SIMULATION EXAM 4

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

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

1. A physician excises a 0.9 cm benign lesion from the patient's right arm with 0.2 cm margins. What is the excised diameter for code selection?

A. 0.9 cm

B. 1.3 cm

C. 1.1 cm

D. 0.4 cm

2. A patient has a complex wound repair of a 6.0 cm laceration on the forehead involving tissue undermining and retention sutures. Which classification describes this repair?

A. Simple

B. Intermediate

C. Layered

D. Complex

3. A surgeon performs a split-thickness skin graft to a 25 sq cm wound on the left thigh. The graft is harvested from the patient's own body. What type of graft is this?

A. Autograft

B. Allograft

C. Xenograft

D. Synthetic graft

4. A physician destroys 12 actinic keratoses on a patient's scalp using cryotherapy. Which code(s) should be reported?

A. 17004

B. 17000 × 12

C. 17000 × 1, 17003 × 11

D. 17000 × 1, 17003 × 14

5. A patient has a 4.0 cm simple repair laceration of the right hand and a 3.0 cm simple repair laceration of the left hand. Both are in the same anatomical grouping. How should these be reported?

A. Two separate simple repair codes, one for each hand

B. One simple repair code for 7.0 cm combining both wounds

C. One simple repair code for the larger wound only

D. One intermediate repair code for 7.0 cm

6. A dermatologist performs a punch biopsy of a suspicious skin lesion on the chest. No excision is performed. Which code range should be used?

A. Skin biopsy codes (11102–11107)

B. Benign excision codes (11400–11471)

C. Malignant excision codes (11600–11646)

D. Shave removal codes (11300–11313)

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

7. A surgeon performs an arthroscopic anterior cruciate ligament (ACL) reconstruction of the right knee using a hamstring tendon autograft. 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. As a separate code with modifier 51

C. As a separate code with modifier 76

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

8. A patient undergoes closed treatment of a nasal bone fracture with stabilization. No manipulation is performed. In CPT, the nose is classified under which body system for fracture treatment?

A. Integumentary system

B. Respiratory system

C. Musculoskeletal system

D. Digestive system

9. A surgeon performs an open reduction with internal fixation of a displaced femoral shaft fracture. The surgeon also performs the preoperative evaluation in the hospital and will provide all postoperative care. Which global package arrangement applies?

A. The surgeon reports the complete global package without splitting modifiers

B. The surgeon reports only the surgical care with modifier 54

C. The surgeon reports only the postoperative care with modifier 55

D. The surgeon reports the procedure with modifier 52

10. An orthopedic surgeon performs posterior lumbar interbody fusion at L4-L5 with insertion of an interbody cage and posterior pedicle screw instrumentation. How is the instrumentation coded?

A. It is included in the fusion code

B. With a separate spinal instrumentation code in addition to the fusion code

C. With modifier 22 on the fusion code

D. With a separate implant code from the HCPCS Level II supply codes only

11. Which of the following statements correctly describes the difference between an arthrotomy and an arthroscopy?

A. An arthrotomy is performed using a camera; an arthroscopy uses an open incision

B. An arthrotomy is always performed on the knee; an arthroscopy can be performed on any joint

C. There is no difference; both terms are interchangeable

D. An arthrotomy involves an open surgical incision into the joint; an arthroscopy uses a small camera inserted through a portal

12. A patient undergoes aspiration of a ganglion cyst on the dorsum of the right wrist. The cyst is aspirated using a needle — no excision is performed. Which type of procedure is this?

A. Excision

B. Arthroscopy

C. Aspiration

D. Incision and drainage

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

13. A patient undergoes a thoracentesis for drainage of a right-sided pleural effusion. The physician uses ultrasound guidance during the procedure. The thoracentesis code includes imaging guidance. How should the ultrasound be coded?

A. It is not reported separately; it is included in the thoracentesis code

B. With a separate ultrasound guidance code and modifier 26

C. With a separate ultrasound guidance code and modifier 59

D. With a separate ultrasound guidance code without a modifier

14. A cardiologist performs a right and left heart catheterization with selective coronary angiography and left ventriculography. How should the catheterization and angiography be coded?

A. A single code for the combined catheterization and all imaging

B. Separate codes for the right heart catheterization, left heart catheterization, coronary angiography, and ventriculography as appropriate per CPT bundling rules

C. Only the coronary angiography code; the catheterization is bundled

D. Only the catheterization code; the angiography is bundled

15. A surgeon performs an emergency sternotomy for repair of a cardiac laceration following a stab wound to the chest. Which surgical approach does a sternotomy involve?

A. An incision between the ribs

B. A small port-based incision

C. An incision through the back

D. Division of the sternum (breastbone) to access the heart and mediastinum

16. A patient has an existing single-chamber pacemaker (ventricular lead only). The cardiologist upgrades the system to a dual-chamber pacemaker by inserting a new atrial lead and replacing the pulse generator with a dual-chamber generator. How should the lead insertion be coded?

A. With a complete dual-chamber system insertion code

B. With only a generator replacement code

C. With a code for insertion of the new atrial lead and a separate code for the generator replacement

D. With a lead revision code and modifier 22

17. A patient undergoes a diagnostic bronchoscopy with transbronchial needle aspiration of a mediastinal lymph node. How should the diagnostic bronchoscopy be coded?

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

B. As a separate code with modifier 51

C. As a separate code with modifier 59

D. As a separate code with modifier 25

18. A surgeon performs a right lower lobectomy via thoracotomy followed by mediastinal lymph node dissection for staging of non-small cell lung cancer. How should the lymph node dissection be coded?

A. It is included in the lobectomy code

B. With a separate mediastinal lymph node dissection code in addition to the lobectomy code

C. With a biopsy code for each individual lymph node removed

D. With only the lymph node dissection code; the lobectomy is bundled

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

19. A patient undergoes a colonoscopy with removal of a polyp by cold forceps biopsy and removal of a separate polyp by snare technique with electrocautery during the same session. How should the polyp removals be coded?

A. One snare polypectomy code only; the biopsy is bundled

B. Two snare polypectomy codes, one for each polyp

C. One code for the cold forceps biopsy polypectomy and one code for the snare polypectomy with appropriate modifier

D. One diagnostic colonoscopy code plus one biopsy code

20. A surgeon performs a laparoscopic gastric sleeve (sleeve gastrectomy) for morbid obesity. What does this procedure involve?

A. Wrapping the stomach fundus around the esophagus

B. Creating a gastric pouch and rerouting the small intestine

C. Placing an adjustable band around the upper portion of the stomach

D. Removing approximately 80% of the stomach along the greater curvature to create a narrow tubular stomach

21. A patient undergoes flexible sigmoidoscopy with biopsy of a rectal polyp. The scope is advanced to the descending colon. How should the diagnostic sigmoidoscopy be coded?

A. As a separate code with modifier 59

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

C. As a separate code with modifier 51

D. As a separate code with modifier 25

22. A surgeon performs a primary open repair of a femoral hernia in a 50-year-old patient. The hernia is incarcerated. Which factors are relevant to code selection?

A. Hernia type (femoral), initial vs. recurrent status, and whether incarcerated or strangulated

B. Only the patient's age and the hernia location

C. Only the approach (open vs. laparoscopic)

D. Only the hernia type and the use of mesh

23. A patient undergoes an EGD with dilation of an esophageal stricture using a balloon dilator and a separate biopsy of a Barrett's esophagus segment during the same session. How should the diagnostic EGD be coded?

