilaterally or bilaterally is reported only once with code 74420.
1. For a hospital-based practice, when billing for exams that include the use of intravenous or intrathecal contrast:
   a. You should charge these as “without contrast” procedures
   b. You should charge these as “with contrast” procedures
   c. You should charge these as “without contrast” procedures but charge separately for the contrast
   d. You should charge these as “with contrast” procedures and also charge separately for the contrast

2. Per AMA guidelines, when only providing oral and/or rectal contrast, these procedures should be coded as:
   a. Without contrast studies
   b. With contrast studies
   c. Without followed by with contrast studies
   d. None of the above

3. When an IV injection of contrast material is provided to assist in the diagnostic CT or MR study, the injection portion of the study is:
   a. Separately coded with CPT 36005
   b. Separately coded with CPT 96374
   c. Separately coded with CPT 36000
   d. Not separately billed

4. For a hospital-based practice, if an intrathecal injection of contrast is performed to aid in the diagnostic study, the following CPT codes (based upon anatomic site of injection) are appropriate in addition to the CPT code(s) for the scan:
   a. 61070 or 61050
   b. 61055 or 62270
   c. 62284 or 61055
   d. 62287 and 61050

5. When reference is made to a “general study of the head under CT”, the following code series is most appropriate:
   a. 70450-70470
   b. 70480-70482
   c. 70486-70488
   d. 70490-70492
6. When reference is made to performance of, “a full and complete CT of the sinuses,”
the following code series is most appropriate:
   a. 70450-70470
   b. 70480-70482
   c. 70486-70488
   d. 70490-70492

7. When reference is made to performance of, “a CT of the IACs, IAMs, or EAMs,” the following
   code series is most appropriate:
   a. 70450-70470
   b. 70480-70482
   c. 70486-70488
   d. 70490-70492

8. When reference is made to the performance of, “a CT of the nasopharynx,” the following code
   series is most appropriate:
   a. 70450-70470
   b. 70480-70482
   c. 70486-70488
   d. 70490-70492

9. If only a CT angiogram (CTA) is ordered, based upon current guidelines, CTA:
   a. Includes both pre- and post-contrast studies of the anatomic site studied
   b. Allows for separate charging of the anatomic site-specific code plus the CTA code
   c. Should be billed by submitting only code 76376 or 76377
   d. None of the above

10. When a CT of the pharynx or larynx is ordered and performed, the following code series is
    most appropriate:
    a. 70480-70482
    b. 70490-70492
    c. 72125-72127
    d. 72128-72130

11. When a “chest CT” study is ordered, this is best defined by the code series:
    a. 70490-70492
    b. 71550-71552
    c. 71250-71270
    d. 76376
12. If dynamic CT scans are performed to “rule out PE”, this is best defined by the code(s):
   a. 70490-70492
   b. 71550-71552
   c. 71250-71270
   d. 76376 or 76377

13. When a report defines “CT heart with cardiac scoring,” the following code(s) should be submitted:
   a. 76497
   b. 75571
   c. 71275
   d. 71270

14. In order to correctly choose the CPT code for any anatomic site studied under CT, the radiology report must:
   a. State whether oral or IV contrast was used
   b. State how the study was done
   c. Define the anatomical area(s) imaged
   d. All of the above

15. If a radiology report states that CT was performed from C1 to C7, this is defined by the code series:
   a. 70490-70492
   b. 72125-72127
   c. 72128-72130
   d. 72131-72133

16. If a radiologic report states that CT was performed from T1 to T12, this is defined by the code series:
   a. 70490-70492
   b. 72125-72127
   c. 72128-72130
   d. 72131-72133

17. If a radiologic report states that CT was performed from L1 to S1, this is defined by the code series:
   a. 72125-72127
   b. 72128-72130
   c. 72131-72133
   d. 72192-72194
18. If following a conventional fluoroscopic myelogram, the patient is then positioned in the CT scanner with imaging performed, based upon the anatomic location(s) studied, this is treated as a:
   a. Without contrast study
   b. With contrast study
   c. Without, followed by with contrast study
   d. Not billed, but considered part of the myelogram

19. If following a routine, non-contrast, transverse (i.e., axial or transaxial) CT study of the lumbar spine, the patient data is now manipulated with the assistance of the CT software to also produce additional 2D images in the sagittal and/or coronal planes, the following would be charged:
   a. 72131 only
   b. 72131 and 78890
   c. 72131 and 76376
   d. None of the above

20. If following a routine non-contrast transverse (i.e., axial or transaxial) CT study of the lumbar spine, the patient was now repositioned on their side so that sagittal images could then be acquired, the following would be charged:
   a. 72131
   b. 72131 and 76376
   c. 72131 and 76377
   d. 72133

21. When a CT report states that, “images were acquired from the top of the crest to the pubis,” or “from the iliac crest to the symphysis pubis,” they are referring to the following code series:
   a. 74176-74178
   b. 74150-74170
   c. 72192-72194
   d. Both A and C

22. When a CT report states that, “imaging was performed to delineate potential acetabular disease,” they are referring to the following code series:
   a. 72131-72133
   b. 74150-74170
   c. 72192-72194
   d. 73200-73202

23. CT imaging of the humerus, shoulder or elbow is best defined by the code series:
   a. 71250-71270
   b. 73200-73202
   c. 72125-72127
   d. 73700-73702
24. Current Medicare rules state that when bilateral upper extremity CT studies are ordered, performed and read, they will be reimbursed at:
   a. 100% for the first side and nothing additional for the second side
   b. 100% for the first side and 50% for the second side
   c. 100% for the first side and 100% for the second side
   d. 100% for the first side and 75% for the second side

25. If the radiology report states that, “non-contrast left-sided upper extremity CT was performed with the patient in both the transverse and sagittal planes,” the correct code(s) would be:
   a. 73200
   b. 73200 and 76376
   c. 73200 and 76380
   d. 73200 and 78890

26. If the radiology report states that “non-contrast left-sided upper extremity CT was performed in the transverse plane with subsequent reconstruction to produce both 2D sagittal and coronal images,” the correct code(s) would be:
   a. 73200 only
   b. 73200 and 76376
   c. 73200 and 76380
   d. 73200 and 76377

27. When a CT report states that, “imaging was performed to include the head and neck of the femur as well as the lesser and greater trochanters,” this is most appropriately defined by the code series:
   a. 74150-74170
   b. 72192-72194
   c. 73200-73202
   d. 73700-73702

28. Current Medicare rules state that when bilateral lower extremity CT studies are ordered, performed and read, they will be reimbursed at:
   a. 100% for the first side and nothing additional for the second side
   b. 100% for the first side and 50% for the second side
   c. 100% for the first side and 100% for the second side
   d. 100% for the first side and 75% for the second side

29. If the radiology report states that, “non-contrast right-sided imaging of the foot and ankle was performed in the axial plane with subsequent 2D reconstruction to produce both coronal and sagittal images,” the correct code(s) would be:
   a. 73700 only
   b. 73700 and 76376
   c. 73700 and 76380
   d. 73700 and 78890
30. If the radiology report states that, “non-contrast right-sided imaging of the foot and ankle was performed in the transaxial and sagittal planes,” the correct code(s) would be:
   a. 73700
   b. 73700 and 76377
   c. 73700 and 76380
   d. 73700 and 76376

31. When reference is made in a CT report of “imaging from the dome of the liver to the iliac crest” or “from the top of the liver to the crest,” this is best defined as the code series:
   a. 72131-72133
   b. 74150-74170
   c. 74176-74178
   d. Both B and C

32. At the same clinical encounter, if the radiology report states, “unenhanced images of the liver were acquired followed by rapid sequence imaging after a bolus injection from the dome of the liver through the pelvis,” this is best defined as code(s):
   a. 74150
   b. 74178
   c. 74150 and 72192
   d. 74170 and 72193

33. If imaging of organs (such as the liver, pancreas or spleen) is performed, anatomically, this correlates to codes:
   a. 74150-74170
   b. 72192-72194 and 74176-74178
   c. 72192-72194
   d. None of the above

34. Occasionally, patients receiving radiation therapy will present to the CT area for scanning to define any potential metastatic lesions. These scans may be limited to one, two or three anatomic sites. Supposing that the patient presented with a written order requesting unenhanced imaging of the chest with pre- and post-contrast images of the liver and pelvis, this would be coded as:
   a. 71270, 74170 and 72194
   b. 71250, 74170 and 72193
   c. 71250 and 74178
   d. 71250, 74170 and 72194

35. If an abdominal CT study is performed both before and after the ingestion of oral contrast, that correct code is:
   a. 74150
   b. 74160
   c. 74170
   d. 74175
36. If separate complete CTA studies are performed of the pelvis and lower extremities, the following code(s) should be submitted:
   a. 72191
   b. 73706
   c. 75635
   d. 74174

37. If a CTA of the abdomen, pelvis and lower extremities is performed, the following code(s) should be submitted:
   a. 74175
   b. 72191
   c. 73706
   d. 75635

38. When a 3-level lumbar vertebroplasty procedure is performed under CT guidance, the correct code(s) is (are):
   a. 72292
   b. 72292 (x3)
   c. 72292, 22521 and 22522
   d. 72292 (x3), 22521 and 22522 (x2)

39. When kyphoplasty of T-12 and L-2 are performed, the correct code(s) is (are):
   a. 72292
   b. 72292 (x2)
   c. 72292 (x2), 22520 and 22521
   d. 72292 (x2), 22523 and 22524

40. Which of the following codes could be used to define CT bone density studies:
   a. 77078
   b. 77080
   c. 77082
   d. Any of the above

41. When a CT guided needle biopsy is performed, the correct guidance code is:
   a. 77012
   b. 77011
   c. 75989
   d. 76942

42. When a CT guided cyst aspiration is performed, the correct guidance code is:
   a. 77012
   b. 77011
   c. 75989
   d. 76942
43. When CT guidance is used to perform an injection for treatment of a lumbar facet nerve (64490-64495), the correct guidance code is:
   a. 77012  
   b. 77011  
   c. 75989  
   d. None of the above

44. When a CT guided abscess drainage is performed, the correct guidance code is:
   a. 77012  
   b. 77011  
   c. 75989  
   d. 76942

45. When a diagnostic Computed Tomographic Colonography is performed with contrast, the correct code is:
   a. 74160 and 76376  
   b. 74262  
   c. 74263  
   d. 76497

46. When an MRI report states that “gad or gadolinium” was used, this means that:
   a. Contrast was not used  
   b. Contrast was used  
   c. A special acquisition sequence was done  
   d. A special surface coil was used.

47. For hospital-based billing of professional services, when studies are performed “with contrast,” the professional bill:
   a. Should have separate coding and payment for the contrast  
   b. Should not contain separate charges for the contrast  
   c. Should have separate coding and charges for the contrast and injection  
   d. None of the above

48. Excluding reimbursement, if billing globally for MRI services in a freestanding center, regarding current CMS regulations, in addition to billing for the MR procedure done with contrast:
   a. A separate charge should also be submitted for the contrast  
   b. A separate charge should be submitted for the contrast and IV injection  
   c. No separate charges should be submitted for the contrast as the technical RVUs already include payment for this portion of the study  
   d. None of the above
49. When both an MRI and MRA study are ordered, performed at the same setting and described in the report, it is:
   a. Appropriate to bill for only the MRI as it already includes RVUs to include the MRA
   b. Appropriate to bill for only the MRA as it already includes RVUs to include the MRI
   c. Not appropriate to bill separately for both studies. Report one or the other CPT code.
   d. Appropriate to bill for both plus code 76376 or 76377

50. When reference is made to MRA, by definition this means:
   a. Magnetic resonance arteriogram
   b. Magnetic resonance acquisition
   c. Magnetic resonance angiography
   d. Magnetic research application

51. MRA studies include imaging studies:
   a. Defined as MRA
   b. Defined as MRV
   c. Both A and B
   d. None of the above

52. When reference is made to “MRV,” this refers to:
   a. Magnetic resonance ventriculography
   b. Magnetic research verification
   c. Magnetic resonance venography
   d. Magnetic resonance venoplasty

53. If both a head and a neck MRA procedure are ordered, performed (with contrast) and read, what code(s) can be billed:
   a. 70546
   b. 70549
   c. 70545 and 70548
   d. 70546 and 70549

54. If an order comes over for an MRI of the heart, the correct code series to select from is:
   a. 71550-71552
   b. 71555 only
   c. 75571-75574
   d. 75557-75565

55. When a radiology report defines the performance of “MRCP,” this refers to ________:
   a. Magnetic resonance cholangiopancreatography
   b. Magnetic resonance cardiac pressures
   c. Magnetic resonance canaloplasty procedure
   d. Magnetic resonance chondroplasty
56. When ordered, performed and dictated, MRCP is best defined by codes in the:
   a. 72141-72159 series  
   b. 76498  
   c. 74181-74183 series plus 76376 or 76377  
   d. 76376

57. When MRI studies of the wrist, elbow or shoulder are ordered, performed and reported, the code series most appropriate to define these studies is:
   a. 73218-73220  
   b. 73221-73223  
   c. 73718-73720  
   d. 73721-73723

58. When MRI studies of the radius, ulna or humerus are ordered, performed and reported, the code series most appropriate to define these studies is:
   a. 73218-73220  
   b. 73221-73223  
   c. 73718-73720  
   d. 73721-73723

59. When MRI studies of the ankle, knee or hip are ordered, performed and reported, the code series most appropriate to define these studies is:
   a. 73218-73220  
   b. 73221-73223  
   c. 73718-73720  
   d. 73721-73723

60. When MRI studies of the foot, lower leg or femur are ordered, performed and reported, the code series most appropriate to define the studies is:
   a. 73218-73220  
   b. 73221-73223  
   c. 73718-73720  
   d. 73721-73723

61. When an MRI study is performed post a fluoroscopically guided injection of gadolinium into the shoulder joint (no fluoroscopic images performed), the correct codes for this procedure are:
   a. 76000, 20610 and 73222  
   b. 77002, 20610 and 73222  
   c. 77002, 23350 and 73222  
   d. 77002, 23350 and 73221
62. If a full and complete fluoroscopic arthrogram of the knee is performed, including an injection of gadolinium and subsequent MRI imaging of the knee, the appropriate codes to bill are:
   a. 77002, 20610 and 73722
   b. 77002, 27370 and 73722
   c. 73580, 20610 and 73722
   d. 73580, 27370 and 73722

63. When an MRI of the brachial plexus is done, which anatomic site CPT code series may best describe the study performed:
   a. Upper extremity
   b. Orbit, face and neck
   c. Chest
   d. Any of the above depending on the clinical indication

64. With the deletion of code 76375 from CPT in 2006, no separate charging option now exists for routine 2D reconstruction?
   a. True
   b. False

65. Codes 76376 and 76377 have replaced code 76375 for 3D processing on the same workstation or at an independent workstation?
   a. Yes, for all 2D and 3D post-processing
   b. Yes, but only for 3D post-processing on an independent workstation
   c. Yes, but only for 3D post-processing performed on either the same equipment in which the data was acquired or on an independent workstation.
   d. None of the above.

66. Codes 76376 and 76377 can be used for image post-processing of all of the following except:
   a. US data
   b. CT data
   c. MRI data
   d. NM data

67. Specifically codes 76376 and 76377 cannot be assigned in conjunction with CPT codes defining:
   a. CTA procedures
   b. MRA procedures
   c. PET/CT procedures
   d. All of the above
68. The new 3D rendering codes will be used to code for/address complex renderings such as:
   a. Surface-shaded and volumetric rendering
   b. Maximum intensity projections (MIPs) and fusion imaging
   c. Quantitative analysis (segmental volumes and surgical planning)
   d. All of the above

69. When functional MRI (fMRI) studies are performed, there are typically a few “usual” MRI images of the brain taken as well. This portion of the study is separately coded from the functional portion of the exam with the following code:
   a. 70551-52
   b. 70552-52
   c. 70553-52
   d. None of the above

70. How would one code for an MRI of the fetal brain (in utero):
   a. As the brain is examined, select from codes in the 70551–70553 series.
   b. Assign a code from the 72195–72197 series as the fetus lies within the mother’s pelvis.
   c. Much function is evaluated here as well, so assign either code 70554 or 70555.
   d. None of the above

71. For physician billing, if a patient is placed in the MRI unit and IV contrast is injected, but no images are actually acquired, what code should be assigned:
   a. None, as no images were taken
   b. The anatomic site-specific code with modifier -53
   c. Bill only a low level E&M code as no sequences were acquired
   d. The anatomic site-specific code with no modifier

72. When performing breast MR procedures and then further post-processing this information with CAD software, the correct method of coding and billing is to submit a -22 modifier to the breast MR CPT code.
   a. True
   b. False

73. Breast CAD following an MR exam of the breast(s) is defined by which, if any, of the following code(s):
   a. 76376
   b. 76377
   c. 0159T and 76377
   d. 0159T
74. When performing cardiac MR (CMR) procedures in a hospital-based setting, it may also be possible for the physician to charge separately for cardiac stress testing, when performed. Which of the following codes would be assigned?
   a. 93015
   b. 93016
   c. 93018
   d. Any of the above CPTs depending upon which services the physician provides
**CHAPTER 25—ANSWERS**

1. (b) For a hospital-based practice, when billing for exams that include the use of intravenous or intrathecal contrast you should charge these as “with contrast” procedures.

2. (a) Per AMA guidelines, when only providing oral and/or rectal contrast, these procedures should be coded as without contrast studies.

3. (d) When an IV injection of contrast material is provided to assist in the diagnostic CT or MR study, the injection is not separately billed.

4. (c) For a hospital-based practice, if an intrathecal injection of contrast is performed to aid in the diagnostic study, CPT codes 62284 or 61055 (based upon anatomic site of injection) are appropriate in addition to the CPT code(s) for the scan.

5. (a) When reference is made to a “general study of the head under CT,” codes 70450–70470 are most appropriate.

6. (c) When reference is made to performance of, “a full and complete CT of the sinuses,” code series 70486-70488 is most appropriate.

7. (b) When reference is made to performance of, “a CT of the IAM’s or EAM’s,” code series 70480–70482 is most appropriate.

8. (d) When reference is made to the performance of, “a CT of the nasopharynx,” code series 70490–70492 is most appropriate.

9. (a) If only a CT angiogram (CTA) is ordered, based upon current guidelines, CTA includes both pre- and post-contrast studies of the anatomic site studied.

10. (b) When a CT of the pharynx or larynx is ordered and performed, codes 70490–70492 are most appropriate.

11. (c) When a “chest CT” study is ordered, this is best defined by the code series 71250–71270.

12. (c) If dynamic CT scans are performed to “rule out PE”, this is best defined by the codes 71250–71270.

13. (b) Code 75571 is the correct code for CT Heart with calcium scoring.

14. (d) In order to correctly choose the CPT code for any anatomic site studied under CT, the radiology report must state whether oral or IV contrast was used, state how the study was done and define the anatomical area(s) imaged.

