SIMULATION EXAM 6

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

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

1. A surgeon excises a 1.8 cm malignant basal cell carcinoma from the patient's right temple with 0.6 cm margins. What is the excised diameter for code selection?

A. 1.8 cm

B. 2.4 cm

C. 3.0 cm

D. 3.6 cm

2. A patient has a 7.5 cm complex wound repair on the left leg requiring extensive undermining and placement of retention sutures. Which of the following services is NOT separately reportable in addition to the complex repair code?

A. Simple wound closure of the same wound

B. Debridement of grossly contaminated tissue

C. Intermediate repair of a separate wound on the opposite leg

D. Administration of local anesthesia

3. A dermatologist destroys 5 actinic keratoses on a patient's forehead using cryotherapy. Which code(s) should be reported?

A. 17004

B. 17000 × 5

C. 17110 × 1, 17111 × 1

D. 17000 × 1, 17003 × 4

4. A surgeon performs a tissue expansion procedure by inserting a tissue expander beneath the skin of the left breast for post-mastectomy reconstruction. Which code range covers tissue expander insertion?

A. Skin graft codes (15100–15278)

B. Tissue expander codes in the integumentary section (11960–11971)

C. Breast reconstruction codes only

D. Adjacent tissue transfer codes (14000–14350)

5. A patient has two wounds: a 4.0 cm intermediate repair on the right cheek and a 6.0 cm intermediate repair on the left forearm. The cheek and the forearm are in different anatomical repair groupings. How should these be reported?

A. One intermediate repair code for 10.0 cm combining both wounds

B. One intermediate repair code for the largest wound only

C. Two separate intermediate repair codes — one for each anatomical grouping

D. One complex repair code for 10.0 cm

6. A physician performs a tangential shave removal of a 1.4 cm raised benign lesion from the patient's shoulder. The lesion is removed by horizontal slicing without full-thickness excision. Which code range should be used?

A. Benign excision codes (11400–11471)

B. Malignant excision codes (11600–11646)

C. Skin biopsy codes (11102–11107)

D. Shave removal codes (11300–11313)

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

7. A surgeon performs a total hip arthroplasty on a patient with avascular necrosis of the femoral head. The patient has never had hip surgery before. Which type of arthroplasty code should be reported?

A. Primary total hip arthroplasty

B. Revision total hip arthroplasty

C. Partial hip arthroplasty (hemiarthroplasty)

D. Resurfacing hip arthroplasty

8. An orthopedic surgeon performs arthroscopic repair of a SLAP (superior labrum anterior to posterior) tear of the right shoulder. During the same session, the surgeon also performs a diagnostic arthroscopy. How should the diagnostic arthroscopy be coded?

A. As a separate code with modifier 59

B. It is not reported separately; it is included in the surgical arthroscopy code

C. As a separate code with modifier 51

D. As a separate code with modifier 25

9. A patient undergoes manipulation under anesthesia (MUA) of the right knee for adhesions following a previous total knee replacement. No incision is made. How is MUA classified in CPT?

A. As an open surgical procedure

B. As an arthroscopic procedure

C. As a percutaneous skeletal fixation procedure

D. As a distinct musculoskeletal procedure with its own code

10. A surgeon performs an anterior cervical discectomy and fusion (ACDF) at C5-C6 using an interbody cage and an anterior cervical plate. How is the anterior cervical plate coded?

A. It is included in the fusion code

B. It is included in the discectomy code

C. With a separate anterior spinal instrumentation code

D. With a HCPCS supply code only

11. A patient sustains a displaced fracture of the surgical neck of the left humerus. The orthopedic surgeon performs closed treatment with manipulation. In CPT, what does "with manipulation" indicate?

A. The fracture fragments are manually reduced (realigned) without surgical exposure

B. The fracture is treated with an external fixation device

C. The fracture site is surgically opened

D. Physical therapy is provided after casting

12. A surgeon performs a bone graft to augment a spinal fusion. The graft material is harvested from the patient's iliac crest through a separate incision. How is the bone graft harvest coded?

A. It is included in the fusion code

B. With a separate bone graft code for the harvest from the iliac crest

C. With a HCPCS supply code for the bone material

D. With the fusion code and modifier 22

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

13. A surgeon performs a right upper lobectomy and right middle lobectomy (bilobectomy) via thoracotomy for lung cancer involving both lobes. How should this be coded?

A. Two separate lobectomy codes with modifier 51

B. One lobectomy code with modifier 22

C. One lobectomy code plus one wedge resection code

D. A single bilobectomy code

14. A cardiologist performs a percutaneous balloon mitral valvuloplasty for mitral stenosis. How does percutaneous valvuloplasty differ from open valve replacement?

A. Valvuloplasty removes the valve; replacement repairs it

B. There is no difference; both are performed through open sternotomy

C. Valvuloplasty dilates the stenotic valve using a balloon catheter without replacing it; open replacement removes and replaces the valve

D. Valvuloplasty is performed only on children; replacement is for adults

15. A patient has a non-tunneled central venous catheter inserted into the right internal jugular vein for short-term IV access. The patient is 40 years old. Which of the following does NOT affect the CPT code selection for CVAD insertion?

A. The specific medication to be administered through the catheter

B. The catheter type (tunneled vs. non-tunneled)

C. The patient's age

D. The access site (central vs. peripheral)

16. A surgeon harvests the right internal mammary artery (RIMA) as a free graft and uses it for a single coronary artery bypass graft. How is the procurement of the RIMA coded?

A. It is included in the arterial CABG code

B. With a separate code for upper extremity artery procurement plus a separate code for the CABG graft

C. With the venous CABG code

D. With an unlisted vascular procedure code

17. A patient undergoes a thoracentesis with insertion of an indwelling pleural catheter (such as a PleurX catheter) for management of recurrent malignant pleural effusion. How should the catheter insertion be coded?

A. With the simple thoracentesis code only

B. With the thoracentesis code plus modifier 22

C. With a chest tube insertion code

D. With the indwelling tunneled pleural catheter insertion code (32550)

18. A cardiologist performs a transcatheter aortic valve replacement (TAVR) via transfemoral approach. This procedure replaces the aortic valve without open-heart surgery. Which type of approach is used?

A. Percutaneous transcatheter via the femoral artery

B. Median sternotomy

C. Left thoracotomy

D. Right mini-thoracotomy

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

19. A patient undergoes a colonoscopy with removal of a polyp by snare technique from the transverse colon and injection of a submucosal tattooing agent adjacent to a previously biopsied site for future surgical identification. How should the diagnostic colonoscopy 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 surgical colonoscopy codes

D. As a separate code with modifier 25

20. A surgeon performs a totally laparoscopic Roux-en-Y gastric bypass. During the procedure, the surgeon creates a small gastric pouch and reroutes the jejunum to bypass the duodenum and proximal jejunum. Which component of the procedure creates the restrictive effect?

A. The jejunal rerouting

B. The creation of the small gastric pouch

C. The duodenal bypass

D. The cholecystectomy

21. A patient is scheduled for a colonoscopy, but after sedation is administered, the patient experiences oxygen desaturation and the physician terminates the procedure before the scope is inserted. How should this be coded?

A. With the diagnostic colonoscopy code and modifier 52

B. With the diagnostic colonoscopy code and modifier 73

C. With an E/M code only; no procedure code is applicable

D. With the diagnostic colonoscopy code and modifier 53 or modifier 73 depending on the setting

22. A surgeon performs an open repair of a recurrent, incarcerated umbilical hernia using mesh reinforcement in a 60-year-old patient. Which factors determine the CPT code?

A. Hernia type (umbilical), initial vs. recurrent, and whether incarcerated or reducible

B. Only the hernia type and the use of mesh

C. Only the patient's BMI and hernia size

D. Only the surgical approach (open vs. laparoscopic)

23. A patient undergoes percutaneous endoscopic gastrostomy (PEG) tube placement. How does PEG differ from an open gastrostomy?

A. PEG removes the stomach; open gastrostomy creates an opening

B. PEG is placed using endoscopic and percutaneous technique without an open abdominal incision; open gastrostomy requires a laparotomy

C. There is no difference; both require an open incision

D. PEG is temporary; open gastrostomy is permanent

24. A patient undergoes an EGD with placement of an esophageal stent for an obstructing esophageal malignancy. How should the diagnostic EGD be coded?

A. As a separate code with modifier 25

B. As a separate code with modifier 59

C. It is not reported separately; it is included in the surgical EGD stent placement code

D. As a separate code with modifier 51

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

25. A urologist performs a cystoscopy with bilateral ureteral catheterization for retrograde pyelography. The diagnostic cystoscopy is bundled. How should the bilateral retrograde pyelography be reported?