A. As a separate code with modifier 25

B. As a separate code with modifier 51

C. As a separate code with modifier 59

D. It is not reported separately; it is included in the surgical EGD codes

24. A surgeon performs a Whipple procedure (pancreaticoduodenectomy) for pancreatic head cancer. Which structures are removed in a standard Whipple procedure?

A. Only the head of the pancreas

B. Only the duodenum and gallbladder

C. The head of the pancreas, duodenum, distal common bile duct, gallbladder, and a portion of the stomach

D. The entire pancreas and spleen

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

25. A urologist performs a cystoscopy with bilateral retrograde pyelography. The diagnostic cystoscopy is bundled into the surgical code. How should the bilateral nature of the retrograde pyelography be reported?

A. With the procedure code and modifier 50 or RT/LT modifiers

B. With a single code and no modifier since the code is inherently bilateral

C. With two diagnostic cystoscopy codes, one for each side

D. With the procedure code and modifier 22

26. A patient undergoes a laparoscopic radical nephrectomy for renal cell carcinoma. What does "radical nephrectomy" involve beyond a simple nephrectomy?

A. Removal of the kidney only

B. Removal of the kidney along with Gerota's fascia, the ipsilateral adrenal gland, and regional lymph nodes

C. Removal of only the tumor within the kidney (partial nephrectomy)

D. Removal of both kidneys simultaneously

27. A physician provides all antepartum care (13 visits), performs a vaginal delivery, and provides all postpartum care. Which coding approach should be used?

A. Individual E/M codes for each antepartum visit plus delivery-only and postpartum-only codes

B. Delivery-only code with modifier 22 for the extensive antepartum care

C. Antepartum-only code plus the global vaginal delivery code

D. The global obstetric code for vaginal delivery

28. A surgeon performs a laparoscopic total hysterectomy (uterus and cervix) on a patient with uterine fibroids. What is the key anatomical distinction between a total and a supracervical hysterectomy?

A. A total hysterectomy removes both the uterine body and the cervix; a supracervical hysterectomy preserves the cervix

B. A total hysterectomy always includes removal of the ovaries; a supracervical does not

C. A total hysterectomy is always performed abdominally; a supracervical is always laparoscopic

D. There is no anatomical difference; the terms describe different surgical approaches

29. A urologist performs a transurethral resection of a 2.5 cm bladder tumor. How are bladder tumor resection codes differentiated in CPT?

A. By the patient's age

B. By the anatomical location within the bladder

C. By the size of the tumor (small vs. large) and whether the procedure is initial or subsequent

D. By whether general or local anesthesia is used

30. A surgeon performs a subtotal parathyroidectomy, removing three of four parathyroid glands for secondary hyperparathyroidism. How is the number of glands removed relevant to coding?

A. It is not relevant; all parathyroidectomies use the same code

B. Parathyroidectomy codes do not exist; the procedure is coded under thyroid surgery

C. The number of glands removed determines the modifier, not the code

D. CPT distinguishes between limited and subtotal/total parathyroidectomy based on the extent of the procedure

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

31. A pain management physician performs a cervical epidural steroid injection at C6-C7 using the interlaminar approach under fluoroscopic guidance. The injection code does NOT include imaging guidance. How should the fluoroscopy be coded?

A. It is not coded separately; all injection codes include imaging guidance

B. With a separate fluoroscopic guidance code since the injection code does not include imaging

C. With modifier 26 on the injection code

D. With a radiology consultation code

32. A neurosurgeon performs a posterior fossa craniectomy to decompress a Chiari malformation. The bone is removed from the posterior skull and NOT replaced. What type of procedure is this?

A. Craniectomy

B. Craniotomy

C. Cranioplasty

D. Burr hole

33. A patient undergoes complex cataract extraction with IOL implantation in the left eye. The extraction is complicated by posterior capsular rupture requiring vitrectomy and the use of a capsular tension ring. Which cataract code should be reported?

A. 66984 (routine cataract extraction with IOL)

B. 66985 (secondary IOL insertion)

C. 66982 (complex cataract extraction with IOL)

D. 66983 (intracapsular cataract extraction with IOL)

34. A child undergoes myringotomy with aspiration of middle ear fluid under general anesthesia. No tympanostomy tube is inserted. How should this be coded?

A. With the tympanostomy tube insertion code

B. With a diagnostic otoscopy code

C. With the myringotomy with aspiration code

D. With the myringotomy code (69421) — myringotomy including aspiration under general anesthesia

35. A neurosurgeon implants a permanent spinal cord neurostimulator. During the procedure, the surgeon places the electrode through a laminotomy (paddle electrode) and implants the pulse generator in a subcutaneous pocket in the left buttock. How many procedure codes are reported?

A. One code for the complete system

B. Two codes — one for the laminotomy electrode placement and one for the generator implantation

C. Three codes — one for the laminotomy, one for the electrode, and one for the generator

D. One code for the electrode only; the generator is included

36. An ophthalmologist performs an intravitreal injection of an anti-VEGF agent in the right eye. This procedure has become one of the most commonly performed eye procedures. Which code is reported?

A. 67028 (intravitreal injection of a pharmacologic agent)

B. 67036 (vitrectomy, mechanical)

C. 67210 (retinal photocoagulation)

D. 66984 (cataract extraction)

Evaluation and Management (Questions 37–42)

37. An established patient presents to the office with multiple complex chronic conditions including uncontrolled diabetes, worsening heart failure, and a new diagnosis of chronic kidney disease. The physician orders multiple diagnostic tests, reviews extensive data, and adjusts multiple medications with significant drug interaction risk. What level of MDM does this support?

A. Moderate

B. Low

C. Straightforward

D. High

38. A physician admits a patient to the hospital and provides initial hospital care on Monday. On Tuesday, the same physician sees the patient for a follow-up visit. Which E/M code set should be used for Tuesday's visit?

A. Initial hospital care codes (99221–99223)

B. Observation care codes (99218–99220)

C. Subsequent hospital care codes (99231–99233)

D. Critical care codes (99291–99292)

39. A neonatologist provides daily management of a critically ill neonate in the NICU. The neonate weighs 1,200 grams and is on day 15 of life. Which E/M code category covers this service?

A. Neonatal critical care codes (99468–99469)

B. Continuing intensive care codes for very low birth weight infants (99478–99480)

C. Subsequent hospital care codes (99231–99233)

D. Critical care codes (99291–99292)

40. A physician performs a level 4 office visit on an established patient and determines during the visit that the patient needs a major surgical procedure with a 90-day global period. The surgery is scheduled for the following week. Which modifier should be appended to the E/M code?

A. Modifier 57

B. Modifier 25

C. Modifier 59

D. Modifier 58

41. A patient presents to the emergency department with chest pain. After a thorough evaluation, the ED physician determines the patient has a non-ST-elevation myocardial infarction (NSTEMI) and admits the patient. The same ED physician provides the admission. Which code set should the physician report?

A. The ED visit code plus the initial hospital care code

B. The ED visit code only

C. The critical care codes

D. The initial hospital care code only; the ED evaluation is rolled into the admission

42. Under the current E/M guidelines for office visits, what is the minimum total time for a new patient level 5 office visit (99205) when using the time-based pathway?