15. (b) If a radiology report states that CT was performed from C1 to C7, this is defined by the code series 72125–72127.
16. (c) If a radiologic report states that CT was performed from T1 to T12, this is defined by the code series 72128–72130.

17. (c) If a radiologic report states that CT was performed from L1 to S1, this is defined by the code series 72131–72133.

18. (b) If following a conventional fluoroscopic myelogram, the patient is then positioned in the CT scanner with imaging performed, based upon the anatomic location(s) studied, this is treated as a with contrast study.

19. (a) If following a routine, non-contrast, transverse (i.e., axial or transaxial) CT study of the lumbar spine, the patient data is now manipulated with the assistance of the CT computer software to also produce additional 2-D images in the sagittal and/or coronal planes, per 2006 CPT deletion of code 76375, only code 72131 would be charged.

20. (a) If following a routine non-contrast transverse (i.e., axial or transaxial CT study of the lumbar spine, the patient was now repositioned on their side so that sagittal images could then be acquired, 72131 would be charged.

21. (c) When a CT report states that, “images were acquired from the top of the crest to the pubis,” or “from the iliac crest to the symphysis pubis,” they are referring to the following code series: 72192–72194.

22. (c) When a CT report states that, “imaging was performed to delineate potential acetabular disease,” they are referring to code series 72192–72194.

23. (b) CT imaging of the humerus, shoulder or elbow is best defined by the code series 73200–73202.

24. (c) Current Medicare rules state that when bilateral upper extremity CT studies are ordered, performed and read, they will be reimbursed at 100% for the first side and 100% for the second side.

25. (a) If the radiology report states that, “non-contrast left-sided upper extremity CT was performed with the patient in both the transverse and sagittal planes,” the correct code would be 73200.

26. (a) If the radiology report states that “non-contrast left-sided upper extremity CT was performed in the transverse plane with subsequent 2-D reconstruction to produce both sagittal and coronal images,” per 2006 CPT deletion of code 76375, only code 73200 would be charged.

27. (d) When a CT report states that, “imaging was performed to include the head and neck of the femur as well as the lesser and greater trochanters,” this is most appropriately defined by the code series 73700-73702.
28. (c) Current Medicare rules state that when bilateral lower extremity CT studies are ordered, performed and read, they will be reimbursed at 100% for the first side and 100% for the second side as well.

29. (a) If the radiology report states that, “non-contrast right-sided imaging of the foot and ankle was performed in the axial plane with subsequent 2-D reconstruction to produce both coronal and sagittal images,” only code 73700 would be charged.

30. (a) If the radiology report states that, “non-contrast right-sided imaging of the foot and ankle was performed in the trans axial and sagittal planes,” the correct code would be 73700.

31. (b) When reference is made in a CT report of “imaging from the dome of the liver to the iliac crest” or “from the top of the liver to the crest,” this is best described by the following code series: 74150-74170.

32. (b) At the same clinical encounter, if the radiology reports states, “unenhanced images of the liver were acquired followed by rapid sequence imaging after a bolus injection from the dome of the liver through the pelvis,” this is best defined as code 74178.

33. (a) If imaging of the liver, pancreas or spleen are performed, anatomically, this correlates to codes 74150–74170.

34. (c) Occasionally, patients receiving radiation therapy will present to the CT area for scanning to define any potential metastatic lesions. These scans may be limited to one, two or three anatomic sites. Supposing that the patient presented with a written order requesting unenhanced imaging of the chest with pre- and post-contrast images of the liver and pelvis, this would be coded as 71250 and 74178.

35. (a) If an abdominal CT study is performed both before and after the ingestion of oral contrast, the correct code is 74150 per AMA guidelines.

36. (c) If a CTA study is performed of the pelvis and lower extremities, code 75635 should be submitted.

37. (d) If a CTA of the abdomen, pelvis and lower extremities is performed, code 75635 should be submitted.

38. (d) When a 3-level lumbar vertebroplasty procedure is performed under CT guidance, the correct codes are 72292 (x3), 22521 and 22522 (x2).

39. (d) When kyphoplasty of T-12 and L-2 are performed, the correct codes are 72292 (x2), 22523 and 22524.

40. (a) From an overall third party payer perspective, code 77078 may be used to define CT bone density studies.

41. (a) When a CT guided needle biopsy is performed, the correct guidance code is 77012.
42. (a) When a CT guided cyst aspiration is performed, the correct guidance code is 77012.

43. (d) When CT guidance is used to perform an injection for treatment of a lumbar facet nerve (64490-64495), no guidance code should be submitted as the surgical code descriptor includes guidance.

44. (c) When CT guided abscess drainage is performed, the correct guidance code is 75989.

45. (b) Computed Tomographic Colonography (CTC) is now coded with code 74262. Category III code 0067T was deleted for 2010.

46. (b) When an MRI report states that “gad or gadolinium” was used, this means that contrast was used.

47. (b) For hospital-based billing of professional services, when studies are performed “with contrast,” the professional bill should not contain separate charges for the contrast.

48. (a) If billing globally for MRI services in a freestanding center, in addition to billing for the MR procedure done with contrast, current CMS information (see Transmittal 502 from CMS manual 100-04) states that a separate charge should also be submitted for the material utilized. Contrast material is defined by current level II HCPCS codes. As always, verify non-Medicare payer policy regarding separate billing of this material.

49. (c) When both an MRI and MRA study are ordered, performed at the same setting and described in the report, it is not appropriate to bill separately for both studies. Only report one CPT code.

50. (c) When reference is made to MRA, by definition this means magnetic resonance angiography.

51. (c) MRA studies include imaging studies defined as MRA and MRV.

52. (c) When reference is made to “MRV,” this refers to magnetic resonance venography.

53. (c) If both the head and the neck have an MRA procedure ordered, performed (with contrast) and read, codes 70545 and 70548 can be billed.

54. (d) If an order comes over for an MRI of the heart, the correct code series to select from is 75557–75565.

55. (a) When a radiology report defines the performance of “MRCP,” this refers to magnetic resonance cholangiopancreatography.

56. (c) When ordered, performed and dictated, MRCP may be defined by codes in the 74181–74183 series plus a code for 3D reconstruction.

57. (b) When MRI studies of the wrist, elbow or shoulder are ordered, performed and reported, the code series 73221–73223 most appropriately defines this study.
58. (a) When MRI studies of the radius, ulna or humerus are ordered, performed and reported, the code series 73218–73220 most appropriately defines these studies.

59. (d) When MRI studies of the ankle, knee or hip are ordered, performed and reported, the code series 73721–73723 most appropriately defines these studies.

60. (c) When MRI studies of the foot, lower leg or femur are ordered, performed and reported, the code series 73718–73720 most appropriately defines these studies.

61. (c) When an MRI study is performed post a fluoroscopically guided injection of gadolinium into the shoulder joint (no fluoroscopic images performed), the correct codes for this procedure are 77002, 23350 and 73222.

62. (d) If a full and complete fluoroscopic arthrogram of the knee is performed, including an injection of gadolinium and subsequent MRI imaging of the knee, the appropriate codes to bill are 73580, 27370 and 73722.

63. (d) When an MRI of the brachial plexus is done, upper extremity, orbit, face and neck, or chest depending on the clinical indication would best describe the study performed.

64. (a) True. With the deletion of code 76375 from CPT in 2006, no separate charging option now exists for routine 2D reconstruction as this is now considered an inherent part of the procedure.

65. (c) Yes, but only for 3D post-processing performed on either the same equipment in which the data was acquired or on an independent workstation.

66. (d) Codes 76376 and 76377 can be used for image post-processing of CT, US and MRI data, but not NM procedures.

67. (d) Specifically codes 76376 and 76377 cannot be assigned in conjunction with CPT codes defining CTA, MRA or PET/CT procedures.

68. (d) The new 3D rendering codes will be used to code for/address complex renderings such as surface-shaded, volumetric rendering, maximum intensity projections (MIPS), fusion imaging and quantitative analysis (segmental volumes and surgical planning).

69. (d) No additional charge should be submitted for this portion of the procedure.

70. (b) As the fetus lies within the mother’s pelvis, the appropriate without, with or without code followed by with contrast code for the pelvis (in utero) should be submitted.

71. (b) An exam begins with the administration of contrast; therefore, the anatomic-site specific code should be assigned with modifier -53. Modifier -53 is not reportable when billing for hospital services on the UB-04 form.
72. (b) False. CAD post processing for breast MR procedures is defined by add-on Category III code 0159T.

73. (d) Add-on code 0159T is the only additional code that should be assigned to the breast MR code when CAD is performed.

74. (d) In addition to CMR services, in a hospital-based setting, if a physician supervises, and/or interprets and/or reports the cardiac stress portion of a CMR procedure, then 93015, and/or 93016, and/or 93018 may be additionally reported.
1. Reviewing the rules previously defined regarding component coding, which of the following are true:
   a. You must know where vascular access was gained and where the catheter was positioned
   b. You may code each vascular family entered separately
   c. You must code the highest degree of selectivity per vascular family and selective codes take precedence over non-selective codes from the same vascular access
   d. All of the above

2. When coding for any invasive and/or interventional procedure in which the radiologist performs both the radiological supervision and interpretation as well as the surgical (procedural) component of the study, the bill should contain:
   a. Only codes from the 7XXXX series of CPT
   b. Only codes from the 3XXXX series of CPT
   c. Codes from the 10XXX–69XXX and 7XXXX series of CPT
   d. It depends on the CPT definition and parenthetical notes for the procedure performed

3. When assigning the code for the radiological supervision and interpretation portion of the study:
   a. This code can be used regardless of whether the radiologist is actually in the room or not
   b. This code can be used by the radiologist if the technologist performs and supervises the injection procedure
   c. This code should only be used (unmodified) when the radiologist is both present in the room for the study as well as interpreting the procedure when completed
   d. None of the above

4. If a radiologist only interprets the films of an invasive procedure, and is not actually in the room supervising the study, such as only providing a reading of a study in the OR by another physician, when submitting the RS&I code, the code:
   a. Should be sent through with no additional modifier
   b. Should also be assigned the modifier -53
   c. Should also be assigned the modifier -52
   d. Should not be assigned at all
5. When performing myelography, in addition to billing for the RS&I code, the surgical code for the injection procedure into the spinal canal:
   a. May not be assigned as this code does not fall in the 7XXXX series
   b. Is always assigned by the radiologist (when performed by them) for all myelograms and is always 62284
   c. Is always assigned by the radiologist (when performed by them) for all myelograms and is dependent on whether the puncture was done in the lumbar area or the cervical area
   d. Is considered an integral component of this study and not billed separately

6. A patient has a myelogram in which it is desired to study both the thoracic and lumbar areas, but following the lumbar puncture, contrast flow is impeded because of a thoracic block. Because of this, a C1-C2 puncture is made to now run the contrast down the canal into the thoracic area. This is now coded as:
   a. 72255, 72265 and 62284
   b. 72255, 72265, 62284 and 61055
   c. 72270, 62284 and 61055
   d. 72270 and 62284

7. Diskography or diskograms can be performed in the cervical, thoracic or lumbar areas. If a diskogram is performed at L2, L3 and L4, this would be:
   a. Coded as 72295 and 62290(x3)
   b. Coded as 72295 and 62290
   c. Coded as 72295 (x3) and 62290
   d. Coded as 72295 (x3) and 62290 (x3)

8. When contrast material is introduced into the lumbar epidural space, epidurography may be charged, but only if:
   a. The amount of contrast exceeds 3.75ml
   b. The contrast is non-ionic
   c. After the administration of the contrast, an epidurogram is performed, recorded and a formal x-ray report is issued
   d. The radiologist interprets the study

9. Based upon the correct answer to #8, the procedures defined are coded as:
   a. 77003 and 62319
   b. 72275 and 62319
   c. 77003 and 62311
   d. 72275 and 62311
10. If the injection procedure defined in #8 was performed, but no films or report were performed or issued, this would be coded as:
   a. 77003 and 62319
   b. 72275 and 62319
   c. 77003 and 62311
   d. 72275 and 62311

11. When a shoulder arthrogram (or arthrography) is performed, the correct code(s) to submit assuming the radiologist does both the injection and RS&I component:
   a. Are 73040 and 23350
   b. Are 73040 and 20610
   c. 77002, 73040 and 23350
   d. 77002, 73040 and 20610

12. If a patient has a triphasic (three separate injections) wrist arthrogram performed, the correct way to code for this procedure is:
   a. 73115 (x3) and 25246
   b. 73115 (x3) and 25246 (x3)
   c. 77002, 73115 and 25246 (x3)
   d. 73115 and 25246 (x3)

13. If bilateral SI joint arthrography is performed, the correct method in which to bill for this service is:
   a. G0259 (x2)
   b. 73542 and 27096 (x2)
   c. 73542 (x2) and 27096 (x2)
   d. 73542 (x2) and 27096

14. If only a therapeutic injection (no arthrogram) is performed of the right SI joint, this is now coded as:
   a. G0259 (x2)
   b. 77003 and 27096
   c. 77002 and 27096
   d. 77003 and 20610

15. If a hip injection (non-contrast) or aspiration is performed under fluoroscopic guidance, this is best defined as:
   a. 73525 and 27093
   b. 77003 and 20610
   c. 73525 and 27096
   d. 77002 and 20610
16. When a percutaneous transhepatic cholangiogram is performed by the interventional radiologist, this is defined by:
   a. Codes 74305 and 47505
   b. Codes 74320 and 47500
   c. Code 74301
   d. Codes 74305 and 48400

17. A t-tube cholangiogram is defined by the codes:
   a. 74305 and 47505
   b. 74320 and 47500
   c. 74425 and 50390
   d. 74425 and 50394

18. Excluding reimbursement, when diagnostic and interventional biliary procedures are performed, it is important to note that when both studies are done in the same setting, such as a PTC and external biliary drainage catheter placement, it:
   a. Is appropriate to charge for only the interventional study as this was the last study done
   b. Is appropriate to charge for only the diagnostic study as this was the initial study done
   c. Is appropriate to charge for both as one study is not inherent in the other
   d. None of the above

19. If placing both right and left sided external biliary drainage catheters, you should:
   a. Charge only one set of the codes 75980 and 47510
   b. Charge two sets of the codes 75980 and 47510
   c. Charge the codes 75982 and 47511
   d. Bill only RS&I codes as they fall into the 7XXXX series

20. When a percutaneous gastrostomy tube is placed, a device is first placed into the mouth, down the esophagus and then into the stomach. After this portion of the study, a device is placed into the stomach from outside of the body (percutaneously). The procedure should be coded as follows:
   a. 74340, 44500-52 and 49442
   b. 74340 and 49440
   c. 49441
   d. 49440

21. When biliary duct dilations are performed, sometimes a biliary stent is placed, other times not. When coding for a dilation with stent placement, the correct code(s) is (are):
   a. 74363
   b. 74363 and 47555
   c. 74363 and 47510
   d. 74363 and 47556
22. Following the placement of any type of external drainage tube (biliary, urinary, etc.), contrast material is often injected to ensure correct position. The injection of this contrast material at the same time as placing the tube is:
   a. Separately billable as a diagnostic study
   b. Not separately billable as a diagnostic study, but considered inherent in the tube placement
   c. Billed always as 75898
   d. None of the above

23. When an antegrade pyelogram is performed, this entails access into the renal pelvis with a needle with subsequent injection of contrast material to evaluate several things, one being the flow of urine from the renal pelvis into the ureter and finally the bladder. Whenever this study is done, the following RS&I code, _____ is used plus the injection code _____:
   a. 74420, 51600
   b. 74425, 50394
   c. 74425, 50390
   d. 74425, 50690

24. Referring to the example in #24, if this study is performed on both the right and left kidneys, it should be defined as:
   a. 74425 and 50390 (x2)
   b. 74425 (x2) and 50390 (x2)
   c. 74425 and 50394 (x2)
   d. 74425 (x2) and 50690 (x2)

25. A cystogram is defined by which two codes:
   a. 76080 and 20501
   b. 76080 and 49424
   c. 74430 and 51600
   d. 74455 and 51600

26. When a percutaneous nephrostomy (PCN) is performed, this involves a separate puncture from outside of the body, into the renal pelvis to place an external drainage tube. This is defined by codes 74475 and 50392. CCI edits state that if also performing full and complete diagnostic antegrade pyelography it _____ acceptable to bill for this study as well:
   a. Is
   b. Is not
   c. Is, but you must modify the nephrostomy surgical code
   d. Is, but you must modify the pyelography surgical code (50390)

27. If bilateral nephrostomy tubes are placed, this should be coded as:
   a. 74475 and 50392 (x2)
   b. 74475 (x2) and 50392 (x2)
   c. 74475 (x2) and 50392
   d. 74475 and 50392
28. Often, when placing an initial nephrostomy tube, the tract necessary to place this tube must be enlarged or dilated to get the tube into the kidney. This dilation:
   a. Is separately chargeable
   b. Is not separately chargeable
   c. Separately chargeable, but must be modified
   d. Separately chargeable with an UPC

29. To define the simple change of a cystostomy tube with imaging guidance, the correct codes are:
   a. 76000 and 51710
   b. 77002 and 51705
   c. 75984 and 51710
   d. 75984 and 51705

30. When a device known as a “J-J”, “double J” or nephroureteral stent is placed, this is best defined as:
   a. 74475 and 50392
   b. 74480 and 50393
   c. 74485 and 52351
   d. 74424 and 50393

When arterial, venous or pulmonary catheterizations are performed via either a multiple or single vascular access, in order to correctly code for the study(s) done, the report must clearly define exactly where the catheter was placed and where each injection was done. Also, the anatomic areas imaged must be defined. The following examples are all based upon these base requirements. As stated earlier in this manual, modifiers should be assigned based upon state/locality specific third party payer guidelines. For example:

31. If via a right femoral access, the catheter is placed in the supra-renal aorta with injection and filming from the level of the renal arteries to the aortic bifurcation, the correct code(s) would be:
   a. 75625
   b. 75625 and 36200
   c. 75630
   d. 75630 and 36200

32. If following a right groin approach, the catheter is placed at the supra renal aorta with subsequent imaging from this solitary injection of the abdominal aorta the correct code(s) would be:
   a. 75625
   b. 75625 and 36200
   c. 75630
   d. 75630 and 36200
33. If following a left groin approach, the catheter was placed at the supra renal aorta with an injection and filming of the abdominal aorta and then the catheter was retracted to the level of the iliac bifurcation with a second injection and filming over the pelvis, and then a third injection was made from the same location with filming on each lower extremity, the correct codes would be:
   a. 75630 and 36200
   b. 75630, 75736 (x2) and 36200
   c. 75716 and 36200
   d. 75625, 75716 and 36200

