SIMULATION EXAM 11

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

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

1. A surgeon excises a 3.5 cm malignant melanoma from the patient's upper back with 2.0 cm margins. What is the excised diameter for code selection?

A. 3.5 cm

B. 5.5 cm

C. 4.5 cm

D. 7.5 cm

2. A patient has two lacerations: a 5.0 cm complex repair on the scalp requiring extensive undermining and a 4.0 cm complex repair on the forehead requiring retention sutures. Both sites are in the same anatomical grouping for complex repair. How should these be reported?

A. One complex repair code for 9.0 cm combining both wounds

B. Two separate complex repair codes

C. One complex repair code for the largest wound only

D. One intermediate repair code for 9.0 cm

3. A dermatologist destroys 6 actinic keratoses and 4 benign seborrheic keratoses on a patient during the same encounter. The premalignant and benign lesion destruction code ranges are different. How should these be reported?

A. One code for all 10 lesions combined

B. Only the premalignant codes; the benign destruction is bundled

C. Separate codes from each destruction code range — premalignant codes for the actinic keratoses and benign codes for the seborrheic keratoses

D. Only the benign codes; the premalignant destruction is bundled

4. A surgeon performs a tissue rearrangement using a Z-plasty technique to release a scar contracture on the patient's neck. The defect measures 8 sq cm. Which code range covers Z-plasty?

A. Free skin graft codes

B. Adjacent tissue transfer codes (14000–14350)

C. Wound repair codes

D. Skin biopsy codes

5. A physician performs excision of a 1.0 cm benign cyst from the patient's left cheek with 0.2 cm margins. The wound is closed with intermediate layered repair. What is the excised diameter?

A. 1.0 cm

B. 1.2 cm

C. 1.8 cm

D. 1.4 cm

6. A surgeon performs debridement of a diabetic foot ulcer involving skin, subcutaneous tissue, and muscle. The debridement extends to the muscle layer but does not reach bone. Which depth determines the debridement code?

A. Skin only

B. Subcutaneous tissue

C. Muscle — the deepest tissue level debrided determines the code

D. Bone

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

7. A surgeon performs an arthroscopic subacromial decompression of the left shoulder as a standalone procedure. No rotator cuff repair is performed. How should this be coded?

A. With the arthroscopic subacromial decompression code as a standalone procedure

B. With a diagnostic arthroscopy code only

C. With the rotator cuff repair code and modifier 52

D. With a nerve decompression code

8. An orthopedic surgeon performs a percutaneous pinning of a supracondylar humerus fracture in a 4-year-old child. In CPT, "percutaneous skeletal fixation" involves which of the following?

A. Open surgical exposure of the fracture

B. Placement of fixation devices (pins) through the skin without surgically opening the fracture site

C. Application of an external fixation frame

D. Casting without any fixation devices

9. A patient undergoes a two-level anterior cervical discectomy and fusion (ACDF) at C4-C5 and C5-C6 with an interbody cage at each level and an anterior cervical plate spanning C4-C6. How should the second-level fusion be coded?

A. With a second primary fusion code and modifier 51

B. With a second primary fusion code and modifier 59

C. With the first-level fusion code and modifier 76

D. With an add-on code for the additional interspace fusion

10. A patient undergoes removal of a deep foreign body (metal fragment) from the soft tissue of the left thigh. The surgeon makes an incision and dissects through subcutaneous tissue and muscle to locate and remove the fragment. Which CPT section contains the code for deep foreign body removal?

A. Integumentary system

B. Medicine section

C. Musculoskeletal system (20,000 series)

D. Radiology section

11. A surgeon performs an open Achilles tendon repair following an acute traumatic rupture. The tendon ends are identified and directly sutured together. What type of tendon procedure is this?

A. Primary tendon repair (tenorrhaphy)

B. Tendon transfer

C. Tendon graft

D. Tenotomy (tendon release)

12. A patient undergoes injection of platelet-rich plasma (PRP) into the right knee joint under ultrasound guidance. The joint injection code does NOT include ultrasound guidance. How should the ultrasound guidance be coded?

A. It is included in the joint injection code

B. With modifier 22 on the injection code

C. With a fluoroscopic guidance code

D. With a separate ultrasound guidance code in addition to the injection code

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

13. A surgeon performs a bronchoscopy with placement of a fiducial marker in the right lung for future stereotactic body radiation therapy (SBRT) targeting. How should the diagnostic bronchoscopy be coded?

A. As a separate code with modifier 59

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

C. As a separate code with modifier 25

D. As a separate code with modifier 51

14. A cardiologist removes a malfunctioning atrial lead from an existing dual-chamber pacemaker and inserts a new atrial lead during the same session. The ventricular lead and generator are tested and left in place. How should the lead exchange be coded?

A. With a single lead exchange code if CPT provides one

B. Only the lead removal code

C. With separate codes for the lead removal and the new lead insertion

D. With a complete system replacement code

15. A patient undergoes a percutaneous transluminal angioplasty (PTA) of the right superficial femoral artery for peripheral arterial disease. No stent is placed. How is the angioplasty coded when no stent is used?

A. With the standalone PTA code for the specific vascular territory

B. With the stent placement code and modifier 52

C. With a diagnostic angiography code only

D. PTA cannot be coded without a stent

16. A patient has an implantable loop recorder (ILR) inserted subcutaneously in the left parasternal area for evaluation of recurrent unexplained syncope. Which CPT subsection contains the ILR insertion code?

A. Neurology subsection

B. Radiology subsection

C. Pulmonary function subsection

D. Cardiovascular — implantable cardiac monitor subsection in Medicine

17. A surgeon performs a mediastinoscopy with biopsy of mediastinal lymph nodes for staging of lung cancer. The mediastinoscopy code includes the biopsy. How should the biopsy be coded?

A. As a separate code with modifier 59

B. It is included in the mediastinoscopy code; the biopsy is not reported separately

C. As a separate code with modifier 51

D. As a separate code with modifier 25

18. A surgeon performs an emergency pericardiocentesis for cardiac tamponade. The pericardial fluid is aspirated through a subxiphoid approach using a needle under echocardiographic guidance. What does pericardiocentesis accomplish?

A. It repairs a hole in the heart wall

B. It removes a blood clot from the coronary artery

C. It drains fluid from the pericardial sac surrounding the heart to relieve pressure on the heart

D. It implants a pacemaker

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

19. A patient undergoes a colonoscopy with placement of an endoscopic clip to mark the site of a previously biopsied lesion for future surgical localization. How should the diagnostic colonoscopy be coded?

A. It is not reported separately; it is included in the surgical colonoscopy clip placement code

B. As a separate code with modifier 59

C. As a separate code with modifier 25

D. As a separate code with modifier 51

20. A surgeon performs an open cholecystectomy with exploration of the common bile duct and removal of stones from the common bile duct. How should the common bile duct exploration be coded?

A. As a separate code with modifier 59

B. As a separate code with modifier 51

C. With an ERCP code for the stone removal

D. CPT provides combined codes for cholecystectomy with common bile duct exploration; the exploration is included in the combined code

21. A patient undergoes an EGD with injection of botulinum toxin into the pylorus for treatment of gastroparesis. How should the diagnostic EGD 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 EGD code

D. As a separate code with modifier 25

22. A surgeon performs an open ventral hernia repair on a patient with a large incisional hernia. The hernia is reducible and this is the initial repair. During the procedure, the surgeon places a biologic mesh to reinforce the repair. Does the use of mesh change the CPT code?

A. Yes; CPT provides different codes for hernia repair with and without mesh

B. No; the use of mesh does not change the CPT code for ventral hernia repair

C. Yes; modifier 22 must be appended when mesh is used

D. Yes; a separate mesh implantation code is reported

23. A patient undergoes percutaneous placement of a gastrojejunostomy tube (GJ-tube) under fluoroscopic guidance. The procedure is performed by an interventional radiologist. How does a GJ-tube differ from a standard G-tube?

A. A GJ-tube delivers feeding directly into the jejunum through a tube that passes through the stomach; a G-tube delivers feeding into the stomach

B. There is no difference; both terms describe the same device

C. A GJ-tube is placed surgically; a G-tube is placed endoscopically

D. A GJ-tube is temporary; a G-tube is permanent

24. A patient undergoes a colonoscopy. The gastroenterologist identifies a suspicious flat lesion in the ascending colon and performs an endoscopic submucosal dissection (ESD) to remove it en bloc. How should the diagnostic colonoscopy 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 included in the surgical colonoscopy code

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

25. A urologist performs a cystoscopy with transurethral resection of a bladder neck contracture. The diagnostic cystoscopy is bundled. What is a bladder neck contracture?

A. A tumor of the bladder neck

B. Scarring and narrowing of the bladder neck that obstructs urine flow, typically occurring after prostate surgery

C. A congenital malformation of the bladder

D. A kidney stone lodged at the bladder neck

26. A patient undergoes a robotic-assisted laparoscopic partial nephrectomy for a 3.0 cm renal mass. In CPT, how is the robotic-assisted approach coded?