A. With two separate retrograde pyelography codes, one for each side

B. With a single code and no modifier

C. With the retrograde pyelography code and modifier 22

D. With the retrograde pyelography code and modifier 50 or RT/LT modifiers

26. A patient undergoes robotic-assisted laparoscopic radical prostatectomy for prostate cancer. In CPT, how is the robotic-assisted approach coded?

A. With the laparoscopic radical prostatectomy code (55866); robotic assistance is included

B. With the open radical prostatectomy code plus a robotic add-on code

C. With a specific robotic surgery code

D. With the laparoscopic code plus modifier 22 for the robotic component

27. A physician provides only postpartum care for a patient. The delivery and antepartum care were provided by a different physician. Which coding approach should be used?

A. The global vaginal delivery code with modifier 55

B. The postpartum care-only code

C. An E/M code for each postpartum visit

D. The delivery-only code with modifier 52

28. A surgeon performs a bilateral salpingo-oophorectomy (BSO) as a separate procedure — not as part of a hysterectomy. How should the bilateral nature be reported?

A. With two separate unilateral oophorectomy codes

B. With the oophorectomy code and modifier 22

C. With a unilateral code only; the second side is bundled

D. With the bilateral salpingo-oophorectomy code or the unilateral code with modifier 50

29. A patient undergoes urodynamic testing including cystometrography (CMG), uroflowmetry, and electromyography of the pelvic floor. Which CPT section contains urodynamic testing codes?

A. Radiology section

B. Pathology and Laboratory section

C. Medicine section

D. Surgery section — urinary system

30. A surgeon performs a total thyroidectomy for multinodular goiter. During the procedure, the surgeon identifies and preserves all four parathyroid glands. Does the preservation of the parathyroid glands affect the thyroidectomy code?

A. No; parathyroid preservation is part of the standard thyroidectomy technique and does not change the code

B. Yes; a separate code is reported for parathyroid preservation

C. Yes; modifier 22 must be appended for the additional work of preservation

D. Yes; a parathyroidectomy code is reported in addition

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

31. A neurosurgeon performs a lumbar microdiscectomy at L5-S1. The procedure is performed through a small incision using an operating microscope. How does the use of a microscope affect the coding?

A. A separate microscope code is always reported

B. The use of the operating microscope is included in the procedure code when performed through a limited approach; a separate code (69990) may be reported only when allowed by CPT guidelines

C. Modifier 22 must be appended for the microscope use

D. A different procedure code is used for microsurgical discectomy versus standard discectomy

32. An ophthalmologist performs YAG laser posterior capsulotomy on the right eye. This procedure is performed after a previous cataract surgery when the posterior capsule becomes opacified. What does this procedure accomplish?

A. It removes the intraocular lens

B. It repairs a retinal detachment

C. It treats glaucoma by opening the trabecular meshwork

D. It creates an opening in the opacified posterior lens capsule to restore clear vision

33. A pain management physician performs a medial branch nerve block at the right L3, L4, and L5 levels under fluoroscopic guidance. The nerve block codes include imaging guidance. How should the three levels be coded?

A. Three separate nerve block codes, one for each level

B. One nerve block code for all three levels combined

C. A primary code for the first level plus add-on codes for each additional level

D. One nerve block code with modifier 22

34. A patient undergoes placement of a lumbar external CSF drainage device (lumbar drain). The drain is placed through a lumbar puncture and left in position for continuous CSF drainage. How is this procedure classified?

A. As a lumbar puncture/spinal tap procedure

B. As a shunt creation procedure

C. As a neurostimulator placement procedure

D. As a craniotomy procedure

35. A child undergoes bilateral myringotomy with aspiration under general anesthesia. No tympanostomy tubes are inserted. How should the bilateral nature be reported?

A. With a single myringotomy code and no laterality modifier

B. With the myringotomy code and modifier 50 or RT/LT modifiers

C. With two separate myringotomy codes on different lines without modifiers

D. Bilateral myringotomy is bundled into a single code by definition

36. An ophthalmologist performs strabismus surgery on two horizontal muscles and one vertical muscle of the left eye during the same session. How should this be coded?

A. With a single code for strabismus surgery on three muscles

B. With one code for the two horizontal muscles and one code for the vertical muscle

C. With three separate codes, one for each muscle

D. With a code for the horizontal muscles plus a code for the vertical muscle, reflecting the number and type of muscles operated

Evaluation and Management (Questions 37–42)

37. A new patient presents to the office with a complex medical history involving four chronic conditions, multiple medications, and two new complaints. The physician reviews extensive data including outside records, imaging, and laboratory results. The management involves high-risk decision-making with a new medication requiring intensive monitoring. What level of MDM is supported?

A. High

B. Moderate

C. Low

D. Straightforward

38. A physician sees an established patient in the nursing facility for a monthly visit. The patient has stable chronic conditions requiring medication management. Which E/M code set should be used?

A. Office visit codes (99211–99215)

B. Initial nursing facility codes (99304–99306)

C. Subsequent nursing facility codes (99307–99310)

D. Domiciliary care codes (99324–99328)

39. A patient is discharged from the hospital. The discharging physician spends 45 minutes on the day of discharge performing the final examination, providing discharge instructions, coordinating follow-up care, and preparing discharge prescriptions and documentation. Which code set covers the discharge service?

A. Subsequent hospital care codes (99231–99233)

B. Hospital discharge day management codes (99238–99239)

C. Critical care codes (99291–99292)

D. Transitional care management codes (99495–99496)

40. A physician sees a patient in the office. The total time spent on the date of service is 70 minutes. Using the time-based pathway, the physician reports 99215 (40 minutes minimum for established patients). The remaining 30 minutes exceed the threshold for 99215. How should the additional time be coded?

A. No additional code; all time is captured in 99215

B. With a second 99215 code and modifier 76

C. With critical care code 99291

D. With prolonged services add-on code 99417

41. An established patient is seen in the office for an annual preventive visit. No other problems are addressed. Which E/M code set should be used?

A. Preventive medicine services codes (99381–99397)

B. Office visit codes (99211–99215) with modifier 25

C. Consultation codes

D. Chronic care management codes

42. A physician provides critical care to a patient in the ICU. The physician spends a total of 140 minutes of critical care time on the date of service. How should this be coded?

A. 99291 × 2

B. 99291 × 1, 99292 × 1

C. 99291 × 1, 99292 × 2

D. 99291 × 1, 99292 × 3

Anesthesia (Questions 43–46)

43. An anesthesiologist provides general anesthesia for an open abdominal aortic aneurysm repair on a 75-year-old patient with severe coronary artery disease and chronic renal failure on dialysis (P4). Total anesthesia time is 240 minutes. The payer uses 15-minute time units and assigns 2 modifying units for P4. Qualifying circumstances code 99100 (extreme age) adds 1 unit. Base units are 15. What is the total unit calculation?

A. 32 units

B. 33 units

C. 31 units

D. 34 units

44. A CRNA provides anesthesia services without medical direction by an anesthesiologist. Which modifier should the CRNA append?

A. Modifier AA

B. Modifier QZ

C. Modifier QY

D. Modifier QX

45. Which of the following correctly describes the purpose of base units in the anesthesia payment formula?

A. They reflect the inherent complexity and risk of providing anesthesia for a specific type of procedure and are fixed for each anesthesia CPT code

B. They vary based on the duration of the anesthetic

C. They are determined by the patient's physical status

D. They represent the cost of anesthetic drugs used

46. An anesthesiologist provides anesthesia for a patient undergoing a total knee replacement. During the procedure, the patient develops malignant hyperthermia requiring emergency intervention. Which qualifying circumstances code should be reported for this complication?

A. 99100 (extreme age)

B. 99135 (controlled hypotension)

C. 99140 (emergency conditions)

D. 99116 (total body hypothermia)

Radiology (Questions 47–52)

47. A patient undergoes a CT angiography (CTA) of the chest to evaluate for pulmonary embolism. IV contrast is administered. How does CTA differ from a standard CT with contrast?

A. CTA uses oral contrast; standard CT uses IV contrast

B. There is no difference; CTA and CT with contrast are the same code

C. CTA uses MRI technology; standard CT uses X-ray technology

D. CTA uses precisely timed IV contrast bolus to visualize blood vessels; standard CT with contrast provides general tissue enhancement

48. A patient undergoes bilateral screening mammography. No breast complaints or abnormalities are present. The patient is 52 years old and has no personal history of breast cancer. Which diagnosis code should be reported?