34. If the catheter was placed in the mid abdominal aorta with filming following a single injection from this spot of the distal aorta as well as bilateral iliac/femoral vasculature, the correct codes would be:
   a. 75630 and 36200
   b. 75630-52 and 36200
   c. 75716 and 36200
   d. 75625, 75716 and 36200

35. If via a single left groin approach, the catheter is placed into the upper or proximal abdominal aorta with an injection and subsequent filming in detail of the right and left renal arteries, the correct fashion in which to code this study is:
   a. 36252
   b. 75625 and 36200
   c. 36252, 36245 and 36245
   d. 36254 and 36200

36. Via a single right brachial artery approach, the catheter is advanced and first placed into the supra renal abdominal aorta. An injection is performed here demonstrating normal size of the abdominal aorta as well as single left and right renal arteries. The catheter was then selectively placed into each main renal artery and injections were performed demonstrating patent renal arteries bilaterally. This would be coded as:
   a. 36252, 75625 and 36245 (x2)
   b. 36252
   c. 36251
   d. 36254 and 36245 (x2)
37. A patient with a suspected GI bleed presents to the ER. The patient states that they have been passing great amounts of blood for the last three hours. The decision is made to proceed on with diagnostic angiography of the main arteries of the gut. Following access into the right common femoral artery (RCFA), the catheter was non-selectively placed into the abdominal aorta. An abdominal aortogram was performed with subsequent selective imaging of the SMA, IMA and celiac arteries. The correct codes would be:
   a. 75625, 75726 and 36245
   b. 75726 (x3) and 36245 (x3)
   c. 75625, 75726 (x3) and 36245 (x3)
   d. 75625, 75726 (x3) and 36245

38. As in #37, but in addition to the selective studies of the IMA, SMA and celiac, supra selective studies of the left and right colic arteries were also done. The correct codes would be:
   a. 75726 (x3), 75774 (x2), 36246 (x2) and 36245
   b. 75726 (x3), 36246 (x2) and 36245
   c. 75726 (x3), 75774 (x2) and 36245 (x3)
   d. 75726 (x5), 36246 (x2) and 36245

39. Via a right groin approach, the catheter was non-selectively placed into the aorta arch with injection and filming of this structure. The codes are:
   a. 75625 and 36200
   b. 75600 and 36221
   c. 36221
   d. 75605 and 36200

40. As in #39, but the catheter is injected a second time from the same position with filming now of the arch and the common carotids. The correct codes should be:
   a. 76937 and 36220
   b. 75605 and 36224
   c. 36222-50
   d. 76937 and 36222

41. As in #39, but now the catheter, after the initial arch injection is selectively advanced into each the right and left common carotids with injections and filming of each of these vessels. The correct codes would be:
   a. 76937
   b. 85605, 76937, and 36200
   c. 36221-50
   d. 36222-50
42. As in #41, but now the catheter, while not being advanced outside of the common carotids is injected a second time from this location with filming of the internal (cerebral) carotids bilaterally as well. The correct codes would be:
   a. 76937 and 36200
   b. 76937, 36215, and 36216
   c. 36224-50
   d. 36221 and 36223-50

43. As in #42, but while the imaging stays the same (the arch, bilateral commons and bilateral cerebrals) the catheter is also advanced and injected when in each internal carotid (right and left sides). The correct codes are:
   a. 75680 and 36200
   b. 75680, 36215, and 36216
   c. 36224-50 and 36228-50
   d. 36224-50 and 36227-50

44. Via the right groin approach, the catheter is advanced into the aortic arch, both common carotids and both vertebrals (selective injections from each) with imaging bilaterally of the neck, head and both vertebrals. The current codes are:
   a. 36222 and 36224
   b. 36222-50 and 36226-50
   c. 36224 and 36227-50
   d. 36222 and 36228-50

45. The radiologist performs a single puncture of the arterial side of the AV fistula. Via this initial access, a contrast injection was performed demonstrating the flow within the fistula as well as the venous flow up the arm and into the superior vena cava (SVC). The patient is covered under the Medicare program. The correct code(s) is (are):
   a. 36147
   b. 75791 and 36147
   c. 75791, 75827 and 36147
   d. 75791, 75820, 75827 and 36147

46. As in #45, but now a stenosis is seen at the venous anastomosis and is successfully treated by venous angioplasty. The correct codes are:
   a. 75791, 36147, 75962 and 35476
   b. 36147, 75978 and 35476
   c. 75791, 75820, 75978 and 35476
   d. 75791, 75820, 75978, 36147 and 35476
47. As in #45, but now a second puncture is made on the venous side of the fistula. The same diagnostic imaging is performed, the venous PTA is still done, but now a thrombectomy procedure has been performed throughout the fistula. The correct codes are:
   a. 36147, 36148, 36870, 75978 and 35476
   b. 36147 (x2), 36860, 75978 and 35476
   c. 75971, 36147 (x2), 36870, 75962 and 35475
   d. 75971, 36148, 36870, 75978 and 35476

48. As in #47, but in addition to the previous studies, another venous PTA is treated in the central venous system. The correct codes are:
   a. 36148, 36870, 75978 (x2), 35476 and 35476
   b. 36147, 36148 36870, 75978 (x2), 35476 and 35476
   c. 75971, 36147 (x2), 36870, 75978 (x2), 35476 (x2), 36010
   d. 75971, 36148 (x3), 36870, 75978 (x2) and 35476 (x2)

It is important to note that Medicare regulations were revised in the 4th quarter of 2003 stating that the use of code 36140 or 36120 is prohibited when performed at the same clinical encounter from a single vascular access point as a contralateral selective catheter placement. It would be incorrect to assign modifier -59 to code 36120 or 36140 in these instances in addition to the selective catheter placement code (3624x). CMS stated that in only two instances would the submission of the non-selective catheter placement code (36120 or 36140) be allowed on the same date of service (DOS) as the selective catheter placement code (3624x). They are:

1. The provider performs the non-selective catheterization and selective catheterization through two separate catheters introduced into two separate arteries;

2. The provider performs the non-selective and selective catheterizations at two separate patient encounters on the same date of service.

Also, when questions include in the answer section code 75774, remember that this code by definition states “Angiography, each additional vessel selectively studied after the basic examination.” This code should not be used for routine completion angiography based upon practice/facility protocols. This code is also not to be assigned when additional venous vessels are studied after the basic examination. Physician dictation/documentation should clearly indicate the need/reason to use this code in the dictated report.

As this code states “selective” in its definition, it should not be assigned for ipsilateral injections (ie., non-selective “pull-back” injections”) done at the same clinical setting as a contralateral selective procedure from a single vascular access point.
49. Via a right groin stick, the catheter was placed non-selectively into the upper abdominal aorta. An abdominal aortogram was performed with the catheter then pulled back into the distal aorta with a subsequent injection and filming of the bilateral lower extremities. Following this imaging, the catheter was then advanced up and over the iliac bifurcation into the contralateral common iliac artery with additional selective diagnostic imaging of the left lower extremity. The correct codes are:
   a. 75625, 72716, 36245
   b. 75625, 75716, 75774 and 36245
   c. 75625, 75716, 75710 and 36200
   d. 75625, 75716, 36200 and 36245

50. As in #49, but on the additional contralateral study, the catheter is advanced into the common femoral artery. The correct codes are:
   a. 75625, 75716 and 36245
   b. 75625, 75716, 75774 and 36245
   c. 75625, 75716, 75774 and 36246
   d. 75625, 75716 and 36246

51. As in #50, but on the additional contralateral study, the catheter is advanced into the superficial femoral (SFA) artery. The correct codes are:
   a. 75625, 75716, 75710 and 36247
   b. 75625, 75716, 75774 and 36247
   c. 75625, 75716, 75710 and 36246
   d. 75630, 74774 and 36247

52. Via a left common femoral artery (LCFA) approach, the catheter was placed non-selectively into the upper abdominal aorta. An injection was performed with subsequent imaging of the abdominal aorta. The catheter was retracted to the iliac bifurcation where a second injection was made demonstrating the bilateral extremity vasculature. The catheter was then advanced contralaterally to the level of the SFA, with an injection and filming of the right lower leg. The catheter was then pulled back into the left groin with an injection demonstrating the left lower extremity. The correct codes are:
   a. 75625, 75716, 75774, 36245 and 36140
   b. 75625, 75716, 75774, 36246 and 36140
   c. 75625, 75716, 75774, 36247 and 36140
   d. 75625, 75716, 75774 and 36247

53. As in #52, but on the additional contralateral study, the catheter was only advanced into the external iliac artery. The ipsilateral injection remains the same from #52. The correct codes are:
   a. 75625, 75716, 75774, 36245 and 36140
   b. 75625, 75716, 75774, 36246 and 36140
   c. 75625, 75716, 75774, 36247 and 36140
   d. 75625, 75716, 75774 and 36246
54. As in #52, but on the additional contralateral study, the catheter was only advanced into the common iliac artery. The ipsilateral injection remains the same. The correct codes are:
   a. 75625, 75716, 75774, 36245 and 36140
   b. 75625, 75716, 75774, 36246 and 36140
   c. 75625, 75716, 75774, 36247 and 36140
   d. 75625, 75716, 75774 and 36245

55. Via a right common femoral vein approach, the catheter was placed into the right pulmonary artery with subsequent injection and filming over the right lung. The correct codes are:
   a. 75746 and 36013
   b. 75741 and 36013
   c. 75741 and 36014
   d. 93544 and 36014

56. As in #55, but now the catheter was selectively placed into each of the right and left pulmonary arteries with injections and filming of each. The correct codes are:
   a. 75741 (x2) and 36014
   b. 75741 (x2) and 36014 (x2)
   c. 75743 and 36014 (x2)
   d. 75743 and 36014

57. As in #56, but now on the left side, the catheter is advanced into the left upper lobe with additional selective injections from this location. The correct codes are:
   a. 75743, 36014 (x2) and 75774
   b. 75743, 36014, 36015 and 75774
   c. 75743, 36014, 36015 and 75741
   d. 75743, 36014, 36015 and 93544

58. If from the same vascular access point both an IVC study and selective bilateral pulmonary angiography are performed, this should be coded as:
   a. 75743, 36014, 36014, 75827 and 36013
   b. 75743, 36014 (x2) and 75825
   c. 75743, 36014, 36015, 75825 and 36010
   d. 75743, 36014 (x2), 75825 and 36010

59. When performing imaging of either the SVC or IVC, the catheter placement code remains the same at _____, but the RS&I code varies. The SVC is RS&I code _____ and the IVC RS&I code _____.
   a. 36200, 75827 and 75825
   b. 36010, 75825 and 75827
   c. 36010, 75827 and 75825
   d. 36200, 75827 and 75625
60. “Via a 23 gauge butterfly needle placed into the veins on the top of each foot, contrast material was injected demonstrating normal ascending venography.” This report substantiates the use of which of the following codes:
   a. 75820 and 36005
   b. 75820 (x2) and 36005 (x2)
   c. 75822 and 36005 (x2)
   d. 75822 and 36000 (x2)

61. If a venous injection is performed of the right or left renal vein via a left common femoral vein (LCFV) puncture, this is a ______, defined by code _____.
   a. Non-selective injection, 36010
   b. First order selective, 36011
   c. First order select, 36245
   d. Second order selective, 36012

62. If a selective venous injection is performed in both the right and left internal jugular veins via a single LCFV approach, this would be defined as a _____, code _____.
   a. First order selective, 36011 (x2)
   b. Second order selective, 36012 (x2)
   c. First order selective, 36215 (x2)
   d. Second order selective, 36216 (x2)

63. Excluding the catheter placement code, when tPA is infused to attempt to dissolve or “lyse” blood clots, this is defined by what code(s)?
   a. 75894 and 37204
   b. 37211
   c. 75896 and 37202
   d. 75898 and 37211

64. Excluding the catheter placement code, when pitressin, papaverine, or verapamil is infused to aid in therapeutic treatment of a patient, this is described by what code(s):
   a. 75894 and 37204
   b. 37211
   c. 75896 and 37202
   d. 37212

65. Following either tPA, papaverine or pitressin therapy, if imaging is performed through the catheter already in place to deliver this material, this may be coded with:
   a. 75900 and 37209
   b. 75710
   c. 75898
   d. 75820
66. If performing an embolization procedure of a single vascular abnormality that is fed by multiple feeder vessels, the correct way to charge for this procedure is:
   a. One embolization RS&I and procedural code and as many selective catheterization codes as needed
   b. As many embolization RS&I and procedural codes as vessels that feed it
   c. Only one RS&I and procedural code, but no surgical code for the catheter placements
   d. None of the above

67. After embolizing a single (non-cerebral) operative field, it is appropriate to charge code 75898 multiple times when a single vessel supplying that operative field is injected and imaged:
   a. Yes
   b. No
   c. Yes, but a surgical code should be used as well to define the catheter placement
   d. Yes, but it is always associated with code 36200

68. When charging for a percutaneous transluminal angioplasty procedure (PTA) and no other interventions are performed, to correctly charge, you must know:
   a. Is the vessel treated a peripheral or renal/visceral vessel
   b. Is the vessel treated the initial or additional structure treated
   c. What is the anatomic location of the vessel being treated
   d. All of the above

69. If via a left groin approach, the right common femoral and popliteal arteries were treated by angioplasty, the correct CPT code(s) to submit would be:
   a. 37226
   b. 37224
   c. 37224 (x2)
   d. 75962, 75964, 35474 (x2), 36247

70. Via a left groin approach, angioplasty performed in either the right or left renal artery is defined by codes:
   a. 75962, 35471 and 36200
   b. 75966, 35471 and 36200
   c. 75966, 35471 and 36245
   d. 75964, 35471 and 36245

71. Bilateral renal angioplasty from either a single or dual groin approach is defined as codes:
   a. 75966, 75968, 36245 (x2), 35471 (x2)
   b. 75966 (x2), 36245 (x2) and 35471 (x2)
   c. 75966, 75964, 36245 (x2) and 35471 (x2)
   d. 75966, 75968, 36245 and 35471
72. Percutaneous venous angioplasty, regardless of the anatomic site in which it may be performed is defined by ____ code pair, _____.
   a. One, 75978 and 35460
   b. One, 75978 and 35476
   c. Two, 75978, 35475 and 35476
   d. None of the above

73. When non-coronary, non-carotid, non-vertebral, non-intracranial, non-iliac, or non-lower extremity intravascular stents are placed, it is important to remember that routine pre- and post-dilation to deposit the stent is not separately billable as a PTA. Likewise, if an angioplasty is required to deposit the stent, the PTA is not separately billed. The RS&I and procedural codes available for assignment for percutaneous non-coronary, non-carotid, non-vertebral, non-intracranial, non-iliac, or non-lower extremity intravascular stent placement are:
   a. 92980 and 92981
   b. 75960, 37207 and 37208
   c. 75960, 37205 and 37206
   d. None of the above

74. Angiography performed at the end of either an intravascular stent placement or a PTA procedure:
   a. Should not be separately charged as this is considered completion angiography
   b. May be separately billed
   c. Is considered inherent in the study unless both PTA and stenting are done on the same DOS
   d. None of the above

75. If bilateral (percutaneous) iliac stents are placed, the correct codes are:
   a. 75960 (x2), 37205 and 37206
   b. 37221 (x2)
   c. 37221 and 3722
   d. 75960, 37205

76. When performing bilateral common femoral PTA and intravascular stenting, you can charge only one PTA and vascular stent code.
   a. True
   b. False

77. Whether performed via US, CT or fluoroscopic guidance, abscess procedures are defined by the same RS&I code. The definition does not differentiate whether a drainage catheter is left in at the completion of the procedure or not. The code is:
   a. 76080
   b. 49423
   c. 75989
   d. 77002
78. From a radiologic perspective, virtually all lower-extremity interventional procedures are done from the _____ approach. Because of that you must be certain not to select the _____ code choices when billing as these codes carry substantially higher RVU’s and will result in gross overpayment if billed:
   a. External, internal
   b. Distal, proximal
   c. Incisional, excisional
   d. Percutaneous, open

79. Previously, the RS&I codes for the guidance procedures were specific only to biopsy. In CPT, these codes now have meanings that cover different types of procedures. These codes (one for each modality of CT, US, MRI and fluoro) will cover guidance for:
   a. Localization device / injection
   b. Biopsy / cyst aspiration
   c. Both A and B
   d. None of the above

80. If multiple stereotactic biopsies are made into the same breast lesion, the correct way to code for this procedure is:
   a. 77031 and 19100 (x2)
   b. 77031 and 19102
   c. 77031 and 19103
   d. 77031 and 19101

81. If at the completion of a stereotactic biopsy of the breast using a vacuum assisted device a small metallic marker is placed, this would be coded as follows:
   a. 77032, 19290 and 19295
   b. 77032, 19102 and 19295
   c. 77031, 19103 and 19295
   d. 76942, 19103 and 19295

82. It is important to note when performing cyst aspiration procedures (as well as biopsies or other drainage/injection procedures) whether the surgical code defines unilateral or bilateral status. If the code descriptor states bilateral, even if charged twice, Medicare payment will only be made once. If the descriptor does not state bilateral:
   a. You will automatically be reimbursed twice for the procedure
   b. You may be reimbursed at 200%
   c. You may be reimbursed at 150%
   d. You must check the Medicare payment rules to verify absolute payment
83. When a patient has an abscess drainage catheter placed on day one, and at the end of the procedure an amount of contrast is injected to verify catheter placement:
   a. This should be separately coded as codes 76080 and 20501
   b. This should be separately coded as codes 76080 and 49424
   c. This is separately coded as code 75898
   d. None of the above, it is inherent in the placement

84. If on Monday, a percutaneous abdominal abscess drainage catheter is placed and on Wednesday the patient returns to have the catheter checked for patency/position via a contrast injection, this:
   a. Should be separately coded as codes 76080 and 20501
   b. Should be separately coded as codes 76080 and 49424
   c. Is separately coded as code 75898
   d. None of the above, it is inherent in the placement

85. If following the study defined in #84, it is now decided that the tube must in fact be changed, it is now:
   a. Coded as if the original tube was placed again (75989 and 49021)
   b. Coded as if the original tube was placed again (75989 and 49020)
   c. Coded as a tube exchange (75984 and 49423) as well
   d. None of the above

86. Assuming all documentation criteria have been met, when placing an Ultrasound-guided tunneled line without a subcutaneous port or pump on a patient over age 5, it is correct to code:
   a. 76937 and 36557
   b. 76937 and 36558
   c. 76937 and 36560
   d. 76937 and 36563

87. When repositioning a previously placed PICC line under fluoro guidance, the correct code choices are:
   a. 77002 and 36493
   b. 76000 and 36493
   c. 76000 and 36597
   d. 77001 and 36596

88. In a patient (over 5 years of age) having a catheter/port system, when replacing the previously placed tunneled catheter only, it is correct to code:
   a. 36575
   b. 36580
   c. 36578
   d. 36582
89. Excluding the selective or non-selective catheter placement code, under fluoro guidance, fibrin stripping of a previously placed central line is defined by code:
   a. 36596 and 75901 
   b. 36593 and 75901 
   c. 36595 and 75901 
   d. 36598 and 76000