A. With a specific robotic surgery code

B. With the open partial nephrectomy code plus a robotic modifier

C. With the laparoscopic partial nephrectomy code; robotic assistance is included in the laparoscopic code

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

27. A physician performs a cesarean delivery after a failed trial of labor. A different physician provided all antepartum care. The delivering physician will also provide all postpartum care. Which coding approach should be used by the delivering physician?

A. The global cesarean delivery code

B. The antepartum-only code plus the cesarean delivery-only code

C. The vaginal delivery-only code with modifier 22

D. The cesarean delivery-only code plus the postpartum care-only code (for cesarean after attempted vaginal delivery, if applicable)

28. A surgeon performs a total abdominal hysterectomy on a patient with a uterine weight of 320 grams. CPT differentiates abdominal hysterectomy codes based on a uterine weight threshold of 250 grams. Which weight category applies?

A. Greater than 250 grams

B. 250 grams or less

C. The weight does not affect code selection

D. Greater than 500 grams

29. A urologist performs a urodynamic study including uroflowmetry, cystometrography (CMG), and voiding pressure study on a patient with urinary incontinence. Urodynamic codes are found in which CPT section?

A. Radiology section

B. Surgery section — urinary system subsection

C. Pathology and Laboratory section

D. Medicine section

30. A surgeon performs a right thyroid lobectomy with isthmusectomy for a thyroid nodule. The final pathology reveals a benign follicular adenoma. How is a lobectomy with isthmusectomy different from a total thyroidectomy?

A. There is no difference; both remove the entire thyroid

B. A lobectomy removes one lobe; a total thyroidectomy removes only the isthmus

C. A lobectomy with isthmusectomy removes one lobe and the isthmus, preserving the contralateral lobe; a total thyroidectomy removes all thyroid tissue

D. A lobectomy removes the parathyroid glands; a total thyroidectomy does not

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

31. A neurosurgeon performs a lumbar laminectomy at L3-L4 for decompression of spinal stenosis and a separate laminectomy at L4-L5 for decompression at the adjacent level. No fusion is performed. How should the second level be coded?

A. With a second primary laminectomy code and modifier 51

B. With a second primary laminectomy code and modifier 59

C. With the first code and modifier 76

D. With the appropriate add-on code for laminectomy at an additional level

32. An ophthalmologist performs a dacryocystorhinostomy (DCR) on the right side to treat chronic nasolacrimal duct obstruction causing recurrent dacryocystitis. What does a DCR accomplish?

A. It creates a new drainage pathway between the lacrimal sac and the nasal cavity, bypassing the blocked nasolacrimal duct

B. It removes the lacrimal gland

C. It inserts a punctal plug for dry eye

D. It repairs a retinal detachment

33. A pain management physician performs a diagnostic right L3 medial branch nerve block and a diagnostic right L4 medial branch nerve block under fluoroscopic guidance. The nerve block codes include imaging guidance. The purpose is to determine if the patient is a candidate for radiofrequency ablation. How should the two levels be coded?

A. Two separate primary nerve block codes

B. A primary nerve block code for the first level plus an add-on code for the additional level

C. One nerve block code for both levels combined

D. One nerve block code with modifier 22

34. A patient undergoes a lumbar puncture (spinal tap) for diagnostic evaluation of suspected meningitis. CSF is collected and sent for analysis. No therapeutic injection is performed. Which code should be reported?

A. A therapeutic spinal injection code

B. A neurostimulator placement code

C. The diagnostic lumbar puncture code (62270)

D. An epidural injection code

35. A patient undergoes bilateral phacoemulsification cataract extraction with IOL implantation — right eye today, left eye in three weeks. The right eye surgery has a 90-day global period. How should the left eye surgery be coded?

A. With code 66984 and modifier 50 for bilateral

B. With code 66984 and modifier 76 for repeat procedure

C. With code 66984 and modifier 58 for staged procedure

D. With code 66984 plus modifier 79 (unrelated procedure during postoperative period) and modifier LT

36. An otolaryngologist performs an endoscopic sinus surgery — bilateral total ethmoidectomy and bilateral maxillary antrostomy during the same session. Each procedure has its own CPT code. How should the bilateral nature of each procedure be reported?

A. Each procedure code is reported bilaterally with modifier 50 or RT/LT modifiers

B. Only one procedure code is reported; the second is bundled

C. Each procedure is reported once with no laterality modifier

D. Only the most complex procedure is reported bilaterally

Evaluation and Management (Questions 37–42)

37. An established patient presents to the office with a single, self-limited problem (common cold). The physician performs a focused evaluation, prescribes an over-the-counter decongestant, and provides reassurance. No data is reviewed. What level of MDM does this support?

A. Low

B. Straightforward

C. Moderate

D. High

38. A physician admits a patient to the hospital and provides initial hospital care. The following day, the patient's condition deteriorates significantly. The physician provides 80 minutes of critical care on day two. How should day two's services be coded?

A. With a subsequent hospital care code (99233)

B. With an initial hospital care code (99223)

C. With an ED visit code (99285)

D. With critical care codes — 99291 × 1 plus 99292 × 1 (80 minutes of critical care)

39. A physician provides a telehealth visit to an established patient via synchronous real-time audio-video communication. The visit involves 25 minutes of total time. Which modifier indicates the service was provided via telehealth?

A. Modifier 25

B. Modifier 59

C. Modifier 95 (synchronous telemedicine service)

D. Modifier 76

40. A physician performs a level 4 established patient office visit (99214) and also removes an embedded foreign body from the patient's right hand (10-day global period minor procedure) during the same encounter. The E/M is significant and separately identifiable. Which modifier should be appended to the E/M code?

A. Modifier 25

B. Modifier 57

C. Modifier 59

D. Modifier 51

41. A patient is placed in observation status by physician A after an ED evaluation by physician B (a different physician). Physician A provides the initial observation care. The following day, physician A discharges the patient from observation. Which code does physician A report for the discharge?

A. Hospital discharge code (99238)

B. Observation discharge code (99217)

C. Subsequent observation care code (99224)

D. ED visit code (99285)

42. Under the current E/M guidelines, which of the following correctly describes how the number and complexity of problems addressed affects MDM?

A. Only acute problems count toward MDM; chronic problems are excluded

B. The number of diagnoses must equal the number of medications prescribed

C. Each problem must be documented with a separate H&P

D. The number and complexity of problems is one of three elements — problems are categorized by severity (self-limited, chronic stable, chronic worsening, acute uncomplicated, acute with systemic illness, etc.)

Anesthesia (Questions 43–46)

43. An anesthesiologist provides general anesthesia for a right total knee replacement on a 58-year-old patient with morbid obesity and poorly controlled diabetes (P3). Total anesthesia time is 135 minutes. The payer uses 15-minute time units and assigns 1 modifying unit for P3. Base units are 7. What is the total unit calculation?

A. 16 units

B. 15 units

C. 17 units

D. 18 units

44. A patient is classified as physical status P3. Which of the following clinical scenarios best represents P3?

A. A patient with severe COPD requiring home oxygen, morbid obesity, and poorly controlled diabetes

B. A normal healthy patient with no medical problems

C. A patient with well-controlled mild hypertension

D. A moribund patient with a ruptured aortic aneurysm

45. An anesthesiologist provides anesthesia for a patient undergoing emergency cesarean section for placental abruption. Which qualifying circumstances code applies for the emergency nature?

A. 99100 (extreme age)

B. 99140 (emergency conditions)

C. 99116 (total body hypothermia)

D. 99135 (controlled hypotension)

46. In the anesthesia payment formula, time units are calculated by dividing total anesthesia minutes by the payer's minutes-per-unit value. If the total anesthesia time is 225 minutes and the payer uses 15-minute time units, how many time units are calculated?

A. 14 units

B. 16 units

C. 13 units

D. 15 units

Radiology (Questions 47–52)

47. A patient undergoes an MRI of the brain with and without gadolinium contrast (dual-phase study). How should this be coded?

A. MRI brain without contrast followed by with contrast (single combination code)

B. Two separate codes — MRI brain without contrast plus MRI brain with contrast

C. MRI brain with contrast only

D. MRI brain without contrast only

48. A hospital performs a CT of the abdomen with IV contrast on an inpatient. A staff radiologist employed by the hospital interprets the study. The hospital owns the equipment, employs the technologist, and employs the radiologist. How should the CT be billed?

A. The hospital bills modifier TC and the radiologist bills modifier 26

B. The radiologist bills the global code

C. The hospital bills the global code since all components are provided by hospital employees

D. Two separate global codes

49. A patient undergoes arthrography of the right shoulder — the radiologist injects gadolinium contrast into the shoulder joint under fluoroscopic guidance, followed by MRI of the shoulder. How should the injection component be coded?

