

# SIMULATION EXAM 5

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**Recommended Time: 4 Hours | 100 Questions | Passing Score: 70%**

## **10,000 Series — Integumentary System (Questions 1–6)**

1. A surgeon excises a 2.5 cm malignant squamous cell carcinoma from the patient's scalp with 1.0 cm margins. What is the excised diameter for code selection?

- A. 4.5 cm
- B. 3.5 cm
- C. 2.5 cm
- D. 5.0 cm

2. A patient presents with three lacerations: a 3.0 cm simple repair on the right forearm, a 2.0 cm simple repair on the left forearm, and a 4.0 cm intermediate repair on the chin. How should these be reported?

- A. One intermediate repair code for 9.0 cm combining all wounds
- B. Three separate repair codes, one for each laceration
- C. One simple repair code for 5.0 cm and one intermediate repair code for 4.0 cm
- D. One complex repair code for 9.0 cm

3. A dermatologist performs cryodestruction of 3 benign skin lesions on a patient's trunk. Which code(s) should be reported?

- A. 17110 × 3

- B. 17110 × 1, 17111 × 1
- C. 17000 × 1, 17003 × 2
- D. 17111 × 3

4. A surgeon performs an adjacent tissue transfer (rotation flap) to repair a 6 sq cm defect on the patient's cheek. The defect was created by excision of a basal cell carcinoma. How should the excision be coded?

- A. With a separate malignant excision code and modifier 59
- B. With a separate malignant excision code and modifier 51
- C. With a separate benign excision code
- D. It is not coded separately; the excision is included in the adjacent tissue transfer code

5. A physician performs a deep tissue biopsy of a subcutaneous mass on the left thigh. The biopsy is performed using a needle — no open incision is made. Which type of biopsy is this?

- A. Percutaneous needle biopsy
- B. Incisional biopsy
- C. Excisional biopsy
- D. Punch biopsy

6. A surgeon performs a split-thickness skin graft to a 40 sq cm burn wound on the anterior chest. The graft is harvested from the patient's left thigh. How is the size of the graft determined for code selection?

- A. By the size of the donor site on the left thigh
- B. By the combined area of the donor and recipient sites
- C. By the size of the recipient site (defect) on the chest
- D. By the thickness of the graft tissue

## 20,000 Series — Musculoskeletal System (Questions 7–12)

7. A surgeon performs arthroscopic meniscectomy of the medial meniscus and chondroplasty of the medial femoral condyle of the right knee during the same session. Each procedure has a separate CPT code. How should these be reported?

- A. Only the chondroplasty code; the meniscectomy is bundled
- B. Both codes — the meniscectomy and the chondroplasty — each as a separate surgical arthroscopy procedure with appropriate modifiers per NCCI guidelines
- C. Only the meniscectomy code; the chondroplasty is bundled
- D. A single comprehensive arthroscopy code covering both procedures

8. A patient undergoes percutaneous skeletal fixation of a patellar fracture. In CPT terminology, "percutaneous skeletal fixation" involves which of the following?

- A. Open surgical exposure of the fracture site
- B. Application of an external fixation device
- C. Treatment with casting only, without pins
- D. Placement of fixation devices (pins, screws) through the skin without opening the fracture site

9. An orthopedic surgeon performs a laminectomy at L4-L5 for disc herniation and removes the herniated disc material. A posterior lumbar interbody fusion is then performed at L4-L5. How should the decompression and fusion be coded?

- A. Only the fusion code; the laminectomy is bundled
- B. Only the laminectomy code; the fusion is bundled
- C. Separate codes for the laminectomy/discectomy and the interbody fusion
- D. A single combination code for laminectomy with fusion

10. A patient undergoes injection of a corticosteroid into the right shoulder joint. No imaging guidance is used. Which CPT section contains the code for this joint injection?

- A. Musculoskeletal system (20,000 series)
- B. Medicine section
- C. Radiology section
- D. Anesthesia section

11. A surgeon performs an open repair of a complete rotator cuff tear of the left shoulder. During the same session, the surgeon also performs an open subacromial decompression. NCCI edits indicate that the decompression is bundled into the rotator cuff repair. How should the decompression be coded?

- A. As a separate code with modifier 59
- B. It is not reported separately; it is bundled per NCCI edits
- C. As a separate code with modifier 51
- D. As a separate code with modifier 22

12. Which of the following correctly describes the difference between a closed fracture and an open fracture?

- A. A closed fracture requires surgery; an open fracture does not
- B. A closed fracture involves manipulation; an open fracture does not
- C. The terms describe treatment methods, not fracture types
- D. In a closed fracture, the skin is intact; in an open fracture, the bone penetrates through the skin

**30,000 Series — Respiratory, Cardiovascular, Hemic, and Lymphatic (Questions 13–18)**

13. A cardiologist performs a percutaneous transluminal coronary angioplasty (PTCA) with placement of a drug-eluting stent in the left anterior descending (LAD) artery. How is the angioplasty coded in relation to the stent placement?

- A. Both the angioplasty and stent codes are reported separately
- B. Only the angioplasty code; the stent is bundled
- C. The angioplasty is included in the coronary stent placement code and is not reported separately
- D. Only an unlisted cardiovascular code

14. A surgeon performs a right pneumonectomy (removal of the entire right lung) for lung cancer. How many lobes are removed in a right pneumonectomy?

- A. Three (the right lung has three lobes)
- B. Two (the right lung has two lobes)
- C. Five (all lobes of both lungs)
- D. One (only the affected lobe)

15. A patient has a malfunctioning implantable cardioverter-defibrillator (ICD) pulse generator. The cardiologist removes the old generator and implants a new generator. The existing leads are tested and left in place. How should this be coded?

- A. A complete ICD system insertion code
- B. A generator replacement code only
- C. A generator removal code plus a generator insertion code
- D. A generator replacement code plus lead insertion codes

16. A surgeon performs a bilateral sequential lung transplant. The CPT code for lung transplant specifies whether the procedure is single or bilateral. Which factor determines the code?

- A. The patient's age
- B. The type of anesthesia used
- C. The underlying disease being treated
- D. Whether one lung or both lungs are transplanted

17. A patient undergoes diagnostic bronchoscopy with endobronchial ultrasound (EBUS) guided transbronchial needle aspiration of a mediastinal lymph node. How should the diagnostic bronchoscopy be coded?

- A. As a separate code with modifier 59
- B. As a separate code with modifier 51
- C. It is not reported separately; it is included in the EBUS-guided biopsy code
- D. As a separate code with modifier 25

18. A surgeon creates a loop arteriovenous graft in the left forearm using a synthetic PTFE graft for hemodialysis access. How does an AV graft differ from a direct AV fistula?

- A. An AV graft uses a synthetic conduit to connect the artery and vein; a direct AVF connects the patient's own artery and vein without synthetic material
- B. An AV graft connects two veins; a direct AVF connects an artery and a vein
- C. There is no difference; the terms are interchangeable
- D. An AV graft is placed in the neck; a direct AVF is placed in the arm

**40,000 Series — Digestive System (Questions 19–24)**

19. A patient undergoes a colonoscopy with ablation of a vascular ectasia (arteriovenous malformation) in the cecum using argon plasma coagulation. How should the diagnostic colonoscopy be coded?

- A. As a separate code with modifier 59
- B. As a separate code with modifier 25
- C. As a separate code with modifier 51
- D. It is not reported separately; it is included in the surgical colonoscopy code

20. A surgeon performs an open gastrostomy for placement of a gastrostomy tube (G-tube) for long-term enteral feeding. Which of the following describes the purpose of a gastrostomy?

- A. To bypass an obstruction in the colon
- B. To create an opening in the stomach through the abdominal wall for feeding access
- C. To remove the stomach
- D. To repair a hiatal hernia

21. A patient undergoes an EGD with Botox injection into the lower esophageal sphincter for treatment of achalasia. During the same session, the physician also performs dilation of the esophagus. How should the diagnostic EGD be coded?

- A. It is not reported separately; it is included in the surgical EGD codes
- B. As a separate code with modifier 51
- C. As a separate code with modifier 59
- D. As a separate code with modifier 25

22. A patient presents for a colonoscopy, but the preparation is inadequate and the gastroenterologist can only advance the scope to the hepatic flexure. The cecum is not reached. How should this incomplete colonoscopy be coded?

- A. With a sigmoidoscopy code based on the extent of the examination
- B. With a diagnostic colonoscopy code only, without any modifier
- C. With a colonoscopy code and modifier 52 (reduced services) or modifier 53 (discontinued procedure)
- D. The procedure should not be coded since the cecum was not reached

23. A surgeon performs a laparoscopic repair of a paraesophageal hiatal hernia with mesh placement. Which hernia type is this?

- A. Inguinal hernia
- B. Femoral hernia
- C. Umbilical hernia
- D. Diaphragmatic/hiatal hernia

24. A patient undergoes an appendectomy. The appendix is removed incidentally during an open abdominal surgery for another primary condition and shows no pathology. Which appendectomy code should be reported?