A. R92.8 (Other abnormal findings on diagnostic imaging of breast)

B. Z12.31 (Encounter for screening mammogram for malignant neoplasm of breast)

C. N63.10 (Unspecified lump in the right breast)

D. Z85.3 (Personal history of malignant neoplasm of breast)

49. A radiologist performs and interprets fluoroscopic guidance for a lumbar puncture performed by another physician. The lumbar puncture code does NOT include imaging guidance. How should the radiologist bill the fluoroscopic guidance?

A. With the fluoroscopic guidance code and modifier 26

B. With the lumbar puncture code and modifier 26

C. The fluoroscopy cannot be billed separately from the lumbar puncture

D. With the fluoroscopic guidance code and modifier TC

50. In nuclear medicine, a V/Q (ventilation/perfusion) scan is the primary diagnostic test for which condition when CT pulmonary angiography is contraindicated?

A. Coronary artery disease

B. Deep vein thrombosis

C. Pulmonary embolism

D. Aortic aneurysm

51. A patient undergoes an MRI of the right knee without contrast. The study is performed at a hospital. The radiologist is employed by a separate radiology group. Which entity bills modifier TC?

A. The radiologist

B. Neither entity; the global code is billed by the hospital

C. Both the hospital and the radiologist

D. The hospital

52. A radiation oncologist performs CT simulation for a patient about to begin radiation therapy for breast cancer. What is the purpose of simulation?

A. To position the patient, verify treatment field geometry, and create a reproducible setup for daily treatments

B. To deliver the first dose of radiation

C. To perform a biopsy of the tumor before treatment

D. To calculate the patient's insurance eligibility

Pathology and Laboratory (Questions 53–58)

53. A laboratory performs a comprehensive metabolic panel (CMP) and a thyroid-stimulating hormone (TSH) test on the same specimen. TSH is NOT a component of the CMP. How should these be reported?

A. Only the CMP code; TSH is bundled

B. The CMP code plus the individual TSH code

C. Individual codes for all 15 tests; the CMP panel cannot be used with additional tests

D. The CMP code with modifier 59 plus the TSH code

54. A pathologist examines a total thyroidectomy specimen. At which level of surgical pathology is a total thyroidectomy specimen classified?

A. Level III (88304)

B. Level IV (88305)

C. Level VI (88309)

D. Level V (88307)

55. A presumptive drug screen is performed using an instrument-assisted direct optical observation method. Which presumptive drug testing code should be reported?

A. 80305 (direct optical observation)

B. 80307 (instrument chemistry analyzer)

C. 80306 (instrument-assisted direct optical observation)

D. 80320 (definitive drug testing)

56. A patient has a quantitative serum hCG level drawn to monitor an early pregnancy. Which of the following correctly describes the difference between qualitative and quantitative hCG testing?

A. Qualitative testing provides a positive/negative result; quantitative testing measures the exact concentration

B. Qualitative testing measures the exact concentration; quantitative provides positive/negative

C. Both provide the same information; the terms are interchangeable

D. Qualitative testing is performed on blood; quantitative on urine

57. A laboratory performs a blood culture for aerobic organisms and a separate blood culture for anaerobic organisms from the same blood draw. How should the cultures be coded?

A. One culture code for both aerobic and anaerobic

B. Two separate culture codes — one for aerobic and one for anaerobic

C. One culture code with modifier 91

D. One culture code with modifier 59

58. A pathologist performs a gross examination only of a surgical specimen consisting of skin tags removed during a dermatology visit. At which level of surgical pathology are skin tags classified?

A. Level II (88302)

B. Level III (88304)

C. Level IV (88305)

D. Level I (88300) — gross examination only

Medicine (Questions 59–64)

59. A patient receives a 2-hour IV infusion of infliximab (a non-antineoplastic biologic agent) for Crohn's disease as the only IV service during the encounter. How should the infusion be coded?

A. With the chemotherapy infusion codes (96413–96415)

B. With the hydration codes (96360–96361)

C. With the therapeutic drug infusion code for the first hour (96365) plus the add-on code for the second hour (96366)

D. With an E/M code only

60. A physician performs an electroencephalogram (EEG) with awake and asleep recording plus activation procedures (hyperventilation and photic stimulation). Which medical specialty most commonly orders EEGs?

A. Neurology

B. Cardiology

C. Pulmonology

D. Gastroenterology

61. A patient undergoes a complete transthoracic echocardiogram with Doppler and color flow imaging at a cardiologist's private office. The cardiologist owns the equipment, employs the sonographer, and interprets the study. Which modifier should be appended?

A. Modifier 26

B. Modifier TC

C. Modifier 59

D. No modifier; the global service is reported

62. A patient receives allergen immunotherapy injections. The allergen extract was prepared by the allergist at a previous visit. Today, a nurse administers two injections. Which immunotherapy codes should be reported for today's visit?

A. The antigen preparation code plus the injection code

B. The injection code for two or more injections (95117) only

C. Only an E/M code; the injections are included

D. Two units of the single injection code (95115 × 2)

63. A physical therapist provides 25 minutes of therapeutic exercise (97110), 15 minutes of manual therapy (97140), and applies a hot pack (97010, supervised modality). How many timed units are reported for the timed codes?

A. 2 units total (1 of 97110, 1 of 97140)

B. 4 units total

C. 3 units total — the total treatment time of 40 minutes supports 3 timed units, allocated based on actual minutes

D. 2 units of 97110 only; 97140 does not meet the threshold

64. An ophthalmologist performs a new patient intermediate ophthalmological examination. Which code should be reported?

A. 92002 (new patient, intermediate ophthalmological examination)

B. 99203 (new patient, office visit, low MDM)

C. 92004 (new patient, comprehensive ophthalmological examination)

D. 99202 (new patient, office visit, straightforward MDM)

Medical Terminology (Questions 65–68)

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

A. Surgical repair

B. Surgical removal

C. Pain

D. Inflammation

66. Which combining form refers to the joint?

A. Oste/o

B. Arthr/o

C. My/o

D. Neur/o

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

A. Excessive

B. Without

C. Difficult, painful, or abnormal

D. Above

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

A. Inflammation of the kidney

B. Inflammation of the liver

C. Inflammation of the nerve

D. Inflammation of the joint

Anatomy (Questions 69–72)

69. The trachea bifurcates (divides) into which two structures?

A. The left and right bronchioles

B. The left and right alveolar ducts

C. The larynx and pharynx

D. The left and right main bronchi

70. Which layer of the heart wall is responsible for the heart's contractile function?

A. Epicardium

B. Myocardium

C. Endocardium

D. Pericardium

71. The gallbladder stores and concentrates bile. Through which duct does bile travel from the gallbladder to the duodenum?

A. The common bile duct (via the cystic duct to the common bile duct)

B. The pancreatic duct

C. The hepatic duct only

D. The thoracic duct

72. The patella is classified as which type of bone?

A. Long bone

B. Irregular bone

C. Sesamoid bone

D. Flat bone

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

73. A patient presents with acute respiratory failure and community-acquired pneumonia. Both conditions are treated during the encounter. The physician documents that the patient was admitted for treatment of the respiratory failure. Which condition should be sequenced as the principal diagnosis?

A. The community-acquired pneumonia

B. Both conditions as co-principal diagnoses

C. Whichever has the higher severity code

D. Acute respiratory failure, since it was the reason for admission

74. A patient is treated for an adverse effect of a correctly prescribed anticoagulant — the patient developed a gastrointestinal hemorrhage. Under ICD-10-CM adverse effect coding, what is the sequencing order?

A. The T code for the adverse effect is sequenced first, followed by the hemorrhage code

B. The hemorrhage (manifestation) is sequenced first, followed by the T code for the adverse effect of the anticoagulant

C. Only the anticoagulant code is reported

D. Only the hemorrhage code is reported

75. In ICD-10-CM, what does the abbreviation "NEC" (Not Elsewhere Classifiable) indicate?

A. The documentation is specific, but the coding system does not have a code that matches the level of specificity documented

B. The documentation lacks specificity

C. The condition has been ruled out

D. The condition is not covered by insurance

76. A patient has a confirmed diagnosis of gout. The gout is documented as affecting the right great toe. The ICD-10-CM code includes laterality. In which position is the laterality typically specified?

A. First character

B. Third character

C. Fifth or sixth character

D. 7th character

77. A patient is being seen for management of a colostomy. The colostomy was created during a previous encounter for colon cancer. Which code category should be used for the colostomy management?

A. The colon cancer code

B. A code from the K94 category (complications of artificial openings of the digestive system)

C. A personal history of colon cancer code (Z85.038)

D. A Z code for the encounter for attention to artificial openings (Z43 category)

HCPCS Level II (Questions 78–80)

78. A patient is transported by ground ambulance from their home to the hospital emergency department. Which HCPCS Level II code range covers the ambulance transport?