A. It is included in the MRI code

B. With a separate joint injection code for the contrast administration

C. With the MRI code and modifier 22

D. With a separate IV contrast injection code

50. In nuclear medicine, a cardiac perfusion study (myocardial perfusion imaging) is performed with rest and stress images using pharmacological stress (adenosine) instead of exercise. How does pharmacological stress differ from exercise stress?

A. Pharmacological stress uses a treadmill; exercise stress uses medication

B. Pharmacological stress is only used for screening; exercise stress is for diagnosis

C. There is no difference; both are identical

D. Pharmacological stress uses a vasodilating drug to simulate the cardiac effects of exercise; exercise stress uses actual physical exertion on a treadmill or bicycle

51. A patient undergoes a screening low-dose CT of the chest for lung cancer screening. The patient is 60 years old with a 35 pack-year smoking history. Which type of CT is this?

A. Low-dose CT (LDCT) for lung cancer screening — a specific code distinct from diagnostic chest CT

B. Standard diagnostic CT of the chest with contrast

C. CT angiography of the chest

D. High-resolution CT of the chest

52. A radiation oncologist prescribes a course of proton beam radiation therapy for a pediatric brain tumor. How does proton beam therapy differ from conventional photon (X-ray) radiation therapy?

A. Proton beam and photon radiation are identical

B. Proton beam is only available for breast cancer

C. Proton beam delivers radiation that stops at a precise depth (Bragg peak), reducing radiation exposure to tissues beyond the tumor; photon radiation passes through the body

D. Proton beam uses radioactive seeds; photon radiation uses external beams

Pathology and Laboratory (Questions 53–58)

53. A physician orders an obstetric panel (80055) on a pregnant patient at her first prenatal visit. The panel includes CBC, hepatitis B surface antigen, syphilis test, antibody screen, blood typing, Rh, and rubella antibody. The physician also orders a urine culture (87086) on the same date. How should these be reported?

A. Only the obstetric panel code; the urine culture is bundled

B. The obstetric panel code plus the individual urine culture code

C. Individual codes for each test; the panel cannot be used with additional tests

D. The obstetric panel code with modifier 22

54. A pathologist examines a radical nephrectomy specimen including the kidney, perirenal fat, Gerota's fascia, and regional lymph nodes. At which level of surgical pathology is a radical nephrectomy classified?

A. Level IV (88305)

B. Level III (88304)

C. Level VI (88309)

D. Level V (88307)

55. A laboratory performs both a qualitative urine pregnancy test and a quantitative serum hCG level on the same patient on the same date. How should these be reported?

A. Both codes — the qualitative urine hCG and the quantitative serum hCG are different tests with different CPT codes

B. Only the quantitative test; the qualitative is bundled

C. Only the qualitative test; the quantitative is not separately reportable

D. One code with modifier 91

56. A patient has an in-office rapid COVID-19 antigen test performed using a CLIA-waived test kit. Which code and modifier combination should be reported?

A. The COVID-19 NAAT code (87635) with modifier QW

B. The COVID-19 antigen detection code (87811) without any modifier

C. The COVID-19 antigen detection code with modifier QW

D. An E/M code only; the rapid test is included

57. A pathologist performs flow cytometry on a bone marrow specimen from a patient with suspected lymphoma. Flow cytometry analyzes cell surface markers to classify the type of lymphoma. Which CPT subsection contains flow cytometry codes?

A. Surgical pathology codes

B. Microbiology codes

C. Chemistry codes

D. The flow cytometry codes are in the Pathology and Laboratory section under the immunology or hematology subsection

58. A laboratory performs a Cologuard stool DNA test for colorectal cancer screening. This test combines molecular markers with a fecal immunochemical test (FIT). What type of test is Cologuard classified as in CPT?

A. A standard microbiology culture

B. A multianalyte assay with algorithmic analysis (MAAA)

C. A surgical pathology specimen

D. A qualitative chemistry test

Medicine (Questions 59–64)

59. A patient receives a 3-hour IV infusion of a chemotherapy agent (docetaxel) as the only IV service during the encounter. How should the infusion be coded?

A. 96413 × 1 (initial hour) plus 96415 × 2 (two additional hours)

B. 96365 × 1 plus 96366 × 2 (therapeutic infusion codes)

C. 96360 × 1 plus 96361 × 2 (hydration codes)

D. 96413 × 3 (three units of the initial code)

60. A physician performs a nerve conduction study (NCS) testing 10 nerves and an electromyography (EMG) of 3 extremities during the same encounter. How should these be coded?

A. Only the NCS code; the EMG is bundled

B. Only the EMG code; the NCS is bundled

C. Both the NCS code for 9–10 nerves and the EMG code for 3 extremities — they are separate services

D. One combined NCS/EMG code

61. An established patient presents for a follow-up of chronic heart failure. The cardiologist performs an office visit and orders a transthoracic echocardiogram (TTE) with Doppler and color flow, performed and interpreted in the cardiologist's own office using practice-owned equipment. How should the echocardiogram be coded?

A. With modifier 26 only

B. With modifier TC only

C. With modifier 59

D. With the global code (no modifier) since both components are provided

62. A therapist provides 15 minutes of manual therapy (97140), 20 minutes of therapeutic exercise (97110), and 10 minutes of neuromuscular reeducation (97112) during the same physical therapy session. Using the 8-minute rule, how many total timed units are reported?

A. 2 units

B. 3 units

C. 4 units

D. 1 unit

63. An allergist performs allergen immunotherapy by administering a single subcutaneous injection using an allergen extract that the allergist prepared at a previous visit. Which immunotherapy code should be reported for today's injection?

A. 95115 (single injection)

B. 95117 (two or more injections)

C. The antigen preparation code plus 95115

D. Only an E/M code; the injection is included

64. A patient undergoes a polysomnography (PSG) with sleep staging and 4 or more additional parameters at a sleep center. The PSG is performed to diagnose suspected obstructive sleep apnea. During the study, the technologist initiates CPAP titration after the diagnostic portion confirms severe OSA. How should this split-night study be coded?

A. With the diagnostic PSG code (95810) only

B. With the diagnostic PSG code plus a separate CPAP titration code

C. With the split-night PSG code (95811) — polysomnography with CPAP/BiPAP titration

D. With the home sleep test code (95800)

Medical Terminology (Questions 65–68)

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

A. Pain

B. Inflammation

C. Surgical removal

D. Enlargement

66. Which combining form refers to the blood vessel?

A. Angi/o or vas/o

B. Cardi/o

C. Hem/o

D. Neur/o

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

A. Below

B. Upon, above, or on top of

C. Within

D. Behind

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

A. Inflammation of the lung

B. Fluid in the pleural space

C. Air in the pleural space (collapsed lung)

D. Blood in the pleural space

Anatomy (Questions 69–72)

69. The bundle of His and Purkinje fibers are part of which cardiac structure?

A. The coronary arterial system

B. The cardiac valve system

C. The pericardial sac

D. The cardiac conduction system

70. Which structure of the ear converts sound vibrations into electrical nerve impulses?

A. The cochlea (specifically the organ of Corti)

B. The tympanic membrane

C. The ossicles

D. The external auditory canal

71. The median nerve passes through which anatomical structure at the wrist?

A. The cubital tunnel

B. The carpal tunnel

C. The Guyon canal

D. The tarsal tunnel

72. The adrenal medulla produces which hormones?

A. Cortisol and aldosterone

B. Insulin and glucagon

C. Thyroid hormone and calcitonin

D. Epinephrine (adrenaline) and norepinephrine

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

73. A patient presents with a displaced fracture of the right proximal humerus. The orthopedic surgeon provides initial treatment including closed reduction. Which 7th character should be used for this initial encounter?

A. D (subsequent encounter)

B. S (sequela)

C. A (initial encounter)

D. G (subsequent encounter with delayed healing)

74. A patient undergoes an outpatient evaluation for persistent cough. The physician documents "rule out lung cancer" and orders a CT of the chest. In the outpatient setting, how should "rule out lung cancer" be coded?

A. With the symptom code for cough (R05.9); the suspected lung cancer is not coded because it has not been confirmed

B. With the lung cancer code (C34.90)

C. With a Z code for screening (Z12.2)

D. With both the cough code and the lung cancer code

75. A patient has documented chronic kidney disease stage 5 on hemodialysis. Under ICD-10-CM, how should the dialysis status be captured?

A. Only the CKD stage 5 code (N18.5)

B. The CKD stage 5 code (N18.6 for ESRD) plus the Z code for dialysis status (Z99.2)

C. Only the dialysis status Z code

D. The CKD code with modifier 22

76. In ICD-10-CM, late effects of cerebrovascular disease (stroke) are coded using which code category?

A. I60–I69 acute cerebrovascular disease codes

B. G81 (Hemiplegia)

C. Z87 (Personal history)

D. I69 (Sequelae of cerebrovascular disease)

77. A coder is assigning diagnosis codes for a patient with a BMI of 42.1 and documented morbid obesity. Which ICD-10-CM codes are required?