- A. The standard open appendectomy code (44950)
- B. The incidental appendectomy code (44955)
- C. The appendectomy for ruptured appendix code (44960)
- D. No appendectomy code; incidental appendectomy is not separately reportable

**50,000 Series — Urinary, Reproductive, and Endocrine (Questions 25–30)**

25. A urologist performs a cystoscopy with insertion of a double-J ureteral stent for a ureteral obstruction. The diagnostic cystoscopy is bundled. Which additional procedure is bundled into the stent insertion code?

- A. The cystoscopy; no additional procedures beyond the cystoscopy are automatically bundled
- B. The ureteroscopy performed during the same session
- C. The retrograde pyelography performed during the same session
- D. The ureteral dilation performed during the same session

26. A patient undergoes a laparoscopic partial nephrectomy for a 3.0 cm renal mass suspicious for renal cell carcinoma. What does "partial nephrectomy" mean?

- A. Removal of the entire kidney
- B. Removal of the kidney and surrounding tissue
- C. Removal of only the renal pelvis
- D. Removal of only the tumor and a margin of normal kidney tissue while preserving the remainder of the kidney

27. An obstetrician performs a cesarean delivery after a failed trial of labor. The same physician provided all antepartum care and will provide all postpartum care. Which code should be reported?

- A. The global vaginal delivery code with modifier 22
- B. The vaginal delivery-only code plus the cesarean delivery-only code
- C. The global cesarean delivery code after previous attempted vaginal delivery (59618 or appropriate code)
- D. The standard global cesarean delivery code (59510)

28. A surgeon performs a total abdominal hysterectomy on a patient with a uterine weight of 300 grams. The CPT code for abdominal hysterectomy differentiates based on uterine weight. What is the standard weight threshold?

- A. 200 grams
- B. 250 grams
- C. 500 grams
- D. 100 grams

29. A urologist performs a vasectomy in the office under local anesthesia. Which body system section contains the vasectomy code?

- A. Male genital system (reproductive)
- B. Urinary system
- C. Medicine section
- D. Integumentary system

30. A surgeon performs a right adrenalectomy for a functional adrenal adenoma. The adrenal glands are part of which body system?

- A. Digestive system
- B. Hemic and lymphatic system
- C. Urinary system
- D. Endocrine system

**60,000 Series — Nervous System, Eyes, and Ears (Questions 31–36)**

31. A neurosurgeon performs a cervical laminoplasty at C3-C6 for multilevel cervical spinal stenosis. How does a laminoplasty differ from a laminectomy?

- A. A laminoplasty removes the lamina completely; a laminectomy preserves the lamina
- B. A laminoplasty is performed only on the lumbar spine; a laminectomy is performed on any spinal level
- C. A laminoplasty hinges the lamina open to expand the spinal canal while preserving the bony structure; a laminectomy removes the lamina entirely
- D. There is no difference; the terms are interchangeable

32. An ophthalmologist performs laser photocoagulation of the retina for proliferative diabetic retinopathy. The treatment involves panretinal photocoagulation (PRP). What does this procedure accomplish?

- A. It removes the vitreous humor
- B. It destroys abnormal blood vessels and areas of retinal ischemia to prevent further neovascularization
- C. It implants an intraocular lens
- D. It repairs a retinal detachment using a scleral buckle

33. A pain management physician performs a stellate ganglion block on the right side for complex regional pain syndrome of the right upper extremity. In CPT, the stellate ganglion block is classified under which nerve block category?

- A. Sympathetic nerve block
- B. Somatic nerve block
- C. Peripheral nerve block
- D. Central neuraxial block

34. A patient undergoes revision of a cochlear implant — the internal receiver-stimulator is replaced due to device failure. The electrode array is left in place. How should this be coded?

- A. With the initial cochlear implant code (69930)
- B. With a complete system removal code plus a new implantation code
- C. With only the electrode replacement code
- D. With the cochlear implant revision/replacement code

35. A patient undergoes bilateral cataract surgery — left eye on Monday and right eye two weeks later. How should the second eye's cataract surgery be coded?

- A. With the cataract code and modifier 50
- B. With the cataract code and modifier 76
- C. With the cataract code and modifier 79 (if within the global period) plus modifier RT for the right eye
- D. With the cataract code and modifier 58

36. An otolaryngologist performs a tympanoplasty with mastoidectomy on the right ear for chronic otitis media with cholesteatoma. Which statement is correct about the coding?

- A. The mastoidectomy is included in the tympanoplasty with mastoidectomy code — a single combined code captures both components
- B. The tympanoplasty and mastoidectomy are always coded separately
- C. Only the mastoidectomy code is reported; the tympanoplasty is bundled
- D. Only the tympanoplasty code is reported; the mastoidectomy is bundled

### Evaluation and Management (Questions 37–42)

37. An established patient presents to the office for evaluation of a new headache. The physician performs a focused evaluation, reviews a recent CT scan report, and prescribes a new medication. The MDM involves one new problem (uncertain prognosis), limited data review, and low-risk management. What level of MDM is supported?

- A. Straightforward
- B. Low
- C. High
- D. Moderate

38. A hospitalist sees an inpatient on days 2 through 5 of the admission. How many subsequent hospital care codes should the hospitalist report for these four days?

- A. One code for the entire 4-day period
- B. Two codes — one for days 2-3 and one for days 4-5
- C. One code on the day with the highest MDM only
- D. Four codes — one subsequent hospital care code for each day

39. A physician provides telephone evaluation and management services to an established patient. The call lasts 20 minutes and involves medical decision-making for a new problem. Which code set covers this service?

- A. Standard office visit E/M codes (99202–99215)
- B. Critical care codes (99291–99292)
- C. Telephone E/M service codes (99441–99443)
- D. Chronic care management codes (99490–99491)

40. A patient is seen in the office by the physician. The physician spends 55 minutes of total time on the date of service. Using the time-based pathway, which established patient office visit code is supported?

- A. 99215 (established patient, 40 minutes)
- B. 99214 (established patient, 30 minutes)
- C. 99213 (established patient, 20 minutes)
- D. 99205 (new patient, 60 minutes)

41. A physician provides initial observation care for a patient placed in observation status following an emergency department evaluation by a different physician. Which E/M code set should the admitting physician use?

- A. ED visit codes (99281–99285)
- B. Initial observation care codes (99218–99220)
- C. Subsequent observation care codes (99224–99226)
- D. Initial hospital care codes (99221–99223)

42. Under the current E/M guidelines, prolonged services add-on code 99417 may be reported with which office visit codes?

- A. 99211–99215 for any level of established patient visit
- B. Only 99213 and 99214
- C. Any new or established patient office visit code
- D. 99205 (new patient) and 99215 (established patient) — the highest-level office visit codes

### Anesthesia (Questions 43–46)

43. An anesthesiologist provides general anesthesia for a vaginal hysterectomy on a 48-year-old patient with morbid obesity and obstructive sleep apnea (P3). Total anesthesia time is 120 minutes. The payer uses 15-minute time units and assigns 1 modifying unit for P3. Base units are 6. What is the total unit calculation?

- A. 15 units
- B. 14 units
- C. 16 units
- D. 13 units

44. A patient is classified as physical status P5. What does this indicate?

- A. A normal healthy patient
- B. A patient with severe systemic disease
- C. A moribund patient not expected to survive without the operation
- D. A patient with mild systemic disease

45. An anesthesiologist provides anesthesia for an emergency surgical procedure. Which qualifying circumstances add-on code should be reported?

- A. 99100
- B. 99140
- C. 99116
- D. 99135

46. An anesthesiologist medically directs two concurrent CRNA cases. The anesthesiologist does not personally perform any anesthesia service. Which modifier should the anesthesiologist append to each claim?

- A. Modifier AA
- B. Modifier QX
- C. Modifier QZ
- D. Modifier QY

**Radiology (Questions 47–52)**

47. A patient undergoes an MRI of the brain without contrast. A follow-up MRI with gadolinium contrast is performed during the same session because the initial images are inconclusive. How should this be coded?

- A. MRI brain without contrast plus a separate MRI brain with contrast code
- B. MRI brain with contrast only
- C. MRI brain without contrast followed by with contrast (single combination code)
- D. MRI brain without contrast only; the contrast study is bundled

48. A radiologist provides only the interpretation and written report for a CT of the abdomen and pelvis performed at an outpatient imaging center. The imaging center provided all equipment and technologists. Which modifier should the radiologist append?

- A. Modifier 26
- B. Modifier TC
- C. No modifier
- D. Modifier 59

49. A patient undergoes a bone scan (nuclear medicine) to evaluate for metastatic disease. The patient receives an IV injection of technetium-99m labeled phosphate compound. What type of imaging is a bone scan?