A. J0000–J9999

B. A0000–A0999

C. E0100–E9999

D. L0000–L9999

79. A provider performs a service that Medicare is expected to deny as not medically necessary. A signed ABN was obtained from the patient. Which modifier should be appended?

A. Modifier GA

B. Modifier GZ

C. Modifier GX

D. Modifier QW

80. A patient is fitted with a below-knee prosthetic leg. Which HCPCS Level II code range covers prosthetic devices?

A. E0100–E9999

B. A4000–A8999

C. L5000–L9999 (within the L-code range for prosthetics)

D. J0000–J9999

Coding Guidelines (Questions 81–87)

81. A surgeon begins a laparoscopic procedure but encounters unexpected dense adhesions that prevent safe completion of the surgery. The surgeon discontinues the procedure after significant work has been performed. Which modifier should be appended?

A. Modifier 52 (reduced services)

B. Modifier 22 (increased procedural services)

C. Modifier 59 (distinct procedural service)

D. Modifier 53 (discontinued procedure)

82. During the 90-day global period of a colectomy, the same surgeon sees the patient for an unrelated problem — a new skin rash. Which modifier should be appended to the E/M code for the skin rash evaluation?

A. Modifier 58

B. Modifier 24

C. Modifier 78

D. Modifier 79

83. A CPT code has a global period of "000." What does this mean?

A. The procedure has a 0-day global period — no postoperative services are included beyond the day of the procedure

B. The procedure has a 90-day global period

C. The procedure has a 10-day global period

D. The global period concept does not apply

84. Under the NCCI, which X modifier specifically indicates that a procedure was performed during a separate encounter on the same day?

A. Modifier XU (Unusual Non-Overlapping Service)

B. Modifier XS (Separate Structure)

C. Modifier XE (Separate Encounter)

D. Modifier XP (Separate Practitioner)

85. A physician performs a bilateral procedure that CPT describes as a unilateral code. Which modifier should be appended to indicate the procedure was performed on both sides?

A. Modifier 59

B. Modifier 51

C. Modifier 22

D. Modifier 50

86. When reporting multiple surgical procedures performed during the same operative session, which procedure should be listed first on the claim?

A. The procedure performed first chronologically

B. The procedure with the highest RVU (most resource-intensive)

C. The shortest procedure

D. The add-on code

87. A patient undergoes a repeat of the same procedure by the same physician on the same day. Which modifier should be appended to the repeat procedure?

A. Modifier 76

B. Modifier 77

C. Modifier 59

D. Modifier 91

Compliance and Regulatory (Questions 88–90)

88. Which of the following accurately describes the difference between facility and non-facility payment rates under the Medicare Physician Fee Schedule?

A. Facility rates are always higher than non-facility rates

B. Non-facility rates and facility rates are always identical

C. Non-facility rates are higher because the physician bears the overhead costs; facility rates are lower because the facility bills separately for overhead

D. Facility rates are higher because hospitals charge more

89. A healthcare organization implements a compliance program. Which element requires the organization to have a mechanism for employees to report suspected violations without fear of retaliation?

A. Written policies and procedures

B. Designated compliance officer

C. Enforcement of disciplinary standards

D. Effective communication, including an anonymous reporting mechanism

90. The practice of reporting separate codes for individual components of a procedure that should be reported with a single comprehensive code is known as which of the following?

A. Upcoding

B. Unbundling

C. Downcoding

D. Duplicate billing

Cases — Integrated Coding Scenarios (Questions 91–100)

Case 1 (Questions 91–92):

A 48-year-old patient undergoes excision of a 2.0 cm malignant melanoma from the left forearm with 1.0 cm margins. The wound is closed with intermediate layered closure. The pathology report confirms melanoma, Breslow depth 1.2 mm.

91. What is the excised diameter for code selection?

A. 4.0 cm

B. 3.0 cm

C. 2.0 cm

D. 5.0 cm

92. The wound requires intermediate layered closure. Should the intermediate repair be coded separately from the excision?

A. No; all wound closures are included in excision codes

B. No; intermediate repair is bundled into malignant excision codes

C. Yes; intermediate and complex closures may be reported separately from excision codes

D. Yes, but only with modifier 51

Case 2 (Questions 93–94):

A 70-year-old patient with chronic atrial fibrillation and congestive heart failure is admitted to the hospital. The cardiologist performs a transesophageal echocardiogram (TEE) to evaluate for left atrial thrombus before a planned cardioversion. The hospital provides the equipment and sonographer.

93. The cardiologist performs the TEE probe placement, supervises the image acquisition, and interprets the study. How should the cardiologist bill?

A. With the global TEE code; the cardiologist provided both components

B. With the TEE code and modifier TC

C. With an E/M code only

D. With the TEE code and modifier 26

94. The TEE confirms the presence of a left atrial appendage thrombus. The planned cardioversion is cancelled. Which diagnosis code best represents the finding?

A. I48.91 (Unspecified atrial fibrillation)

B. I51.3 (Intracardiac thrombosis, not elsewhere classified)

C. Z01.810 (Encounter for preprocedural cardiovascular examination)

D. I50.9 (Heart failure, unspecified)

Case 3 (Questions 95–96):

A pain management physician performs a right C5-C6 transforaminal epidural steroid injection and a right C6-C7 transforaminal epidural steroid injection during the same session under fluoroscopic guidance. The injection codes include imaging guidance.

95. How should the two-level transforaminal injection be coded?

A. A primary transforaminal injection code for the first level plus an add-on code for the additional level

B. Two primary transforaminal injection codes with modifier 59 on the second

C. A single injection code for both levels

D. Two injection codes with modifier 76 on the second

96. How should the fluoroscopic guidance be coded?

A. With a separate fluoroscopy code for each level

B. With a separate fluoroscopy code and modifier 26

C. With a separate fluoroscopy code and modifier 59

D. It is not reported separately; imaging guidance is included in the injection codes

Case 4 (Questions 97–98):

A 65-year-old Medicare patient presents for an initial visit with a new primary care physician. The patient has Type 2 diabetes with diabetic nephropathy and stage 3 CKD. The physician performs a comprehensive evaluation with high-complexity MDM.

97. Which E/M code should be reported for this new patient office visit with high-complexity MDM?

A. 99213 (established patient, low MDM)

B. 99214 (established patient, moderate MDM)

C. 99205 (new patient, high MDM)

D. 99215 (established patient, high MDM)

98. The patient's Type 2 diabetes with diabetic nephropathy requires an ICD-10-CM code from the E11 category with a kidney complication code. What additional code is required?

A. Only the E11 code is needed; no additional code is required

B. An additional code from N18 specifying the CKD stage

C. An additional code from I12 for hypertensive CKD

D. An additional code from Z79.4 for long-term insulin use

Case 5 (Questions 99–100):

A surgeon performs a laparoscopic appendectomy on a patient with acute appendicitis without rupture. The procedure is completed laparoscopically without conversion to an open approach.

99. Which CPT code should be reported?

A. Laparoscopic appendectomy (44970)

B. Open appendectomy (44950)

C. Appendectomy for ruptured appendix (44960)

D. Incidental appendectomy (44955)

100. The patient develops a wound infection 10 days after surgery, requiring the surgeon to return the patient to the operating room for incision and drainage of the wound abscess. This is within the 90-day global period. Which modifier should be appended to the I&D code?

A. Modifier 58 (staged procedure)

B. Modifier 79 (unrelated procedure)

C. Modifier 24 (unrelated E/M)

D. Modifier 78 (unplanned return to OR for complication)

Simulation Exam 6 — Answer Key with Explanations

10,000 Series — Integumentary System

1. **C. 3.0 cm** The excised diameter is calculated as lesion diameter plus margins on both sides: 1.8 cm + (0.6 cm × 2) = 3.0 cm. The margin is doubled because normal tissue is removed circumferentially around the entire lesion. This 3.0 cm excised diameter determines the correct code within the malignant excision range for the face/scalp anatomical grouping.
2. **A. Simple wound closure of the same wound** Simple closure is always included in any wound repair code — simple, intermediate, or complex. It is never separately reportable for the same wound. Debridement of grossly contaminated tissue may be reported separately when performed as a distinct service. Intermediate repair of a separate wound on a different anatomical site is separately reportable. Local anesthesia is always included in any surgical procedure and is never coded separately.
3. **D. 17000 × 1, 17003 × 4** For destruction of premalignant lesions (actinic keratoses), code 17000 covers the first lesion and code 17003 covers the second through fourteenth additional lesions. For 5 lesions: 17000 × 1 (first lesion) plus 17003 × 4 (lesions 2 through 5). The flat code 17004 is only used when 15 or more lesions are destroyed.
4. **B. Tissue expander codes in the integumentary section (11960–11971)** Tissue expander insertion codes (11960–11971) are located in the integumentary system section of CPT. These codes cover the insertion, removal, and replacement of tissue expanders used for breast reconstruction and other soft tissue expansion procedures. Skin graft codes and adjacent tissue transfer codes describe different reconstructive techniques.
5. **C. Two separate intermediate repair codes — one for each anatomical grouping** Wounds in different anatomical repair groupings cannot be combined, even if they share the same repair classification. The face (cheek) and the extremity (forearm) are in different CPT anatomical repair groupings. Each wound is reported separately with its own intermediate repair code based on the wound length and specific anatomical grouping.
6. **D. Shave removal codes (11300–11313)** Shave removal involves tangential (horizontal) slicing of a raised skin lesion at the level of the surrounding skin or slightly below. No full-thickness excision into the subcutaneous tissue is performed. Shave removal codes are selected based on the lesion diameter and the anatomical location. Excision codes require full-thickness removal with margins. Biopsy codes describe tissue sampling for diagnostic purposes.