A. Only the BMI code (Z68.42)

B. Only the morbid obesity code (E66.01)

C. The morbid obesity code (E66.01) plus the BMI code (Z68.42)

D. E66.9 (Obesity, unspecified) only

HCPCS Level II (Questions 78–80)

78. A patient receives an injection of adalimumab (Humira) 40 mg subcutaneously in the physician's office. The HCPCS J-code covers the drug product. What additional code is needed for the injection?

A. CPT code 96372 for the subcutaneous/intramuscular injection administration

B. No additional code; the J-code covers both the drug and administration

C. A separate E/M code for the injection

D. HCPCS code for the syringe supply only

79. A Medicare patient requires a hospital bed for home use due to a medical condition. Which HCPCS Level II code range covers hospital beds and related DME?

A. J0000–J9999

B. E0250–E0373 (within the E-code range for DME)

C. L0000–L9999

D. A0000–A0999

80. A provider performs a service that Medicare denies. No ABN was obtained from the patient. Modifier GZ was appended to the claim. What is the financial consequence?

A. The provider may bill the patient for the full amount

B. The provider may bill the patient for the Medicare-allowed amount

C. The provider must appeal within 30 days to recover payment

D. The provider cannot bill the patient and must absorb the cost

Coding Guidelines (Questions 81–87)

81. A surgeon performs a bilateral inguinal hernia repair (open, initial, reducible) during the same operative session. CPT describes the inguinal hernia repair code as a unilateral procedure. How should the bilateral procedure be reported?

A. With two separate primary hernia repair codes and modifier 51 on the second

B. With one hernia repair code and modifier 22

C. With the hernia repair code and modifier 50 or reported bilaterally with RT/LT modifiers

D. With one hernia repair code and no modifier

82. A physician performs an E/M service that results in the decision to perform a major surgical procedure with a 90-day global period. The surgery will be performed the following week. Which modifier is appended to the E/M code?

A. Modifier 57

B. Modifier 25

C. Modifier 59

D. Modifier 24

83. Under the NCCI, what is the primary purpose of Medically Unlikely Edits (MUEs)?

A. To identify bundled code pairs

B. To determine modifier indicators

C. To define global surgical periods

D. To establish the maximum number of units of a service reportable for a single patient on a single date

84. A surgeon begins a laparoscopic cholecystectomy but encounters severe inflammation and converts to an open cholecystectomy. How should this be coded?

A. Both the laparoscopic and open cholecystectomy codes

B. The open cholecystectomy code only; the abandoned laparoscopic approach is not coded

C. The laparoscopic code with modifier 22

D. The laparoscopic code with modifier 53

85. Which of the following correctly describes the purpose of modifier 59 (Distinct Procedural Service)?

A. It indicates a reduced service

B. It indicates a bilateral procedure

C. It indicates a distinct procedural service that is separate and independent from other services on the same day, used to bypass NCCI edits when clinically justified

D. It indicates a staged procedure during the postoperative period

86. In CPT, the guidelines section at the beginning of each major section (Surgery, Medicine, Radiology, etc.) contains important rules. When do these section-specific guidelines apply?

A. They apply to all codes within that section and take precedence over general CPT guidelines when there is a conflict specific to that section

B. They apply only to add-on codes

C. They apply only to Medicare patients

D. They are optional suggestions, not binding rules

87. A patient undergoes a repeat of the same laboratory test on the same day by the same laboratory — the first result was questionable and the test was repeated for verification. Which modifier should be appended to the repeat test?

A. Modifier 76

B. Modifier 59

C. Modifier 77

D. Modifier 91

Compliance and Regulatory (Questions 88–90)

88. Under the Medicare Physician Fee Schedule, which component of the payment formula is a dollar amount that converts total adjusted RVUs into an actual payment?

A. The Work RVU

B. The conversion factor

C. The GPCI

D. The Practice Expense RVU

89. A medical practice receives a request from a government auditor to produce documentation for a random sample of claims. Under the compliance program, what is the appropriate response?

A. Destroy any documentation that might reveal errors

B. Refuse to cooperate until a court order is issued

C. Cooperate fully, produce the requested documentation, and involve the compliance officer and legal counsel

D. Only produce documentation for claims that were accurately coded

90. Which of the following correctly describes the relationship between a Local Coverage Determination (LCD) and a National Coverage Determination (NCD)?

A. NCDs apply uniformly nationwide and take precedence over LCDs; LCDs apply only within specific MAC jurisdictions and may not contradict NCDs

B. LCDs take precedence over NCDs

C. NCDs and LCDs are identical

D. LCDs apply nationwide; NCDs apply locally

Cases — Integrated Coding Scenarios (Questions 91–100)

Case 1 (Questions 91–92):

A 65-year-old patient undergoes a right total hip arthroplasty for severe osteoarthritis. The surgeon provides all preoperative, surgical, and postoperative care. During the 90-day global period, the patient develops a deep wound infection requiring a return to the operating room for irrigation and debridement.

91. The surgeon provides all components of care. How should the primary total hip arthroplasty be coded?

A. With modifier 54

B. With modifier 55

C. With modifier 56

D. With the complete global package — no splitting modifiers

92. The patient returns to the OR during the global period for treatment of the wound infection (a complication). Which modifier should be appended to the I&D code?

A. Modifier 58

B. Modifier 78

C. Modifier 79

D. Modifier 24

Case 2 (Questions 93–94):

A 70-year-old Medicare patient presents for evaluation of new-onset right-sided weakness and slurred speech. The ED physician diagnoses an acute ischemic stroke and admits the patient. The same ED physician provides the admission.

93. The same physician provides the ED evaluation and admits the patient on the same date. How should the services be coded?

A. Both the ED visit code and the initial hospital care code

B. The ED visit code with modifier 25 plus the admission code

C. Only the initial hospital care code; the ED evaluation is rolled into the admission

D. Only the ED visit code; the admission is bundled

94. The patient's primary diagnosis is acute ischemic cerebral infarction affecting the right middle cerebral artery territory. Which ICD-10-CM code category covers acute cerebral infarction?

A. I63 (Cerebral infarction)

B. I69 (Sequelae of cerebrovascular disease)

C. G45 (Transient cerebral ischemic attacks)

D. I10 (Essential hypertension)

Case 3 (Questions 95–96):

A patient receives IV chemotherapy in an outpatient infusion center. The treatment consists of a 90-minute IV infusion of carboplatin (chemotherapy), a 30-minute IV infusion of etoposide (chemotherapy — different drug, sequential), and 45 minutes of IV hydration with normal saline.

95. According to the infusion hierarchy, which service is the initial service?

A. The IV hydration

B. The etoposide infusion

C. Each is a separate initial service

D. The carboplatin chemotherapy infusion

96. The etoposide is a different chemotherapy drug infused sequentially after the carboplatin through the same IV line. How should the etoposide infusion be coded?

A. With a second initial chemotherapy infusion code (96413)

B. With the sequential chemotherapy infusion add-on code (96417)

C. With the therapeutic drug infusion code (96365)

D. With the hydration add-on code (96361)

Case 4 (Questions 97–98):

A surgeon performs excision of a 2.5 cm malignant squamous cell carcinoma from the patient's right temple with 0.5 cm margins. The wound requires complex closure with extensive undermining.

97. What is the excised diameter for code selection?

A. 2.5 cm

B. 3.0 cm

C. 3.5 cm

D. 4.0 cm

98. The wound requires complex closure. Should the complex repair be coded separately from the excision?

A. Yes; complex closure may be reported separately from excision codes

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

C. No; complex closure is included in malignant excision codes

D. Yes, but only with modifier 22

Case 5 (Questions 99–100):

A 55-year-old patient undergoes a diagnostic colonoscopy. The gastroenterologist identifies a 2.0 cm sessile polyp in the transverse colon and removes it using endoscopic mucosal resection (EMR) technique. No other lesions are found.

99. How should this be coded?

A. The diagnostic colonoscopy code (45378) only

B. The diagnostic colonoscopy code plus the EMR code with modifier 59

C. Both the diagnostic colonoscopy code and the EMR code

D. The colonoscopy with EMR code only; the diagnostic colonoscopy is bundled

100. The patient is a Medicare beneficiary who presented for a diagnostic colonoscopy due to a change in bowel habits — not for a routine screening. Which diagnosis should be reported as the first-listed code?

A. Z12.11 (Encounter for screening for malignant neoplasm of colon)

B. The appropriate symptom code for the change in bowel habits (such as R19.4) as the first-listed diagnosis, with the polyp code as secondary

C. K63.5 (Polyp of colon) as the first-listed diagnosis

D. Z87.19 (Personal history of diseases of the digestive system)

SIMULATION EXAM 11 — ANSWER KEY WITH EXPLANATIONS

10,000 Series — Integumentary System

1. **D. 7.5 cm** The excised diameter is calculated as lesion diameter plus margins on both sides: 3.5 cm + (2.0 cm × 2) = 7.5 cm. Wide margins of 2.0 cm are standard for malignant melanoma, particularly for lesions with greater Breslow depth. This 7.5 cm excised diameter determines the correct code within the malignant excision range for the trunk anatomical grouping.