- A. Diagnostic radiology
- B. Nuclear medicine
- C. Ultrasound
- D. Magnetic resonance imaging

50. In radiation oncology, stereotactic radiosurgery (SRS) is used to treat a single brain metastasis. Despite the name, SRS is not actually surgery. What is SRS?

- A. Open surgical removal of a brain tumor
- B. Placement of radioactive seeds in the brain
- C. Implantation of a deep brain stimulator
- D. A single, highly focused, high-dose radiation treatment delivered non-invasively

51. A patient undergoes a diagnostic ultrasound of the thyroid gland to evaluate a thyroid nodule. The physician performs and interprets the study in the office using practice-owned equipment. Which modifier should be appended?

- A. No modifier; the global service is reported
- B. Modifier 26
- C. Modifier TC
- D. Modifier 59

52. A CT of the chest is performed with intravenous contrast and oral contrast. In CPT, how is this study coded regarding contrast designation?

- A. CT chest without contrast (oral contrast does not qualify)
- B. CT chest without contrast followed by with contrast
- C. CT chest with contrast (IV contrast was administered)
- D. Two separate CT codes, one for each type of contrast

**Pathology and Laboratory (Questions 53–58)**

53. A physician orders a basic metabolic panel (BMP) and separately orders a serum magnesium level on the same specimen. Magnesium is NOT a component of the BMP. How should these be reported?

- A. Only the BMP code; the magnesium is bundled
- B. Only the magnesium code; the BMP is included
- C. The BMP code with modifier 22 to indicate the additional test
- D. The BMP code plus the individual magnesium code

54. A pathologist examines a skin excision specimen. The specimen is a 1.5 cm elliptical excision of a pigmented lesion. At which level of surgical pathology is a skin excision typically classified?

- A. Level II (88302)
- B. Level IV (88305)
- C. Level III (88304)
- D. Level V (88307)

55. A laboratory receives an order for a hepatic function panel. The laboratory performs all seven component tests. The physician also orders a GGT (gamma-glutamyl transferase) on the same specimen. GGT is NOT included in the hepatic function panel. How should these be reported?

- A. The hepatic function panel code plus the individual GGT code

- B. Individual codes for all eight tests; the panel cannot be used with additional tests
- C. The hepatic function panel code only; the GGT is bundled
- D. The hepatic function panel code with modifier 59 plus the GGT code

56. A patient undergoes a fine needle aspiration (FNA) of a thyroid nodule under ultrasound guidance. The pathologist performs an immediate adequacy assessment of the aspirated material. How is the adequacy assessment coded?

- A. It is included in the FNA procedure code
- B. With a surgical pathology level code
- C. With the cytopathology evaluation of FNA code (88172) — a separate code from both the FNA procedure and the ultrasound guidance
- D. With a pathology consultation code

57. A presumptive drug screen is performed using a visual-read immunoassay test cup in the physician's office (direct optical observation). Which presumptive drug testing code should be reported?

- A. 80307 (instrument chemistry analyzer)
- B. 80306 (instrument-assisted direct optical observation)
- C. 80320 (definitive drug testing)
- D. 80305 (direct optical observation)

58. An immunohistochemistry panel is performed on a lung cancer specimen using ER, PR, TTF-1, and Napsin-A (4 antibodies). The first antibody is coded with 88342. How are the remaining 3 antibodies coded?

- A. 88342 × 3
- B. 88341 × 3 (add-on code for each additional antibody)
- C. With a single panel code for lung cancer IHC

D. 88341 × 1 covering all remaining antibodies

**Medicine (Questions 59–64)**

59. A patient receives the following IV services during a single outpatient encounter: 90 minutes of IV hydration with normal saline as the only IV service. How should the hydration be coded?

- A. 96360 × 1 (initial, 31 minutes to 1 hour) plus 96361 × 1 (each additional hour, for the remaining 30 minutes)
- B. 96360 × 2
- C. 96360 × 1 only; the additional 30 minutes does not meet the threshold
- D. 96365 × 1 (therapeutic infusion)

60. A physician performs an in-office nerve conduction study testing 7 nerves in the upper and lower extremities. Which NCS code should be reported?

- A. 95907 (1–2 nerves)
- B. 95908 (3–4 nerves)
- C. 95909 (5–6 nerves)
- D. 95910 (7–8 nerves)

61. A patient undergoes a sleep study at a sleep center. The polysomnography includes sleep staging with 4 additional parameters of sleep. Which code should be reported?

- A. 95808 (sleep staging with 1–3 additional parameters)
- B. 95800 (home sleep testing)
- C. 95810 (sleep staging with 4 or more additional parameters)
- D. 95811 (polysomnography with CPAP titration)

62. An established patient sees a psychiatrist for a 30-minute medication management visit plus 40 minutes of psychotherapy. How should the psychotherapy be coded?

- A. 90834 (standalone 45-minute psychotherapy)
- B. 90836 (45-minute add-on psychotherapy with E/M)
- C. 90837 (standalone 60-minute psychotherapy)
- D. 90832 (standalone 30-minute psychotherapy)

63. A patient receives one subcutaneous injection of a therapeutic medication in the physician's office. How should the injection administration be coded?

- A. 96372 (therapeutic/prophylactic/diagnostic injection, SC or IM)
- B. 96365 (IV infusion, initial hour)
- C. 90471 (immunization administration)
- D. 96374 (IV push)

64. A cardiologist performs a transesophageal echocardiogram (TEE) in the hospital. The hospital provides the equipment and sonographer. The cardiologist performs the probe placement, image acquisition, and interpretation. How should the cardiologist bill?

- A. With modifier TC
- B. With the TEE code and no modifier (global service)
- C. With the E/M code only
- D. With modifier 26

## Medical Terminology (Questions 65–68)

65. The suffix "-scopy" means which of the following?

- A. Surgical removal
- B. Incision into
- C. Visual examination
- D. Creating a new opening

66. Which combining form refers to the blood?

- A. Hem/o or hemat/o
- B. Neur/o
- C. Oste/o
- D. My/o

67. The prefix "retro-" means which of the following?

- A. Above
- B. Behind or backward
- C. Below
- D. Around

68. What does the medical term "tachycardia" mean?

- A. Slow heart rate
- B. Irregular heart rhythm

- C. Absent heart sounds
- D. Rapid heart rate

**Anatomy (Questions 69–72)**

69. The adrenal glands are located on top of which organs?

- A. Lungs
- B. Liver and spleen
- C. Kidneys
- D. Pancreas

70. Which blood vessel carries deoxygenated blood from the heart to the lungs?

- A. Pulmonary artery
- B. Pulmonary vein
- C. Aorta
- D. Superior vena cava

71. The meninges are the protective membranes surrounding which structures?

- A. The heart
- B. The lungs
- C. The abdominal organs
- D. The brain and spinal cord

72. Which of the following is the largest organ in the human body?

- A. Heart
- B. Skin
- C. Liver
- D. Brain

**ICD-10-CM / Diagnosis Coding (Questions 73–77)**

73. A patient presents with left lower quadrant abdominal pain. After evaluation, the physician documents "left lower quadrant abdominal pain, etiology undetermined." In the outpatient setting, which code should be reported?

- A. R10.32 (Left lower quadrant pain)
- B. K35.80 (Unspecified acute appendicitis)
- C. R10.9 (Unspecified abdominal pain)
- D. K57.92 (Diverticulitis)

74. A patient has a confirmed diagnosis of major depressive disorder, recurrent episode, moderate severity. Which ICD-10-CM chapter contains this diagnosis?

- A. Chapter 6 (Diseases of the nervous system)
- B. Chapter 18 (Symptoms, signs, and abnormal findings)
- C. Chapter 5 (Mental, behavioral, and neurodevelopmental disorders)
- D. Chapter 21 (Factors influencing health status)

75. In ICD-10-CM, laterality is captured in many codes. A patient has a displaced fracture of the right femoral neck. The laterality is specified in which position of the ICD-10-CM code?

- A. The first character
- B. The third character
- C. The 7th character
- D. The fifth or sixth character

76. A patient is seen for aftercare of a healing right tibial fracture. The fracture is in the normal healing phase. Which 7th character should be used?

- A. A (initial encounter)
- B. D (subsequent encounter)
- C. S (sequela)
- D. G (subsequent encounter for fracture with delayed healing)

77. A coder is assigning diagnosis codes for a patient with chronic kidney disease stage 3 and documented hypertension. Under ICD-10-CM guidelines, what relationship is assumed between these two conditions?

- A. A causal relationship is presumed; a code from I12 (hypertensive chronic kidney disease) is reported
- B. No relationship is assumed; both are coded independently
- C. The CKD is assumed to be secondary to the hypertension only if the physician documents "due to"
- D. Only the hypertension code is reported; the CKD is included

## HCPCS Level II (Questions 78–80)

78. A patient is fitted with a knee-ankle-foot orthosis (KAFO). Which HCPCS Level II code range covers orthotic devices?

- A. E0100–E9999
- B. J0000–J9999
- C. A0000–A0999
- D. L0000–L9999

79. A Medicare beneficiary receives a colonoscopy as a preventive screening service. Which modifier identifies the service as a covered preventive service?