20,000 Series — Musculoskeletal System

7. **A. Primary total hip arthroplasty** A primary total hip arthroplasty is the first-time replacement of the hip joint with a prosthetic implant. Since the patient has never had hip surgery before, this is a primary replacement — not a revision. Revision arthroplasty would be used when replacing or modifying a previously implanted prosthesis. Hemiarthroplasty replaces only the femoral head, not the entire joint.
8. **B. It is not reported separately; it is included in the surgical arthroscopy code** Diagnostic arthroscopy is always bundled into surgical arthroscopy when both are performed on the same joint during the same session. The SLAP repair is a surgical arthroscopic procedure — the diagnostic examination is included. Reporting both the diagnostic and surgical codes constitutes unbundling.
9. **D. As a distinct musculoskeletal procedure with its own code** Manipulation under anesthesia (MUA) of a joint has its own CPT code and is classified as a distinct musculoskeletal procedure. It involves forcibly moving the joint through its range of motion under anesthesia to break adhesions and restore mobility. No incision or arthroscope is used. MUA codes are specific to the joint being manipulated.
10. **C. With a separate anterior spinal instrumentation code** An anterior cervical plate is spinal instrumentation that is coded separately from the fusion using the appropriate anterior instrumentation code (22845 for anterior instrumentation spanning 2–3 segments). The plate stabilizes the fusion construct and is not included in the fusion code or the discectomy code. Instrumentation is always coded as a separate component.
11. **A. The fracture fragments are manually reduced (realigned) without surgical exposure** "With manipulation" in CPT fracture terminology means the physician manually reduces (realigns) the displaced fracture fragments — typically by applying traction, rotation, or direct manual force — to restore proper alignment. This is done without surgically opening the fracture site (which would be open treatment). Manipulation increases the complexity and code level above treatment without manipulation.
12. **B. With a separate bone graft code for the harvest from the iliac crest** When bone graft material is harvested from a separate donor site (the iliac crest) through a separate incision, the graft harvest is coded separately from the fusion using the appropriate bone graft code (20937 for morselized autograft through a separate incision, or 20938 for structural autograft). The harvest site work and the separate incision justify the additional code.

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

13. **D. A single bilobectomy code** When two adjacent lobes of the same lung are removed in a single procedure, CPT provides a specific bilobectomy code (32482). Reporting two separate lobectomy

codes would not accurately capture the procedure. A bilobectomy is a distinct procedure with its own code reflecting the specific surgical approach of removing two contiguous lobes.

14. **C. Valvuloplasty dilates the stenotic valve using a balloon catheter without replacing it; open replacement removes and replaces the valve** Percutaneous balloon valvuloplasty is a catheter-based procedure that uses a balloon to open a stenotic (narrowed) heart valve. The existing valve is preserved. Open valve replacement involves surgically removing the diseased valve and implanting a prosthetic valve (mechanical or bioprosthetic) through a sternotomy. These are fundamentally different procedures with different code ranges.
15. **A. The specific medication to be administered through the catheter** Central venous access device code selection depends on the catheter type (tunneled, non-tunneled, port), the patient's age, and the access site (central vs. peripheral). The specific drug that will later be infused through the catheter does not affect the CVAD insertion code. The drug is coded separately at the time of administration using the appropriate HCPCS J-code and administration code.
16. **B. With a separate code for upper extremity artery procurement plus a separate code for the CABG graft** When the internal mammary artery is harvested as a free graft (detached from its origin) rather than used as an in-situ pedicle graft, the procurement is coded with a separate upper extremity artery procurement code (35600) in addition to the arterial CABG graft code. In-situ IMA grafts include the procurement in the CABG code, but free IMA grafts require separate procurement coding.
17. **D. With the indwelling tunneled pleural catheter insertion code (32550)** Insertion of an indwelling tunneled pleural catheter has its own specific CPT code (32550). This is a distinct procedure from simple thoracentesis (which involves needle aspiration without leaving a catheter in place) and from chest tube insertion (which uses a different technique and is for acute drainage). The tunneled catheter is designed for chronic, recurring effusions.
18. **A. Percutaneous transcatheter via the femoral artery** Transfemoral TAVR involves advancing a catheter through the femoral artery, up the aorta, and positioning a replacement valve within the diseased aortic valve. This is a percutaneous transcatheter approach — no sternotomy or thoracotomy is required. TAVR codes are specific to the approach used (transfemoral, transapical, transaortic), as each represents a different level of surgical complexity.

40,000 Series — Digestive System

19. **C. It is not reported separately; it is included in the surgical colonoscopy codes** When surgical procedures (snare polypectomy and submucosal injection) are performed during a colonoscopy, the diagnostic examination is bundled into the surgical codes. The polypectomy and the injection are each reported with their own surgical colonoscopy codes. The diagnostic colonoscopy is not reported as an additional code.

20. **B. The creation of the small gastric pouch** The restrictive component of a Roux-en-Y gastric bypass is the creation of a small gastric pouch (approximately 30 mL capacity) that limits the amount of food the patient can eat at one time. The malabsorptive component is the jejunal rerouting that bypasses a portion of the small intestine, reducing nutrient absorption. The gastric pouch provides the physical restriction.
21. **D. With the diagnostic colonoscopy code and modifier 53 or modifier 73 depending on the setting** When a procedure is discontinued after anesthesia has been administered but before the procedure has begun (the scope was never inserted), the appropriate modifier depends on the setting. Modifier 73 is used in the hospital outpatient setting (ASC) for procedures discontinued before anesthesia induction or after the patient has been prepared but before the procedure. Modifier 53 is used by the physician. The specific modifier depends on who is billing.
22. **A. Hernia type (umbilical), initial vs. recurrent, and whether incarcerated or reducible** CPT codes for umbilical hernia repair are determined by the hernia type (umbilical), whether the repair is initial or recurrent, and whether the hernia is reducible, incarcerated, or strangulated. These factors reflect the surgical complexity. The use of mesh and the patient's BMI do not change the CPT code. The approach may also affect code selection.
23. **B. PEG is placed using endoscopic and percutaneous technique without an open abdominal incision; open gastrostomy requires a laparotomy** Percutaneous endoscopic gastrostomy (PEG) uses an endoscope passed through the mouth to visualize the stomach while a G-tube is inserted percutaneously (through the skin) into the stomach. No open abdominal incision is required. An open gastrostomy requires a laparotomy (abdominal incision) to directly access the stomach. These are different techniques with different CPT codes.
24. **C. It is not reported separately; it is included in the surgical EGD stent placement code** When a surgical procedure (esophageal stent placement) is performed during an EGD, the diagnostic examination is bundled into the surgical code. Only the surgical EGD code for stent placement is reported. Reporting both the diagnostic EGD and the stent placement code constitutes unbundling.

50,000 Series — Urinary, Reproductive, and Endocrine

25. **D. With the retrograde pyelography code and modifier 50 or RT/LT modifiers** Retrograde pyelography codes are unilateral. When performed bilaterally, the procedure is reported with modifier 50 (bilateral) or on separate lines with RT and LT modifiers. The diagnostic cystoscopy is bundled into the surgical cystoscopy code and is not reported separately. The bilateral modifier applies to the retrograde pyelography procedure code.
26. **A. With the laparoscopic radical prostatectomy code (55866); robotic assistance is included** CPT code 55866 covers laparoscopic radical prostatectomy, which includes both standard laparoscopic and robotic-assisted techniques. The robot is a tool used to perform the laparoscopy

— it is not a separate surgical approach. There is no separate "robotic" code or robotic add-on code in CPT. Modifier 22 is not appropriate simply because robotic technology was used.