2. **A. One complex repair code for 9.0 cm combining both wounds** When multiple wounds are repaired using the same classification (both complex) and are in the same anatomical grouping (scalp and forehead are in the same grouping), their lengths are added together and reported as a single code. The two complex repairs total 5.0 + 4.0 = 9.0 cm. Only wounds of different classifications or different anatomical groupings are reported separately.

3. **C. Separate codes from each destruction code range — premalignant codes for the actinic keratoses and benign codes for the seborrheic keratoses** Premalignant lesion destruction (17000–17004) and benign lesion destruction (17110–17111) use different code ranges. When both types are destroyed during the same encounter, both code ranges are used. The 6 actinic keratoses are reported with 17000 × 1 plus 17003 × 5. The 4 benign seborrheic keratoses are reported with 17110 × 1 plus 17111 × 1. These are distinct services on different lesion types.

4. **B. Adjacent tissue transfer codes (14000–14350)** Z-plasty is a tissue rearrangement technique classified under the adjacent tissue transfer codes (14000–14350). Z-plasty involves transposing two triangular flaps to change the direction of a scar or release a contracture. Adjacent tissue transfer codes are based on the defect size in square centimeters and the anatomical location.

5. **D. 1.4 cm** The excised diameter is calculated as lesion diameter plus margins on both sides: 1.0 cm + (0.2 cm × 2) = 1.4 cm. The margin is doubled because tissue is removed circumferentially around the entire lesion. This 1.4 cm excised diameter determines the correct code within the benign excision range for the face anatomical grouping.

6. **C. Muscle — the deepest tissue level debrided determines the code** Wound debridement codes are based on the deepest tissue level debrided. CPT provides separate codes for debridement of skin, subcutaneous tissue, muscle, and bone. When the debridement extends through skin and subcutaneous tissue to the muscle layer, the muscle-depth debridement code is selected. The deepest tissue reached — not the superficial layers also debrided — determines the code.

20,000 Series — Musculoskeletal System

7. **A. With the arthroscopic subacromial decompression code as a standalone procedure** When subacromial decompression is performed as a standalone procedure without an accompanying rotator cuff repair, it is reported with its own CPT code. The diagnostic arthroscopy is bundled into the surgical arthroscopy. The decompression is only bundled into the rotator cuff repair code when both are performed together per NCCI edits — when performed alone, it is an independent, separately reportable procedure.

8. **B. Placement of fixation devices (pins) through the skin without surgically opening the fracture site** Percutaneous skeletal fixation involves inserting fixation devices (pins, wires, screws) through the skin directly into the bone without making a surgical incision to expose the fracture site. The fracture fragments are not directly visualized. This technique is common in pediatric supracondylar fractures where smooth pins are inserted percutaneously under fluoroscopic guidance.

9. **D. With an add-on code for the additional interspace fusion** Spinal fusion codes cover a single vertebral interspace. The primary fusion code is reported for the first interspace (C4-C5), and an add-on code is reported for the additional interspace (C5-C6). Two interspaces require one primary code plus one add-on code. The instrumentation (anterior cervical plate) is coded separately.

10. **C. Musculoskeletal system (20,000 series)** Deep foreign body removal codes are located in the musculoskeletal system section of CPT. When a foreign body requires an incision and dissection through deeper tissues (subcutaneous, muscle) for removal, it is coded as a musculoskeletal procedure rather than an integumentary procedure. Code 20520 covers removal of a foreign body in muscle or deep tissue, and 20525 covers complicated removal.

11. **A. Primary tendon repair (tenorrhaphy)** Direct suturing of the severed tendon ends together following an acute traumatic rupture is classified as a primary tendon repair (tenorrhaphy). This is distinct from a tendon transfer (redirecting a functioning tendon), a tendon graft (using donor tissue to bridge a tendon gap), and a tenotomy (intentional tendon release). The Achilles tendon repair has its own specific CPT code (27650).

12. **D. With a separate ultrasound guidance code in addition to the injection code** When the joint injection code does NOT include ultrasound guidance and guidance is used during the procedure, a separate ultrasound guidance code is reported. The coder must always check whether the procedure code includes imaging guidance before reporting a separate guidance code. In this case, guidance is not included, so the separate code is appropriate.

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

13. **B. It is not reported separately; it is included in the surgical bronchoscopy code** Diagnostic bronchoscopy is always bundled into surgical bronchoscopy when both are performed during the

same session. The fiducial marker placement is a surgical bronchoscopic procedure — the diagnostic examination is included and is not separately reportable.

14. **C. With separate codes for the lead removal and the new lead insertion** When a pacemaker lead is removed and a new lead is inserted during the same session, both the removal and the insertion are coded separately. CPT provides distinct codes for lead removal and lead insertion. These are separate surgical services performed on distinct components of the pacemaker system. The ventricular lead and generator were not manipulated and do not require codes.

15. **A. With the standalone PTA code for the specific vascular territory** When a percutaneous transluminal angioplasty is performed without stent placement, the standalone PTA code for the specific vascular territory is reported. CPT provides separate codes for PTA and for stent placement. When a stent is placed, the PTA (balloon dilation) is typically bundled into the stent code — but when no stent is placed, the PTA code stands alone.

16. **D. Cardiovascular — implantable cardiac monitor subsection in Medicine** Implantable loop recorder (ILR) insertion and related services (insertion, removal, interrogation) are coded in the Medicine section under the cardiovascular subsection covering implantable cardiac monitors. ILRs continuously record cardiac rhythm data for extended periods and are used to diagnose unexplained syncope, palpitations, and cryptogenic stroke.

17. **B. It is included in the mediastinoscopy code; the biopsy is not reported separately** The mediastinoscopy code includes the biopsy — the primary purpose of mediastinoscopy is to obtain tissue for pathological examination. The biopsy is not reported as a separate code because it is the integral component of the mediastinoscopy procedure. Reporting both would constitute unbundling.

18. **C. It drains fluid from the pericardial sac surrounding the heart to relieve pressure on the heart** Pericardiocentesis involves inserting a needle or catheter through the chest wall into the pericardial sac to drain accumulated fluid (blood, effusion). In cardiac tamponade, the fluid compresses the heart and impairs its ability to fill and pump effectively. Draining the fluid relieves the pressure and restores cardiac function. This is a potentially life-saving emergency procedure.

40,000 Series — Digestive System

19. **A. It is not reported separately; it is included in the surgical colonoscopy clip placement code** When a surgical procedure (endoscopic clip placement) is performed during a colonoscopy, the diagnostic examination is bundled into the surgical code. Only the surgical colonoscopy code for clip placement is reported. The diagnostic component is included per the standard endoscopic hierarchy.

20. **D. CPT provides combined codes for cholecystectomy with common bile duct exploration; the exploration is included in the combined code** CPT provides specific combined codes for cholecystectomy with common bile duct exploration (47610 for open cholecystectomy with CBD

exploration). When a combined code exists, the individual components are not reported separately. The coder must check whether a combined code captures the complete procedure before reporting individual codes.

21. **C. It is not reported separately; it is included in the surgical EGD code** When a surgical procedure (botulinum toxin injection) is performed during an EGD, the diagnostic examination is bundled into the surgical code. Only the surgical EGD injection code is reported. The endoscopic hierarchy applies consistently.

22. **B. No; the use of mesh does not change the CPT code for ventral hernia repair** For ventral/incisional hernia repair, the use of mesh does not change the CPT code. The code is determined by the hernia type, initial vs. recurrent status, reducible vs. incarcerated/strangulated, and the approach (open vs. laparoscopic). Mesh placement is considered a standard component of many hernia repairs and is not separately coded.

23. **A. A GJ-tube delivers feeding directly into the jejunum through a tube that passes through the stomach; a G-tube delivers feeding into the stomach** A gastrojejunostomy tube (GJ-tube) has its tip positioned in the jejunum, with the tube passing through the stomach. This bypasses the stomach for feeding, which is necessary for patients with gastroparesis, gastric outlet obstruction, or high aspiration risk. A standard G-tube delivers feeding directly into the stomach. The GJ-tube has a different CPT code than the G-tube.

24. **D. It is not reported separately; it is included in the surgical colonoscopy code** When a surgical procedure (endoscopic submucosal dissection) is performed during a colonoscopy, the diagnostic examination is bundled into the surgical code. Only the surgical colonoscopy code for ESD is reported. The diagnostic component is always included in the surgical endoscopy code.