- A. Modifier GA
- B. Modifier GZ
- C. Modifier 33
- D. Modifier QW

80. A physician administers 125 mg of methylprednisolone sodium succinate (Solu-Medrol) by IV push. The HCPCS J-code for this drug specifies "up to 125 mg" per unit. How many units should be reported?

- A. 2 units
- B. 1 unit
- C. 5 units
- D. 125 units

### Coding Guidelines (Questions 81–87)

81. A patient undergoes a surgical procedure that is documented as involving significantly more work than typically required for the procedure. No other specific modifier applies. Which modifier should the surgeon append?

- A. Modifier 22 (increased procedural services)
- B. Modifier 52 (reduced services)
- C. Modifier 51 (multiple procedures)
- D. Modifier 59 (distinct procedural service)

82. A surgeon performs a diagnostic laparoscopy and determines that a laparoscopic surgical procedure is needed. The surgical procedure is performed during the same session. How should the diagnostic laparoscopy be coded?

- A. As a separate code with modifier 59
- B. As a separate code with modifier 51
- C. As a separate code with modifier 25
- D. It is not reported separately; it is bundled into the surgical laparoscopy code

83. Which of the following correctly defines a "global surgical package" under Medicare?

- A. Only the surgical procedure itself, with no pre- or post-operative services included
- B. Only intraoperative services and the day of surgery
- C. The preoperative, intraoperative, and postoperative services included in a single payment for a surgical procedure
- D. All services provided by the surgeon for the patient's lifetime

84. A patient requires two separate and unrelated E/M services on the same date from the same physician — one for a pre-existing condition and one for a new acute problem. How should the second E/M be coded?

A. With modifier 76

B. With modifier 25 on the E/M associated with a procedure, or if no procedure, the two evaluations are combined into a single code reflecting the total work

C. With modifier 57

D. With modifier 59

85. Under the NCCI, modifier XS specifically indicates which of the following?

A. The procedure was performed on a separate organ or anatomical structure

B. The procedure was performed during a separate encounter

C. The procedure was performed by a separate practitioner

D. The procedure does not overlap with the primary service

86. A CPT code has a global period of XXX. What does this mean?

A. The code has a 90-day global period

B. The code has a 10-day global period

C. The code has a 0-day global period

D. The global period concept does not apply to this code

87. In the CPT index, when a code range is listed (e.g., "Appendectomy... 44950–44960"), what should the coder do next?

A. Report the first code in the range

- B. Report the last code in the range
- C. Look up each code in the tabular section to verify the correct code based on the specific procedure documented
- D. Report the code in the middle of the range

**Compliance and Regulatory (Questions 88–90)**

88. Under Medicare, which entity is responsible for processing and paying Medicare claims in a specific geographic jurisdiction?

- A. The Centers for Medicare and Medicaid Services (CMS) directly
- B. Medicare Administrative Contractors (MACs)
- C. The American Medical Association (AMA)
- D. The Office of Inspector General (OIG)

89. A medical practice performs an internal coding audit and discovers a pattern of incorrect modifier usage resulting in overpayments. Under an effective compliance program, what action should be taken regarding the overpayments?

- A. The overpayments should be refunded to the affected payers and corrective action should be implemented
- B. The overpayments should be retained until an external audit identifies them
- C. The overpayments are not the practice's responsibility; the payer should have caught the error
- D. The overpayments should be documented internally but no refund is necessary

90. The Medicare Physician Fee Schedule uses which payment system to calculate physician reimbursement?

- A. Diagnosis-Related Groups (DRGs)

- B. Ambulatory Payment Classifications (APCs)
- C. Chargemaster-based pricing
- D. Resource-Based Relative Value Scale (RBRVS)

Cases — Integrated Coding Scenarios (Questions 91–100)

**Case 1 (Questions 91–92):**

**A 60-year-old patient undergoes a right total knee arthroplasty for severe osteoarthritis. The orthopedic surgeon provides the preoperative evaluation, performs the surgery, and will provide all postoperative care.**

91. Which global package modifier arrangement applies when the surgeon provides all components of care?

- A. Modifier 54 (surgical care only)
- B. Modifier 55 (postoperative management only)
- C. No modifier; the surgeon reports the complete global package
- D. Modifier 56 (preoperative management only)

92. The patient's primary diagnosis is severe primary osteoarthritis of the right knee. Which ICD-10-CM code should be reported?

- A. M17.11 (Primary osteoarthritis, right knee)
- B. M17.0 (Bilateral primary osteoarthritis of knee)
- C. M25.561 (Pain in right knee)
- D. Z96.651 (Presence of right artificial knee joint)

**Case 2 (Questions 93–94):**

**A 55-year-old patient receives IV chemotherapy in the outpatient infusion center. The treatment consists of a 2-hour IV infusion of carboplatin (chemotherapy agent) followed by a 1-hour IV infusion of paclitaxel (chemotherapy agent) through the same IV line sequentially.**

93. How should the carboplatin infusion be coded?

- A. With the initial chemotherapy infusion code (96413) for the first hour plus the additional hour add-on code (96415) for the second hour
- B. With the initial chemotherapy infusion code (96413) × 2
- C. With the therapeutic drug infusion code (96365) for 2 hours
- D. With the hydration code (96360) for 2 hours

94. How should the paclitaxel infusion be coded?

- A. With a second initial chemotherapy infusion code (96413)
- B. With the therapeutic drug infusion code (96365)
- C. With the hydration add-on code (96361)
- D. With the sequential chemotherapy infusion add-on code (96417) for infusion of a new substance

**Case 3 (Questions 95–96):**

**A pain management physician performs a left L4-L5 transforaminal epidural steroid injection under fluoroscopic guidance (imaging included in the injection code) and a separate left L3 and L4 medial branch nerve block during the same session.**

95. How should the fluoroscopic guidance for the transforaminal injection be coded?

- A. With a separate fluoroscopy code and modifier 59
- B. With a separate fluoroscopy code and modifier 26

- C. It is not reported separately; it is included in the injection code
- D. With a separate fluoroscopy code and modifier TC

96. The medial branch nerve blocks at L3 and L4 are distinct services from the transforaminal injection. How should the nerve blocks be coded?

- A. With the appropriate nerve block codes for L3 and L4 medial branches, using modifiers as needed to indicate distinct services from the transforaminal injection
- B. They cannot be reported on the same date as a transforaminal injection
- C. With only one nerve block code; the second level is bundled
- D. With the transforaminal injection code reported twice

**Case 4 (Questions 97–98):**

**A 7-year-old patient presents for a well-child visit. The pediatrician performs a comprehensive preventive medicine examination and administers two vaccine injections: MMR (measles, mumps, rubella — 3 antigen components) and varicella (1 antigen component). The physician provides face-to-face counseling about each vaccine.**

97. How many total vaccine administration codes should be reported for this encounter?

- A. Two codes only: 90460 × 2 (one for each injection)
- B. Four codes: 90471 × 1 plus 90472 × 1 (adult codes for two injections)
- C. One code: 90460 × 1 for all vaccines combined
- D. Six codes: 90460 × 2 (first component of each vaccine) plus 90461 × 4 (additional components)

98. The MMR vaccine has three antigen components (measles, mumps, rubella). How is the MMR administration specifically coded using pediatric codes?

- A. 90471 × 1 (one injection)

- B. 90460 × 1 plus 90461 × 2 (first component plus two additional components)
- C. 90460 × 3 (one for each antigen)
- D. 90472 × 3

**Case 5 (Questions 99–100):**

**A surgeon performs excision of a 1.0 cm benign nevus from the patient's back with 0.3 cm margins. The wound is closed with simple sutures.**

99. What is the excised diameter for code selection?

- A. 1.0 cm
- B. 1.3 cm
- C. 1.6 cm
- D. 2.0 cm

100. The wound is closed with simple sutures. Should the simple repair be coded separately?

- A. No; simple closure is included in the excision code and is not reported separately
- B. Yes; simple repair is always coded separately from excision
- C. Yes, with modifier 59 to indicate a distinct service
- D. Yes, with modifier 51 to indicate multiple procedures

# SIMULATION EXAM 5 — ANSWER

## KEY WITH EXPLANATIONS

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### 10,000 Series — Integumentary System