A. 40 minutes

B. 45 minutes

C. 60 minutes

D. 75 minutes

Anesthesia (Questions 43–46)

43. An anesthesiologist provides general anesthesia for a laparoscopic cholecystectomy on a 55-year-old patient with well-controlled Type 2 diabetes (P2). The total anesthesia time is 75 minutes. The payer uses 15-minute time units and assigns no modifying units for P2. Base units for the procedure are 7. What is the total unit calculation?

A. 11 units

B. 12 units

C. 13 units

D. 10 units

44. Which of the following correctly describes the difference between general anesthesia and monitored anesthesia care (MAC)?

A. General anesthesia produces complete unconsciousness with loss of protective reflexes; MAC provides sedation with continuous monitoring while the patient maintains some level of consciousness

B. General anesthesia uses only intravenous agents; MAC uses only inhaled agents

C. General anesthesia is always provided by an anesthesiologist; MAC is always provided by a CRNA

D. There is no difference; both terms describe the same service

45. A patient undergoes anesthesia for a total shoulder replacement. The anesthesia time is 195 minutes. The payer uses 15-minute time units. How many time units should be reported?

A. 12 units

B. 14 units

C. 12.5 units

D. 13 units

46. An anesthesiologist personally performs the entire anesthesia service without the involvement of a CRNA or anesthesia assistant. Which modifier should be appended to indicate the anesthesiologist's personal performance?

A. Modifier QY

B. Modifier QX

C. Modifier AA

D. Modifier QZ

Radiology (Questions 47–52)

47. A patient undergoes a CT of the head without contrast followed by CT of the head with intravenous contrast. How should this study be coded?

A. CT head without contrast followed by with contrast (single combination code)

B. CT head without contrast plus a separate CT head with contrast code

C. CT head with contrast only

D. CT head without contrast only; the contrast portion is bundled

48. A hospital performs an X-ray of the right knee (3 views) on a patient in the emergency department. A staff radiologist employed by the hospital interprets the images. The hospital owns all equipment and employs the technologist and the radiologist. How should the X-ray be billed?

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

B. The hospital bills the global code since both the technical and professional components are provided by hospital employees

C. The radiologist bills the global code

D. Two separate claims, each with the global code

49. In nuclear medicine, a PET scan uses which type of agent to detect metabolic activity?

A. Iodinated contrast

B. Gadolinium

C. Barium sulfate

D. Radioactive tracer (typically fluorodeoxyglucose/FDG)

50. A patient undergoes MR arthrography of the right shoulder. This involves injection of gadolinium contrast into the shoulder joint followed by MRI. How is the injection component coded?

A. It is included in the MRI code

B. It is included in an arthrography-specific combination code

C. With a separate joint injection code in addition to the MRI code

D. With a separate intravenous contrast injection code

51. A radiation oncologist provides 5 fractions of IMRT treatment delivery. How many units of the treatment management code (77427) should be reported for these 5 fractions?

A. 5 units

B. 1 unit

C. 2 units

D. 0 units; IMRT does not require treatment management

52. A patient undergoes an abdominal ultrasound. The sonographer evaluates the liver, gallbladder, common bile duct, pancreas, spleen, kidneys, and abdominal aorta. Is this a complete or limited study?

A. Complete — all required structures have been evaluated

B. Limited — only major organs were evaluated

C. Neither; ultrasound codes do not distinguish between complete and limited

D. Limited — the bladder was not evaluated

Pathology and Laboratory (Questions 53–58)

53. A physician orders a lipid panel and a hepatic function panel on the same date. The lipid panel includes total cholesterol, HDL, triglycerides, and LDL. The hepatic function panel includes albumin, total bilirubin, direct bilirubin, alkaline phosphatase, total protein, ALT, and AST. Do these two panels share overlapping component tests?

A. Yes; both panels include total cholesterol

B. Yes; both panels include albumin

C. Yes; both panels include ALT and AST

D. No; the lipid panel and hepatic function panel have no overlapping component tests

54. A laboratory performs a CBC with automated differential (85025). The automated differential is flagged as abnormal, requiring a manual review of the blood smear by a technologist. How should the manual differential be coded?

A. With a repeat of 85025 and modifier 91

B. It is included in the CBC code; no additional code is needed

C. With the manual differential add-on code (85004) in addition to the CBC code

D. With a pathology consultation code

55. A pathologist examines a tonsil specimen from a routine tonsillectomy. At which level of surgical pathology is a tonsil specimen classified?

A. Level II (88302)

B. Level III (88304)

C. Level IV (88305)

D. Level V (88307)

56. A presumptive drug screen is performed by instrument chemistry analyzer on a urine specimen, testing for 10 drug classes. How should the presumptive testing be coded?

A. One unit of code 80307 regardless of the number of drug classes

B. Ten units of code 80307, one per drug class

C. One unit of code 80305 for each drug class

D. Five units of code 80307

57. A physician orders a renal function panel (80069). The panel includes albumin, calcium, carbon dioxide, chloride, creatinine, glucose, phosphorus, potassium, sodium, and BUN. How many component tests are in this panel?

A. Eight

B. Fourteen

C. Ten

D. Seven

58. Special stains are performed on a tissue specimen. The pathologist orders PAS, GMS, and AFB stains on the same tissue block. How should the special stains be coded?

A. One code for all three stains combined

B. Two codes — one for bacterial stains and one for fungal stains

C. With a pathology consultation code

D. Three units of the special stain code — one per stain per specimen

Medicine (Questions 59–64)

59. A patient receives a 45-minute IV infusion of iron sucrose (a non-chemotherapy therapeutic agent) as the only IV service during the encounter. Which code should be reported as the initial service?

A. The therapeutic drug infusion code (96365) for the first hour

B. The hydration code (96360) for the first hour

C. The chemotherapy infusion code (96413) for the first hour

D. The IV push code (96374)

60. A physician provides an established patient E/M visit (99214) and also performs an intramuscular injection of ketorolac during the same encounter. How should the injection be coded?

A. It is included in the E/M code; injections are not separately reportable

B. With code 96372 (therapeutic injection, SC or IM) in addition to the E/M code

C. With the drug J-code only; no administration code is needed

D. With the E/M code and modifier 25 only

61. An established patient on chronic dialysis is managed by a nephrologist. The patient is 55 years old and the physician provides 4 face-to-face visits during the month. Which code set covers the monthly management?

A. Four separate subsequent hospital care codes

B. Four separate office visit E/M codes

C. ESRD monthly management code for patients 20+ years with 4 or more visits (90960)

D. Hemodialysis procedure codes (90935) × 4

62. A supervised modality (hot packs, 97010) is applied to a patient's lower back during a physical therapy session. How is a supervised modality reported?

A. Per 15-minute unit based on treatment time

B. Per 8-minute unit based on therapist contact time

C. Per each additional modality after the first

D. One unit per application regardless of the duration

63. A 2-year-old child receives one injection of the DTaP vaccine (3 antigen components: diphtheria, tetanus, pertussis) at a well-child visit. The physician provides face-to-face counseling. How many administration codes are reported in total?

A. Three codes: 90460 × 1, 90461 × 2

B. One code: 90471 × 1

C. Two codes: 90460 × 1, 90461 × 1

D. One code: 90460 × 1

64. An ophthalmologist performs optical coherence tomography (OCT) of the retina during an established patient comprehensive eye examination. How should the OCT be coded?