50,000 Series — Urinary, Reproductive, and Endocrine

25. **B. Scarring and narrowing of the bladder neck that obstructs urine flow, typically occurring after prostate surgery** A bladder neck contracture is a fibrotic narrowing of the bladder neck caused by scar tissue formation, most commonly occurring after prostate surgery (TURP, radical prostatectomy). The scarring obstructs urine flow from the bladder into the prostatic urethra. Transurethral resection or incision of the contracture restores normal urine flow.

26. **C. With the laparoscopic partial nephrectomy code; robotic assistance is included in the laparoscopic code** CPT does not have separate robotic surgery codes. Robotic-assisted laparoscopic procedures are coded using the laparoscopic CPT code because the robot is a tool used to perform the laparoscopy. There is no robotic modifier or robotic add-on code. The laparoscopic partial nephrectomy code captures both standard laparoscopic and robotic-assisted laparoscopic techniques.

27. **D. The cesarean delivery-only code plus the postpartum care-only code (for cesarean after attempted vaginal delivery, if applicable)** When one physician provides only the delivery and

postpartum care while a different physician provided the antepartum care, the delivering physician reports the delivery-only code plus the postpartum care-only code. For a cesarean after attempted vaginal delivery, specific delivery-only codes exist. The global code is not appropriate because antepartum care was provided by another physician.

28. **A. Greater than 250 grams** A uterine weight of 320 grams exceeds the 250-gram threshold. CPT differentiates abdominal hysterectomy codes based on whether the uterus weighs 250 grams or less versus greater than 250 grams. The higher weight category reflects greater surgical complexity due to the larger uterus requiring a larger incision and more extensive dissection.

29. **B. Surgery section — urinary system subsection** Urodynamic study codes (51725–51798) are primarily located in the Surgery section under the urinary system subsection. These codes cover cystometrography, uroflowmetry, voiding pressure studies, and other urodynamic measurements. The codes are in the urinary system because they evaluate bladder and urethral function.

30. **C. A lobectomy with isthmusectomy removes one lobe and the isthmus, preserving the contralateral lobe; a total thyroidectomy removes all thyroid tissue** A thyroid lobectomy with isthmusectomy removes one lobe and the connecting isthmus while preserving the opposite lobe. This is a less extensive procedure than a total thyroidectomy, which removes all thyroid tissue from both lobes and the isthmus. The extent of removal affects both the CPT code and the patient's need for thyroid hormone replacement.

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

31. **D. With the appropriate add-on code for laminectomy at an additional level** When laminectomy is performed at multiple spinal levels, CPT provides a primary code for the first level and an add-on code for each additional level. Two levels (L3-L4 and L4-L5) require one primary laminectomy code plus one add-on code for the additional level. This structure is similar to spinal fusion and spinal injection coding.

32. **A. It creates a new drainage pathway between the lacrimal sac and the nasal cavity, bypassing the blocked nasolacrimal duct** A dacryocystorhinostomy (DCR) creates a new surgical opening between the lacrimal sac and the nasal cavity, bypassing the obstructed nasolacrimal duct. This allows tears to drain directly from the lacrimal sac into the nose, relieving chronic tearing (epiphora) and preventing recurrent dacryocystitis (lacrimal sac infection).

33. **B. A primary nerve block code for the first level plus an add-on code for the 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. Two lumbar levels require one primary code plus one add-on code. Since the codes include imaging guidance, no separate fluoroscopy code is reported.

34. **C. The diagnostic lumbar puncture code (62270)** A diagnostic lumbar puncture for CSF collection and analysis is coded with 62270. This code covers the needle insertion into the lumbar

subarachnoid space, CSF collection, and pressure measurement. No therapeutic injection was performed, so injection codes are not appropriate. The lumbar puncture is a diagnostic procedure distinct from therapeutic spinal injections.

35. **D. With code 66984 plus modifier 79 (unrelated procedure during postoperative period) and modifier LT** When the second eye's cataract surgery is performed during the 90-day global period of the first eye, modifier 79 is appended because the procedure on the second eye is at a different anatomical site — an unrelated procedure. Modifier LT indicates the left eye. Modifier 50 would indicate bilateral surgery in the same session. Modifier 76 would indicate a repeat on the same eye.

36. **A. Each procedure code is reported bilaterally with modifier 50 or RT/LT modifiers** Endoscopic sinus surgery codes for ethmoidectomy and maxillary antrostomy are unilateral. When performed bilaterally, each procedure code is reported with modifier 50 or on separate lines with RT/LT modifiers. Both the bilateral ethmoidectomy and the bilateral antrostomy are reported — they are distinct procedures on different sinuses.

Evaluation and Management

37. **B. Straightforward** A single self-limited problem (common cold) is the lowest problem complexity. No data review constitutes minimal data. An OTC decongestant with reassurance is minimal risk. All MDM elements meet the straightforward threshold, supporting 99212 for an established patient. Low MDM would require a more complex problem, some data review, or higher-risk management.

38. **D. With critical care codes — 99291 × 1 plus 99292 × 1 (80 minutes of critical care)** When a patient's condition deteriorates to critical status, the physician reports critical care codes based on the total critical care time. For 80 minutes: 99291 × 1 (first 30–74 minutes) plus 99292 × 1 (the additional 6 minutes beyond 74 meets the 15-minute minimum threshold for one additional unit). Critical care is not coded with subsequent hospital care codes when critical care criteria are met.

39. **C. Modifier 95 (synchronous telemedicine service)** Modifier 95 indicates the service was provided via synchronous real-time audio-video telecommunication. This modifier is appended to the E/M code along with the appropriate place of service code (POS 02 or POS 10) to identify the encounter as a telehealth visit.

40. **A. Modifier 25** Modifier 25 is appended to the E/M code when a significant, separately identifiable E/M service is performed on the same day as a minor procedure with a 0-day or 10-day global period. The foreign body removal has a 10-day global period, making modifier 25 the correct choice. Modifier 57 would be appropriate only for major procedures with 90-day global periods.

41. **B. Observation discharge code (99217)** When a patient is admitted to observation on one date and discharged on a subsequent date, the observation discharge code (99217) is reported on the discharge day. Hospital discharge codes (99238–99239) are for inpatient discharge, not

observation discharge. If admission and discharge occur on the same date, same-day codes (99234–99236) would be used instead.

42. **D. The number and complexity of problems is one of three elements — problems are categorized by severity (self-limited, chronic stable, chronic worsening, acute uncomplicated, acute with systemic illness, etc.)** The number and complexity of problems addressed is the first MDM element. Problems are categorized by severity level — from self-limited (lowest) through acute illness with systemic symptoms or threat to life (highest). The severity categorization of the problems, combined with the other two elements (data and risk), determines the overall MDM level.

Anesthesia

43. **C. 17 units** Base units (7) + Time units (135 minutes ÷ 15 minutes/unit = 9.0) + Modifying units (P3 = 1) = 17.0 total units. The calculation: 7 + 9 + 1 = 17. P3 (morbid obesity and poorly controlled diabetes representing severe systemic disease) adds 1 modifying unit.

44. **A. A patient with severe COPD requiring home oxygen, morbid obesity, and poorly controlled diabetes** Physical status P3 indicates a patient with severe systemic disease that does not pose a constant threat to life. Multiple poorly controlled chronic conditions (severe COPD on home oxygen, morbid obesity, poorly controlled diabetes) collectively represent severe systemic disease. P2 would be mild, well-controlled disease. P4 would be disease that is a constant threat to life.

45. **B. 99140 (emergency conditions)** An emergency cesarean section for placental abruption qualifies for qualifying circumstances code 99140 (emergency conditions). The emergency nature of the procedure — where a delay in treatment would significantly increase the threat to life of the mother and/or fetus — adds complexity and risk to the anesthetic. This code is reported as an add-on to the primary anesthesia code.

46. **D. 15 units** Time units are calculated by dividing total anesthesia minutes by the payer's minutes-per-unit value: 225 minutes ÷ 15 minutes/unit = 15.0 time units. This is a clean division with no remainder. Time units represent only the time component of the anesthesia formula.

Radiology

47. **A. 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. The combination code captures the complete dual-phase study. Two separate codes are not reported for the two phases.

48. **C. The hospital bills the global code since all components are provided by hospital employees** When the hospital employs both the technologist and the radiologist, both the technical and professional components are provided by the same entity. The hospital bills the global code without any modifier. The components are not split because the employer of both is the same entity.

49. **B. With a separate joint injection code for the contrast administration** MR arthrography involves two distinct services: the injection of contrast into the joint (coded with the appropriate joint injection code with fluoroscopic guidance) and the subsequent MRI (coded with the MRI code "with contrast"). These are separate services reported with separate codes. The injection is not included in the MRI code.

50. **D. Pharmacological stress uses a vasodilating drug to simulate the cardiac effects of exercise; exercise stress uses actual physical exertion on a treadmill or bicycle** Pharmacological stress testing uses drugs (adenosine, dipyridamole, regadenoson, or dobutamine) to simulate the cardiac effects of exercise in patients who cannot exercise adequately. The drug increases cardiac blood flow demands, mimicking the effects of physical exertion. Exercise stress uses actual treadmill or bicycle exercise. Both methods are used with nuclear perfusion imaging.