1. **A. 4.5 cm** The excised diameter is calculated as lesion diameter plus margins on both sides:  $2.5 \text{ cm} + (1.0 \text{ cm} \times 2) = 4.5 \text{ cm}$ . Wide margins are typical for malignant squamous cell carcinoma of the scalp due to the aggressive nature of the cancer. This total excised diameter determines the correct code within the malignant excision range for the scalp anatomical grouping.
2. **C. One simple repair code for 5.0 cm and one intermediate repair code for 4.0 cm** Wounds of different repair classifications cannot be combined. The two simple repairs on the forearms ( $3.0 + 2.0 = 5.0 \text{ cm}$ ) are in the same anatomical grouping and same classification, so they are added together into one simple repair code. The intermediate repair on the chin (4.0 cm) is a different classification and is reported separately with its own code.
3. **B. 17110 × 1, 17111 × 1** For destruction of benign lesions other than premalignant (such as warts and other benign skin lesions), code 17110 covers the first lesion and code 17111 covers the second through fourteenth additional lesions as a flat code. For 3 lesions: 17110 × 1 (first lesion) plus 17111 × 1 (lesions 2 and 3 — the code covers all additional lesions from 2 through 14 in a single unit).
4. **D. It is not coded separately; the excision is included in the adjacent tissue transfer code** Adjacent tissue transfer codes include the excision of the lesion that created the defect. The excision is considered an integral part of the flap procedure and is not reported separately. This bundling rule is specific to adjacent tissue transfers — it differs from free skin grafts, where the excision may be coded separately.
5. **A. Percutaneous needle biopsy** A needle biopsy performed through the skin without an open incision is classified as a percutaneous needle biopsy. This is a minimally invasive technique using a needle to obtain tissue for pathological examination. An incisional biopsy involves an open incision to remove a portion of the lesion. An excisional biopsy removes the entire lesion. A punch biopsy uses a circular cutting instrument on the skin surface.
6. **C. By the size of the recipient site (defect) on the chest** Skin graft codes are measured by the square centimeter area of the recipient site (the defect being covered), not the donor site. The 40 sq cm burn wound on the chest determines the code. The donor site (left thigh) and its size do not affect the graft code selection. A separate donor site code may be applicable depending on the complexity of the harvest.

## 20,000 Series — Musculoskeletal System

7. **B. Both codes — the meniscectomy and the chondroplasty — each as a separate surgical arthroscopy procedure with appropriate modifiers per NCCI guidelines** When two distinct surgical arthroscopic procedures are performed on the same knee during the same session and NCCI edits allow both to be reported, each procedure is coded separately with appropriate modifiers. The diagnostic arthroscopy is bundled into the surgical codes. The coder must verify current NCCI edits to confirm both are separately reportable.
8. **D. Placement of fixation devices (pins, screws) through the skin without opening the fracture site** Percutaneous skeletal fixation involves inserting fixation devices (pins, screws, wires) through the skin into the bone without surgically exposing the fracture site. The fracture fragments are not directly visualized. This is a middle ground between closed treatment (no fixation devices) and open treatment (surgical exposure of the fracture site).
9. **C. Separate codes for the laminectomy/discectomy and the interbody fusion** When a laminectomy with discectomy and a spinal fusion are performed at the same level during the same session, both are reported with separate codes. The decompression and the fusion are distinct surgical procedures addressing different objectives — the laminectomy removes the compressive tissue, and the fusion stabilizes the spine. Instrumentation, if used, is also coded separately.
10. **A. Musculoskeletal system (20,000 series)** Joint injection codes (20600–20611) are located in the musculoskeletal system section of CPT. These codes cover injections into small, intermediate, and large joints and are differentiated by joint size and whether ultrasound guidance is used. The code covers the injection procedure itself; the drug injected is coded separately with the appropriate HCPCS J-code.
11. **B. It is not reported separately; it is bundled per NCCI edits** When NCCI edits indicate that subacromial decompression is bundled into the rotator cuff repair, the decompression is not reported separately — even if it has its own CPT code. The coder must follow the current NCCI edits. Appending modifier 59 to bypass the edit without clinical justification for a truly distinct service would constitute a compliance violation.
12. **D. In a closed fracture, the skin is intact; in an open fracture, the bone penetrates through the skin** A closed fracture means the skin overlying the fracture is intact — there is no wound communicating with the fracture. An open (compound) fracture means the bone has penetrated through the skin, or there is a wound that communicates with the fracture site. This is a fracture type classification — not a treatment method. The fracture type and the treatment method are independent concepts in CPT.

## 30,000 Series — Respiratory, Cardiovascular, Hemic, and Lymphatic

13. **C. The angioplasty is included in the coronary stent placement code and is not reported separately** When a coronary stent is placed, the angioplasty (balloon dilation) performed to

prepare the vessel for stent deployment is included in the stent placement code. The angioplasty is considered an integral part of the stent procedure and is not reported separately. Reporting both the angioplasty and the stent code for the same vessel constitutes unbundling.

14. **A. Three (the right lung has three lobes)** The right lung has three lobes — upper (superior), middle, and lower (inferior). A right pneumonectomy removes the entire right lung, which means all three lobes are removed. The left lung has only two lobes. This anatomical distinction is important for coding lung resection procedures.
15. **B. A generator replacement code only** When the ICD pulse generator is removed and a new generator is implanted with the existing leads left in place, only the generator replacement code is reported. No lead codes are needed because the leads were not inserted, repositioned, or removed. Component-based coding means each component is coded only when it is directly manipulated during the procedure.
16. **D. Whether one lung or both lungs are transplanted** Lung transplant codes distinguish between single lung transplant and bilateral (double) lung transplant. The number of lungs transplanted determines the code. A bilateral sequential lung transplant involves transplanting both lungs, which is a more complex and extensive procedure than a single lung transplant.
17. **C. It is not reported separately; it is included in the EBUS-guided biopsy code** Diagnostic bronchoscopy is bundled into the EBUS-guided transbronchial needle aspiration code when both are performed during the same session. The diagnostic examination is an integral part of the surgical bronchoscopic procedure. Only the EBUS-guided biopsy code is reported.
18. **A. An AV graft uses a synthetic conduit to connect the artery and vein; a direct AVF connects the patient's own artery and vein without synthetic material** An arteriovenous graft uses a synthetic tube (typically PTFE/Gore-Tex) to bridge the artery and vein. A direct arteriovenous fistula surgically connects the patient's own artery directly to a vein without any synthetic material. AVFs are preferred over grafts because they have lower infection and thrombosis rates. Both are used for hemodialysis access.

#### **40,000 Series — Digestive System**

19. **D. It is not reported separately; it is included in the surgical colonoscopy code** When a surgical procedure (ablation of vascular ectasia) is performed during a colonoscopy, the diagnostic examination is bundled into the surgical code. Only the surgical colonoscopy code for ablation is reported. The diagnostic colonoscopy is included and is not reported as an additional code.
20. **B. To create an opening in the stomach through the abdominal wall for feeding access** A gastrostomy creates an opening (stoma) in the stomach through the abdominal wall, allowing direct access for enteral feeding. A G-tube is placed through this opening for long-term nutritional support in patients who cannot eat by mouth. This is different from a gastrectomy (stomach removal), fundoplication (anti-reflux wrap), or colostomy (colon opening).

21. **A. It is not reported separately; it is included in the surgical EGD codes** When surgical procedures (Botox injection and dilation) are performed during an EGD, the diagnostic examination is bundled into the surgical codes. Both the Botox injection and the dilation are separately reportable surgical EGD procedures, each with their own code. The diagnostic EGD is not reported as an additional code.
22. **C. With a colonoscopy code and modifier 52 (reduced services) or modifier 53 (discontinued procedure)** When a colonoscopy is attempted but the cecum is not reached due to inadequate preparation, the procedure is still coded as a colonoscopy — not a sigmoidoscopy — because the intent was to perform a complete colonoscopy. Modifier 52 or 53 is appended to indicate the examination was incomplete. The intent of the procedure, not the extent reached, determines the code range.
23. **D. Diaphragmatic/hiatal hernia** A paraesophageal hiatal hernia involves herniation of abdominal contents through the esophageal hiatus of the diaphragm into the thoracic cavity. This is a type of diaphragmatic hernia. CPT codes for hiatal hernia repair are found in the digestive system section and are distinct from inguinal, femoral, and umbilical hernia codes.
24. **B. The incidental appendectomy code (44955)** When an appendix is removed incidentally during an open abdominal surgery for another primary condition and the appendix shows no pathology, the incidental appendectomy code (44955) is reported. This code has a lower RVU than the standard appendectomy code (44950) because the appendix removal was not the reason for the surgery and adds minimal additional work to the primary procedure.

#### **50,000 Series — Urinary, Reproductive, and Endocrine**

25. **A. The cystoscopy; no additional procedures beyond the cystoscopy are automatically bundled** The diagnostic cystoscopy is bundled into the surgical cystoscopy code for ureteral stent insertion. However, the question asks what additional procedure is bundled into the stent insertion code beyond the cystoscopy. The stent insertion code covers the cystoscopy and the stent placement. Other procedures (ureteroscopy, retrograde pyelography, ureteral dilation) performed during the same session may or may not be separately reportable depending on NCCI edits.
26. **D. Removal of only the tumor and a margin of normal kidney tissue while preserving the remainder of the kidney** A partial nephrectomy (nephron-sparing surgery) removes only the tumor and a small margin of surrounding normal kidney tissue, preserving the remainder of the functioning kidney. This is the preferred approach for small renal masses (typically  $\leq 4$  cm) when technically feasible. A radical nephrectomy removes the entire kidney along with surrounding structures.
27. **C. The global cesarean delivery code after previous attempted vaginal delivery (59618 or appropriate code)** CPT provides specific global codes for cesarean delivery after a failed trial of labor (attempted vaginal delivery). This code captures the complete obstetric package — antepartum care, the attempted vaginal delivery, the cesarean delivery, and postpartum care — in

a single code. The standard global cesarean code (59510) would not accurately reflect the attempted vaginal delivery.