A. It is included in the comprehensive ophthalmological examination code

B. With a separate OCT code (92134) in addition to the examination code

C. With the examination code and modifier 22

D. With an unlisted ophthalmological service code

Medical Terminology (Questions 65–68)

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

A. Surgical removal

B. Creating a new opening

C. Surgical repair

D. Incision into

66. Which combining form refers to the stomach?

A. Enter/o

B. Col/o

C. Gastr/o

D. Esophag/o

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

A. Slow

B. Fast

C. Difficult

D. Excessive

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

A. Paralysis of all four extremities

B. Paralysis of one side of the body

C. Paralysis of both lower extremities

D. Weakness of one extremity

Anatomy (Questions 69–72)

69. The spleen is part of which body system?

A. Digestive system

B. Endocrine system

C. Respiratory system

D. Hemic and lymphatic system

70. Which structure connects the stomach to the duodenum?

A. Pyloric sphincter

B. Lower esophageal sphincter

C. Ileocecal valve

D. Cardiac sphincter

71. The thyroid gland is located in which anatomical region?

A. Mediastinum

B. Retroperitoneum

C. Anterior neck

D. Posterior cranial fossa

72. Which of the following bones is part of the appendicular skeleton?

A. Sternum

B. Humerus

C. Vertebra

D. Rib

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

73. A patient presents with acute exacerbation of chronic obstructive pulmonary disease (COPD). The physician documents "acute exacerbation of COPD." Which ICD-10-CM code should be reported?

A. J44.9 (COPD, unspecified)

B. J44.0 (COPD with acute lower respiratory infection)

C. J43.9 (Emphysema, unspecified)

D. J44.1 (COPD with acute exacerbation)

74. A patient has a confirmed diagnosis of Type 1 diabetes mellitus with diabetic neuropathy. Under ICD-10-CM, which category should be used?

A. E10 (Type 1 diabetes mellitus) with the appropriate neuropathy complication code

B. E11 (Type 2 diabetes mellitus) with the neuropathy code

C. G62.9 (Polyneuropathy, unspecified) alone

D. E13 (Other specified diabetes mellitus)

75. In ICD-10-CM, which guideline governs the coding of conditions documented as "probable" or "suspected" in the inpatient setting?

A. Code the condition as if it does not exist

B. Code only the presenting symptoms

C. Code the condition as if it exists — confirmed and suspected diagnoses are coded the same way in the inpatient setting

D. Use a Z code for the encounter reason

76. A patient is seen for follow-up of a healed tibial fracture. The fracture has fully healed with no residual complications. Which 7th character should be used?

A. A (initial encounter)

B. D (subsequent encounter)

C. S (sequela)

D. No 7th character is needed

77. A coder is assigning a diagnosis code for a patient with both hypertension and Type 2 diabetes. There is no documented causal relationship between the two conditions. How should these be coded?

A. With a single combination code for both conditions

B. With a code from I10 (Essential hypertension) and a code from E11 (Type 2 diabetes) reported separately

C. With a code from I13 (Hypertensive heart and chronic kidney disease)

D. With the diabetes code only; hypertension is assumed to be included

HCPCS Level II (Questions 78–80)

78. A patient receives an injection of methylprednisolone acetate 40 mg intramuscularly. The HCPCS J-code for this drug specifies the dosage per unit. What must the coder verify before assigning the number of units?

A. The per-unit dosage in the HCPCS code description to calculate the correct number of units based on the amount administered

B. The patient's weight

C. The route of administration only

D. The payer's contracted rate for the drug

79. Which HCPCS Level II code range covers ambulance transport services?

A. E0100–E9999

B. J0000–J9999

C. A0000–A0999

D. L0000–L9999

80. A provider performs a service on a Medicare patient and has obtained a signed ABN. Medicare denies the claim. Can the provider bill the patient?

A. No; Medicare patients can never be billed for denied services

B. Yes; when a valid signed ABN is in place (modifier GA), the provider may bill the patient for the denied service

C. Yes, but only if the provider appeals the denial first

D. No; the provider must write off the balance regardless of the ABN

Coding Guidelines (Questions 81–87)

81. A surgeon performs a diagnostic endoscopy followed by a surgical endoscopy during the same session on the same anatomical site. Which of the following is the correct coding approach?

A. Report only the surgical endoscopy code; the diagnostic endoscopy is bundled

B. Report both the diagnostic and surgical endoscopy codes with modifier 59

C. Report the diagnostic endoscopy code only with modifier 22

D. Report both codes without any modifier

82. During the 90-day global period of a major surgery, a patient develops a wound infection that requires the surgeon to return to the operating room for debridement. Which modifier should be appended to the debridement code?

A. Modifier 58

B. Modifier 79

C. Modifier 24

D. Modifier 78

83. Which CPT symbol indicates that a code has a revised description from the prior year's edition?

A. Plus sign (+)

B. Filled circle (●)

C. Triangle (▲)

D. Circle with line (Ø)

84. A physician performs a minor procedure with a 10-day global period and also provides a significant, separately identifiable E/M service on the same day. Which modifier is appended to the E/M code?

A. Modifier 57

B. Modifier 25

C. Modifier 51

D. Modifier 59

85. Under the NCCI, what is the purpose of Column 1/Column 2 edits?

A. To identify code pairs where the Column 2 code is a component of the Column 1 code and is bundled when reported together

B. To establish time-based billing thresholds for each code

C. To define the maximum number of units for each code

D. To assign relative value units to each procedure

86. A surgeon performs an unrelated surgical procedure during the 90-day global period of a previous major surgery. Which modifier should be appended to the new procedure?

A. Modifier 58

B. Modifier 78

C. Modifier 24

D. Modifier 79

87. In CPT, what does the term "add-on code" mean?

A. A code that can only be reported by a specific medical specialty

B. A code that must always have modifier 51 appended

C. A code that is never reported as a standalone service and must accompany a designated primary procedure code

D. A code that represents a new procedure added in the current year

Compliance and Regulatory (Questions 88–90)

88. Under the Medicare Physician Fee Schedule, which component of the RVU reflects the physician's time, skill, effort, and judgment in performing the service?

A. Practice Expense (PE) RVU

B. Work RVU

C. PLI (Professional Liability Insurance) RVU

D. Conversion Factor

89. A medical coder discovers that a physician is consistently reporting 99215 (level 5 established patient) for nearly every patient visit, regardless of clinical complexity. Under the compliance program, what is the appropriate first step?

A. Report the concern to the compliance officer or through the anonymous reporting mechanism

B. Change all the codes to 99213 without notifying the physician

C. Ignore the pattern since the physician has clinical authority

D. Report the physician directly to the OIG without internal review

90. Place of service code 11 represents which setting?

A. Inpatient hospital

B. Emergency department

C. Ambulatory surgical center

D. Physician's office

Cases — Integrated Coding Scenarios (Questions 91–100)

Case 1 (Questions 91–92):

A 45-year-old patient undergoes a diagnostic EGD for evaluation of chronic GERD symptoms. During the procedure, the gastroenterologist finds Barrett's esophagus and performs a biopsy of the esophageal mucosa. No other procedures are performed.

91. Which procedure code(s) should be reported?

A. Both the diagnostic EGD code and the biopsy code

B. The diagnostic EGD code only; the biopsy is included

C. The EGD with biopsy code only; the diagnostic EGD is bundled

D. The biopsy code with modifier 26

92. The biopsy confirms Barrett's esophagus with intestinal metaplasia. Which diagnosis code should be reported as the primary reason for the encounter?