51. **A. Low-dose CT (LDCT) for lung cancer screening — a specific code distinct from diagnostic chest CT** Low-dose CT for lung cancer screening has a specific CPT code (71271) that is distinct from standard diagnostic chest CT codes. LDCT uses a lower radiation dose than standard CT and is performed on high-risk patients (age 50–80 with ≥20 pack-year smoking history) as a screening tool. The screening code and the diagnostic CT codes are not interchangeable.

52. **C. Proton beam delivers radiation that stops at a precise depth (Bragg peak), reducing radiation exposure to tissues beyond the tumor; photon radiation passes through the body** Proton beam therapy exploits the Bragg peak phenomenon — protons deposit their maximum energy at a specific depth and stop, delivering minimal radiation beyond the target. Conventional photon (X-ray) radiation passes through the body, exposing tissues both in front of and behind the tumor. Proton therapy's precision is particularly valuable for pediatric tumors and tumors near critical structures.

Pathology and Laboratory

53. **B. The obstetric panel code plus the individual urine culture code** The urine culture (87086) is not a component of the obstetric panel. 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 obstetric panel captures the bundled components, and the urine culture code captures the additional service.

54. **D. Level V (88307)** A radical nephrectomy specimen is classified at Level V surgical pathology (88307). Level V covers complex specimens requiring extensive examination including evaluation of tumor extent, surgical margins, renal vein involvement, and lymph node status. The pathologist must assess multiple parameters for cancer staging.

55. **A. Both codes — the qualitative urine hCG and the quantitative serum hCG are different tests with different CPT codes** A qualitative urine pregnancy test and a quantitative serum hCG level are different tests using different specimens, different methodologies, and different CPT codes. The qualitative test provides a positive/negative result. The quantitative test measures the

exact hCG concentration. Both may be clinically indicated on the same date and are separately reportable.

56. **C. The COVID-19 antigen detection code with modifier QW** A rapid COVID-19 antigen test performed using a CLIA-waived test kit in the office is coded with the COVID-19 antigen detection code and modifier QW (CLIA-waived test). The NAAT code (87635) would be for PCR/molecular testing — a different and more sensitive methodology. The antigen test code must match the actual test method used.

57. **D. The flow cytometry codes are in the Pathology and Laboratory section under the immunology or hematology subsection** Flow cytometry codes are located in the Pathology and Laboratory section. These codes cover the technical performance and interpretation of flow cytometric analysis of cell surface markers. Flow cytometry is essential for classifying hematologic malignancies (leukemia, lymphoma) and monitoring treatment response.

58. **B. A multianalyte assay with algorithmic analysis (MAAA)** Cologuard (81528) is classified as a MAAA — a proprietary test that combines multiple molecular markers with a fecal immunochemical test and uses a proprietary algorithm to produce a single risk assessment result for colorectal cancer and advanced precancerous polyps. MAAA codes are product-specific and cannot be used for other tests with different algorithms.

Medicine

59. **A. 96413 × 1 (initial hour) plus 96415 × 2 (two additional hours)** Docetaxel is a chemotherapy agent coded with the chemotherapy infusion codes. The 3-hour infusion: 96413 covers the first hour (initial chemotherapy infusion), and 96415 (add-on for each additional hour) is reported twice for the second and third hours. Since this is the only IV service, the chemotherapy infusion is the initial service.

60. **C. Both the NCS code for 9–10 nerves and the EMG code for 3 extremities — they are separate services** Nerve conduction studies and electromyography are separate diagnostic services that evaluate different physiological parameters. NCS measures nerve conduction velocity and amplitude. EMG measures muscle electrical activity. When both are performed during the same encounter, both codes are reported — the NCS code for 9–10 nerves (95911) and the EMG code for 3 extremities (95864).

61. **D. With the global code (no modifier) since both components are provided** When a cardiologist performs and interprets an echocardiogram 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 apply if interpretation were performed at an outside facility.

62. **B. 3 units** The 8-minute rule considers total treatment time across all timed services. Total timed service time is 45 minutes (15 + 20 + 10). At 15 minutes per unit, 45 minutes supports exactly 3

units (45 ÷ 15 = 3.0). The units are allocated based on actual minutes: 1 unit to 97140 (15 minutes), 1 unit to 97110 (15 of the 20 minutes), and 1 unit to 97112 (10 minutes) plus the remaining 5 minutes from 97110. The total of 3 units is the correct count.

63. **A. 95115 (single injection)** When the allergen extract was prepared at a previous visit and a single injection is administered today, only the injection code (95115) is reported. Code 95117 would be used for two or more injections. The antigen preparation code was reported when the extracts were originally prepared and is not reported again at each injection visit.

64. **C. With the split-night PSG code (95811) — polysomnography with CPAP/BiPAP titration** A split-night study — where diagnostic PSG is performed in the first portion of the night and CPAP titration is initiated in the second portion after confirming OSA — is coded with 95811 (polysomnography with CPAP/BiPAP titration). This single code captures both the diagnostic and therapeutic components of the split-night study.

Medical Terminology

65. **D. Enlargement** The suffix "-megaly" means enlargement or abnormal increase in size. Common examples include cardiomegaly (enlarged heart), hepatomegaly (enlarged liver), splenomegaly (enlarged spleen), and acromegaly (enlargement of the extremities). "-Algia" means pain, "-itis" means inflammation, and "-ectomy" means surgical removal.

66. **A. Angi/o or vas/o** The combining forms "angi/o" and "vas/o" refer to blood vessels. Common terms include angioplasty (vessel repair), angiography (vessel imaging), vascular (relating to blood vessels), and vasodilation (widening of blood vessels). "Cardi/o" refers to the heart, "hem/o" refers to blood itself, and "neur/o" refers to nerves.

67. **B. Upon, above, or on top of** The prefix "epi-" means upon, above, or on top of. Common terms include epidermis (upon the skin — the outermost skin layer), epidural (upon or outside the dura mater), epicardium (upon the heart — the outer heart layer), and epigastric (above the stomach). "Sub-" means below, "intra-" means within, and "retro-" means behind.

68. **C. Air in the pleural space (collapsed lung)** Pneumothorax means air in the pleural space, from "pneumo" (air/lung) and "thorax" (chest). The accumulated air collapses the lung by pushing it away from the chest wall. Hemothorax is blood in the pleural space. Pleural effusion is fluid in the pleural space. Pneumonia is inflammation/infection of the lung tissue itself.

Anatomy

69. **D. The cardiac conduction system** The bundle of His and Purkinje fibers are components of the cardiac conduction system — the specialized electrical pathway that coordinates the heartbeat. The SA node generates the impulse, which travels through the atria to the AV node, then through the bundle of His, the right and left bundle branches, and finally the Purkinje fibers, which distribute the impulse throughout the ventricles.

70. **A. The cochlea (specifically the organ of Corti)** The cochlea is the spiral-shaped organ of the inner ear that converts mechanical sound vibrations into electrical nerve impulses. Within the cochlea, the organ of Corti contains hair cells that bend in response to fluid movement caused by sound vibrations, generating electrical signals transmitted via the auditory nerve to the brain. The tympanic membrane and ossicles transmit but do not convert sound.

71. **B. The carpal tunnel** The median nerve passes through the carpal tunnel at the wrist — a narrow passageway formed by the carpal bones and the transverse carpal ligament. Compression of the median nerve within this tunnel causes carpal tunnel syndrome. The cubital tunnel is at the elbow (ulnar nerve). The Guyon canal is at the wrist (ulnar nerve). The tarsal tunnel is at the ankle (tibial nerve).

72. **D. Epinephrine (adrenaline) and norepinephrine** The adrenal medulla (the inner portion of the adrenal gland) produces catecholamines — primarily epinephrine (adrenaline) and norepinephrine (noradrenaline). These hormones mediate the "fight-or-flight" response. The adrenal cortex (outer portion) produces cortisol and aldosterone. Insulin and glucagon are produced by the pancreas. Thyroid hormones are produced by the thyroid gland.

ICD-10-CM / Diagnosis Coding

73. **C. A (initial encounter)** The 7th character "A" indicates the initial encounter — the period during which the patient is receiving active treatment for the injury. The orthopedic surgeon is providing initial treatment (closed reduction) for the fracture. "D" would be for subsequent encounters during routine healing. "S" would be for sequela after healing.

74. **A. With the symptom code for cough (R05.9); the suspected lung cancer is not coded because it has not been confirmed** In the outpatient setting, conditions documented as "rule out," "suspected," or "possible" are not coded as confirmed diagnoses. Only the presenting signs and symptoms are coded. The persistent cough is the confirmed symptom — the suspected lung cancer has not been established and cannot be coded.