90. When instilling a pharmacologic agent to attempt to “clear” a previously placed tunneled or PICC line, the correct code(s) is/are:
   a. 75896 and 37201 
   b. 36593 
   c. 75896 and 37202 
   d. 75896 and 36593

91. Excluding the non-selective or selective catheter placement code(s), when clearing of the inside of a previously placed tunneled or PICC line is performed, this is defined by code(s):
   a. 75902 and 36595 
   b. 75902 and 36596 
   c. 75902 and 36598 
   d. 36598 only

92. If a report states that “via blunt dissection...,” this typically refers to a central venous catheter placement of what type:
   a. percutaneous 
   b. tunneled 
   c. open 
   d. none of the above

93. If on a 45-year old male an existing non-tunneled centrally inserted central venous catheter is exchanged, but a totally new subcutaneous tunnel is created, how is this procedure coded:
   a. 36580 
   b. 36581 
   c. 36558 
   d. 36556

94. If an injection of contrast is made to check the patency of an existing central venous access device (CVAD), the correct code(s) is (are):
   a. 76000 
   b. 76000 and 36299 
   c. 36598 
   d. 76000 and 36598
95. If a stent is placed at the carotid bifurcation (no distal embolic protection/filter device is used) it is __________ to code for the ipsilateral catheter placement(s) as well as code __________ for the unilateral, extracranial carotid bifurcation stenting:
   a. appropriate, 37215
   b. inappropriate, 37216
   c. appropriate, 37216
   d. inappropriate, 37205

96. The most common method of carotid bifurcation stenting __________ the placement of a distal filter device and is described by CPT code ______.
   a. involves, 37215
   b. does not involve, 37215
   c. involves, 37216
   d. does not involve, 37216

97. If placing more than one stent in the ipsilateral carotid bifurcation area, it is __________ to charge code(s) __________ multiple times:
   a. appropriate, 37215
   b. inappropriate, 37215 or 37216
   c. appropriate, 37216
   d. inappropriate, 37215

98. Per CPT, proximal carotid artery or extracranial vertebral artery stenting may be defined by what CPT code(s):
   a. 75960 & 37205
   b. 37215
   c. 37215 & 37216
   d. 0075T & 0076T

99. CPT provides no code options to define intracranial PTA or stenting?
   a. True
   b. False

100. CPT codes for intracranial PTA only are defined by code option(s):
    a. 61630
    b. 61640
    c. 61641 & 61642
    d. All of the above

101. If performing intracranial PTA for atherosclerotic stenosis, it is correct to code for catheter placement as well as diagnostic imaging?
    a. True
    b. False
102. If performing both PTA and stenting of a single intracranial vessel for atherosclerotic stenosis, it is correct to code separately for each service (PTA & stent) when both are medically necessary?
   a. True
   b. False

103. As in #102, but now two separate vessels are treated (one with PTA, the other with stenting).
   a. True
   b. False

104. When performing PTA of an intracranial vessel for vasospasm, the initial diagnostic angiogram performed at the same session as the PTA may be separately coded for (with the appropriate S&I code):
   a. True
   b. False

105. If three separate vessels are treated in the same vascular family by PTA for intracranial vasospasm, the correct coding for the surgical aspect of this service is:
   a. 61640 (x3)
   b. 61640 & 61641 (x2)
   c. 61640 & 61641
   d. 61640, 61641 & 61642

106. If three separate vessels are treated by PTA for intracranial vasospasm, two on the right side of the head and one on the left side of the head, the correct coding for the surgical aspect of the procedure is:
   a. 61640 (x3)
   b. 61640, 61641 (x2)
   c. 61640 (x2), 61642
   d. 61640, 61641 & 61642

107. When performing percutaneous mechanical thrombectomy of an artery other than an AVF, the correct CPT code(s) is (are):
   a. 36870
   b. 37799
   c. 37184–37186
   d. 37184–37188

108. When performing percutaneous mechanical arterial thrombectomy, there are separate code categories for primary, secondary and tertiary thrombectomy procedures:
   a. True
   b. False
109. The S&I component of percutaneous mechanical thrombectomy is separately identified by code:
   a. 76001
   b. 75894
   c. 75898
   d. None of the above

110. While intraprocedural injection of a thrombolytic agent is not separately reportable in conjunction with percutaneous mechanical thrombectomy, subsequent or prior continuous infusion of a thrombolytic agent is not included in the thrombectomy and is separately reportable:
   a. True
   b. False

111. Primary mechanical thrombectomy may be reported:
   a. Once per vascular family treated
   b. Once, regardless how many vascular families are treated
   c. For each vessel treated, whether they are in the same family or different families
   d. None of the above

112. If the right SFA and right anterior tibial artery were treated with percutaneous mechanical thrombectomy, the correct codes to submit are:
   a. 37184 and 37184-51
   b. 37184 and 37187
   c. 37184 and 37185
   d. 37184 and 37188

113. During successful primary stenting of the left common femoral artery, completion angiography shows poor flow distal to the stent placement. Mechanical thrombectomy is performed of the popliteal artery where the filling defect is seen. This mechanical thrombectomy is coded as:
   a. 37184
   b. 37185
   c. 37186
   d. Not coded at all as inherent in stent placement

114. Percutaneous mechanical thrombectomy of a vein may be defined by CPT codes:
   a. 37184–37185
   b. 37184–37186
   c. 37184–37188
   d. 37187–37188
115. If the right and left common femoral veins are treated by percutaneous mechanical thrombectomy, CPT directs us to code as:
   a. 37187 and 37188
   b. 37187 (x2)
   c. 37187 -50
   d. 37187 and 37187 -51

116. If a patient has percutaneous venous mechanical thrombectomy performed on a Monday, and then, 2 days, later they repeat the same (venous) thrombectomy procedure, this is coded as __________on Monday and _____________ on Wednesday. Initial thrombolytic therapy was also provided.
   a. 37187 and 37187–76
   b. 37187 and 37186
   c. 37187 and 37188
   d. 37187 and 37799

117. If performing both angiography and embolization of uterine fibroids, this should be coded as follows:
   a. 75736(x2), 36247(x2), 75894, 37204 and 75898(x2)
   b. 75736(x2), 36247(x2), 75894, 37210 and 75898
   c. 75894 and 37204 only
   d. 37210 only

118. Code 37210 should be assigned to all embolizations of vessels within the pelvis:
   a. True
   b. False

119. When converting a percutaneous gastrostomy tube (G-tube) to a gastro-jejunostomy (G-J tube) at the time of the initial placement of the G-tube, the correct coding for this procedure is:
   a. 49440
   b. 49446
   c. 49440 and 49446
   d. 43761 and 76000

120. Contrast is injected in an indwelling percutaneous duodenostomy tube. Radiographic imaging demonstrates that the tube is occluded. Wires and catheters of various sizes are advanced through the tube. Contrast is injected through the tube showing that patency has been regained. The correct method of coding for these services is:
   a. 49446
   b. 49451
   c. 49465 and 49460
   d. 49460
121. When injecting contrast to verify the patency of a previously placed percutaneous G, D, J, G-J, cecostomy (or other colonic tube), the correct method to define and code for this procedure is:
   a. 76080 and 49424
   b. 76080 and 49465
   c. 49465 only
   d. 49465 and 76000

122. If a previously placed percutaneous J-tube has been shown to be clogged and the physician is now asked to replace this tube through the existing stoma/tract without the use of imaging or endoscopic guidance, the correct code(s) to assign is/are:
   a. 49451
   b. 49451 and 75984
   c. 43760
   d. 43246

123. Assign an unlisted procedure code (UPC) if a percutaneous gastrostomy tube is placed under endoscopic guidance.
   a. True
   b. False

124. When an indwelling ureteral stent is removed and replaced from a transurethral approach, this procedure is defined by the following code(s):
   a. 75984 and 50382
   b. 50382 only
   c. 50385 and 75984
   d. 50385 only

125. If the ureter must be dilated when removing or removing and replacing an indwelling ureteral stent via a transurethral approach, it is ________ to define this dilation separately.
   a. Incorrect
   b. Correct

126. Assuming that the answer to question 125 is “correct,” the code(s) that should be used for this dilation are:
   a. 74485 and 50395
   b. 74485 and 53899
   c. 50395 only
   d. 76001 and 53899
127. When a diagnostic aspiration of an intravertebral disc is performed under fluoroscopic guidance, the correct code(s) is/are:
   a. 77002 and 62287  
   b. 77003 and 62267  
   c. 77002 and 62267  
   d. 77003 and 62287

128. When decompression of an intravertebral disc is performed under fluoroscopic guidance, the correct code(s) is/are:
   a. 77002 and 62287  
   b. 77003 and 62267  
   c. 77002 and 62267  
   d. 77003 and 62287

129. When phrases such as “biopsies were sent for histological evaluation” or “specimens were placed in formalin for histological analysis” are present in a dictated report, this correlates to what type of biopsy:
   a. Needle or core biopsy  
   b. Aspirational or FNA  
   c. Both a and b  
   d. Neither a nor b

130. A phrase “sample submitted on a slide for cytological evaluation” seen in a dictated report correlates to which of the following types of biopsy?
   a. Needle or core biopsy  
   b. Aspirational or FNA  
   c. Both A and B  
   d. Neither A nor B

131. When performing facet joint or facet joint nerve pain management injections, it is appropriate to component code these with both the surgical code option and the guidance option:
   a. True  
   b. False

132. When injecting an anesthetic and/or a steroid into the L3 level under CT guidance, the following code(s) is (are) submitted:
   a. 77012 and 64490  
   b. 77012 and 64493  
   c. 64490 only  
   d. 64493 only
133. When injecting an anesthetic and/or a steroid into the T1 and T2 levels under fluoroscopic guidance, the following code(s) is (are) submitted:
   a. 77003 and 64490
   b. 77003 and 64490 (x2)
   c. 77003, 64490 and 64491
   d. 64490 and 64491

134. When injecting an anesthetic and/or a steroid into the L1, L2, L3 and L4 levels under CT guidance, the following code(s) is (are) submitted:
   a. 64493, 64494 and 64495
   b. 64493, 64494 and 64495 (x2)
   c. 77012, 64493, 64494 and 64495
   d. 77012, 64493, 64494 and 64495 (x2)
CHAPTER 26—ANSWERS

1. (d) Reviewing the rules previously defined regarding component coding, you must know where vascular access was gained and where the catheter was positioned, you may code each vascular family entered separately and you must code the highest degree of selectivity per vascular family and selective codes take precedence over non-selective codes from the same vascular access.

2. (d) When coding for any invasive and/or interventional procedure in which the radiologist performs both the radiological supervision and interpretation as well as the surgical (procedural) component of the study, it depends on the CPT definition and the parenthetical notes for the procedure performed, as more code descriptions include both the imaging guidance and the surgical component.

3. (c) When assigning the code for the radiological supervision and interpretation portion of the study, this code should only be used (unmodified) when the radiologist is both present in the room for the study as well as interpreting the procedure.

4. (c) If a radiologist only interprets the films of an invasive procedure, and is not actually in the room supervising the study, such as only providing a reading of a study in the OR by another physician, when submitting the RS&I code, the code should also be assigned the modifier -52.

5. (c) When performing myelography, in addition to billing for the RS&I code, the surgical code for the injection procedure into the spinal canal is always assigned by the radiologist (when performed by them) for all myelograms and is dependent in whether the puncture was done in the lumbar area or the cervical area.

6. (c) A patient has a myelogram in which it is desired to study both the thoracic and lumbar areas but following the lumbar puncture, contrast flow is impeded because of a thoracic block. Because of this, a C1-C2 puncture is made to now run the contrast down the canal into the thoracic area. This is now coded as 72270, 62284 and 61055.

7. (d) Diskography or diskograms can be performed in the cervical, thoracic or lumbar areas. If a diskogram were performed at L2, L3 and L4, this would be coded as 72295 (x3) and 62290 (x3).

8. (c) When contrast material is introduced into the lumbar epidural space, epidurography may be charged, but only if after the administration of the contrast, an epidurogram is performed, recorded and a formal x-ray report is issued.

9. (d) Based upon the correct answer to #8, the procedures defined are coded as 72275 and 62311.

10. (c) If the injection procedure defined in #8 was performed, but no films or report were performed or issued, this would be coded as 77003 and 62311.
11. (a) When a shoulder arthrogram (or arthrography) is performed, the correct code(s) to submit assuming the radiologist does both the injection and RS&I component are 73040 and 23350.

12. (d) If a patient has a triphasic (three separate injections) wrist arthrogram performed, the correct way to code for this procedure is 73115 and 25246 (x3).

13. (c) If bilateral SI joint arthrography is performed, the correct method in which to bill for this service is 73542 (x2) and 27096 (x2).

14. (b) If only a therapeutic injection (no arthrogram) is performed of the right SI joint, this is now coded as 77003 and 27096.

15. (d) If a hip injection (non-contrast) or aspiration is performed under fluoroscopic guidance, this is best defined as 77002 and 20610.

16. (b) When a percutaneous transhepatic cholangiogram is performed by the interventional radiologist, this is defined by codes 74320 and 47500.

17. (a) A t-tube cholangiogram is defined by the codes 74305 and 47505.

18. (c) When diagnostic and interventional biliary procedures are performed, it is important to note that when both studies are done in the same setting, such as a PTC and external biliary drainage catheter placement, it is appropriate to charge for both as one study is not inherent in the other.

19. (b) If placing both right and left sided external biliary drainage catheters, you should charge two sets of the codes 75980 and 47510.

20. (d) When a percutaneous gastrostomy tube is placed, a device is first placed into the mouth, down the esophagus and then into the stomach. After this portion of the study, a device is placed into the stomach from outside of the body (percutaneously). The procedure should be coded with 49440.

21. (d) When biliary duct dilations are performed, sometimes a biliary stent is placed, other times not. When coding for dilation with stent placement, the correct codes are 74363 and 47556.

22. (b) Following the placement of any type of external drainage tube (biliary, urinary, etc.), contrast material is often injected to ensure correct position. The injection of this contrast material at the same time as placing the tube is not separately billable as a diagnostic study, but considered inherent in the tube placement.

23. (c) When an antegrade pyelogram is performed, this entails access into the renal pelvis with a needle with subsequent injection of contrast material to evaluate several things, one being the flow of urine from the renal pelvis into the ureter and finally the bladder. Whenever this study is done, the following RS&I code, 74425 is used plus the injection code 50390.
24. (b) Referring to the example in #24, if this study is performed on both the right and left kidneys, it should be defined as 74425 (x2) and 50390 (x2).

25. (c) A cystogram is defined by 74430 and 51600.

26. (d) When a percutaneous nephrostomy (PCN) is performed, this involves a separate puncture from outside of the body, into the renal pelvis to place an external drainage tube. This is defined by codes 74475 and 50392. CCI edits stat that if also performing full and complete diagnostic antegrade pyelography, it is acceptable to bill for this study as well, with modifier -59 assigned to code 50390.

27. (b) If bilateral nephrostomy tubes are placed, this should be coded as 74475 (x2) and 50392 (x2).

28. (b) Often, when placing an initial nephrostomy tube, the tract necessary to place this tube must be enlarged or dilated to get the tube into the kidney. This dilation is not separately chargeable.

29. (d) For the simple change of a cystostomy tube, the most appropriate codes are 75984 and 51705.

30. (b) When a device known as a “J-J”, “double J” or nephroureteral stent is placed, this is best defined as 74480 and 50393.

31. (b) If via a right femoral access, the catheter were placed in the supra-renal aorta with injection and filming from the level of the renal arteries to the aortic bifurcation, the correct codes would be 75625 and 36200.

32. (b) If following a right groin approach, the catheter is placed at the supra renal aorta with subsequent imaging from this solitary injection of the abdominal aorta as the correct codes would be 75625 and 36200.

33. (d) If following a left groin approach, the catheter was placed at the supra renal aorta with an injection and filming of the abdominal aorta and then the catheter was retracted to the level of the iliac bifurcation with a second injection and filming over the pelvis, and then a third injection was made from the same location with filming on each lower extremity, the correct codes would be 75625, 75716 and 36200.

34. (c) If the catheter were placed in the mid abdominal aorta with filming following a single injection from this spot of the distal aorta as well as bilateral iliac/femoral vasculature, the correct codes would be 75716 and 36200.

35. (b) If via a single left groin approach, the catheter is placed into the upper or proximal abdominal aorta with an injection and subsequent filming in detail of the right and left renal arteries, the correct fashion in which to code this study is 75625 and 36200.
36. (b) Via a single right brachial artery approach, the catheter is advanced and first placed into the supra renal abdominal aorta. An injection is performed here demonstrating normal size of the abdominal aorta as well as single left and right renal arteries. The catheter was then selectively placed into each main renal artery and injections were performed demonstrating patent renal arteries bilaterally. This would be coded as 36252.

37. (b) A patient with a suspected GI bleed presents to the ER. The patient states that they have been passing great amounts of blood for the last three hours. The decision is made to proceed on with diagnostic angiography of the main arteries of the gut. Following access into the right common femoral artery (RCFA), the catheter was non-selectively placed into the abdominal aorta. An abdominal aortogram was performed with subsequent selective imaging of the SMA, IMA and celiac arteries. The correct code(s) would be 75726 (x3) and 36245 (x3).

38. (a) As in #37, but in addition to the selective studies of the IMA, SMA and celiac, supra selective studies of the left and right colic arteries were also done. The correct codes would be 75726 (x3), 75774 (x2), 36246 (x2) and 36245.

39. (c) The correct code is 36221.

40. (c) The correct code should be 36222-50.

41. (d) The correct code should be 36222-50.

42. (c) The correct code would be 36224-50.

43. (c) The correct answer would be 36224-50 and 36228-50.

44. (b) The correct answer should be 36222-50 and 36226-50.

45. (a) Via the initial access, a single puncture of the arterial side of the AV fistula, a contrast injection was performed demonstrating the flow within the fistula as well as the venous flow up the arm and into the superior vena cava (SVC). The correct code is 36147.

46. (b) As in #45, but now a stenosis is seen at the venous anastomosis and is successfully treated by venous angioplasty. The correct codes are 36147, 75978 and 35476.

47. (a) As in #45, but now a second puncture is made on the venous side of the fistula. The same diagnostic imaging is performed, the venous PTA is still done, but now a thrombectomy procedure has been performed without the fistula. The correct codes are 36147, 36148, 36870, 75978 and 35476.