A. K21.0 (GERD with esophagitis)

B. K22.70 (Barrett's esophagus without dysplasia)

C. Z12.0 (Encounter for screening for malignant neoplasm of stomach)

D. R12 (Heartburn)

Case 2 (Questions 93–94):

A 68-year-old Medicare patient presents for a routine screening colonoscopy. The patient has a family history of colon cancer but no personal history. During the procedure, the gastroenterologist identifies and removes a 0.8 cm pedunculated polyp from the sigmoid colon using snare technique with electrocautery.

93. Which diagnosis should be reported as the first-listed code?

A. Z12.11 (Encounter for screening for malignant neoplasm of colon) as the first-listed diagnosis

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

C. Z80.0 (Family history of malignant neoplasm of digestive organs) as the first-listed diagnosis

D. D12.5 (Benign neoplasm of sigmoid colon) as the first-listed diagnosis

94. The diagnostic colonoscopy (45378) is performed as part of the screening, and the snare polypectomy is performed during the same session. Should the diagnostic colonoscopy code be reported separately?

A. Yes, with modifier 59

B. Yes, with modifier 25

C. Yes, with modifier 33 to indicate preventive service

D. No; the diagnostic colonoscopy is bundled into the surgical colonoscopy code

Case 3 (Questions 95–96):

A surgeon performs a right inguinal hernia repair (open, initial, reducible) on a 42-year-old patient. During the same operative session, the surgeon also performs a left inguinal hernia repair (open, initial, reducible).

95. How should the bilateral hernia repairs be reported?

A. One hernia repair code with modifier 22

B. One hernia repair code without any modifier

C. One hernia repair code reported bilaterally with modifier 50 or with RT and LT modifiers

D. Two different hernia repair codes with modifier 51

96. The surgeon also provides a separately identifiable E/M service on the same date that results in the decision to perform the hernia repairs. The hernia repair has a 90-day global period. Which modifier is appended to the E/M code?

A. Modifier 25

B. Modifier 57

C. Modifier 59

D. Modifier 24

Case 4 (Questions 97–98):

A pain management physician performs a right L3 medial branch nerve radiofrequency ablation and a right L4 medial branch nerve radiofrequency ablation during the same session under fluoroscopic guidance.

97. What type of nerve procedure is radiofrequency ablation classified as in CPT?

A. Neurolysis (nerve destruction)

B. Nerve block (temporary interruption)

C. Nerve repair

D. Neurostimulation

98. The procedure is performed at two lumbar levels (L3 and L4 medial branches). How should the multiple levels be coded?

A. One code for each nerve destroyed with modifier 51

B. With a single code covering all levels

C. With a primary code and modifier 22

D. With a primary code for the first level and an add-on code for the additional level

Case 5 (Questions 99–100):

A patient receives the following IV services during a single outpatient encounter: a 1-hour IV infusion of a chemotherapy agent (doxorubicin), followed by a 30-minute IV push of a second chemotherapy drug (cyclophosphamide), and 45 minutes of IV hydration with normal saline.

99. According to the infusion hierarchy, which service should be reported as the initial service?

A. The IV hydration

B. The IV push of cyclophosphamide

C. The chemotherapy infusion of doxorubicin

D. Each service should be reported as a separate initial service

100. The IV hydration lasted 45 minutes. Since it is provided on the same day as chemotherapy, how should the hydration be reported?

A. As the initial hydration code (96360)

B. As a secondary/sequential hydration service using the appropriate add-on code

C. Hydration is not separately reportable when chemotherapy is provided

D. As the initial hydration code with modifier 59

SIMULATION EXAM 4 — ANSWER KEY WITH EXPLANATIONS

10,000 Series — Integumentary System

1. **B. 1.3 cm** The excised diameter is calculated as lesion diameter plus margins on both sides: 0.9 cm + (0.2 cm × 2) = 1.3 cm. Even small margins are doubled because tissue is removed circumferentially around the entire lesion. This 1.3 cm excised diameter determines the correct code within the benign excision range for the arm/trunk anatomical grouping.

2. **D. Complex** Complex wound repair involves techniques beyond simple layered closure, including tissue undermining, stents, retention sutures, and debridement. The use of undermining and retention sutures in this forehead laceration elevates the classification from intermediate to complex. Simple repair involves single-layer closure. Intermediate involves layered closure of subcutaneous tissue and skin.

3. **A. Autograft** An autograft is a skin graft harvested from the patient's own body. This is the preferred type of graft because there is no risk of immunological rejection. An allograft (homograft) uses tissue from another human (cadaver skin). A xenograft (heterograft) uses tissue from another species (porcine skin). Autografts and allografts have separate CPT code ranges.

4. **C. 17000 × 1, 17003 × 11** For destruction of premalignant lesions (actinic keratoses), code 17000 covers the first lesion and code 17003 covers the second through fourteenth lesions. For 12 lesions: 17000 × 1 (first lesion) plus 17003 × 11 (lesions 2 through 12). The flat code 17004 is only used when 15 or more lesions are destroyed.

5. **B. One simple repair code for 7.0 cm combining both wounds** When multiple wounds are repaired using the same classification (both simple) and are in the same anatomical grouping (hands are in the same group as the extremities), their lengths are added together and reported as a single code. The two wounds total 4.0 + 3.0 = 7.0 cm. Only wounds of different classifications or different anatomical groupings are reported separately.

6. **A. Skin biopsy codes (11102–11107)** A punch biopsy of a skin lesion is coded using the skin biopsy codes (11102 for the first lesion, 11103 for each additional lesion). Biopsy codes describe the removal of tissue for diagnostic pathological examination without complete excision of the lesion. Excision codes would be used only if the entire lesion were removed with margins. Shave removal codes describe tangential removal of a lesion.

20,000 Series — Musculoskeletal System

7. **D. 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 ACL reconstruction is a surgical arthroscopic procedure — the diagnostic examination is included. Reporting both the diagnostic and surgical codes constitutes unbundling.

8. **C. Musculoskeletal system** Nasal bone fracture treatment codes are located in the musculoskeletal system section of CPT. Although the nose is part of the respiratory system functionally, the treatment of nasal bone fractures involves the skeletal structure and is classified under musculoskeletal system procedures. Nasal fracture codes (21310–21340) are organized by whether manipulation is performed.

9. **A. The surgeon reports the complete global package without splitting modifiers** When a single surgeon provides the preoperative evaluation, performs the surgical procedure, and provides all postoperative care, the complete global surgical package is reported without splitting modifiers. No modifier 54, 55, or 56 is needed. The global package bundles the pre-op, intra-op, and post-op care into a single payment.

10. **B. With a separate spinal instrumentation code in addition to the fusion code** Spinal instrumentation (pedicle screws, rods, plates) is coded separately from the spinal fusion using the appropriate instrumentation code (22840–22855). The fusion code covers the biological fusion of the vertebral interspace. The instrumentation code covers the mechanical hardware used to stabilize the fusion. These are distinct surgical components reported with separate codes.

11. **D. An arthrotomy involves an open surgical incision into the joint; an arthroscopy uses a small camera inserted through a portal** An arthrotomy is an open surgical procedure involving a direct incision into the joint capsule to access the joint space. An arthroscopy is a minimally invasive procedure using a small camera (arthroscope) inserted through small portals. The two techniques have different approaches, different recovery times, and different CPT code ranges.