28. **B. 250 grams** CPT differentiates abdominal hysterectomy codes based on whether the uterine weight is 250 grams or less versus greater than 250 grams. A 300-gram uterus exceeds the 250-gram threshold, requiring the code for the larger uterine weight. The weight affects the code because larger uteri require more surgical work, including larger incisions and more extensive dissection.
29. **A. Male genital system (reproductive)** The vasectomy code is located in the male genital system subsection of the CPT surgery section. The vas deferens is part of the male reproductive system, and procedures on the vas deferens — including vasectomy and vasovasostomy (vasectomy reversal) — are coded under the male genital system, not the urinary system.
30. **D. Endocrine system** The adrenal glands are part of the endocrine system. They sit atop each kidney and produce hormones including cortisol, aldosterone, and catecholamines (epinephrine and norepinephrine). Adrenalectomy codes are found in the endocrine system subsection of CPT, alongside thyroid and parathyroid procedures.

#### **60,000 Series — Nervous System, Eyes, and Ears**

31. **C. A laminoplasty hinges the lamina open to expand the spinal canal while preserving the bony structure; a laminectomy removes the lamina entirely** Laminoplasty is a canal-expanding procedure that creates a hinge on one side of the lamina and opens it like a door, widening the spinal canal while preserving the bony posterior elements. Laminectomy completely removes the lamina, permanently eliminating the posterior bony coverage of the spinal canal. Laminoplasty is designed to maintain spinal stability while providing decompression.
32. **B. It destroys abnormal blood vessels and areas of retinal ischemia to prevent further neovascularization** Panretinal photocoagulation (PRP) applies laser burns to the peripheral retina, destroying areas of retinal ischemia that produce vascular endothelial growth factor (VEGF). By eliminating the ischemic stimulus, PRP reduces the drive for abnormal new blood vessel growth (neovascularization) that causes vitreous hemorrhage and tractional retinal detachment in proliferative diabetic retinopathy.
33. **A. Sympathetic nerve block** The stellate ganglion is a sympathetic nervous system structure located in the lower cervical/upper thoracic region. A stellate ganglion block targets the sympathetic nervous system to treat conditions mediated by sympathetic dysfunction, such as complex regional pain syndrome (CRPS). Sympathetic nerve blocks are classified separately from somatic peripheral nerve blocks in CPT.
34. **D. With the cochlear implant revision/replacement code** When a cochlear implant internal component is replaced due to device failure, the revision/replacement code is used — not the initial implantation code. The revision code reflects the different surgical complexity of replacing an

existing device compared to initial implantation. Since only the receiver-stimulator is replaced and the electrode array is left in place, the coding reflects the specific component revised.

35. **C. With the cataract code and modifier 79 (if within the global period) plus modifier RT for the right eye** When the second eye's cataract surgery is performed during the global period of the first eye's surgery, modifier 79 (unrelated procedure during the postoperative period) is appended because the second eye is a separate anatomical site. Modifier RT indicates the right eye. Modifier 50 would indicate bilateral surgery in the same session. Modifier 76 indicates a repeat procedure on the same eye.
36. **A. The mastoidectomy is included in the tympanoplasty with mastoidectomy code — a single combined code captures both components** CPT provides combined codes for tympanoplasty with mastoidectomy (69641–69646) that capture both the tympanic membrane repair and the mastoid surgery in a single code. The coder does not report separate tympanoplasty and mastoidectomy codes when a combined code exists. The combined code reflects the clinical reality that these procedures are frequently performed together.

## Evaluation and Management

37. **B. Low** A new problem with uncertain prognosis is a low-level problem. Limited data review (one external CT report) is low-level data. A new prescription medication is low-level risk. Two of three MDM elements meet the low threshold, supporting low-level MDM and code 99213 for an established patient. Moderate MDM would require more complex problems, data, or risk.
38. **D. Four codes — one subsequent hospital care code for each day** Subsequent hospital care codes (99231–99233) are reported once per day for each day the physician sees the patient. Four days of visits require four subsequent care codes — one for each day. The code level may vary from day to day based on the MDM complexity of each individual encounter.
39. **C. Telephone E/M service codes (99441–99443)** Telephone E/M service codes (99441–99443) cover medical management provided via telephone to an established patient. These codes are time-based (5–10 minutes, 11–20 minutes, 21–30 minutes). A 20-minute call falls in the 11–20 minute range (99442). Standard office visit codes require a face-to-face encounter and would not apply to a telephone-only service.
40. **A. 99215 (established patient, 40 minutes)** Under the time-based pathway, 99215 requires a minimum of 40 minutes of total time. The physician spent 55 minutes, which exceeds the 40-minute threshold for 99215. The additional 15 minutes beyond the threshold may qualify for prolonged services add-on code 99417 if the payer recognizes it. The base code is 99215.
41. **B. Initial observation care codes (99218–99220)** When a physician admits a patient to observation status, the initial observation care codes (99218–99220) are used. These codes are selected based on MDM complexity, similar to other E/M codes. If the patient had been admitted

to inpatient status, the initial hospital care codes would be used instead. The ED physician's evaluation was provided by a different physician and is billed separately.

42. **D. 99205 (new patient) and 99215 (established patient) — the highest-level office visit codes** Prolonged services add-on code 99417 may only be reported with the highest-level office visit codes — 99205 for new patients and 99215 for established patients. It cannot be used with lower-level codes. Each unit of 99417 represents 15 minutes of additional time beyond the time threshold for the base code.

## Anesthesia

43. **A. 15 units** Base units (6) + Time units (120 minutes ÷ 15 minutes/unit = 8.0) + Modifying units (P3 = 1) = 15.0 total units. The calculation: 6 + 8 + 1 = 15. P3 (morbid obesity and obstructive sleep apnea representing severe systemic disease) adds 1 modifying unit.
44. **C. A moribund patient not expected to survive without the operation** Physical status P5 indicates a moribund patient who is not expected to survive without the surgical procedure. This is the most critical classification before P6 (declared brain-dead organ donor). Examples include a patient with a ruptured abdominal aortic aneurysm with profound shock or massive trauma with ongoing hemorrhage. P1 is normal, P2 is mild disease, P3 is severe disease, P4 is constant threat to life.
45. **B. 99140** Qualifying circumstances code 99140 covers anesthesia provided during emergency conditions. An emergency procedure is defined by CPT as one in which a delay in treatment would lead to a significant increase in the threat to life or body part. This add-on code is reported with the primary anesthesia code to capture the additional complexity and risk of emergency anesthesia.
46. **D. Modifier QY** Modifier QY indicates medical direction of a CRNA by an anesthesiologist. When the anesthesiologist medically directs one to four concurrent CRNA cases without personally performing any anesthesia, modifier QY is appended to the anesthesiologist's claims. Modifier AA indicates personal performance by the anesthesiologist. Modifier QX is appended to the CRNA's claims. Modifier QZ indicates a CRNA without medical direction.

## Radiology

47. **C. MRI brain without contrast followed by with contrast (single combination code)** When an MRI is performed first without contrast and then repeated with contrast during the same session, a single combination code is reported — "without contrast followed by with contrast." This combination code captures the complete dual-phase study. Two separate codes are not reported for the two phases.
48. **A. Modifier 26** When a radiologist provides only the interpretation and written report (professional component) for an imaging study performed at an outside facility, modifier 26 is appended. The imaging center bills the technical component with modifier TC. Each entity bills only for the component it provided.

49. **B. Nuclear medicine** A bone scan is a nuclear medicine procedure. It uses a radioactive tracer (technetium-99m labeled phosphate compound) injected intravenously that accumulates in areas of increased bone metabolism. A gamma camera detects the radiation emitted by the tracer to create images. Nuclear medicine differs from diagnostic radiology because the radiation source is inside the patient, not external.
50. **D. A single, highly focused, high-dose radiation treatment delivered non-invasively** Stereotactic radiosurgery (SRS) delivers a single, precisely focused, high-dose radiation treatment to a small target — typically an intracranial lesion. Despite its name containing "surgery," SRS is entirely non-invasive — no incision is made. The radiation beams converge on the target from multiple angles, delivering a destructive dose to the tumor while minimizing exposure to surrounding normal tissue.
51. **A. No modifier; the global service is reported** When a physician performs and interprets an ultrasound study in their own office using practice-owned equipment, both the technical and professional components are provided by the same entity. The global code is reported without any modifier. Modifier 26 would only be used if the physician provided only the interpretation at an outside facility.
52. **C. CT chest with contrast (IV contrast was administered)** In CPT, "with contrast" means intravenous or injected contrast. When IV contrast is administered — regardless of whether oral contrast is also given — the study is coded as "with contrast." The oral contrast does not change the coding. The IV contrast administration is the determining factor for the contrast designation.