27. **B. The postpartum care-only code** When a physician provides only postpartum care while another physician provided the antepartum care and delivery, the postpartum care-only code is reported. CPT provides separate codes for each component of obstetric care to accommodate split care arrangements. The postpartum care-only code covers all postpartum visits from delivery through the standard postpartum period.
28. **D. With the bilateral salpingo-oophorectomy code or the unilateral code with modifier 50** When a bilateral salpingo-oophorectomy is performed as a separate procedure (not part of a hysterectomy), the bilateral nature is reported either with a specific bilateral code (if one exists) or with the unilateral code and modifier 50. The coding depends on whether CPT provides a specific bilateral code or requires the unilateral code with a bilateral modifier.
29. **C. Medicine section** Reflecting that some components of urodynamic studies are coded in the Medicine section.
30. **A. No; parathyroid preservation is part of the standard thyroidectomy technique and does not change the code** Identification and preservation of the parathyroid glands during thyroidectomy is part of the standard surgical technique and does not affect the thyroidectomy code. Surgeons routinely preserve the parathyroid glands during thyroid surgery to prevent hypoparathyroidism. No separate code or modifier is needed for this standard component of the procedure.

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

31. **B. The use of the operating microscope is included in the procedure code when performed through a limited approach; a separate code (69990) may be reported only when allowed by CPT guidelines** The operating microscope code (69990) is an add-on code that may be reported when its use is not inherent to the procedure. However, for many spinal procedures including microdiscectomy, the use of the microscope is considered part of the standard technique and is included in the procedure code. The coder must verify CPT guidelines and parenthetical notes to determine whether 69990 is separately reportable for each specific procedure.
32. **D. It creates an opening in the opacified posterior lens capsule to restore clear vision** YAG laser posterior capsulotomy uses a laser to create an opening in the posterior lens capsule when it becomes clouded (posterior capsular opacification — sometimes called a "secondary cataract") after previous cataract surgery. The opacified capsule blocks light from reaching the retina, causing blurred vision. The laser opening restores the clear path of light to the retina.
33. **C. A primary code for the first level plus add-on codes for each additional level** Paravertebral facet medial branch nerve block codes use a primary code for the first level and add-on codes for

each additional level within the same spinal region. Three lumbar levels require one primary code plus two add-on codes. Since the codes include imaging guidance, no separate fluoroscopy code is reported. Up to three levels per spinal region may be reported per session.

34. **A. As a lumbar puncture/spinal tap procedure** Lumbar drain placement is coded as a spinal puncture/lumbar drainage procedure. The drain is placed through a standard lumbar puncture approach — a needle is inserted into the lumbar subarachnoid space, and a catheter is left in position for continuous CSF drainage. This is distinct from a VP shunt (permanent CSF diversion) and from neurostimulator placement.
35. **B. With the myringotomy code and modifier 50 or RT/LT modifiers** Myringotomy codes are unilateral. When performed bilaterally, the procedure is reported with modifier 50 (bilateral) or on separate lines with modifiers RT and LT. Since no tympanostomy tubes are inserted, only the myringotomy code is used — not the tympanostomy code. The bilateral modifier indicates the procedure was performed on both ears.
36. **D. With a code for the horizontal muscles plus a code for the vertical muscle, reflecting the number and type of muscles operated** Strabismus surgery codes are based on the number of muscles operated and the muscle type (horizontal vs. vertical). Two horizontal muscles on one eye use one code (67312). One vertical muscle uses a separate code (67314). Both codes are reported for the same eye when both horizontal and vertical muscles are operated on during the same session.

Evaluation and Management

37. **A. High** Four chronic conditions with two new complaints constitute high-level problem complexity. Extensive data review including outside records, imaging, and laboratory results constitutes extensive/high-level data. A new medication requiring intensive monitoring with high drug interaction risk constitutes high-level risk. All three MDM elements meet the high threshold, supporting code 99205 (new patient).
38. **C. Subsequent nursing facility codes (99307–99310)** For follow-up visits in a nursing facility by the same physician, the subsequent nursing facility codes (99307–99310) are used. Initial nursing facility codes are used only for the first encounter. Office visit codes are used in the physician's office, not in the nursing facility. The code selection is based on MDM complexity.
39. **B. Hospital discharge day management codes (99238–99239)** Hospital discharge day management codes cover all services provided on the day of discharge. Code 99238 covers discharge management of 30 minutes or less, and 99239 covers more than 30 minutes. The 45 minutes spent on discharge activities supports 99239. These codes are reported only on the actual day of discharge.

40. **D. With prolonged services add-on code 99417** When the total time exceeds the threshold for 99215 (40 minutes for established patients), the additional time may be captured with prolonged services add-on code 99417. Each unit of 99417 represents 15 minutes of additional time beyond the base code threshold. The 30 additional minutes (70 minus 40 = 30) would support 2 units of 99417.

41. **A. Preventive medicine services codes (99381–99397)** When an established patient presents solely for an annual preventive visit with no other problems addressed, the preventive medicine services codes are used. For established patients, the code range is 99391–99397 (age-specific). If a significant, separately identifiable problem were also addressed, a separate E/M code with modifier 25 could be reported in addition.

42. **C. 99291 × 1, 99292 × 2** Critical care code 99291 covers the first 30–74 minutes. Code 99292 covers each additional 30 minutes beyond the first 74 minutes. For 140 total minutes: 99291 × 1 (first 74 minutes), leaving 66 remaining minutes. First 99292 unit covers minutes 75–104 (30 minutes). Second 99292 unit covers minutes 105–134 (30 minutes). The remaining 6 minutes do not meet the 15-minute minimum for a third 99292 unit. Total: 99291 × 1, 99292 × 2.

Anesthesia

43. **D. 34 units** Base units (15) + Time units (240 minutes ÷ 15 minutes/unit = 16.0) + Modifying units (P4 = 2) + Qualifying circumstances (99100 extreme age over 70 = 1) = 34.0 total units. The calculation: 15 + 16 + 2 + 1 = 34. Multiple modifying factors (physical status and qualifying circumstances) are additive.

44. **B. Modifier QZ** Modifier QZ indicates a CRNA providing anesthesia services without medical direction by an anesthesiologist. The CRNA is independently providing the anesthesia service. Modifier AA indicates personal performance by an anesthesiologist. Modifier QX indicates a CRNA under medical direction. Modifier QY indicates the anesthesiologist who is medically directing.

45. **A. They reflect the inherent complexity and risk of providing anesthesia for a specific type of procedure and are fixed for each anesthesia CPT code** Base units are assigned to each anesthesia CPT code and reflect the inherent complexity, risk, and skill required to provide anesthesia for that particular type of procedure. They do not change based on case duration, patient health status, or qualifying circumstances. Higher-risk procedures (cardiac surgery, intracranial procedures) have higher base unit values.

46. **C. 99140 (emergency conditions)** Malignant hyperthermia is a life-threatening emergency that transforms the anesthesia encounter into emergency conditions. Qualifying circumstances code 99140 covers anesthesia complicated by emergency conditions, which includes both cases that

begin as emergencies and cases where emergency conditions develop during the procedure. This code is reported as an add-on to the primary anesthesia code.

Radiology

47. **D. CTA uses precisely timed IV contrast bolus to visualize blood vessels; standard CT with contrast provides general tissue enhancement** CT angiography uses precisely timed IV contrast injection synchronized with the CT acquisition to specifically visualize blood vessels during peak contrast opacification. Standard CT with contrast provides general tissue enhancement for evaluating organs and structures. CTA has specific CPT codes separate from standard CT codes because it requires different acquisition protocols and interpretation expertise.
48. **B. Z12.31 (Encounter for screening mammogram for malignant neoplasm of breast)** A screening mammogram performed on an asymptomatic patient with no breast complaints or abnormalities is coded with Z12.31 (encounter for screening mammogram). This is the standard screening diagnosis code. Abnormal finding codes, breast lump codes, and personal history codes are not appropriate for a routine screening on an asymptomatic patient.
49. **A. With the fluoroscopic guidance code and modifier 26** When the radiologist provides only the imaging guidance (fluoroscopy) and interpretation for a procedure performed by another physician, the radiologist reports the fluoroscopic guidance code with modifier 26 (professional component). The other physician reports the lumbar puncture code. Since the lumbar puncture code does not include imaging guidance, the fluoroscopy is separately reportable.
50. **C. Pulmonary embolism** A V/Q scan evaluates ventilation (airflow) and perfusion (blood flow) in the lungs. A mismatch — normal ventilation with decreased perfusion — is the hallmark finding of pulmonary embolism. V/Q scanning is the primary alternative to CT pulmonary angiography (CTPA) for diagnosing PE, particularly when CTPA is contraindicated (contrast allergy, renal insufficiency, pregnancy).
51. **D. The hospital** The hospital provides the equipment, room, technologist, and supplies (technical component) and bills with modifier TC. The radiologist from the separate group provides the interpretation (professional component) and bills with modifier 26. The hospital is the entity that bills modifier TC because it provided the technical component.
52. **A. To position the patient, verify treatment field geometry, and create a reproducible setup for daily treatments** Simulation is the planning phase that establishes the patient's treatment position, verifies the radiation treatment field geometry using imaging, and creates a reproducible setup that will be used for each daily treatment fraction. CT simulation uses cross-sectional imaging to precisely define the treatment target and surrounding normal structures.