12. **C. Aspiration** Aspiration of a ganglion cyst involves draining the fluid content using a needle and syringe — no incision or excision is performed. This is a distinct procedure from excision (surgical removal of the entire cyst) or incision and drainage (which involves an incision to drain an abscess or fluid collection). The correct code reflects the aspiration technique used.

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

13. **A. It is not reported separately; it is included in the thoracentesis code** When the thoracentesis code includes imaging guidance in its code description, a separate ultrasound guidance code should not be reported. Reporting both the procedure and a separate guidance code constitutes double billing. The coder must always verify whether imaging guidance is included in the procedure code before reporting a separate guidance code.

14. **B. Separate codes for the right heart catheterization, left heart catheterization, coronary angiography, and ventriculography as appropriate per CPT bundling rules** Cardiac catheterization coding uses a component-based approach. The right heart catheterization, left heart catheterization, coronary angiography, and ventriculography may have separate or combined codes depending on the specific CPT bundling rules. The coder must read the code descriptions carefully to determine which components are bundled and which are reported separately.

15. **D. Division of the sternum (breastbone) to access the heart and mediastinum** A sternotomy involves dividing the sternum vertically to open the chest and provide wide access to the heart, great vessels, and mediastinum. This is the standard approach for most open cardiac surgical procedures including CABG, valve replacement, and cardiac repair. A thoracotomy involves an incision between the ribs, which is used for lung and lateral chest procedures.

16. **C. With a code for insertion of the new atrial lead and a separate code for the generator replacement** Pacemaker coding is component-based. Upgrading from a single-chamber to a dual-chamber system requires inserting a new atrial lead (coded with the lead insertion code) and replacing the single-chamber generator with a dual-chamber generator (coded with the generator replacement code). Each component is coded separately.

17. **A. It is not reported separately; it is included in the surgical bronchoscopy code** Diagnostic bronchoscopy is bundled into surgical bronchoscopy when both are performed during the same session. The transbronchial needle aspiration is a surgical bronchoscopic procedure — the diagnostic examination is included. This follows the standard endoscopic hierarchy rule that applies across all endoscopic procedures in CPT.

18. **B. With a separate mediastinal lymph node dissection code in addition to the lobectomy code** Mediastinal lymph node dissection performed during a lobectomy for lung cancer staging is coded separately from the lobectomy. The lymph node dissection addresses a different structure and a different surgical objective (staging) from the lobectomy (tumor removal). Both codes are reported to capture the complete service.

40,000 Series — Digestive System

19. **C. One code for the cold forceps biopsy polypectomy and one code for the snare polypectomy with appropriate modifier** When polyps are removed using different techniques during the same colonoscopy, each technique is reported with its own code. The cold forceps biopsy polypectomy and the snare polypectomy with electrocautery have different CPT codes reflecting different levels of complexity. Modifier 59 or XS is appended to the lesser procedure to indicate distinct techniques. The diagnostic colonoscopy is bundled into the surgical codes.

20. **D. Removing approximately 80% of the stomach along the greater curvature to create a narrow tubular stomach** A gastric sleeve (sleeve gastrectomy) involves removing approximately 80% of the stomach along the greater curvature, leaving a narrow tube-shaped stomach (sleeve) approximately the size of a banana. This restricts food intake and reduces hunger hormone

production. It differs from gastric bypass (which reroutes the intestine), gastric banding (which places a band), and fundoplication (which wraps the stomach around the esophagus).

21. **B. It is not reported separately; it is included in the surgical sigmoidoscopy code** When a surgical procedure (biopsy) is performed during a sigmoidoscopy, only the surgical sigmoidoscopy code is reported. The diagnostic examination is bundled into the surgical code. This follows the same endoscopic hierarchy rule that applies to colonoscopy, EGD, bronchoscopy, and all other endoscopic procedures in CPT.

22. **A. Hernia type (femoral), initial vs. recurrent status, and whether incarcerated or strangulated** CPT codes for femoral hernia repair are determined by the hernia type (femoral), whether the repair is initial or recurrent, and whether the hernia is incarcerated or strangulated. These factors directly affect the complexity of the repair and therefore the code selection. The surgical approach (open vs. laparoscopic) may also affect code selection.

23. **D. It is not reported separately; it is included in the surgical EGD codes** When surgical procedures (dilation and biopsy) are performed during an EGD, the diagnostic examination is bundled into the surgical codes. Both the dilation and the biopsy are separately reportable surgical EGD procedures, each with their own code. The diagnostic EGD is not reported as an additional code.

24. **C. The head of the pancreas, duodenum, distal common bile duct, gallbladder, and a portion of the stomach** A standard Whipple procedure (pancreaticoduodenectomy) removes the head of the pancreas, the entire duodenum, the distal common bile duct, the gallbladder, and a portion of the distal stomach (antrum). The remaining structures are then reconstructed with anastomoses. This is one of the most complex abdominal surgeries, classified at Level VI surgical pathology.

50,000 Series — Urinary, Reproductive, and Endocrine

25. **A. With the procedure 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 two separate lines with modifiers RT and LT. The diagnostic cystoscopy is bundled into the surgical cystoscopy and is not reported separately. The laterality modifier applies to the retrograde pyelography code.

26. **B. Removal of the kidney along with Gerota's fascia, the ipsilateral adrenal gland, and regional lymph nodes** Radical nephrectomy involves removal of the kidney, the surrounding perirenal fat and Gerota's fascia, the ipsilateral adrenal gland (in some cases), and regional lymph nodes. This more extensive resection is performed for renal cell carcinoma to ensure complete removal of the tumor with adequate margins. A simple nephrectomy removes only the kidney.

27. **D. The global obstetric code for vaginal delivery** When a single physician provides all three components — complete antepartum care, delivery, and all postpartum care — the global obstetric code is reported. The global code for vaginal delivery (59400) captures the entire package as a

single service. Unbundling into individual component codes is only appropriate when different physicians provide different components of care.

28. **A. A total hysterectomy removes both the uterine body and the cervix; a supracervical hysterectomy preserves the cervix** The key anatomical distinction is whether the cervix is removed. A total hysterectomy removes both the uterine body and the cervix. A supracervical (subtotal) hysterectomy removes only the uterine body while preserving the cervix. This distinction affects CPT code selection because total and supracervical hysterectomies have different codes.

29. **C. By the size of the tumor (small vs. large) and whether the procedure is initial or subsequent** CPT codes for transurethral bladder tumor resection are differentiated by the size of the tumor (small/2.0 cm or less vs. large/greater than 2.0 cm) and whether the resection is a primary or subsequent procedure on the same tumor. These factors reflect the complexity and extent of the surgical procedure.

30. **D. CPT distinguishes between limited and subtotal/total parathyroidectomy based on the extent of the procedure** CPT provides different codes for parathyroidectomy based on the extent of gland removal. A limited exploration involves removal of one or two glands. A subtotal or total parathyroidectomy involves removal of three or more glands and is a more extensive procedure. The extent of the procedure — not just the number of glands — determines the appropriate code.

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

31. **B. With a separate fluoroscopic guidance code since the injection code does not include imaging guidance** When the injection code does NOT include imaging guidance in its description, and fluoroscopy is used during the procedure, a separate fluoroscopic guidance code is reported in addition to the injection code. The coder must read each injection code description carefully to determine whether guidance is included or excluded before deciding whether a separate guidance code is appropriate.