### **Pathology and Laboratory**

53. **D. The BMP code plus the individual magnesium code** Magnesium is not a component of the BMP. When all BMP components are performed plus an additional test not included in the panel, the BMP panel code is reported plus the individual code for the additional test (magnesium). The panel code captures the bundled components, and the individual code captures the separate analyte.
54. **B. Level IV (88305)** A skin excision specimen is classified at Level IV surgical pathology (88305). Level IV is the most commonly reported level and covers most diagnostic biopsies and excision specimens. The pathologist must evaluate the tissue architecture, margins, and cellular characteristics to determine whether the lesion is benign, premalignant, or malignant.
55. **A. The hepatic function panel code plus the individual GGT code** When all components of a panel are performed plus an additional test not included in the panel, the panel code is reported plus the individual code for the additional test. GGT is not a component of the hepatic function panel, so it is reported separately. The panel code captures the seven bundled components, and the GGT code captures the additional analyte.
56. **C. With the cytopathology evaluation of FNA code (88172) — a separate code from both the FNA procedure and the ultrasound guidance** The immediate adequacy assessment of FNA

material is coded with the cytopathology evaluation code (88172). This is a separate service from the FNA procedure code (which covers the needle aspiration) and the ultrasound guidance code (which covers the imaging). Three distinct services are reported: the FNA procedure, the ultrasound guidance, and the cytopathology adequacy assessment.

57. **D. 80305 (direct optical observation)** A visual-read immunoassay test cup that is read by direct optical observation (the technician visually reads the test results) is coded with 80305 (presumptive drug testing by direct optical observation). Code 80306 is for instrument-assisted reading. Code 80307 is for automated instrument chemistry analyzers. The method of reading determines the code.
58. **B. 88341 × 3 (add-on code for each additional antibody)** Immunohistochemistry is coded per antibody. Code 88342 is reported for the first antibody (ER), and code 88341 (add-on) is reported for each additional antibody. With 4 total antibodies: 88342 × 1 (first) plus 88341 × 3 (PR, TTF-1, Napsin-A). There is no panel code for IHC — each antibody is counted individually.

## Medicine

59. **A. 96360 × 1 (initial, 31 minutes to 1 hour) plus 96361 × 1 (each additional hour, for the remaining 30 minutes)** Hydration coding: 96360 covers the initial 31 minutes to 1 hour. 96361 covers each additional hour beyond the first. For 90 minutes: 96360 × 1 (first hour) plus 96361 × 1 (the additional 30 minutes exceeds the midpoint of the next hour, qualifying for an additional unit). Since hydration is the only IV service, it is appropriately reported as the initial service.
60. **D. 95910 (7–8 nerves)** Nerve conduction study codes are based on the total number of nerves tested during the encounter. Testing 7 nerves falls in the 7–8 nerve range, coded with 95910. A single code is reported for the total nerve count — not one code per nerve. The physician's interpretation and report are included in the NCS code.
61. **C. 95810 (sleep staging with 4 or more additional parameters)** Polysomnography with sleep staging and 4 or more additional parameters is coded with 95810. This is the standard comprehensive PSG used for diagnosing obstructive sleep apnea and other sleep disorders. Code 95808 covers studies with only 1–3 additional parameters. Code 95811 includes CPAP/BiPAP titration.
62. **B. 90836 (45-minute add-on psychotherapy with E/M)** When a psychiatrist provides both an E/M service (medication management) and psychotherapy during the same encounter, the add-on psychotherapy codes are used. The 40 minutes of psychotherapy falls in the 38–52 minute range, corresponding to add-on code 90836. The E/M code is reported first, and the add-on psychotherapy code is reported second. Standalone psychotherapy codes are not used when psychotherapy accompanies an E/M service.
63. **A. 96372 (therapeutic/prophylactic/diagnostic injection, SC or IM)** Code 96372 covers therapeutic, prophylactic, or diagnostic injections administered subcutaneously or intramuscularly.

This code is reported for each injection. The drug product is coded separately with the appropriate HCPCS J-code. Code 96372 is distinct from vaccine administration codes (90471) and IV push codes (96374).

64. **D. With modifier 26** The question states the cardiologist performs the probe placement, image acquisition, and interpretation. However, since the hospital provides the equipment and sonographer (technical component), the billing depends on the specific arrangement. Given that the hospital provides the equipment and staff, the standard approach is for the cardiologist to bill modifier 26 for the professional component and the hospital to bill modifier TC. The cardiologist's probe placement and interpretation constitute the professional component.

### Medical Terminology

65. **C. Visual examination** The suffix "-scopy" means visual examination using an instrument (scope). Common examples include colonoscopy (visual examination of the colon), bronchoscopy (visual examination of the bronchi), and arthroscopy (visual examination of a joint). "-Ectomy" means surgical removal, "-otomy" means incision into, and "-ostomy" means creating a new opening.
66. **A. Hem/o or hemat/o** The combining forms "hem/o" and "hemat/o" refer to blood. Common terms include hematoma (collection of blood), hematology (study of blood), hemorrhage (bleeding), and hematuria (blood in the urine). "Neur/o" refers to nerve, "oste/o" refers to bone, and "my/o" refers to muscle.
67. **B. Behind or backward** The prefix "retro-" means behind, backward, or in back of. Common terms include retroperitoneal (behind the peritoneum), retrograde (moving backward), and retroflexion (bending backward). "Supra-" means above, "sub-" means below, and "peri-" means around.
68. **D. Rapid heart rate** Tachycardia means rapid heart rate, from the prefix "tachy-" (fast, rapid) and the root "cardi/o" (heart). Tachycardia is typically defined as a heart rate exceeding 100 beats per minute. Bradycardia means slow heart rate. An arrhythmia is an irregular heart rhythm. The prefix "tachy-" is the opposite of "brady-" (slow).

### Anatomy

69. **C. Kidneys** The adrenal (suprarenal) glands are small triangular glands located on top of each kidney. "Adrenal" literally means "near the kidney" (ad- = near, renal = kidney). Despite their location atop the kidneys, the adrenal glands are part of the endocrine system, not the urinary system. They produce hormones including cortisol, aldosterone, and epinephrine.
70. **A. Pulmonary artery** The pulmonary artery is the only artery in the body that carries deoxygenated blood. It carries blood from the right ventricle to the lungs for oxygenation. The pulmonary veins return oxygenated blood from the lungs to the left atrium. The aorta carries oxygenated blood from the left ventricle to the body. The vena cava returns deoxygenated blood from the body to the right atrium.

71. **D. The brain and spinal cord** The meninges are three protective membranes that surround and protect the brain and spinal cord. From outermost to innermost: the dura mater (tough outer layer), the arachnoid mater (web-like middle layer), and the pia mater (delicate inner layer that adheres to the surface of the brain and spinal cord). Meningitis is inflammation of these membranes.
72. **B. Skin** The skin (integument) is the largest organ in the human body, covering approximately 20 square feet in an average adult. It serves as a protective barrier against infection, regulates body temperature, provides sensory reception, and prevents fluid loss. The liver is the largest internal organ. The skin's status as the largest organ is the basis for the integumentary system being the first surgical subsection in CPT.

### ICD-10-CM / Diagnosis Coding

73. **A. R10.32 (Left lower quadrant pain)** When the physician documents abdominal pain in a specific location without confirming an underlying cause ("etiology undetermined"), the symptom code for the specific location is reported. R10.32 captures left lower quadrant pain. The unspecified code R10.9 would be less specific and should not be used when location is documented. Conditions like appendicitis or diverticulitis are not confirmed and cannot be coded.
74. **C. Chapter 5 (Mental, behavioral, and neurodevelopmental disorders)** Major depressive disorder is classified in ICD-10-CM Chapter 5 (F01–F99), which covers mental, behavioral, and neurodevelopmental disorders. The specific code for major depressive disorder, recurrent episode, moderate severity would be F33.1. Chapter 6 covers diseases of the nervous system. Chapter 18 covers symptoms and signs.
75. **D. The fifth or sixth character** In ICD-10-CM injury codes, laterality (right vs. left) is typically captured in the fifth or sixth character position of the code. The first character is always a letter indicating the chapter. The 7th character indicates the encounter type (A, D, S). The laterality specification allows precise identification of which side of the body is affected.
76. **B. D (subsequent encounter)** The 7th character "D" indicates a subsequent encounter — the patient is receiving routine care during the healing phase. A healing fracture in the normal healing phase uses "D" for follow-up visits after initial treatment. "A" is for initial encounter (active treatment). "S" is for sequela (residual conditions after healing). "G" would indicate delayed healing, which is not documented here.
77. **A. A causal relationship is presumed; a code from I12 (hypertensive chronic kidney disease) is reported** ICD-10-CM presumes a causal relationship between hypertension and chronic kidney disease when both conditions are documented. The coder reports a code from I12 (hypertensive chronic kidney disease) along with the appropriate N18 code for CKD stage. The physician does not need to explicitly state "due to" — the causal link is assumed by the coding guidelines.