48. (b) As in #47, but in addition to the previous studies, another venous PTA is treated in the central venous system. The correct codes are 36147, 36148, 36870, 75978 (x2), 35476 and 35476.
49. (b) Via a right groin stick, the catheter was placed non-selectively into the upper abdominal aorta. An abdominal aortogram was performed with the catheter then pulled back into the distal aorta with a subsequent injection and filming of the bilateral lower extremities. Following this imaging, the catheter was then advanced up and over the iliac bifurcation into the contralateral common iliac artery with an injection and filming of the left lower leg. The correct codes are 75625, 75716, 75774 and 36245.

50. (c) As in #49, but on the additional contralateral study, the catheter is advanced into the common femoral artery. The correct codes are 75625, 75716, 75774 and 36246.

51. (b) As in #50, but on the additional contralateral study, the catheter is advanced into the superficial femoral (SFA) artery. The correct codes are 75625, 75716, 75774 and 36247.

52. (d) Via a left common femoral artery (LCFA) approach, the catheter was placed non-selectively into the upper abdominal aorta. An injection was performed with subsequent imaging of the abdominal aorta. The catheter was retracted to the iliac bifurcation where a second injection was made demonstrating the bilateral extremity vasculature. The catheter was then advanced contralaterally to the level of the SFA, with an injection and filming of the right lower leg. The catheter was then pulled back into the left groin with an injection demonstrating the left lower extremity. The correct codes are 75625, 75716, 75774, and 36247. This answer is based upon current CMS regulations. Other third party payers may allow code 36140 as well for the ipsilateral injection. Verify with other third party payers before submitting this code (36140) in addition to the contralateral selective code from a single vascular access point.

53. (d) As in #52, but on the additional contralateral study, the catheter was only advanced into the external iliac artery. The ipsilateral injection remains the same from #52. The correct codes are 75625, 75716, 75774, and 36246. This answer is based upon current CMS regulations. Other third party payers may allow code 36140 as well for the ipsilateral injection. Verify with other third party payers before submitting this code (36140) in addition to the contralateral selective code from a single vascular access point.

54. (d) As in #52, but on the additional contralateral study, the catheter was only advanced into the common iliac artery. The ipsilateral injection remains the same. The correct codes are 75625, 75716, 75774, and 36245. This answer is based upon current CMS regulations. Other third party payers may allow code 36140 as well for the ipsilateral injection. Verify with other third party payers before submitting this code (36140) in addition to the contralateral selective code from a single vascular access point.

55. (c) Via a right common femoral vein approach, the catheter was placed into the right pulmonary artery with subsequent injection and filming over the right lung. The correct codes are 75741 and 36014.

56. (c) As in #55, but now the catheter was selectively placed into each of the right and left pulmonary arteries with injections and filming of each. The correct codes are 75743 and 36014 (x2).
57. (b) As in #56, but now on the left side, the catheter is advanced into the left upper lobe with additional selective injections from this location. The correct codes are 75743, 36014, 36015 and 75774.

58. (d) If from the same vascular access point both an IVC study and selective bilateral pulmonary angiography are performed, this should be coded as 75743, 36014 (x2), 75825 and 36010.

59. (c) When performing imaging of either the SVC or IVC, the catheter placement code remains the same at 36010, but the RS&I code varies. The SVC is RS&I code 75827 and the IVC RS&I code 75825.

60. (c) “Via a 23 gauge butterfly needle placed into the veins on the top of each foot, contrast material was injected demonstrating normal ascending venography.” This report substantiates the use codes 75822 and 36005 (x2).

61. (b) If a venous injection is performed of the right or left renal vein via a left common femoral vein (LCFV) puncture, this is a first order selective, defined by code 36011.

62. (b) If a selective venous injection is performed in both the right and left internal jugular veins via a single LCFV approach, this would be defined as a second order selective, code 36012 (x2).

63. (b) Excluding the catheter placement, when tPA is infused to attempt to dissolve or “lyse” blood clots, this is defined by code 37211.

64. (c) Excluding the catheter placement code, when pitressin, papaverine or verapamil is infused to aid in therapeutic treatment of a patient, this is described by code pair 75896 and 37202.

65. (a) 37211

66. (a) If performing an embolization procedure of a single vascular abnormality that is fed by multiple feeder vessels, the correct way to charge for this procedure is one embolization RS&I and procedural code and as many selective catheterization codes as needed.

67. (b) After embolizing a non-cerebral structure, it is inappropriate to charge code 75898 multiple times when a single vessel is studied that has been embolized in a single operative field.

68. (d) When charging for percutaneous transluminal angioplasty procedures (PTA), to correctly charge, you must know is the vessel treated a peripheral or renal/visceral vessel, is the vessel treated the initial or additional structure treated and what is the anatomic location of the vessel being treated.

69. (b) If via a left groin approach, the right common femoral and popliteal arteries were treated by angioplasty, the correct code to submit would be a single unit of CPT code 37224.

70. (c) Via a left groin approach, angioplasty performed in either the right or left renal artery is defined by codes 75966, 35471 and 36245.
71. (a) Bilateral renal angioplasty from either a single or dual groin approach is defined as codes 75966, 75968, 36245 (x2), 35471 (x2).

72. (b) Percutaneous venous angioplasty, regardless of the anatomic site in which it may be performed is defined by one code pair, 75978 and 35476.

73. (a) 92920 and 92921

74. (a) Angiography performed at the completion of either an intravascular stent placement or a PTA procedure should not be separately charged as this is considered completion angiography.

75. (b) If bilateral iliac artery stents are placed, the correct codes are 37721 (x2).

76. (b) False. When performing bilateral common femoral artery PTA and intravascular stenting, you may code only one CPT from 37224-37227 per unilateral vessel (per leg), so 37226 x2 would be the appropriate code assignment if both PTA and stent placement were performed in bilateral common femoral arteries.

77. (c) Whether performed via US, CT or fluoroscopic guidance, abscess procedures are defined by the same RS&I code. The definition for this code does not differentiate whether a drainage catheter was left in at the completion of the procedure or not. The code is 75989.

78. (d) From a radiologic perspective, virtually all lower-extremity interventional procedures are done from the percutaneous approach. Because of that you must be certain not to select the open code choices when billing as these codes carry substantially higher RVU’s and will result in gross overpayment if billed.

79. (c) The RS&I codes for the guidance procedures were specific only to biopsy. These codes now have meanings that cover different types of procedures. These codes (one for each modality of CT, US, MRI and fluoro) will cover guidance for localization device, injection, biopsy and cyst aspiration.

80. (b) If multiple stereotactic biopsies are made into the same breast lesion, the correct way to code for this procedure is 77031 and 19102.

81. (c) If at the completion of a stereotactic biopsy of the breast using a vacuum assisted device a small metallic marker is placed, this would be coded as 77031, 19103 and 19295.

82. (d) It is important to note when performing cyst aspiration procedures (as well as biopsies or other drainage/injection procedures) whether the surgical code defines unilateral or bilateral status. If the code descriptor states bilateral, even if charged twice, Medicare payment will only be made once. If the descriptor does not state bilateral, you must check the Medicare payment rules to verify absolute payment.

83. (d) When a patient has an abscess drainage catheter placed on day one, and at the end of the procedure an amount of contrast is injected to verify catheter placement, this should not be coded separately as it is inherent in the placement.
84. (b) If on Monday, a percutaneous abdominal abscess drainage catheter is placed and on Wednesday the patient returns to have the catheter checked for patency/position via a contrast injection, this should be separately coded as codes 76080 and 49424.

85. (c) If following the study defined in #84, it is now decided that the tube must in fact be changed, it is now coded as a tube exchange (75984 and 49423) as well.

86. (b) When placing a tunneled line under ultrasonic guidance without a subcutaneous port or pump in a patient 5 years old or greater, it is correct to code 76937 and 36558.

87. (c) When repositioning a previously placed PICC line under fluoroscopic guidance, the correct code choices are 76000 and 36597.

88. (c) In a catheter/port system, when replacing the previously placed tunneled catheter only, the correct surgical code is 36578.

89. (c) When performing a fibrin stripping of previously placed central line, the correct S&I and surgical codes (excluding the catheter placement code) are 75901 and 36595.

90. (b) No S&I code is used in this instance. That is, assign code 36593 only; it would be inappropriate to assign a 7xxxx code in addition.

91. (b) When performing the removal of an intraluminal obstruction of a previously placed central line, the correct S&I and surgical codes (excluding the catheter placement code) are 75902 and 36596.

92. (b) The terms “blunt dissection, subcutaneous tunneling or subcutaneous tunneler” most typically refer to tunneled, as opposed to percutaneous procedures.

93. (c) On a 45 year old male, when an existing non-tunneled centrally inserted catheter is converted to a tunneled catheter from the same access point, this is best described as the placement of a new tunneled catheter (36558).

94. (c) If an injection of contrast is made to to check the patency of an existing central venous access device (CVAD), the correct code is 36598.

95. (b) If a stent is placed at the carotid bifurcation (no distal embolic protection/filter device is used) it is inappropriate to code for the ipsilateral catheter placement(s) as well as code 37216 for the unilateral, extracranial carotid bifurcation stenting.

96. (a) The most common method of carotid bifurcation stenting involves the placement of a distal filter device and is described by CPT code 37215.

97. (b) If placing more than one stent in the ipsilateral carotid bifurcation area, it is inappropriate to charge codes 37215 or 37216 multiple times.
98. (d) Per CPT, proximal carotid artery or extracranial vertebral artery stenting may be defined by Category III CPT codes 0075T and 0076T.

99. (b) False. Since 2006, there are code options to define intracranial PTA or stenting. Prior to 2006, no listed CPT code options were available for assignment.

100. (d) CPT codes for intracranial PTA only are defined by code options 61630 and 61640-61642.

101. (b) False. If performing intracranial PTA for atherosclerotic stenosis, it is not correct to code for catheter placement as well as diagnostic imaging.

102. (b) False. If performing both PTA and stenting of a single intracranial vessel for atherosclerotic stenosis, it is not correct to code separately for each service (PTA and stent) when both are medically necessary and a bundled code is present.

103. (a) True. As now two separate vessels are treated (one with PTA, the other with stenting).

104. (b) False. When performing PTA of an intracranial vessel for vasospasm, the initial diagnostic angiogram may not be separately coded at the same session as the PTA. Charge only for the angiography if it is performed at a different setting than the transcatheter therapy.

105. (b) If three separate vessels are treated in the same vascular family by PTA for intracranial vasospasm, the correct coding for the surgical aspect of this service is 61640 and 61641 (x2).

106. (d) If three separate vessels are treated by PTA for intracranial vasospasm—two on the right side of the head and one on the left side of the head, the correct coding for the surgical aspect of the procedure is 61640, 61641 and 61642.

107. (c) When performing percutaneous mechanical thrombectomy of an artery other than an AVF, the correct CPT codes are 37184-37186.

108. (b) False. When performing percutaneous mechanical arterial thrombectomy procedures, there are separate code categories for only primary and secondary procedures.

109. (d) There is no S&I component of percutaneous mechanical thrombectomy, and as such, is not separately identified.

110. (a) True. While intraprocedural injection of a thrombolytic agent is not separately reportable in conjunction with percutaneous mechanical thrombectomy, subsequent or prior continuous infusion of a thrombolytic agent is not included in the thrombectomy and is separately reportable.

111. (a) Primary mechanical thrombectomy may be reported once per vascular family treated.

112. (c) If the right SFA and right anterior tibial artery were treated with percutaneous mechanical thrombectomy, the correct codes to submit are 37184 and 37185.
113. (c) During successful primary stenting of the left common femoral artery, if completion angiography shows poor flow distal to the stent placement and mechanical thrombectomy is performed of the popliteal artery where the filling defect is seen, this mechanical thrombectomy is coded as 37186.

114. (d) Percutaneous mechanical thrombectomy of a vein may be defined by CPT codes 37187-37188.

115. (c) If the right and left common femoral veins are treated by percutaneous mechanical thrombectomy, CPT directs us to code as 37187-50.

116. (c) If a patient has percutaneous venous mechanical thrombectomy performed on a Monday (with infusion therapy also performed), and then, two days, a repeat of the same (venous) thrombectomy procedure, this is coded as 37187 on Monday and 37188 on Wednesday.

117. (d) Code 37210 is all inclusive of services performed during uterine fibroid embolization (UFE). This code includes payment for services previously defined by codes 3624x, 75736, 75894, 75774, 37204 and 75898.

118. (b) False. This code is only to be used when UFE procedures are performed. It is still correct to assign component codes 75894 and 37204 when performing embolization of vessels within the pelvic area (male and/or female) for non-UFE reasons (i.e., post-partum hemorrhage, pelvic bleed from MVA, etc).

119. (c) When converting a percutaneous gastrostomy tube (G-tube) to a gastro-jejunostomy (G-J tube) at the time of the initial placement of the G-tube, the correct coding for this procedure is 49440 and 49446.

120. (d) Code 49460 includes any and all methods needed to restore patency to the indwelling G, D, J, G-J, cecostomy or other colonic tube. No additional charges should be submitted for fluoroscopy or contrast injections performed during the course of this service.

121. (c) When injecting contrast to verify the patency of a previously placed percutaneous G, D, J, G-J, cecostomy (or other colonic tube), the correct method to define and code for this procedure is to submit CPT code 49465 only.

122. (c) If a previously placed percutaneous J-tube has been shown to be clogged and the physician is now asked to replace this tube through the existing stoma/tract without the use of imaging or endoscopic guidance, the correct code to assign is 43760.

123. (b) False. CPT provides code 43246 to define the percutaneous placement of a gastrostomy tube under endoscopic guidance.

124. (d) When an indwelling ureteral stent is removed and replaced from a transurethral approach, this procedure is defined by code 50385.
125. (b) Per the AMA, if the ureter must be dilated when removing, or removing and replacing, an indwelling ureteral stent via a transurethral approach, it is correct to define this dilation separately.

126. (b) Per the AMA’s *CPT Changes 2008, An Insider’s View*, “if balloon dilatation of the ureter is necessary for stent passage, this is separately reportable” with 53899 and 74485.

127. (b) When a diagnostic aspiration of an intravertebral disc is performed under fluoroscopic guidance, the correct codes are 77003 and 62267.

128. (d) When decompression of an intravertebral disc is performed under fluoroscopic guidance, the correct codes are 77003 and 62287.

129. (a) When phrases such as “biopsies were sent for histological evaluation” or “specimens were placed in formalin for histological analysis” are present in a dictated report, this correlates to a needle or core biopsy.

130. (b) When the phrase “sample submitted on a slide for for cytological evaluation” is seen in a dictated report, this correlates to an aspirational or FNA biopsy.

131. (b) False. When performing facet joint or facet joint nerve pain management injections, it is not appropriate to component code these with both the surgical code option and the guidance option.

132. (d) When injecting an anesthetic and/or a steroid into the L3 level under CT (or fluoroscopic) guidance, only code 64493 is submitted as this is a bundled code and includes either CT or fluoroscopic guidance.

133. (d) When injecting an anesthetic and/or a steroid into the T1 and T2 levels under fluoroscopic guidance, codes 64490 and 64491 are submitted. No separate guidance code may be used as these codes include that (guidance) portion of the study.

134. (a) When injecting an anesthetic and/or a steroid into the L1, L2, L3 and L4 levels under CT guidance, codes are 64493, 64494, and 64495 are submitted. No separate guidance code may be used as these codes include that (guidance) portion of the study. No more than one unit of any of these codes may be submitted on the same date of service. Code 64495 includes the third and all additional levels treated in the lumbar/sacral areas.
1. Codes that may be used to define ultrasound procedures are:
   a. 76506-76999
   b. 75945 and 75946
   c. 37250 and 37251
   d. All of the above

2. When an invasive ultrasound-guided procedure is performed, the guidance portion could be defined by code:
   a. 75989
   b. 76942
   c. 76946
   d. Any of the above

3. When an ultrasound procedure is performed on an infant or child to detect intracranial hemorrhage or cerebral ventricular dilatation, the correct CPT code is:
   a. 76536
   b. 76511
   c. 76506
   d. 76999

4. If an ultrasound of the parotids is performed, the correct CPT code for this procedure is:
   a. 76536
   b. 76511
   c. 76506
   d. 76999

5. When a diagnostic ultrasound is performed of both breasts, the correct CPT code to assign for this study is:
   a. 76604
   b. 76645
   c. 76645 (x2)
   d. 76882 (x2)

6. If a diagnostic study of the chest is performed to evaluate the pleural space for fluid(s), the correct CPT code to use is:
   a. 76645
   b. 76604
   c. 76942
   d. 76999
7. When US guidance is utilized to provide guidance to perform a thoracentesis or paracentesis, the guidance code for this procedure is:
   a. 77012
   b. 75989
   c. 76942
   d. 76999

8. When US guidance is provided to assist the radiologist in gaining access into either an artery or vein, the appropriate guidance code is:
   a. 77012
   b. 76942
   c. 75989
   d. None of the above

9. When US imaging of the liver, spleen, common duct, pancreas, gallbladder, kidneys, upper abdominal aorta and IVC, and hollow upper abdominal visceral area is done, the following code should be submitted:
   a. 76705
   b. 76775
   c. 76700
   d. 76770

10. If all of the areas defined in question #9 were studied as well as screening views or “survey studies” of each kidney were also done, the following CPT code(s) would be assigned:
    a. 76700
    b. 76700 and 76775
    c. 76700 and 76770
    d. 76705 and 76770

11. If all the structures defined in questions #9 and 10 were imaged, plus both spectral and a color duplex examination of this vascular anatomy, which code may also be appropriate:
    a. 93975 or 93976
    b. 93978 or 93979
    c. Either A or B
    d. None of the above

12. If an US was done to determine if a patient had pyloric stenosis, which code would be appropriate:
    a. 76700
    b. 76705
    c. 76770
    d. 76775
13. If a patient had an US study of only the liver or only the gallbladder or only the organs in the right upper quadrant, which code is most appropriate:
   a. 76700
   b. 76705
   c. 76770
   d. 76775

14. If US imaging was performed of the kidneys, ureters and bladder, on a patient with clinical history of urinary tract pathology, the most appropriate code for this procedure is:
   a. 76700
   b. 76705
   c. 76770
   d. 76775

15. If US imaging was performed in detail on both of the kidneys as well as bladder (patient has urinary tract pathology) plus spectral doppler and color duplex imaging of both renal veins and arteries, the correct code(s) to submit would be:
   a. 76770
   b. 76700
   c. 76775 and 93976
   d. 76770 and 93975

16. If US imaging is performed of only a solitary kidney or just the aorta, the correct code for his procedure is:
   a. 76700
   b. 76705
   c. 76775
   d. 76770

17. If a patient that has previously had a renal transplant now has detailed US imaging of the transplanted kidney as well as duplex studies to evaluate both venous outflow and arterial inflow into the kidney, the correct code(s) to submit would be:
   a. 76770
   b. 76776 and 76775
   c. 76776 and 93975
   d. 76776
18. When ultrasonic imaging is performed to determine the number of gestational sacs and fetuses, gestational sac measurements appropriate for gestation (<14 weeks, 0 days), survey of visible placental and fetal anatomic structure, qualitative anatomic fluid volume/gestational sac shape and examination of the maternal uterus and adnexa, this is defined by code:
   a.  76801
   b.  76805
   c.  76811
   d.  76815