32. **A. Craniectomy** A craniectomy involves removing bone from the skull without replacing it. In this case, the posterior fossa bone is removed and not replaced to allow the cerebellar tonsils to decompress in a Chiari malformation. This is a decompressive craniectomy. A craniotomy would involve replacing the bone flap. A cranioplasty is a separate procedure to repair the skull defect at a later date.

33. **C. 66982 (complex cataract extraction with IOL)** Complex cataract extraction (66982) is reported when the procedure requires devices or techniques not used in routine cataract surgery. The posterior capsular rupture, vitrectomy, and capsular tension ring use elevate this case beyond a routine extraction. Routine cataract extraction (66984) would not capture the additional complexity. Complex cataract codes carry a higher RVU.

34. **D. With the myringotomy code (69421) — myringotomy including aspiration under general anesthesia** Myringotomy with aspiration under general anesthesia is coded with 69421. This code covers the incision of the tympanic membrane and aspiration of middle ear fluid without tube insertion. Since no tympanostomy tube was inserted, the tube insertion code is not appropriate. The myringotomy code captures the complete service.

35. **B. Two codes — one for the laminotomy electrode placement and one for the generator implantation** Neurostimulator coding uses a component-based approach. The laminotomy electrode placement (63655 — paddle electrode placed through a laminotomy) and the pulse generator implantation (63685) are coded separately. There is no single "complete system" code. Each component has its own CPT code. The laminotomy approach to place the electrode is included in the electrode placement code.

36. **A. 67028 (intravitreal injection of a pharmacologic agent)** Code 67028 covers the intravitreal injection of a pharmacologic agent — the injection of medication directly into the vitreous cavity of the eye. This is one of the most commonly performed eye procedures, used to deliver anti-VEGF drugs for macular degeneration, diabetic macular edema, and retinal vein occlusion. The drug itself is coded separately with the appropriate HCPCS J-code.

Evaluation and Management

37. **D. High** Multiple complex chronic conditions (uncontrolled diabetes, worsening heart failure, new CKD) constitute high-level problem complexity. Extensive data review with multiple diagnostic tests constitutes extensive/high-level data. Multiple medication adjustments with significant drug interaction risk constitute high-level risk. All three MDM elements meet the high threshold, supporting code 99215 or 99205.

38. **C. Subsequent hospital care codes (99231–99233)** After the initial hospital care on Monday, all subsequent visits by the same physician during the same admission are coded using subsequent hospital care codes (99231–99233). Initial hospital care codes are used only on the first day of admission. Observation codes are for observation status patients. Critical care codes require management of a life-threatening condition.

39. **B. Continuing intensive care codes for very low birth weight infants (99478–99480)** A 1,200-gram neonate on day 15 of life qualifies for continuing intensive care codes for very low birth weight infants (1,500 grams or less). Neonatal critical care codes (99468–99469) cover the first 28 days but are used when the neonate requires critical care services. After the initial critical care period, the continuing intensive care codes based on birth weight are used for ongoing daily management.

40. **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. The decision was made during this visit, and the surgery has a 90-day global period, making

modifier 57 the correct choice. Modifier 25 would be appropriate only for minor procedures with 0-day or 10-day global periods.

41. **D. The initial hospital care code only; 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 (99221–99223) is reported. The ED evaluation is rolled into the admission service and is not reported separately. This prevents double billing for the same physician's cognitive services on the same date.

42. **C. 60 minutes** Under the current E/M guidelines, the time-based pathway for a new patient level 5 office visit (99205) requires a minimum of 60 minutes of total time on the date of the encounter. This includes all physician activities — pre-visit, face-to-face, and post-visit work. The next level (prolonged services with 99417) would begin at times exceeding this threshold.

Anesthesia

43. **B. 12 units** Base units (7) + Time units (75 minutes ÷ 15 minutes/unit = 5.0) + Modifying units (P2 = 0) = 12.0 total units. Physical status P2 (well-controlled diabetes) typically does not add modifying units. The calculation: 7 + 5 + 0 = 12.

44. **A. General anesthesia produces complete unconsciousness with loss of protective reflexes; MAC provides sedation with continuous monitoring while the patient maintains some level of consciousness** General anesthesia renders the patient completely unconscious with loss of protective airway reflexes, requiring airway management (intubation or LMA). MAC provides varying levels of sedation while the patient maintains some consciousness and protective reflexes. Both are provided by anesthesia professionals, but the depth of anesthesia and airway management requirements differ significantly.

45. **D. 13 units** Time units are calculated by dividing total anesthesia minutes by the minutes-per-unit value: 195 minutes ÷ 15 minutes/unit = 13.0 time units. This is a clean division with no remainder. Time units represent only the time component — they are added to base units and modifying units to calculate total anesthesia units.

46. **C. Modifier AA** Modifier AA indicates that the anesthesiologist personally performed the entire anesthesia service. No CRNA or anesthesia assistant was involved. Modifier QY indicates medical direction of a CRNA. Modifier QX is appended to the CRNA's claim when under medical direction. Modifier QZ indicates a CRNA providing services without medical direction.

Radiology

47. **A. CT head without contrast followed by with contrast (single combination code)** When a CT is performed first without contrast and then repeated with contrast during the same session, a single combination code is reported — "without contrast followed by with contrast." Two separate codes (one without, one with) are not reported. The combination code captures the complete dual-phase study as a single service.

48. **B. The hospital bills the global code since both the technical and professional components are provided by hospital employees** When the hospital employs both the technologist (technical component) and the radiologist (professional component), the hospital bills the global code without any modifier. The components are not split because both are provided by the same entity. If the radiologist were an independent contractor, the components would be split with modifiers TC and 26.

49. **D. Radioactive tracer (typically fluorodeoxyglucose/FDG)** PET scans use radioactive tracers — most commonly fluorodeoxyglucose (FDG), a radioactive glucose analog — to detect metabolic activity. Cancer cells have higher metabolic rates and take up more FDG, appearing as bright spots on the PET image. Iodinated contrast is used for CT. Gadolinium is used for MRI. Barium is used for fluoroscopic GI studies.

50. **C. With a separate joint injection code in addition to the MRI code** MR arthrography involves two components: the injection of contrast into the joint and the subsequent MRI. The injection is coded with the appropriate joint injection code (with fluoroscopic or CT guidance), and the MRI is coded with the MRI code for the appropriate body region "with contrast." These are separate services reported with separate codes.

51. **B. 1 unit** Treatment management code 77427 is reported per 5 fractions of treatment delivery. Five fractions constitute exactly 1 full unit of 77427. If fewer than 5 fractions were delivered in the treatment course, modifier 52 would be appended. If more than 5 fractions were delivered, additional units would be reported for each subsequent 5-fraction block.

52. **A. Complete — all required structures have been evaluated** A complete abdominal ultrasound requires evaluation of the liver, gallbladder, common bile duct, pancreas, spleen, kidneys, and abdominal aorta. All of these structures were evaluated in this case, making it a complete study. A limited study evaluates only one or a few specific structures. Using the complete code when a limited study was performed constitutes upcoding.