Pathology and Laboratory

53. **B. The CMP code plus the individual TSH code** TSH is not a component of the CMP. When all panel components are performed plus an additional test not included in the panel, the panel code is reported plus the individual code for the additional test. The CMP code captures the 14 bundled components, and the individual TSH code captures the additional analyte. There is no prohibition on reporting panel codes with additional individual tests.
54. **D. Level V (88307)** A total thyroidectomy specimen is classified at Level V surgical pathology (88307). Level V covers complex specimens requiring more extensive examination, including thyroid total resection, colon resection, kidney, and breast excision with margin assessment. The pathologist must evaluate the entire gland for tumor extent, margins, and capsular invasion.
55. **C. 80306 (instrument-assisted direct optical observation)** Instrument-assisted direct optical observation uses a device to read the test strip or immunoassay cartridge, providing a more objective result than visual reading alone. Code 80306 is the correct code for this method. Code 80305 covers visual (unaided) reading. Code 80307 covers fully automated instrument chemistry analyzers. The method of reading determines the code.
56. **A. Qualitative testing provides a positive/negative result; quantitative testing measures the exact concentration** Qualitative hCG testing provides a yes/no result — the hormone is either present or absent above a threshold level. Quantitative hCG testing measures the exact concentration of hCG in the blood (expressed in mIU/mL), which is essential for monitoring early pregnancy viability, ectopic pregnancy, and gestational trophoblastic disease. These have different CPT codes.
57. **B. Two separate culture codes — one for aerobic and one for anaerobic** Aerobic and anaerobic blood cultures are separate tests that use different growth media and incubation conditions. Each is reported with its own CPT code. An aerobic culture (87040) and an anaerobic culture (87040 with appropriate modifier or the specific anaerobic culture code) are distinct laboratory services.
58. **D. Level I (88300) — gross examination only** Skin tags are classified at Level I surgical pathology (88300), which requires only gross examination. Level I specimens are those where gross examination alone is sufficient — no microscopic examination is needed. Skin tags have no diagnostic value that would benefit from microscopic analysis, making them the simplest category of surgical pathology specimens.

Medicine

59. **C. With the therapeutic drug infusion code for the first hour (96365) plus the add-on code for the second hour (96366)** Infliximab for Crohn's disease is a non-antineoplastic biologic agent. Non-antineoplastic drugs are coded using the therapeutic drug infusion codes (96365–96368), not

the chemotherapy codes. Since this is the only IV service, the therapeutic infusion is the initial service: 96365 for the first hour plus 96366 for the second hour.

60. **A. Neurology** Electroencephalography (EEG) is primarily ordered by neurologists to evaluate brain electrical activity. The most common indication for EEG is seizure disorder (epilepsy). EEGs are also used to evaluate altered consciousness, encephalopathy, and brain death. EEG codes are located in the neurology subsection of the Medicine section.

61. **D. No modifier; the global service is reported** When a cardiologist owns the equipment, employs the sonographer, and performs the interpretation in their private office, both the technical and professional components are provided by the same entity. The global code is reported without any modifier. Modifier 26 would only apply if the cardiologist provided only the interpretation at an outside facility.

62. **B. The injection code for two or more injections (95117) only** When the allergen extract was prepared at a previous visit, only the injection administration code is reported at the injection visit. Code 95117 covers two or more allergen immunotherapy injections. The antigen preparation code was reported when the extracts were originally prepared and is not reported again at each injection visit.

63. **C. 3 units total — the total treatment time of 40 minutes supports 3 timed units, allocated based on actual minutes** The 8-minute rule considers total treatment time across all timed services. Total timed service time is 40 minutes (25 + 15). At 15 minutes per unit, 40 minutes supports either 2 or 3 units. Since 40 minutes exceeds the midpoint threshold for 3 units (37.5 minutes), 3 total timed units are appropriate: 2 units allocated to 97110 (25 minutes) and 1 unit to 97140 (15 minutes). The hot pack (97010) is a supervised modality reported as 1 unit regardless of time — it is not a timed code.

64. **A. 92002 (new patient, intermediate ophthalmological examination)** For a new patient presenting for an intermediate ophthalmological examination, code 92002 is the appropriate code. Ophthalmological service codes are used by eye care providers (ophthalmologists and optometrists) for eye-specific encounters. Code 92004 would be a comprehensive examination. General E/M codes (99202–99205) would be used by non-eye-care providers.

Medical Terminology

65. **D. Inflammation** The suffix "-itis" means inflammation. Common examples include appendicitis (inflammation of the appendix), bronchitis (inflammation of the bronchi), and arthritis (inflammation of the joints). "-Plasty" means surgical repair, "-ectomy" means surgical removal, and "-algia" means pain.

66. **B. Arthr/o** The combining form "arthr/o" refers to the joint. Common terms include arthritis (inflammation of a joint), arthroscopy (visual examination of a joint), and arthroplasty (surgical

reconstruction of a joint). "Oste/o" refers to bone, "my/o" refers to muscle, and "neur/o" refers to nerve.

67. **C. Difficult, painful, or abnormal** The prefix "dys-" means difficult, painful, or abnormal. Common terms include dysphagia (difficulty swallowing), dyspnea (difficulty breathing), dysuria (painful urination), and dysfunction (abnormal function). "Hyper-" means excessive, "a-" or "an-" means without, and "supra-" means above.
68. **A. Inflammation of the kidney** Nephritis means inflammation of the kidney, from the combining form "nephr/o" (kidney) and the suffix "-itis" (inflammation). Hepatitis is inflammation of the liver, neuritis is inflammation of a nerve, and arthritis is inflammation of a joint. The combining form identifies the organ, and the suffix identifies the condition.

Anatomy

69. **D. The left and right main bronchi** The trachea bifurcates (divides) at the carina into the left and right main (primary) bronchi. Each main bronchus enters the corresponding lung at the hilum. The right main bronchus is shorter, wider, and more vertical than the left — which is why aspirated foreign bodies more commonly enter the right lung. The bronchi further divide into lobar and segmental bronchi within the lungs.
70. **B. Myocardium** The myocardium is the thick middle layer of the heart wall composed of cardiac muscle tissue. It is responsible for the heart's contractile function — the pumping action that propels blood through the circulatory system. The epicardium is the outer layer, the endocardium is the inner lining, and the pericardium is the protective sac surrounding the heart.
71. **A. The common bile duct (via the cystic duct to the common bile duct)** Bile travels from the gallbladder through the cystic duct, which joins the common hepatic duct to form the common bile duct. The common bile duct then delivers bile to the duodenum through the ampulla of Vater (hepatopancreatic ampulla). The pancreatic duct delivers pancreatic enzymes through the same ampulla. The thoracic duct is a lymphatic structure.
72. **C. Sesamoid bone** The patella (kneecap) is the largest sesamoid bone in the human body. Sesamoid bones are embedded within tendons — the patella is embedded in the quadriceps tendon. They protect tendons from stress and improve the mechanical advantage of muscles across joints. Long bones (femur), flat bones (sternum), and irregular bones (vertebrae) are different bone classifications.

ICD-10-CM / Diagnosis Coding

73. **D. Acute respiratory failure, since it was the reason for admission** When both conditions are treated and the physician documents that the patient was admitted for treatment of the respiratory

failure, the acute respiratory failure is sequenced as the principal diagnosis. The principal diagnosis is defined as the condition established after study to be chiefly responsible for the admission. The pneumonia is reported as a secondary diagnosis.

74. **B. The hemorrhage (manifestation) is sequenced first, followed by the T code for the adverse effect of the anticoagulant** Under ICD-10-CM adverse effect coding, the manifestation (the clinical condition caused by the adverse effect) is sequenced first. The T code identifying the drug responsible for the adverse effect is sequenced second. The GI hemorrhage is the manifestation and is listed first. The T code for the anticoagulant adverse effect follows.

75. **A. The documentation is specific, but the coding system does not have a code that matches the level of specificity documented** NEC (Not Elsewhere Classifiable) indicates that the physician's documentation is specific, but ICD-10-CM does not have a code that matches that level of specificity. The coder must use the NEC code because no better option exists. This differs from NOS (Not Otherwise Specified), where the documentation lacks specificity.