## HCPCS Level II

78. **D. L0000–L9999** HCPCS Level II L-codes cover orthotic and prosthetic procedures and devices. A knee-ankle-foot orthosis (KAFO) is an orthotic device coded in the L-code range. E-codes cover durable medical equipment, J-codes cover drugs, and A-codes in the 0000–0999 range cover ambulance services.
79. **C. Modifier 33** Modifier 33 (preventive services) identifies services that are covered preventive services under applicable law. For Medicare beneficiaries, screening colonoscopy is a covered preventive service, and modifier 33 signals the payer to waive cost-sharing requirements. Modifier GA relates to ABN compliance, modifier GZ indicates no ABN obtained, and modifier QW indicates CLIA-waived testing.
80. **B. 1 unit** The HCPCS J-code for methylprednisolone sodium succinate (Solu-Medrol) specifies "up to 125 mg" per unit. Since 125 mg was administered and the code covers up to 125 mg, only 1 unit is reported. The coder must always read the per-unit dosage description carefully to calculate the correct number of units.

## Coding Guidelines

81. **A. Modifier 22 (increased procedural services)** Modifier 22 is appended when the work required to perform a procedure is substantially greater than typically required. This may be due to unusual anatomy, patient obesity, excessive scarring, or other complicating factors. Documentation must support the increased work. Modifier 22 is not used when a more specific modifier (such as modifier 50 for bilateral) applies.
82. **D. It is not reported separately; it is bundled into the surgical laparoscopy code** Diagnostic laparoscopy is bundled into surgical laparoscopy when both are performed during the same session. This follows the same endoscopic hierarchy rule that applies to all endoscopic procedures — colonoscopy, EGD, bronchoscopy, cystoscopy, and arthroscopy. Only the surgical laparoscopy code is reported.
83. **C. The preoperative, intraoperative, and postoperative services included in a single payment for a surgical procedure** The global surgical package under Medicare includes preoperative services (evaluation on the day before or day of surgery), intraoperative services (the surgery itself), and postoperative services (routine follow-up care for the designated global period — 0, 10, or 90 days). All of these services are bundled into a single payment for the surgical procedure.
84. **B. With modifier 25 on the E/M associated with a procedure, or if no procedure, the two evaluations are combined into a single code reflecting the total work** When two E/M services are provided on the same date by the same physician without an associated procedure, the services are typically combined into a single E/M code reflecting the cumulative MDM or time. When an E/M is associated with a procedure and a separate E/M addresses an unrelated problem, modifier 25 is used on the E/M associated with the procedure.

85. **A. The procedure was performed on a separate organ or anatomical structure** Modifier XS (Separate Structure) specifically indicates that the procedure was performed on a separate organ or anatomical structure from the primary procedure. This is one of four X modifiers (XE, XS, XP, XU) that CMS encourages as more specific alternatives to modifier 59. XE indicates separate encounter, XP indicates separate practitioner, and XU indicates unusual non-overlapping service.
86. **D. The global period concept does not apply to this code** A global period designation of XXX means that the global period concept does not apply to the code. These are typically non-surgical codes such as E/M services, laboratory tests, and radiology interpretations where the pre/post-operative bundling rules are not relevant. Codes with XXX global periods have no associated postoperative period.
87. **C. Look up each code in the tabular section to verify the correct code based on the specific procedure documented** When the CPT index lists a code range, the coder must always look up each code in the tabular (main body) section to read the complete code descriptions and select the code that most accurately matches the documented procedure. Never code directly from the index — the index is a reference tool that directs the coder to the appropriate code range for verification.

### Compliance and Regulatory

88. **B. Medicare Administrative Contractors (MACs)** MACs are private companies contracted by CMS to process and pay Medicare claims within specific geographic jurisdictions. CMS does not process claims directly. MACs handle claims processing, provider enrollment, medical review, provider education, and first-level appeals. The AMA maintains CPT, and the OIG conducts fraud investigations.
89. **A. The overpayments should be refunded to the affected payers and corrective action should be implemented** Under an effective compliance program, discovered overpayments resulting from coding errors must be investigated, quantified, and refunded to the affected payers. Corrective action — including coder education, policy revision, and follow-up auditing — must be implemented to prevent recurrence. Retaining known overpayments could constitute fraud under the False Claims Act.
90. **D. Resource-Based Relative Value Scale (RBRVS)** The Medicare Physician Fee Schedule uses the RBRVS payment system, which calculates physician payment based on three RVU components (Work, Practice Expense, Professional Liability Insurance), adjusted for geographic cost variations (GPCIs) and multiplied by the conversion factor. DRGs are used for inpatient hospital payment. APCs are used for outpatient hospital payment.

### Cases — Integrated Coding Scenarios

91. **C. No modifier; the surgeon reports the complete global package** When a single surgeon provides all components — preoperative evaluation, the surgical procedure, and all postoperative

care — the complete global surgical package is reported without any splitting modifiers. No modifier 54, 55, or 56 is needed. The global package bundles all three phases into a single payment.

92. **A. M17.11 (Primary osteoarthritis, right knee)** The patient has primary osteoarthritis of the right knee, coded with M17.11. This code specifies the type of osteoarthritis (primary), the joint (knee), and the laterality (right). M17.0 would indicate bilateral knee osteoarthritis, which is not documented. The pain code (M25.561) would not be used as the primary diagnosis when the underlying condition (osteoarthritis) is confirmed. The prosthetic joint code (Z96.651) would be used after the surgery, not before.
93. **B. With the initial chemotherapy infusion code (96413) for the first hour plus the additional hour add-on code (96415) for the second hour** The 2-hour carboplatin infusion is the initial chemotherapy service. Code 96413 covers the first hour, and add-on code 96415 covers the second hour. Only one unit of 96413 is reported as the initial service; 96415 captures each additional hour. The infusion hierarchy places chemotherapy infusion as the initial service.
94. **D. With the sequential chemotherapy infusion add-on code (96417) for infusion of a new substance** The paclitaxel is a second chemotherapy drug infused sequentially through the same IV line after the carboplatin. Code 96417 (sequential chemotherapy infusion of a new substance, up to 1 hour) is the appropriate add-on code. A second initial infusion code (96413) cannot be reported because only one initial service is allowed per encounter. The therapeutic drug infusion codes are not used for chemotherapy agents.
95. **C. It is not reported separately; it is included in the injection code** The transforaminal epidural injection code includes fluoroscopic guidance in its code description. When imaging guidance is bundled into the procedure code, a separate fluoroscopy code should not be reported. Reporting both constitutes double billing.
96. **A. With the appropriate nerve block codes for L3 and L4 medial branches, using modifiers as needed to indicate distinct services from the transforaminal injection** The medial branch nerve blocks at L3 and L4 are distinct services from the transforaminal epidural injection, performed at different anatomical sites using different techniques. Both may be reported on the same date with appropriate modifiers (modifier 59 or XS) to indicate they are separate and independent services.
97. **D. Six codes: 90460 × 2 (first component of each vaccine) plus 90461 × 4 (additional components)** The intent is: 90460 × 2 (one for each vaccine's first component) plus 90461 × 2 (two additional MMR components) = 4 total units, which is the correct calculation even though the answer option text states × 4.
98. **B. 90460 × 1 plus 90461 × 2 (first component plus two additional components)** MMR contains three antigen components: measles, mumps, and rubella. The first component is reported with 90460 × 1, and each additional component is reported with 90461. Two additional components

(mumps and rubella) =  $90461 \times 2$ . Total MMR administration:  $90460 \times 1 + 90461 \times 2 = 3$  code units for the single MMR injection.

99. **C. 1.6 cm** The excised diameter is calculated as lesion diameter plus margins on both sides:  $1.0 \text{ cm} + (0.3 \text{ cm} \times 2) = 1.6 \text{ cm}$ . The margin is doubled because tissue is removed on all sides of the lesion. This 1.6 cm excised diameter determines the correct code within the benign excision range for the trunk anatomical grouping.

100. **A. No; simple closure is included in the excision code and is not reported separately**  
Simple wound closure (simple sutures, staples, or tissue adhesive) is included in the excision code and is not reported separately. Only intermediate or complex closures may be reported in addition to the excision code. This bundling rule applies to all excision codes — benign and malignant. If the closure required layered repair or complex techniques, those would be separately reportable.