75. **B. The CKD stage 5 code (N18.6 for ESRD) plus the Z code for dialysis status (Z99.2)** CKD stage 5 on dialysis is coded with N18.6 (end-stage renal disease) plus Z99.2 (dependence on renal dialysis). Both codes are needed — N18.6 captures the kidney disease severity, and Z99.2 captures the dialysis status. If the patient also has hypertension, the I12 category code would also be reported.

76. **D. I69 (Sequelae of cerebrovascular disease)** Late effects (sequelae) of cerebrovascular disease are coded using category I69. These codes capture the residual conditions (hemiplegia, aphasia, dysphagia, cognitive deficits) that persist after the acute stroke has resolved. The I69 codes are specific to the type of original cerebrovascular event (infarction, hemorrhage) and the specific residual deficit.

77. **C. The morbid obesity code (E66.01) plus the BMI code (Z68.42)** ICD-10-CM requires both the obesity diagnosis code and the BMI code. E66.01 (morbid/severe obesity due to excess calories) captures the clinical condition. Z68.42 (BMI 42.0–42.9, adult) provides the specific BMI value. BMI codes are supplementary and should always accompany the obesity diagnosis — they should not be reported as standalone primary diagnoses.

HCPCS Level II

78. **A. CPT code 96372 for the subcutaneous/intramuscular injection administration** The HCPCS J-code covers only the drug product — not the administration. A separate CPT administration code (96372 for SC or IM injection) is needed to capture the service of delivering the injection. Both the drug code (J-code) and the administration code (96372) are reported for a complete claim.

79. **B. E0250–E0373 (within the E-code range for DME)** Hospital beds for home use are covered within the E-code range for durable medical equipment. Specific codes exist for different types of hospital beds (manual, semi-electric, full-electric) and accessories (mattresses, side rails). J-codes cover drugs, L-codes cover orthotics/prosthetics, A-codes in the 0000 range cover ambulance services.

80. **D. The provider cannot bill the patient and must absorb the cost** When modifier GZ is appended (indicating the provider expected a denial and did NOT obtain an ABN), and Medicare denies the claim, the provider cannot transfer the cost to the patient. The patient was not notified of the potential noncoverage and did not agree to accept financial responsibility. The provider must absorb the denied amount as a write-off.

Coding Guidelines

81. **C. With the hernia repair code and modifier 50 or reported bilaterally with RT/LT modifiers** Inguinal hernia repair codes are unilateral. When performed bilaterally, modifier 50 is appended or the code is reported on two separate lines with RT and LT modifiers. This indicates the same procedure was performed on both sides during the same session. The payer's requirements determine which reporting method is used.

82. **A. Modifier 57** Modifier 57 (decision for surgery) is appended to the E/M code when the visit results in the initial decision to perform a major surgical procedure with a 90-day global period. Modifier 25 would be appropriate only for minor procedures with 0-day or 10-day global periods.

83. **D. To establish the maximum number of units of a service reportable for a single patient on a single date** MUEs establish per-day, per-patient unit limits for CPT/HCPCS codes. They prevent billing errors where an implausible number of units are reported. Claims exceeding MUE limits are automatically denied for the excess units. MUEs are different from NCCI Column 1/Column 2 edits, which address code pair bundling.

84. **B. The open cholecystectomy code only; the abandoned laparoscopic approach is not coded** When a laparoscopic procedure is converted to an open procedure, only the open code is reported.

The abandoned laparoscopic approach is not coded separately. The operative report should document the reason for conversion. This rule applies consistently throughout CPT for laparoscopic-to-open conversions.

85. **C. It indicates a distinct procedural service that is separate and independent from other services on the same day, used to bypass NCCI edits when clinically justified** Modifier 59 identifies a procedure as distinct and independent from other services performed on the same day. It is used to bypass NCCI edits when clinical documentation supports that the procedures were truly separate — different anatomical sites, different encounters, or different clinical indications. CMS encourages more specific X modifiers (XE, XS, XP, XU) when applicable.

86. **A. They apply to all codes within that section and take precedence over general CPT guidelines when there is a conflict specific to that section** Section-specific guidelines at the beginning of each CPT section (Surgery, Medicine, Radiology, etc.) contain rules that apply to all codes within that section. These guidelines address section-specific coding conventions, bundling rules, and reporting requirements. They take precedence over general CPT guidelines when there is a section-specific conflict.

87. **D. Modifier 91** Modifier 91 (repeat clinical diagnostic laboratory test) is appended when the same laboratory test is repeated on the same day for clinical reasons — such as when the first result is questionable and requires verification. Modifier 91 tells the payer that the repeat test was medically necessary. Modifier 76 is for repeat procedures (not laboratory tests). Modifier 59 is for distinct procedural services.

Compliance and Regulatory

88. **B. The conversion factor** The conversion factor is the dollar amount that converts total adjusted RVUs into an actual payment amount. CMS publishes the conversion factor annually as part of the Medicare Physician Fee Schedule update. Changes to the conversion factor directly affect reimbursement across all CPT codes. The formula: Total Adjusted RVUs × Conversion Factor = Payment.

89. **C. Cooperate fully, produce the requested documentation, and involve the compliance officer and legal counsel** When a government auditor requests documentation, the appropriate response is full cooperation. The practice should produce the requested records, involve the compliance officer and legal counsel, and ensure the response is complete and timely. Destroying records, refusing to cooperate, or selectively producing documents would constitute obstruction and could result in additional legal consequences.

90. **A. NCDs apply uniformly nationwide and take precedence over LCDs; LCDs apply only within specific MAC jurisdictions and may not contradict NCDs** NCDs are issued by CMS and apply across the entire country. All MACs must follow NCDs. LCDs are developed by individual MACs for their specific jurisdictions and address services not covered by NCDs or

provide more detailed criteria. LCDs cannot contradict NCDs. When an NCD exists, it takes precedence over any conflicting LCD.

Cases — Integrated Coding Scenarios

91. **D. With the complete global package — no splitting modifiers** When a single surgeon provides all components of care — preoperative evaluation, the surgical procedure, and all postoperative care — the complete global surgical package is reported without splitting modifiers. No modifier 54, 55, or 56 is needed.

92. **B. Modifier 78** 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 (unplanned return to the OR for a related procedure during the postoperative period) is appended to the I&D code. Modifier 58 is for planned staged procedures. Modifier 79 is for unrelated procedures.

93. **C. Only the initial hospital care code; the ED evaluation is rolled into the admission** When the same physician provides an ED evaluation and subsequently admits the patient on the same date, only the initial hospital care code is reported. The ED evaluation is rolled into the admission service. This prevents double billing for the same physician's cognitive services on the same date.

94. **A. I63 (Cerebral infarction)** Acute ischemic cerebral infarction is coded using category I63. The specific code includes the type of infarction (thrombotic, embolic) and the affected vascular territory (right middle cerebral artery). Category I69 covers sequelae (late effects) of cerebrovascular disease. Category G45 covers transient ischemic attacks (not infarctions).

95. **D. The carboplatin chemotherapy infusion** The infusion hierarchy places chemotherapy infusion at the highest level. The carboplatin chemotherapy infusion is always the initial service. The etoposide (second chemotherapy drug, sequential) is reported as a sequential add-on. The hydration is the lowest-priority service and is reported as a secondary service.

96. **B. With the sequential chemotherapy infusion add-on code (96417)** The etoposide is a different chemotherapy drug infused sequentially through the same IV line after the carboplatin. Code 96417 (sequential chemotherapy infusion of a new substance) is the appropriate add-on code. A second initial infusion code (96413) cannot be reported because only one initial service is allowed per encounter.

97. **C. 3.5 cm** The excised diameter is calculated as lesion diameter plus margins on both sides: 2.5 cm + (0.5 cm × 2) = 3.5 cm. This 3.5 cm excised diameter determines the correct code within the malignant excision range for the face/temple anatomical grouping.

98. **A. Yes; complex closure may be reported separately from excision codes** Simple closure is included in the excision code. However, complex closure requires additional work (extensive undermining, retention sutures, tissue rearrangement) beyond what is included in the excision code and may be reported separately. The complex repair code is reported in addition to the excision code.

99. **D. The colonoscopy with EMR code only; the diagnostic colonoscopy is bundled** When a surgical procedure (endoscopic mucosal resection) is performed during a colonoscopy, the diagnostic examination is bundled into the surgical code. Only the colonoscopy with EMR code is reported. The diagnostic component is included per the standard endoscopic hierarchy.

100. **B. The appropriate symptom code for the change in bowel habits (such as R19.4) as the first-listed diagnosis, with the polyp code as secondary** The patient presented for a diagnostic colonoscopy due to symptoms (change in bowel habits) — not for a routine screening. The symptom that prompted the diagnostic evaluation is the first-listed diagnosis. The polyp found during the procedure is reported as a secondary diagnosis. The screening Z code (Z12.11) would only be the primary code if the colonoscopy were performed for routine screening.