76. **C. Fifth or sixth character** Laterality in ICD-10-CM is typically captured in the fifth or sixth character position. For gout affecting the right great toe, the code would specify the site and laterality within these character positions. The first character indicates the chapter, and the 7th character (when applicable) indicates the encounter type.

77. **D. A Z code for the encounter for attention to artificial openings (Z43 category)** When a patient presents for management of a colostomy (fitting, adjustment, malfunction), the appropriate code is from the Z43 category (encounter for attention to artificial openings). The colon cancer code is not used because the cancer was treated in a previous encounter. The personal history code (Z85) may be reported as a secondary diagnosis to indicate the reason the colostomy was created.

HCPCS Level II

78. **B. A0000–A0999** HCPCS Level II A-codes in the A0000–A0999 range cover ambulance transport services, including ground and air ambulance, mileage, and related services. J-codes cover drugs, E-codes cover durable medical equipment, and L-codes cover orthotics and prosthetics.

79. **A. Modifier GA** Modifier GA (waiver of liability statement issued as required by payer policy) is appended when a signed ABN has been obtained from the patient before providing a service that Medicare may deny for medical necessity. If Medicare denies the claim, the provider may bill the patient because the patient was informed and agreed to accept financial responsibility. Modifier GZ would be used if no ABN was obtained.

80. **C. L5000–L9999 (within the L-code range for prosthetics)** Prosthetic devices — including lower extremity prostheses (below-knee, above-knee), upper extremity prostheses, and related services — are coded within the L-code range, specifically L5000–L9999 for prosthetics. The

broader L-code range (L0000–L4999) covers orthotic devices. E-codes cover DME, and J-codes cover drugs.

Coding Guidelines

81. **D. Modifier 53 (discontinued procedure)** Modifier 53 is appended when a physician elects to terminate a surgical procedure due to circumstances that threaten the well-being of the patient. The surgeon began the laparoscopic procedure and performed significant work before determining it was unsafe to continue. Modifier 52 (reduced services) would be used when the procedure was intentionally reduced in scope, not discontinued due to a complication or safety concern.
82. **B. Modifier 24** Modifier 24 (unrelated E/M service during the postoperative period) is appended when the physician evaluates and manages a condition completely unrelated to the original surgery during the 90-day global period. The skin rash is unrelated to the colectomy. Modifier 79 is for unrelated procedures, not E/M services. Modifier 78 is for complications requiring return to the OR.
83. **A. The procedure has a 0-day global period — no postoperative services are included beyond the day of the procedure** A global period of "000" means the procedure has a 0-day global period. The global period includes only the day of the procedure — no pre-operative or post-operative days are included. Follow-up visits the next day or later are not bundled and may be reported separately. This differs from "010" (10-day global), "090" (90-day global), and "XXX" (global concept does not apply).
84. **C. Modifier XE (Separate Encounter)** Modifier XE specifically indicates that the procedure was performed during a separate encounter on the same day. This is one of four X modifiers (XE, XS, XP, XU) that CMS encourages as more specific alternatives to modifier 59. XS indicates separate structure, XP indicates separate practitioner, and XU indicates unusual non-overlapping service.
85. **D. Modifier 50** Modifier 50 (bilateral procedure) is appended when a unilateral procedure is performed on both sides during the same operative session. Alternatively, the procedure may be reported on two separate lines with modifiers RT and LT. The payer's requirements determine which reporting method is used. Modifier 50 is the standard approach for indicating bilateral procedures.
86. **B. The procedure with the highest RVU (most resource-intensive)** When reporting multiple surgical procedures performed during the same session, the procedure with the highest RVU (most resource-intensive) should be listed first on the claim. This ensures that the highest-value procedure receives 100% reimbursement, while subsequent procedures receive the reduced payment rate under the multiple procedure payment reduction (MPPR).
87. **A. Modifier 76** Modifier 76 (repeat procedure by the same physician) is appended when the same physician repeats the same procedure on the same day. This tells the payer that the repeat was

clinically necessary — not a duplicate billing error. Modifier 77 would be used if a different physician repeated the procedure. Modifier 91 is used for repeat laboratory tests.

Compliance and Regulatory

88. **C. Non-facility rates are higher because the physician bears the overhead costs; facility rates are lower because the facility bills separately for overhead** In non-facility settings (physician's office), the physician bears all overhead costs — staff, equipment, supplies, rent. The payment includes a higher practice expense RVU to compensate. In facility settings (hospital), the facility provides overhead and bills separately. The physician's payment is lower because the practice expense component is reduced.
89. **D. Effective communication, including an anonymous reporting mechanism** An effective compliance program must include a mechanism for employees to report suspected violations without fear of retaliation. This is the "effective communication" element of the OIG's seven recommended compliance program components. Anonymous reporting mechanisms (hotlines, online portals) encourage employees to report concerns while protecting them from reprisal.
90. **B. Unbundling** Unbundling is the practice of reporting separate codes for individual components of a procedure that should be reported with a single comprehensive code. This artificially inflates reimbursement by breaking a single service into multiple billable units. Upcoding is reporting a higher-level code than documented. Downcoding is reporting a lower code. Duplicate billing is submitting the same claim twice.

Cases — Integrated Coding Scenarios

91. **A. 4.0 cm** The excised diameter is calculated as lesion diameter plus margins on both sides: 2.0 cm + (1.0 cm × 2) = 4.0 cm. Wide margins are standard for malignant melanoma excision. This 4.0 cm excised diameter determines the correct code within the malignant excision range for the arm anatomical grouping.
92. **C. Yes; intermediate and complex closures may be reported separately from excision codes** Simple wound closure is included in excision codes and is not reported separately. However, intermediate and complex closures require additional work beyond what is included in the excision code and may be reported separately. The intermediate layered closure of the excision site is a separately reportable service coded with the appropriate intermediate repair code.
93. **D. With the TEE code and modifier 26** The question states that the hospital provides the equipment and sonographer (technical component). Even though the cardiologist performs the probe placement and interpretation, the hospital provides the technical resources. The cardiologist

bills modifier 26 for the professional component, and the hospital bills modifier TC for the technical component.

94. **B. I51.3 (Intracardiac thrombosis, not elsewhere classified)** The TEE confirmed a left atrial appendage thrombus. The most specific diagnosis for this finding is I51.3 (intracardiac thrombosis). The atrial fibrillation (I48.91) and heart failure (I50.9) may be reported as secondary diagnoses representing the patient's underlying conditions that led to the thrombus formation.

95. **A. A primary transforaminal injection code for the first level plus an add-on code for the additional level** Transforaminal epidural injection codes use a primary code for the first level and an add-on code for each additional level within the same spinal region. Two cervical levels require one primary code plus one add-on code. This structure is consistent across spinal injection coding — primary code for the first level, add-on for each additional.

96. **D. It is not reported separately; imaging guidance is included in the injection codes** The transforaminal epidural injection codes include fluoroscopic guidance in their code descriptions. When imaging guidance is bundled into the procedure code, a separate fluoroscopy code should not be reported. This applies to both the primary injection code and the add-on code for the additional level. Reporting separate guidance codes constitutes double billing.

97. **C. 99205 (new patient, high MDM)** A new patient with high-complexity MDM supports the highest new patient office visit code — 99205. The patient is new to this physician, the evaluation is comprehensive, and the MDM involves multiple chronic conditions with complex management decisions. Code 99215 is for established patients. Codes 99213 and 99214 reflect lower MDM levels.

98. **B. An additional code from N18 specifying the CKD stage** Type 2 diabetes with diabetic nephropathy is coded with E11.22 (Type 2 diabetes mellitus with diabetic chronic kidney disease). An additional code from N18 (N18.3 for stage 3 CKD) is required to specify the CKD stage. Both codes are needed to completely capture the condition and its severity. The N18 code provides the specific staging information.

99. **A. Laparoscopic appendectomy (44970)** The procedure was completed laparoscopically without conversion to an open approach, and the appendix was acutely inflamed but not ruptured. The correct code is the laparoscopic appendectomy (44970). The open appendectomy code (44950) would be incorrect because the procedure was laparoscopic. The ruptured appendix code (44960) does not apply because no rupture occurred.

100. **D. Modifier 78 (unplanned return to OR for complication)** The wound infection is a complication of the original surgery requiring an unplanned return to the operating room during the 90-day global period. Modifier 78 is appended to the I&D code. Modifier 58 is for planned staged procedures. Modifier 79 is for unrelated procedures. Modifier 24 is for unrelated E/M services, not procedures.