19. When (at 13 weeks menstrual age) two fetuses are examined in the same fashion as described in question #18, the following code(s) should be used:
   a.  76801
   b.  76802
   c.  76801 and 76802
   d.  76805 and 76810

20. When an US study is done solely to document fetal position, the following code should be used:
   a.  76801
   b.  76805-52
   c.  76815
   d.  76816

21. If both a single fetus complete obstetrical US and biophysical profile (at 13 weeks menstrual age) are performed at the same setting, the current ACR recommendation is to use code(s):
   a.  76801 only
   b.  76805 only
   c.  76801 and 76819
   d.  76819 only

22. When a non-OB transvaginal (TV) US is performed, this is defined by the following code:
   a.  76801
   b.  76817
   c.  76830
   d.  76856

23. A routine transabdominal non-OB ultrasound is ordered and performed. Following this initial exam a transvaginal (TV) study is also deemed medically necessary. Coding for these studies is defined as:
   a.  76817 only
   b.  76801 and 76830
   c.  76856 and 76830
   d.  76830
24. When performing a pelvic ultrasound on a male patient, the appropriate CPT codes to choose from include:
   a. 76830
   b. 76805-76815
   c. 76856-76857
   d. All of the above

25. On a patient with an increased HCG blood level test (confirmed pregnancy), if a complete US is performed in the first trimester to confirm a single ectopic pregnancy, the correct CPT code is:
   a. 76801
   b. 76805
   c. 76856
   d. 76815

26. If bilateral US imaging is performed to determine the presence of testicular swelling or a varicocele, the correct code is:
   a. 76870
   b. 76870 (x2)
   c. 76872
   d. 76856

27. When an ultrasound probe (transducer) is placed in the male patient’s rectum with subsequent diagnostic imaging then performed, the code which best describes this study is:
   a. 76870
   b. 76872
   c. 76873
   d. 76942

28. When US imaging of anatomic areas such as the shoulder, knee or femur is performed, the most appropriate code to use would be:
   a. 76880
   b. 93971
   c. 76881 or 76882
   d. 93926

29. When complete US imaging of an extremity is performed in which neither the arterial or venous flow is studied, the most appropriate code(s) to submit is:
   a. 76881
   b. 76880
   c. 76882
   d. Both a and c
30. As a general rule, whenever an US procedure is performed in which a tube, needle or catheter is placed into the patient under US guidance, these studies are defined by codes from what code range:
   a. 76506-76886
   b. 76700-76776
   c. 76930-76965
   d. 76970-76999

31. When an US-guided abscess drainage is performed, the most common type of surgical (procedural) code assignment (based upon the specific anatomic area studied) is:
   a. Incisional
   b. Percutaneous
   c. Excisional
   d. Open

32. When submitting the guidance and surgical (procedural) codes for an US-guided biopsy of the kidney, the current correct choices are:
   a. 76942 and 50021
   b. 76942 and 50200
   c. 76942 and 50202
   d. 76942 and 50390

33. When performing an US-guided cyst aspiration of the thyroid, the current appropriate code pair is:
   a. 76942 and 60300
   b. 76942 and 60100
   c. 76942 and 60001
   d. 76942 and 60000

34. When performing an US-guided thoracentesis, the current appropriate code(s) is(are):
   a. 32554
   b. 32555
   c. 32550
   d. All of the above

35. Depending upon the clinical situation, which of the following surgical (procedural) code(s) may be assigned when performing an US-guided chest procedures:
   a. 32405
   b. 32553
   c. 32550
   d. All of the above
36. If on Monday a patient has an US-guided paracentesis and then on Thursday of the same week, he has another US-guided paracentesis performed, what codes would be assigned for these studies:
   a. For Monday, 76942 and 49080, for Thursday, 76942 and 49081
   b. For Monday, 76942 and 49080, for Thursday, 76942 and 49080
   c. For Monday, 76942 and 49080, for Thursday, no charges
   d. None of the above

37. Referring to question #36, if at two separate times on Monday only, separate US guided paracenteses were performed, how would this then be coded (excluding modifiers):
   a. 76942 (x2) and 49080 (x2)
   b. 76942, 49080 and 49081
   c. 76942 (x2), 49080 and 49081
   d. None of the above

38. If a bone density study is performed under US guidance of the left heel, which code should be submitted:
   a. G0130
   b. 77082
   c. 77081
   d. 76977

39. When performing an OB ultrasound by only a transvaginal approach, the correct code is:
   a. 76815
   b. 76816
   c. 76817
   d. 76830

40. If a patient has an ultrasound exam, which is limited to the reassessment or reevaluation of one or more abnormalities of a fetus previously demonstrated on ultrasound, the correct code is:
   a. 76805
   b. 76811
   c. 76815
   d. 76816

41. If a patient requires an ultrasonic study for a “quick look” to verify fetal position, fetal heart beat and/or placental localization, the correct code is:
   a. 76801
   b. 76805
   c. 76815
   d. 76816
42. Relating to the previous question, this code may be used multiple times if there are multiple gestations (i.e., twins = x2, triplets = x3, etc).
   a. True
   b. False

43. If a patient has an ultrasound exam that includes determination of number of fetuses and amniotic/chronic sacs, measurements appropriate for gestational age (> 14 weeks 0 days), survey of intracranial/spinal/abdominal anatomy, 4 chambered heart, umbilical cord insertion site, placenta location and amniotic fluid assessment and, when possible, examination of maternal adnexa, the most appropriate codes are:
   a. 76801 and 76802
   b. 76805 and 76810
   c. 76811 and 76812
   d. 76816 and 76817

44. At the same clinical encounter, when assigning either code 76815 or 76816, you must have always first also assigned a code from the CPT range of 76801-76812.
   a. True
   b. False

45. Codes 76802, 76810, or 76812 can only be submitted in conjunction with codes in the 76801-76812 range.
   a. True
   b. False

46. When an OB patient is having a detailed ultrasound to provide evaluation of twin fetal brain/ventricles, face heart/outflow tracts and chest anatomy, abdominal organ specific anatomy, number/length/architecture of limbs and detailed evaluation of the umbilical cord and placenta and other fetal anatomy as clinically indicated as well as the determination of number of fetuses and amniotic/chorionic sacs, measurements appropriate for gestational ages, survey of intracranial/spinal/abdominal anatomy, 4 chambered heart, umbilical cord insertion site, placenta location and amniotic fluid assessment and, when visible, examination of maternal adnexa, the correct code(s) is/are:
   a. 76801 and 76802
   b. 76805 and 76810
   c. 76811 and 76812
   d. 76816

47. A complete abdominal ultrasound is defined as including the liver, gallbladder, common bile duct, pancreas, spleen, kidneys, the upper abdominal aorta and IVC including any demonstrated abdominal abnormality:
   a. True
   b. False
48. Assuming all areas defined in the previous question (#47) must be imaged and documented to qualify as a “complete” abdominal ultrasound, if the gallbladder is not mentioned in the report, this is still considered a complete exam:
   a. True
   b. False

49. Assuming everything stated in question #47 is correct regarding a complete abdominal ultrasound, if the gallbladder was surgically removed, so imaging does not show the gallbladder, but in the dictated report the reading physician states why the gallbladder could not be visualized, this now qualifies as a limited study:
   a. True
   b. False

50. If doing a complete abdominal US, and then at the same clinical setting, additional, detailed scanning is performed of the liver, it is appropriate to submit both the complete and limited codes (76700 and 76705) to define this extra work:
   a. True
   b. False
   c. True, but assign modifier -59 to code 76705
   d. True, but assign UPC 76999

51. A complete retroperitoneal ultrasound exam is defined as including scanning of the kidneys, abdominal aorta, common iliac artery origins, IVC and any demonstrated retroperitoneal abnormality:
   a. True
   b. False

52. Assuming all areas defined in question #51 must be imaged and documented to qualify as a “complete” retroperitoneal exam, if the right kidney has been surgically removed, but is described as such in the dictated report (all other areas are scanned and defined), this is now coded as a limited procedure:
   a. True
   b. False

53. If color flow doppler is used to provide anatomic reference, this code from the 93875-93990 section of CPT is separately reportable in addition to any diagnostic US exam:
   a. True
   b. False
   c. True, but assign modifier -59 to the 93xxx series code.
   d. True, but assign UPC 76999
54. When performing US guided aspirations, biopsies or drainage procedures, it is necessary to also acquire an image of the site to be studied:
   a. True
   b. False

55. For any US procedure (diagnostic or therapeutic), a written report should be present in the patient record, but is not required:
   a. True
   b. False
   c. True, but only for diagnostic procedures
   d. True, but assign UPC 76999

56. Non-obstetrical (non-ob) US codes can be used for imaging exams on:
   a. Female patients only
   b. Male patients only as CPT already contains a large section of codes for OB procedures
   c. Both female and male patients, but patients must be greater than 16 years old
   d. Female and male patients

57. By definition, code 76856 (complete non-ob pelvis) states that when imaging a female, the following areas/structures must be defined:
   a. Description and measurement of the uterus and adnexal structures
   b. Measurement of the endometrium and bladder (when applicable)
   c. A description of any pelvic pathology
   d. All of the above

58. Assuming code 76856 can also be used for pelvic US imaging on male patients, the following areas must be included in the exam and defined in the written report (whether seen or not):
   a. Measurement (when applicable) of the urinary bladder and evaluation of the prostate and seminal vesicles (to the extent that they can be “seen” transabdominally)
   b. Any pelvic pathology
   c. The appendix
   d. a and b

59. If only the bladder is imaged using US, which code(s) is/are appropriate:
   a. 76856
   b. 76857
   c. 76999
   d. 51798
60. Similar to abdominal and retroperitoneal US exams regarding limited and complete code choices, when performing non-ob US exams it is not necessary to image, report and document the listed criteria of each code to bill for the service:
   a. True
   b. False

61. An US of the buttock would be defined by code:
   a. 76857
   b. 76880
   c. 76856
   d. 76999

62. When performing an US-guided thoracentesis, if the drainage is performed via a needle, the correct code(s) is (are):
   a. 32554
   b. 32555
   c. 76942 and 32551
   d. 75989 and 32551

63. When performing a bedside chest tube placement, the correct code(s) is (are):
   a. 32554
   b. 32556
   c. 76942 and 32551
   d. 75989 and 32551

64. During the first trimester, US may be used in a specific way to image the thickness of what fetal, anatomic area to aid in predicting Downs Syndrome:
   a. the facial features
   b. the skin at the back of the neck
   c. abdominal shape and volume
   d. all of the above

65. A nuchal translucency measurement is an US exam of:
   a. the abdomen
   b. the chest
   c. the fetus
   d. the brain
66. Fetal nuchal translucency measurements are only codeable:
   a. in the first trimester
   b. in the second trimester
   c. in the third trimester
   d. in all trimesters

67. Fetal nuchal translucency measurements may be charged multiple times during the same encounter if one set of measurements are performed transabdominally and another set is performed transvaginally:
   a. True
   b. False

68. Which code(s) could the options for fetal nuchal translucency be assigned in conjunction with:
   a. 76801 or 76815
   b. 76801 or 76802
   c. 76801, 76802 or 76815
   d. 76801, 76802, 76810, 76811 and 76815
CHAPTER 27—ANSWERS

1. (d) Codes that may be used to define ultrasound procedures are 76506-76999, 75945 and 75946, and 37250 and 37251.

2. (d) When an invasive ultrasound guided procedure is performed, the guidance portion could be defined by codes 75989, 76942 or 76946.

3. (c) When an ultrasound procedure is performed on an infant of child to detect intracranial hemorrhage or cerebral ventricular dilatation, the correct CPT code is 76506.

4. (a) If an ultrasound of the parotids is performed, the correct CPT code for this procedure is 76536.

5. (b) When a diagnostic ultrasound is performed of both breasts, the correct CPT code to assign for this study is 76645.

6. (b) If a diagnostic study of the chest is performed to evaluate the pleural space for fluid(s), the correct CPT code to use is 76604.

7. (c) When US guidance is utilized to provide guidance to perform a thoracentesis or paracentesis, the guidance code for this procedure is 76942. This code, while correct, may be denied by several third party payers. Closely monitor third party payer guidelines when charging for this portion of the service.

8. (d) None of the above. Assuming all documentation criteria have been met, when US guidance is provided to assist the radiologist in gaining access into either an artery or vein, the appropriate guidance code (assuming all documentation criteria are met) is 76937.

9. (c) Code 76700 should be submitted for this US imaging.

10. (a) If all of the areas defined in question #9 were studied as well as screening views or “survey studies” of each kidney were also done, only CPT code 76700 would be assigned.

11. (a) If all the structures defined in questions #9 and #10 were imaged, plus a color and spectral Doppler duplex examination of this vascular anatomy, code 93975 or 93976 may also be appropriate. When using the 93xxx codes with codes from the Ultrasound section of CPT, be vigilant in monitoring CCI edits to assign correct modifiers when valid. Also, do not submit the 93xxx code if the sole reason for this portion of the exam is for anatomic structure identification. The ACR states that in order to use the vascular code(s), “both spectral and color Doppler are performed.”

12. (b) If an US were done to determine if a patient had pyloric stenosis, code 76705 would be appropriate.
13. (b) If a patient had an US study of only the liver or only the gallbladder or only the organs in the right upper quadrant, code 76705 is most appropriate.

14. (c) If US imaging was performed of the kidneys, ureters and bladder, the most appropriate code for this procedure is 76770.

15. (d) If US imaging was performed in detail on both of the kidneys and bladder (patient has urinary tract pathology) as well as spectral doppler and color duplex imaging of both renal veins and arteries, the correct code(s) to submit would be 76770 and 93975. When using the 93xxx codes with codes from the Ultrasound section of CPT, be vigilant in monitoring CCI edits to assign correct modifiers when valid.

16. (c) If US imaging is performed of only a solitary kidney or just the aorta, the correct code for his procedure is 76775.

17. (d) If a patient that has previously had a renal transplant now has detailed US imaging of the transplanted kidney as well as duplex studies to evaluate both venous outflow and arterial inflow into the kidney, the correct code to submit would be 76776.

18. (a) When ultrasonic imaging is performed to determine the number of gestational sacs and fetuses, gestational sac measurement appropriate for gestation, survey of visible placental and fetal anatomic structure, qualitative anatomic fluid volume/gestational sac same and examination of the maternal uterus and adnexa, the code 76801 should be assigned.

19. (c) When (at 13 weeks menstrual age) two fetuses are examined in the same fashion as described in question #18, the codes that should be used are 76801 and 76802.

20. (c) When an US study is done solely to document fetal position, the code that should be used is 76815.

21. (c) If both a single fetus complete obstetrical US and biophysical profile (at 13 weeks menstrual age) are performed at the same setting, the current ACR recommendation is to code 76801 and 76819.

22. (c) When a non-OB transvaginal (TV) or intravaginal US is performed, this is defined by the code 76830.

23. (c) Assuming both studies have been ordered by the referring physician, if after performance of a routine transabdominal non-ob pelvic US, the need is demonstrated that a transvaginal (TV) study is also necessary, this imaging and subsequent coding is defined as 76856 and 76830.

24. (c) When performing a pelvic ultrasound on a male patient, the appropriate CPT codes to choose from include 76856-76857.

25. (a) On a patient with an increased HCG blood level test (confirmed pregnancy), if a complete US is performed in the first trimester to confirm a single ectopic pregnancy, the correct CPT code is 76801.
26. (a) If bilateral US imaging is performed to determine the presence of testicular swelling or a varocele, the correct code is 76870.

27. (b) When an ultrasound probe (transducer) is placed in the male or female patient’s rectum with subsequent diagnostic imaging then performed, the code which best describes this study is 76872.

28. (c) When US imaging of anatomic areas such as the shoulder, knee or femur is performed, the most appropriate code to use would be either 76881 or 76882 based upon whether a complete or limited study was done.

29. (a) When complete US imaging of an extremity is performed in which neither the arterial or venous flow is studied, the most appropriate code to submit is 76881.

30. (c) As a general rule, whenever an US procedure is performed in which a tube, needle or catheter is placed into the patient under US guidance, these studies are defined by codes from the 76930-76965 range.

31. (b) When an US-guided abscess drainage is performed, the most common type of surgical (procedural) code assignment (based upon the specific anatomic area studied) is percutaneous.

32. (b) When submitting the guidance and surgical (procedural) codes for an US-guided biopsy of the kidney, the current correct choices are 76942 and 50200.

33. (a) When performing an US-guided cyst aspiration of the thyroid, the current appropriate code pair is 76942 and 60300.

34. (b) When performing an US-guided thoracentesis, the current appropriate code is 32555.

35. (d) Depending upon the clinical situation, the surgical (procedural) codes that may be assigned when performing an US-guided chest procedure are 32405, 32553, and 32550.

36. (b) If on Monday a patient has an US-guided paracentesis and then on Thursday of the same week, he has another US-guided paracentesis performed, you would assign codes 76942 and 49080 for Monday, and, for Thursday, 76942 and 49080.

37. (c) Referring to question #36, if at two separate times on Monday only, separate US-guided paracenteses were performed, would be coded (excluding modifiers) using 76942 (x2), 49080 and 49081.

38. (d) If a bone density study is performed under US guidance of the left heel, code 76977 should be submitted.

39. (c) When performing OB ultrasound by only a transvaginal approach, code 76817 should be submitted.
40. (d) If a patient has an ultrasound exam, which is limited to the reassessment or reevaluation of
one or more abnormalities of a fetus previously demonstrated on ultrasound, code 76816
should be submitted.

41. (c) Code 76815 would be submitted if the patient required an ultrasonic study for a
“quick look.”

42. (b) Referring to question #41, could the code be used multiple times if there are multiple
gestations, the answer is False.

43. (b) When a patient has an ultrasound exam that includes determination of number of fetuses
and amniotic/chorionic sacs, measurements appropriate for gestational age, surgery of
intracranial/spinal/abdominal anatomy, 4 chambered heart, umbilical cord insertion site,
placenta location and amniotic fluid assessment and when possible, examination of maternal
adnexa the most appropriate codes are 76805 and 76810.

44. (b) False. Codes 76815 and 76816 are not defined as add-on codes (noted by a “+” sign). They
may be submitted by themselves; a primary code is not necessary.

45. (a) True. Codes 76802, 76810 and 76812 are prefaced in CPT by the add-on symbol (+)
meaning that they can only be used in conjunction with a code that defines the primary
procedure such as 76801, 76805, or 76811.

46. (c) 76811 and 76812 are both to be submitted in this case.

47. (a) True. A complete abdominal ultrasound is defined as including the liver, gallbladder,
common bile duct, pancreas, spleen, kidneys, the upper abdominal aorta and IVC including
any demonstrated abdominal abnormality.

48. (b) False. In order for the exam to be coded as a complete abdominal study, all areas defined in
the previous question (#47) must be imaged and documented.

49. (b) False. Per CPT instructions, “For those anatomic regions that have “complete” and “limited”
ultrasound codes, note the elements that comprise a “complete” exam. The report should
contain a description of these elements or the reason that an element could not be visualized
(e.g., obscured by bowel gas, surgically absent etc.).”

50. (b) False. If doing a complete abdominal US, and then at the same clinical setting, additional,
detailed scanning is performed of the liver, it is inappropriate to submit both the complete
and limited codes (76700 and 76705) to define this extra work. CPT 2005 states the
following,” A limited exam of an anatomic region should not be reported for the same exam
session as a “complete” exam of that same region.”

51. (a) True. A complete retroperitoneal ultrasound exam is defined as including scanning of
the kidneys, abdominal aorta, common iliac artery origins, IVC and any demonstrated
retroperitoneal abnormality.
52. (b) False. All areas as stated in answer #51 must be imaged and documented to qualify as a “complete” retroperitoneal exam. As the right kidney was been surgically removed, but has been described as such in the dictated report (all other areas are scanned and defined), this meets the criteria of a complete procedure. CPT 2005 states, “For those anatomic regions that have “complete” and “limited” ultrasound codes, note the elements that comprise a “complete” exam. The report should contain a description of these elements or the reason that an element could not be visualized (e.g., obscured by bowel gas, surgically absent etc.).”

53. (b) False. If color flow doppler/duplex imaging is used to provide anatomic reference only in addition to any diagnostic US exam, the doppler portion of the exam is not separately codeable.

54. (a) True. When performing US guided aspirations, biopsies or drainage procedures, it is necessary to also acquire an image of the site to be studied. CPT 2005 states, “Ultrasound guidance procedures also require permanently recorded images of the site to be localized, as well as a documented description of the localization process, either separately or within the report of the procedure for which the guidance is utilized.”

55. (b) False. For any US procedure (diagnostic or therapeutic), use of ultrasound, without thorough evaluation of organ(s) or anatomic region, image documentation, and final, written report, is not separately reportable.

56. (d) Non-obstetrical (non-ob) US codes can be used for imaging exams on both female and male patients assuming all documentation criteria have been met. The codes are not age dependent.

57. (d) A complete non-ob pelvis, when imaging a female patient, must include a description and measurement of the uterus and adnexal structures, measurement of the endometrium and bladder (when applicable) and a description of any pelvic pathology.

58. (d) A complete non-ob pelvis, when imaging a male patient (whether seen or not), must include a description and measurement (when applicable) of the urinary bladder and evaluation of the prostate and seminal vesicles (to the extent that they can be “seen” transabdominally) and any pelvic pathology.

59. (b) If only the bladder is imaged and reported, code 76857 is appropriate. Only use code 51798 if a bladder volume or post-void residual measurement is obtained without imaging the bladder.

60. (b) False. In order to assign the complete non-ob US code (76856), all elements listed as requirements must be imaged, documented and reported, or the reason why non-visualization occurred must be stated to code as a complete exam. A limited procedure represents a focused exam of one or more of the elements listed as being required to submit code 76856. A limited exam could also be coded when a previously defined(described/demonstrated abnormality on US has been reevaluated.
61. (a) An US of the buttock would be defined by code 76857.

62. (a) When performing an US-guided thoracentesis, if the drainage is performed via a needle, the correct code is 32554.

63. (b) When performing a bedside chest tube placement, the correct code is 32556.

64. (b) During the first trimester, US may be used in a specific way to image the thickness of the skin at the base of the neck to aid in predicting Downs Syndrome.

65. (c) A nuchal translucency measurement is an US exam of the fetus.

66. (a) Fetal nuchal translucency measurements are only codeable in the first trimester.

67. (b) False. Fetal nuchal translucency measurements may only be charged a single time at the same patient encounter regardless of whether the measurements are performed transabdominally or transvaginally.

68. (c) Code(s) for fetal nuchal translucency may be assigned in conjunction with either code 76801, 76802, or 76815.
Chapter 28

Nuclear Medicine

1. When coding and billing for hospital-based nuclear medicine services, the radiologist (i.e., professional component) may bill for:
   a. The study performed
   b. The study performed and the injection procedure
   c. The study performed, the injection procedure and the radiopharmaceutical
   d. The study performed, the injection procedure, the radiopharmaceutical and all supplies

2. In a non-hospital-based setting where the radiologist owns the equipment, employs the staff and reads and performs the procedure (i.e., global component), they may code and bill for:
   a. The study performed
   b. The study performed and the injection procedure
   c. The study performed, the radiopharmaceutical(s) used and the non-radioactive drugs injected
   d. None of the above

3. As a general rule, when billing Part B for hospital based nuclear medicine procedures (diagnostic or therapeutic) it is:
   a. Appropriate to bill for both the procedure and injection of the isotope
   b. Appropriate to bill for both the procedure and inhalation of the isotope
   c. Appropriate to bill for both the procedure and ingestion of the isotope
   d. None of the above

4. In a hospital-based setting when a radiologist interprets a 24-hour thyroid uptake, the correct way to bill for this service is:
   a. 78012-26
   b. 78013
   c. 78014-26
   d. 78012-26 and 78013-26

5. When reference is made to a 6 and 24-hour uptake and scan, the radiologist is specifically referring to:
   a. 78013
   b. 78014
   c. 78012 (x2) and 78013
   d. 78012
6. When an injection of MDP or HDP is given and the radiologist reports, “imaging performed during vascular flow, immediate blood pool and delayed static studies,” they are referring to a:
   a. Whole body bone scan, CPT 78320
   b. Three-phase bone scan, CPT 78315
   c. Multiple area tumor localization, CPT 78802
   d. SPECT bone scan, CPT 78320

7. Traditionally when SPECT bone imaging is performed, from a Medicare perspective, this code:
   a. Is reimbursed separately in addition to the whole body bone scan
   b. Is reimbursed separately in addition to a three-phase bone scan
   c. Is reimbursed separately in addition to a limited area bone scan
   d. Is reimbursed separately in addition to a multiple area bone scan

8. When a radiologists’ report defines, “tomographic imaging of the left ventricle after immediate stress and three-hour delay,” they are referring to:
   a. Code 78472
   b. Code 78473
   c. Code 78451
   d. Code 78452

9. When the radiologists’ report defines, “following stress and rest SPECT myocardial perfusion imaging, the left ventricular EF was calculated at 63% and a dyskinetic area was observed in the…” they are referring to code(s):
   a. 78453
   b. 78454
   c. 78451
   d. 78452

10. When the radiologists’ report defines, “the resting MUGA scan demonstrated…” they are referring to code:
    a. 78453
    b. 78472
    c. 78454
    d. 78473

11. When the radiology report defines, “following immediate injection of 99mTc sulfur colloid, vascular flow and static imaging was performed over the hepatic and splenic areas…” they are referring to code(s):
    a. 78201
    b. 78201 and 78202
    c. 78215 and 78216
    d. 78216
12. When a radiologic report states, “after IV administration of 99mTc hepatolite, serial imaging was performed of the GB both prior to and after the administration of CCK,” it is specifically referring to code(s):
   a. 78216
   b. 78445
   c. 78226
   d. 78227

13. Occasionally, an imaging procedure will be performed to localize a site of gastric mucosa not situated in its normal location. This study is defined by code:
   a. 78278
   b. 78264
   c. 78290
   d. 78261

14. When a scan is requested to define a Meckels diverticulum, this CPT code is correct:
   a. 78264
   b. 78220
   c. 78290
   d. 78278

15. When a patient is studied to localize the site of an acute GI bleed, the following CPT code should be assigned:
   a. 78262
   b. 78264
   c. 78278
   d. 78282

16. Nuclear lung studies can be performed using ventilation, with either an aerosol (DTPA) or a gas (133 Xe). Blood supply analysis is performed using an injected perfusion agent (MAA). When imaging studies of the lungs are performed following the inhalation of 99mTc DTPA and injection of 99mTc MAA, the correct code is:
   a. 78580
   b. 78599
   c. 78598
   d. 78582
17. Nuclear lung studies can be performed using ventilation, with either an aerosol (DTPA) or a gas (133 Xe). Blood supply analysis is performed using an injected perfusion agent (MAA). When imaging studies of the lungs are performed following the inhalation of 133Xe only, the correct code(s) are (is):
   a. 78579
   b. 78599
   c. 78597 and 78598
   d. 78597

18. Nuclear lung studies can be performed using ventilation, with either an aerosol (DTPA) or a gas (133 Xe). Blood supply analysis is performed using an injected perfusion agent (MAA). When an imaging study of the lungs is performed following the injection of 99mTc MAA only, the correct code is:
   a. 78579
   b. 78580
   c. 78598
   d. 78597

19. When the radiology report mentions bilateral imaging following the IV administration of 99mTc apcitide (AcuTect), they are referring to code:
   a. 78456
   b. 78457
   c. 78458
   d. 78445

20. While these radioactive materials may be used for other types of imaging, thallium, cardiolite (sestamibi) and myoview (tetrofosmin) are primarily utilized in studies of the:
   a. Heart
   b. Lungs
   c. Bone
   d. Kidneys

21. When radioactive materials such as MAA, DTPA (aerosol) or 133Xe (xenon) are mentioned in a report, they refer to imaging studies of the:
   a. Heart
   b. Lungs
   c. Bone
   d. Kidneys
22. When radiopharmaceuticals in dosages of microcuries (uCi) such as 123 I capsules or 131 I capsules are mentioned in a report, they are primarily referring to studies of the:
   a. Parathyroid
   b. Parotid glands
   c. Thyroid
   d. Salivary glands

23. Occasionally, there may be a patient in which there is a leaking of spinal fluid. In this scenario, cotton balls or pledgets are placed in the nostrils or external ear(s) to in effect “soak-up” any of the abnormally draining radioactive fluid. These pieces of absorbent material are then imaged and/or placed into a special device capable of detecting radioactivity. This procedure is best define by code:
   a. 78630
   b. 78645
   c. 78650
   d. 78660

24. If an imaging procedure is performed to define whether a patient has “cerebral silence” or “brain death,” this may be evaluated utilizing a vascular flow study and 1-2 static images. This procedure is best defined by code:
   a. 78610
   b. 78607
   c. 78601
   d. 78606

25. Following the injection procedure defined in question #24, imaging may be performed of the spinal canal as well as when radioactive spinal fluid flows into the base of the skull and “up and over” the ventricles. This imaging procedure most often is carried out over 2-4 days. It is best described by code:
   a. 78607
   b. 78630
   c. 78635
   d. 78645

26. Renal imaging or imaging of the kidneys may be performed in several different methods. When an injection of the isotope is given and imaging is carried out in a vascular flow, extraction, concentration and excretion phase, this is defined by code:
   a. 78700
   b. 78701
   c. 78707
   d. 78708
27. As described in question #26, sometimes an abnormality is causing the kidney not to be able to excrete the radioactive urine in a normal fashion. In this situation, the physician may determine that it is necessary to give an IV injection of a diuretic (i.e., lasix or furosemide) to aid in this process. Nuclear imaging continues during this additional injection. This procedure is best defined as code:
   a. 78701
   b. 78707
   c. 78708
   d. 78709

28. Similar to the processes defined in cases #26 and 27, a patient may have two separate full and complete studies performed both with and without administration of a separate drug (non-radioactive) such as an ACE inhibitor. This procedure is now best defined by code(s):
   a. 78707
   b. 78708 (x2)
   c. 78707 and 78708
   d. 78709

29. When spot views (or static images) of the kidneys are performed strictly to determine size, shape, position, etc. not to determine function, this procedure is best defined by code ____. Common imaging agents are 99mTc GH or 99mTc DMSA.
   a. 78700
   b. 78701
   c. 78710
   d. 78445

30. Occasionally, nuclear renal studies will be done to check for reflux or “backwards flow” from the urinary bladder up into the kidneys. This procedure is best defined as code:
   a. 78730
   b. 78761
   c. 78740
   d. 78725

31. When static imaging of the scrotum is performed with a vascular flow to aid in diagnosis of acute torsion or acute epididymo-orchitis, the following code is correct:
   a. 78701
   b. 78708
   c. 78761
   d. 78601
32. The following imaging agents may all be used when performing imaging studies to detect or monitor malignant neoplasms. They are 67Ga (gallium) onciscint, CEA scan, prostascint, verluma and myoscint. Codes used to describe these studies fall in the following range:
   a. 78300–78320
   b. 78580–78596
   c. 78800–78804
   d. 79005–79999

33. When computer processing images or data acquired during a nuclear medicine scan, the following codes describe this portion of the study:
   a. 78223
   b. 78472–78473
   c. 79005–79999
   d. None of the above

34. When a radiology report mentions the terminology “monoclonal antibody imaging” they are referring to:
   a. Tumor localization studies (codes 78800–78804)
   b. Inflammatory process or abscess imaging (78805–78807)
   c. Lung imaging (codes 78580–78596)
   d. GI imaging (codes 78201–78291)

35. When a radiology report mentions terminology such as “tagged white cells” or “labeled white cell” imaging, they are referring to:
   a. Tumor localization studies (codes 78800–78804)
   b. Inflammatory process or abscess imaging (78805–78807)
   c. Lung imaging (codes 78580–78596)
   d. GI imaging (codes 78201–78291)

36. Scintimammography is best defined by CPT code(s):
   a. 78306
   b. 78805–78807
   c. 78800
   d. 78195

37. When sentinel node imaging is performed, this is best described by code:
   a. 78191
   b. 78195
   c. 78800
   d. 78801
38. If the radiology report contains the phrase, “following multiple injections about the breast area of filtered sulfur colloid,” this is referring to the injection procedure for:
   a. Sentinel node localization  
   b. Tumor imaging  
   c. Liver scanning  
   d. Hemangioma scanning

39. Referring to question #38, if following these injections no nuclear imaging (scintigraphy) is performed, in this scenario, the only code to submit would be:
   a. 19290  
   b. 38792  
   c. 19120  
   d. 36005

40. The acronym “PET” refers to:
   a. Portable exercise treadmill  
   b. Positron emission tomography  
   c. Positive emission test  
   d. None of the above

41. Currently, the following codes are acceptable to Medicare carriers when billing for PET studies:
   a. CPT codes in the 78XXX series  
   b. Level II G-codes  
   c. Both A and B  
   d. None of the above

42. When a radiology report mentions the terminology of, “multiple coincidence detection” or MCD,” they are referring to studies that in effect, will currently be coded the same way as:
   a. Myocardial perfusion studies  
   b. Bone SPECT  
   c. PET scans  
   d. Thyroid therapy procedures

43. Radionuclide or radioisotope therapy is defined by the following series of codes:
   a. 78000-78099  
   b. 78000-78999  
   c. 79005-79445  
   d. 79005-79999
44. When a radiology report mentions, “treatment of Graves Disease,” they are referring to _____, defined by CPT code _____.
   a. Hashimoto’s thyroiditis, 79101
   b. Hypothyroidism, 79200
   c. Hyperthyroidism, 79300
   d. Hyperthyroidism, 79005

45. When the radioactive materials Strontium 89 or “metastron” Samarium 153 or “quadramet” are mentioned in a radiology report, they are describing radiopharmaceutical therapy by (and code):
   a. Intra-articular administration (79440)
   b. Interstitial radioactive colloid (79300)
   c. Intravenous administration (79101)
   d. Intracavitary administration (79200)

46. Assuming Category I (CPT) codes are available for assignment, when coding for a PET/CT study, any of the 6 codes in CPT can be used:
   a. True
   b. False

47. If a PET/CT scan is performed to allow precise image fusion, it is correct to code separately for the PET scan as well as the CT scan:
   a. True
   b. False

48. If after a radionuclide voiding cystourethrogram, the patient’s bladder is examined by a non-imaging technique (i.e., ultrasound), the correct code to submit for this portion of the exam is:
   a. 51798
   b. 78730
   c. 76857
   d. None of the above

49. If after a radionuclide voiding cystourethrogram, the patient’s bladder is examined by ultrasound imaging, the correct code to submit for this portion of the exam is:
   a. 76856
   b. 76857
   c. 76775
   d. 76999
50. If after a radionuclide voiding cystourethrogram, the patient’s bladder is examined by nuclear imaging, the correct code to submit for this portion of the exam is:
   a. 78710
   b. 78725
   c. 78730
   d. 78799

51. If an intravenous injection of a radiopharmaceutical is made in the radiology department and the patient subsequently goes to the OR for localization of a parathyroid adenoma, which code(s) is/are submitted? No images are taken.
   a. 38792
   b. 38792 and 78195
   c. 78070
   d. 78808

52. If an injection of methylene blue was made to attempt to locate a sentinel node, the correct code(s) to define this service would be:
   a. 38792
   b. 38792 and 78195
   c. 38900
   d. 38900 and 78195
CHAPTER 28—ANSWERS

1. (a) When coding and billing for hospital-based nuclear medicine services, the radiologist (i.e., professional component) may bill for the study performed.

2. (c) In a non-hospital-based setting where the radiologist owns the equipment, employs the staff and reads and performs the procedure(s), they may code and bill for the study performed, the radiopharmaceutical (i.e., global component) used and the non-radioactive drugs injected.

3. (d) As a general rule, when billing Part B for hospital based nuclear medicine procedures (diagnostic or therapeutic) it is not appropriate to bill for both the procedure and injection of the isotope, not appropriate to bill for both the procedure and inhalation of the isotope, nor appropriate to bill for both the procedure and ingestion of the isotope.

4. (a) Code 78012-26

5. (b) 78014

6. (b) When an injection of MDP or HDP is given and the radiologist reports, “Imaging performed during vascular flow, immediate blood pool and delayed static studies,” they are referring to a three-phase bone scan, CPT 78315.

7. (a) Traditionally when SPECT bone imaging is performed, from a Medicare perspective, this code is reimbursed separately in addition to the whole body bone scan.

8. (d) When a radiologist’s report defines, “tomographic imaging of the left ventricle after immediate stress and three hour delay,” they are referring to code 78452.

9. (d) When the radiologist’s report defines, “following stress and rest SPECT myocardial perfusion imaging, the left ventricular EF was calculated at 63% and a dyskinetic area was observed in the…” they are referring to code 78452.

10. (b) When the radiologist’s report defines, “the resting MUGA scan demonstrated…” they are referring to code 78472.

11. (d) When the radiology report defines, “following immediate injection of 99mTc sulfur colloid, vascular flow and static imaging was performed over the hepatic and splenic areas…” they are referring to code 78216.

12. (d) When a radiologic report states, “After IV administration of 99mTc hepatolite, serial imaging was performed of the GB both prior to and after the administration of CCK,” it is specifically referring to code 78227.

13. (c) Occasionally, an imaging procedure will be performed to localize a site of gastric mucosa not situated in its normal location. This study is defined by code 78290.
14. (c) When a scan is requested to define a Meckels diverticulum, CPT code 78290 is correct.

15. (c) When a patient is studied to localize the site of an acute GI bleed, CPT code 78278 should be assigned.

16. (d) When imaging studies of the lungs are performed following the inhalation of 99mTc DTPA and injection of 99mTc MAA, the correct code is 78582.

17. (a) When imaging studies of the lungs are performed following the inhalation of 133Xe only, the correct code is 78579.

18. (b) When an imaging study of the lungs is performed following the injection of 99mTc MAA only, the correct code is 78580.

19. (a) When the radiology report mentions bilateral imaging following the IV administration of 99mTc apcitide (AcuTecl), they are referring to code 78456. The procedure is performed to attempt to identify lower extremity Deep Venous Thrombosis (DVT).

20. (a) While these radioactive materials may be used for other types of imaging, thallium, cardiolite (sestamibi) and myoview (tetrofosmin) are primarily utilized in studies of the heart.

21. (b) When radioactive materials such as MAA, DTPA (aerosol) or 133Xe (xenon) are mentioned in a report, they refer to imaging studies of the lungs.

22. (c) When radiopharmaceuticals in dosages of microcuries (uCi) such as 123 I capsules or 131 I capsules are mentioned in a report, they are primarily referring to studies of the thyroid.

23. (c) Occasionally, there may be a patient in which there is a leaking of spinal fluid. In this scenario, cotton balls or pledgets are placed in the nostrils or external ear(s) to in effect “soak-up” any of the abnormally draining radioactive fluid. These pieces of absorbent material are then imaged and/or placed into a special device capable of detecting radioactivity. This procedure is best defined by code 78650.

24. (c) If an imaging procedure is performed to define whether a patient has “cerebral silence” or “brain death,” this may be evaluated utilizing a vascular flow study and 1-2 static images. This procedure is best defined by code 78601.

25. (c) Following the injection procedure defined in question #24, imaging may be performed of the spinal canal as well as when radioactive spinal fluid flows into the base of the skull and “up and over” the ventricles. This imaging procedure most often is carried out over 2-4 days. It is best described by code 78635.

26. (c) Renal imaging, or imaging of the kidneys may be performed in several different methods. When an injection of the isotope is given and imaging is carried out in a vascular flow, extraction, concentration and excretion phase, this is defined by code 78707.
27. (c) As described in question #26, sometimes an abnormality is causing the kidney not to be able to excrete the radioactive urine in a normal fashion. In this situation, the physician may determine that it is necessary to give an IV injection of a diuretic (i.e., lasix or furosemide) to aid in this process. Nuclear imaging continues during this additional injection. This procedure is best defined as code 78708.

28. (d) Similar to the processes defined in cases #26 and 27, a patient may have two separate full and complete studies performed both with and without administration of a separate drug (non-radioactive) such as an ACE inhibitor. This procedure is now best defined by code 78709.

29. (a) When spot views (or static images) of the kidneys are performed strictly to determine size, shape, position, etc. not to determine function, this procedure is best defined by code 78700. Common imaging agents are 99mTc GH or 99mTc DMSA.

30. (c) Occasionally, nuclear renal studies will be done to check for reflux or “backwards flow” from the urinary bladder up into the kidneys. This procedure is best defined as code 78740.

31. (c) When static imaging of the scrotum is performed with a vascular flow to aid in diagnosis of acute torsion or acute epididymo-orchitis, the correct code is 78761. If a flow was not performed, modifier -52 should be assigned to the code.

32. (c) The following imaging agents may all be used when performing imaging studies to detect or monitor malignant neoplasms. They are 67Ga (gallium) oncoscint, CEA scan, prostascint, verluma and myoscint. Codes used to describe these studies fall in the following range 78800–78804.

33. (d) None of the above. Codes 78890 and 78891, which previously did define these services, were deleted from CPT in 2009. It is incorrect to submit any additional charge/code for computer processing of nuclear medicine or PET procedures.

34. (a) When a radiology report mentions the terminology “monoclonal antibody imaging” they are referring to tumor localization studies (codes 78800–78804).

35. (b) When a radiology report mentions terminology such as “tagged white cells” or “labeled white cell” imaging, they are referring to inflammatory process or abscess imaging (78805-78807).

36. (c) Scintimammography is best defined by CPT code 78800.

37. (b) When sentinel node imaging is performed, this is best described by code 78195.

38. (a) If the radiology report contains the phrase, “following multiple injections of filtered sulfur colloid about the breast area,” this is referring to the injection procedure for sentinel node localization.

39. (b) Referring to question #38, if following these injections no nuclear imaging (scintigraphy) is performed, in this scenario, the only code to submit would be 38792.
40. (b) The acronym “PET” refers to positron emission tomography.

41. (c) Currently, both CPT codes in the 78xxx series and Level II G-codes are acceptable to Medicare carriers when billing for PET studies.

42. (c) When a radiology report mentions the terminology of, “multiple coincidences detection” or MCD,” they are referring to studies that in effect, will currently be coded the same way as PET scans.

43. (d) Radionuclide or radioisotope therapy is defined by the code series 79005–79999.

44. (d) When a radiology report mentions, “treatment of Graves Disease,” they are referring to hyperthyroidism, defined by CPT code 79005.

45. (c) When the radioactive materials Strontium 89 (metastron) or Samarium 153 (quadramet) are mentioned in a radiology report, they are describing the procedure (and code) for radiopharmaceutical therapy by intravenous administration (79101).

46. (b) False. CPT provides for use six specific Category I (CPT) codes for PET and PET/CT studies. Codes 78811–78813 define PET imaging only. Codes 78814– 78816 define PET/CT exams. In order to code for PET/CT, three distinct sets of image data are created and reviewed:
   1. Emission PET scan
   2. CT anatomical localization data
   3. Fusion of the PET and CT data to anatomically superimpose one over the other

47. (b) False. CT imaging performed for image fusion is not separately reportable. If a full and complete diagnostic CT exam were performed in addition to a full and complete PET scan, CPT directs the reader to report the anatomic site-specific CT code and the PET code, but assign the modifier -59 to the CT code.

48. (a) If after a radionuclide voiding cystourethrogram, the patient’s bladder is examined by a non-imaging technique (i.e., ultrasound), the correct code to submit for this portion of the exam is 51798.

49. (b) If after a radionuclide voiding cystourethrogram, the patient’s bladder is examined by ultrasound imaging, the correct code to submit for this portion of the exam is 76857.

50. (c) If after a radionuclide voiding cystourethrogram, the patient’s bladder is examined by nuclear imaging, the correct code to submit for this portion of the exam is 78730.

51. (d) If an intravenous injection of a radiopharmaceutical is made in the radiology department and the patient subsequently goes to the OR for localization of a parathyroid adenoma, with no images being taken, code 78808 should be submitted.

52. (c) If an injection of methylene blue was made to attempt to locate a sentinel node, the correct code(s) to define this service would be 38900.
CHAPTER 29

Code to the Highest Level of Specificity

1. Terms such as “probable, suspected, questionable, likely, rule out” should be documented as diagnostic statements whenever applicable to patient care, but in regard to coding, it can be coded as confirmed in which of the following:
   a. Inpatient professional coding
   b. Inpatient facility coding
   c. Radiology procedure coding
   d. All of the above

2. To follow ICD-9-CM’s guidelines regarding “highest level of specificity,” which code would be assigned first:
   a. Three-digit code only if there is no four- or five digit code within a category
   b. Four-digit code if there is no fifth-digit code sub classification category
   c. Fifth-digit sub classification code for categories where it exists
   d. All of the above

3. Coding for signs and symptoms, in the absence of (confirmed) disease, is perfectly acceptable for providers and hospital-based outpatient services.
   a. True
   b. False

4. Which of the following is an incorrect statement:
   a. Ordering physicians are required to include diagnosis codes on referral slips or requests for radiological or other diagnostic tests
   b. Referral slips or requests are required to include a narrative description of the reason for the test
   c. A narrative description on a referral slip will help a radiologist to properly perform and interpret the requested test
   d. They are all correct statements

5. The correct code assignment for narrative statement “bilateral carotid artery plaque” is:
   a. 433.3
   b. 433.30
   c. 433.10
   d. 433.10, 433.30
CHAPTER 29—ANSWERS

1. (b) Although this is appropriate for inpatient facility diagnosis coding, it is unacceptable to code unconfirmed diagnoses for diagnostic studies in the outpatient and professional fee coding arenas. Codes for the signs or symptoms that lead the physician to suspect the condition they are looking for would be assigned.

2. (d) All statements are correct in regards to the prioritization of ICD-9 coding to the highest level of specificity.

3. (a) Although this is appropriate for physicians, they should know that this is contrary to the coding practices used by hospitals and medical record departments for coding the diagnoses of hospital inpatients. Further, the coding of symptoms by medical record departments for inpatients is generally unacceptable particularly when there is an established diagnosis.

4. (a) Ordering physicians are not required to include diagnosis codes on referral slips or request for radiological or other diagnostic tests as stated in option “a.” Having a narrative description also will help radiologists when they fill out their claims.

5. (d) Assign code 433.10, occlusion and stenosis of precerebral arteries, carotid artery, without mention of cerebral infarction, for carotid artery stenosis. Code 433.30, occlusion and stenosis of precerebral arteries, multiple and bilateral, without mention of cerebral infarction, may be assigned as an additional diagnosis to further describe the laterality. Assigning both codes will allow information on both the specific artery involved and the laterality to be captured.
CHAPTER 30

Sequencing of Codes

(Some questions may have more than one correct answer)

1. For patients receiving diagnostic services only during an encounter/visit, which of the following would be sequenced first for ICD-9-CM coding:
   a. Level of care code
   b. Diagnosis, condition, problem or other reason for the encounter/visit
   c. Other diagnoses, such as chronic conditions
   d. None of the above

2. A physician refers a patient to a radiologist for a chest x-ray with the reason for the exam identified as cough and fever, rule out pneumonia. The radiologist’s report states that the x-ray is normal. Choose the correct ICD-9-CM code(s) that should be reported on the claim form:
   a. 786.2, Cough
   b. 780.60, Fever, unspecified
   c. 786.2 and 780.60
   d. 770.0, Congenital infective pneumonia

3. A physician refers a patient to a radiologist for a chest x-ray with the reason for the exam identified as cough and fever, rule out pneumonia. The radiologist’s report confirms a diagnosis of pneumonia. Choose the correct code(s) to describe the reason(s) for the visit:
   a. 786.2, Cough; 780.60 Fever, unspecified; 485, Bronchopneumonia, organism unspecified
   b. 786.2, Cough; 780.60 Fever, unspecified
   c. 486 Pneumonia, unspecified
   d. None of the above

4. It is never appropriate to assign only one diagnosis code.
   a. True
   b. False

5. When should a patient’s chronic conditions be coded?
   a. Chronic conditions that are still present should always be coded if they substantiate the care provided.
   b. When the patient has received treatment for one or more of them during the encounter
   c. When they affect the management of the patient’s current illness
   d. Never, because they never relate to the radiology service provided
6. The ICD-9-CM manual includes “dump” codes or “catch-all” codes. What is the “real” name of these codes:
   a. Generic
   b. Three-digit codes
   c. Nonspecific
   d. All of the above
CHAPTER 30—ANSWERS

1. (b) These would be taken from the medical record and be shown as the chief reason for the visit. Codes for other diagnoses, such as chronic conditions, may be sequenced as additional diagnoses.

2. (c) The symptoms—cough and fever—would be coded. According to the ICD-9-CM coding guidelines, a diagnosis code would not be assigned for “rule out pneumonia” as it is not an established condition.

3. (c) Cough and fever are not coded, as more specific information is available.

4. (b) The ICD-9-CM code assigned should describe the primary, or most important reason, for the visit. Often, one code adequately identifies the need for care.

5. (b)(c) According to ICD-9-CM coding guidelines, all documented conditions that coexist at the time of the encounter/visit and require or affect patient care, treatment or management should be coded for that encounter.

6. (c) Non-specific codes are indicated with the abbreviation (NOS). Coders should look for more specific codes when possible.
CHAPTER 31

Nonspecific Codes/
Not Elsewhere Classifiable/
Not Otherwise Specified

1. What does the abbreviation NOS mean:
   a. No other symptom
   b. Not official signature
   c. Not otherwise specified
   d. Nothing of substance

2. What does the phrase “not elsewhere classified” (NEC) mean:
   a. The specific reason for the patient’s visit is unclear
   b. The diagnostic statement is too general to be more specific than a NOS code
   c. Test results have not been received at the time of code assignment
   d. All of the above

3. What is the most common reason for assigning an unspecified code:
   a. The specific reason for the patient’s visit is unclear
   b. The diagnostic statement is too general to be more specific than a NOS code
   c. Test results have not been received at the time of code assignment
   d. All of the above

4. Chronic diseases treated on an ongoing basis may be coded and reported as many times as the patient receives treatment and care for the condition.
   a. True
   b. False

5. The code for the diagnosis of “wheezing and probable pneumonia” is:
   a. 486
   b. 486, 786.09
   c. 786.07
   d. Need more information
CHAPTER 31 — ANSWERS

1. (c) NOS indicates that the code is unspecified and, if possible, the coder should continue looking for a more specific code.

2. (b) NEC identifies codes and terms to be used when you lack the information necessary to code the diagnosis to a more specific category.

3. (d) All of the examples could lead to an unspecified code.

4. (a) True.

5. (c) Wheezing is a sign/symptom and is appropriate to assign.
Chapter 32

Disease Codes

(Some questions may have more than one correct answer)

1. Symptoms, signs and ill-defined conditions are reported with diagnosis codes 780 through 799. To which of the following do these point:
   a. Cases where a definitive diagnosis has been made
   b. Cases where a definitive diagnosis has not been made at the time of the encounter
   c. Conditions not requiring more than one diagnostic test
   d. None of the above

2. Which sections of the ICD-9-CM coding manual do physicians use:
   a. Volume 1, Tabular listing of diseases
   b. Volume 2, Alphabetic index of diseases, conditions and diagnostic terms
   c. Volume 3, Procedure codes
   d. Volume 1, Tabular listing of diseases, and Volume 2, Alphabetic index of diseases, conditions and diagnostic terms

3. For what reason would a physician use the numeric codes (001.0 to 999.9) found in ICD-9-CM’s Tabular Listing of Diseases:
   a. To identify a disease
   b. To describe the reason for the encounter
   c. To identify the “essential modifiers” of the ICD-9-CM code assigned
   d. None of the above

4. Which of the following would be consulted when a patient who is not currently ill presents for an encounter for some other specific purpose or treatment:
   a. E codes
   b. V codes
   c. Major diagnostic categories
   d. None of the above
CHAPTER 32—ANSWERS

1. (b) With these codes, you can report symptoms and signs in place of the disease, illness or condition where a definitive diagnosis has not been made at the time of the encounter.

2. (d) Volume 1 of the manual contains option “a” above and is defined by body system. Volume 2 contains option “b”—terms that are used in referencing the tabular listings. Physicians do not use the third volume of ICD-9-CM, which contains procedure codes because they report procedures using CPT.

3. (b) The reason for the encounter varies, and this volume divides all available codes into 17 categories of diseases, body systems, conditions, symptoms, etc.

4. (b) These codes can be found in a section of the ICD-9-CM coding manual called The Supplementary Classification of Factors Influencing Health Status and Contact with Health Services (V01.0–V82.09). They are used when circumstances other than a disease or injury are recorded as a diagnosis or problem.
1. V-codes can be used to report which of the following:
   a. Physical exams
   b. Postoperative follow-up
   c. X-rays
   d. All of the above

2. In what order would you assign codes when only a radiology screening service has been provided:
   a. List a code for the symptom(s) first then the V code
   b. List a V code first and a code for the problem or condition second
   c. List a V code first then a code for the symptom(s)
   d. None of the above

3. Which of the following does code V72.5 (radiological exam, not elsewhere classified) include:
   a. Referrals for routine chest x-rays without specific symptoms not covered by Medicare
   b. Referrals for non-routine chest x-rays covered by Medicare
   c. Evaluation of signs, symptoms or diagnoses
   d. All of the above

4. The code for diagnosis of “history of breast cancer from 6 years ago with no reoccurrence” is:
   a. V16.3
   b. V10.3
   c. 174.9
   d. None of the above

5. A patient presents for a screening colonoscopy. The results of the procedure indicate that the patient has a few polyps. The primary diagnosis code should be:
   a. 211.3
   b. V76.51
   c. 211.4
   d. None of the above
CHAPTER 33—ANSWERS

1. (d) V codes also can be used to report preventive medical treatment, physical therapy, lab tests, etc.

2. (b) This guideline also applies for other ancillary diagnostic services, although radiologists who are performing exams on referrals use it frequently.

3. (a) V72.5 is sequenced first on the bill, and the diagnosis or problem (e.g., wheezing or cough) is sequenced second. If a second code is not listed, a carrier may request more information. Supplying a second code to describe the reason for the referral clearly identifies that this test is to be done to evaluate symptoms, signs or diseases and is not a routine screening.

4. (b) V10.3. In this case, the patient has a personal history of breast cancer and is not under active treatment of the disease.

5. (b) V76.51. In this case, the intent of the procedure was a screening colonoscopy. Even though there were positive findings, Medicare states that the screening diagnosis code should be sequenced as primary unless a diagnostic procedure is performed.

   According to CMS, if during the course of the screening colonoscopy, a lesion or growth is detected that results in a biopsy or removal of the growth, the appropriate diagnostic procedure classified as a colonoscopy with biopsy or removal should be billed rather than the G0105 procedure code with the appropriate ICD-9-CM code.
References

The following publications were consulted to develop and update this study guide.

FROM THE AMERICAN MEDICAL ASSOCIATION:

- CPT 2012, Professional Edition
- CPT Changes: An Insider’s Guide (various years)

FROM THE CENTERS FOR MEDICARE AND MEDICAID SERVICES:

Various Medicare manuals, including:

- Medicare Claims Processing Manual
- Medicare National Coverage Determinations Manual
- Medicare Benefit Policy Manual

These and other Medicare manuals can be found at http://www.cms.hhs.gov/Manuals/IOM/list.asp.

FROM MEDLEARN PUBLISHING, ST. PAUL, MINNESOTA

- CT/MR Coder—2012
- Interventional Radiology Coder—2012
- Nuclear Medicine and PET Coder—2012
- The Radiology Correct Coding Initiative (updated quarterly)

FROM OTHER SOURCES:

The copyright dates shown below are the most current available at the time of this writing. However, these editions may not be the original documents consulted in the development of this study guide.


O’Toole, Miller-Keane and Marie T: Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing and Allied Health, 7th edition, Elsevier, 2009 (revised reprint).


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