Pathology and Laboratory

53. **D. No; the lipid panel and hepatic function panel have no overlapping component tests** The lipid panel (total cholesterol, HDL, triglycerides, LDL) and the hepatic function panel (albumin, total bilirubin, direct bilirubin, alkaline phosphatase, total protein, ALT, AST) do not share any overlapping components. They measure entirely different analytes. Both panel codes are reported in full without concern for overlap or double billing.

54. **C. With the manual differential add-on code (85004) in addition to the CBC code** When the automated differential is flagged as abnormal and a manual differential is performed (technologist examines a blood smear under a microscope), the manual differential code (85004) is reported in addition to the CBC code (85025). The manual differential is an add-on service that provides additional clinical information beyond the automated result.

55. **B. Level III (88304)** A tonsil specimen from a routine tonsillectomy is classified at Level III surgical pathology (88304). Level III includes routine surgical specimens such as tonsils and adenoids, gallbladder, skin biopsies, and other common specimens requiring standard gross and microscopic examination. The specimen type — not the difficulty of the diagnosis — determines the level.

56. **A. One unit of code 80307 regardless of the number of drug classes** Presumptive drug testing by instrument chemistry analyzer (80307) is reported once per date of service regardless of the number of drug classes tested. Whether the screen tests for 5 drug classes or 10, only one unit is reported. This is a fundamental difference from definitive drug testing, which is reported per drug class.

57. **C. Ten** The renal function panel (80069) contains ten component tests: albumin, calcium, carbon dioxide, chloride, creatinine, glucose, phosphorus, potassium, sodium, and BUN. All ten tests must be performed to report the panel code. If any component is missing, each test must be reported individually.

58. **D. Three units of the special stain code — one per stain per specimen** Special stain codes are reported per stain per specimen. Three different stains (PAS, GMS, AFB) performed on the same tissue block require three units of the special stain code. Each stain identifies different tissue components or organisms and represents a separate laboratory service. There is no combination code for multiple stains.

Medicine

59. **A. The therapeutic drug infusion code (96365) for the first hour** Iron sucrose is a non-chemotherapy therapeutic agent. Non-chemotherapy drugs administered by IV infusion are coded using the therapeutic drug infusion codes (96365–96368), not the chemotherapy codes. Since this is the only IV service during the encounter, the therapeutic infusion is appropriately reported as the initial service. The chemotherapy codes are reserved for antineoplastic agents.

60. **B. With code 96372 (therapeutic injection, SC or IM) in addition to the E/M code** The intramuscular injection of ketorolac is a separately reportable service coded with 96372 (therapeutic/prophylactic/diagnostic injection, SC or IM). This administration code is reported in addition to the E/M code. The drug product (ketorolac J-code) is also reported separately. The injection is not bundled into the E/M service.

61. **C. ESRD monthly management code for patients 20+ years with 4 or more visits (90960)** ESRD monthly management codes bundle all dialysis-related physician services for the calendar month into a single per-month code. Code 90960 covers patients 20 years and older with 4 or more face-to-face physician visits per month. This code replaces individual E/M visits for dialysis-related care during the month.

62. **D. One unit per application regardless of the duration** Supervised modalities are not time-based. They are reported as one unit per application regardless of the treatment duration. The therapist sets up the treatment (hot packs) and provides initial instruction but does not need to remain with the patient continuously. This differs from constant attendance modalities and therapeutic procedures, which are time-based and reported per 15-minute unit.

63. **A. Three codes: 90460 × 1, 90461 × 2** For patients through 18 years of age with physician counseling, the pediatric component-based codes are used. DTaP contains three antigen components (diphtheria, tetanus, pertussis). The first component is reported with 90460 × 1, and each additional component is reported with 90461 × 2. Total administration codes: three (90460 × 1 + 90461 × 2).

64. **B. With a separate OCT code (92134) in addition to the examination code** Optical coherence tomography is a special ophthalmological diagnostic service that is coded separately from the ophthalmological examination. Code 92134 covers the OCT scanning of the retina and is reported in addition to the comprehensive eye examination code (92014). Special diagnostic services are not included in the examination codes.

Medical Terminology

65. **D. Incision into** The suffix "-otomy" means incision into or cutting into. Common examples include craniotomy (incision into the skull), thoracotomy (incision into the chest), and laparotomy (incision into the abdomen). "-Ectomy" means surgical removal, "-ostomy" means creating a new opening, and "-plasty" means surgical repair.

66. **C. Gastr/o** The combining form "gastr/o" refers to the stomach. Common terms include gastrectomy (removal of the stomach), gastritis (inflammation of the stomach), and gastroscopy (examination of the stomach). "Enter/o" refers to the intestine, "col/o" refers to the colon, and "esophag/o" refers to the esophagus.

67. **A. Slow** The prefix "brady-" means slow. Common terms include bradycardia (slow heart rate), bradypnea (slow breathing), and bradykinesia (slow movement). The opposite prefix "tachy-" means fast (tachycardia, tachypnea). "Dys-" means difficult, and "hyper-" means excessive.

68. **B. Paralysis of one side of the body** Hemiplegia means paralysis of one side of the body — the arm, leg, and sometimes the face on the same side. The prefix "hemi-" means half or one side. Quadriplegia (tetraplegia) is paralysis of all four extremities. Paraplegia is paralysis of both lower extremities. Monoplegia is paralysis of a single extremity.

Anatomy

69. **D. Hemic and lymphatic system** The spleen is part of the hemic (blood) and lymphatic system. It filters blood, removes old or damaged red blood cells, produces lymphocytes, and stores platelets. The spleen is the largest lymphoid organ in the body. Spleen procedures are coded in the

hemic and lymphatic system subsection of CPT surgery, not the digestive system despite its abdominal location.

70. **A. Pyloric sphincter** The pyloric sphincter is the muscular valve that connects the stomach to the duodenum (first part of the small intestine). It regulates the passage of partially digested food (chyme) from the stomach into the duodenum. The lower esophageal sphincter connects the esophagus to the stomach. The ileocecal valve connects the ileum to the cecum.

71. **C. Anterior neck** The thyroid gland is located in the anterior neck, just below the larynx (Adam's apple) and in front of the trachea. It wraps around the trachea with two lateral lobes connected by a central isthmus. The mediastinum contains the heart and great vessels. The retroperitoneum contains the kidneys and adrenal glands.

72. **B. Humerus** The humerus (upper arm bone) is part of the appendicular skeleton, which includes all bones of the upper and lower extremities and the girdles that attach them to the axial skeleton. The sternum, vertebrae, and ribs are all part of the axial skeleton, which forms the central axis of the body.

ICD-10-CM / Diagnosis Coding

73. **D. J44.1 (COPD with acute exacerbation)** ICD-10-CM provides a specific combination code J44.1 for COPD with acute exacerbation. This single code captures both the underlying chronic condition and the acute episode. The unspecified COPD code (J44.9) would not reflect the acute exacerbation. J44.0 is for COPD with acute lower respiratory infection, which is a different clinical scenario.

74. **A. E10 (Type 1 diabetes mellitus) with the appropriate neuropathy complication code** Type 1 diabetes mellitus is coded in category E10. The specific code would be E10.40 (Type 1 diabetes with diabetic neuropathy, unspecified) or a more specific code depending on the type of neuropathy documented. An additional code from G60–G65 may be used to specify the type of neuropathy. Type 2 diabetes (E11) would be incorrect for a confirmed Type 1 patient.

75. **C. Code the condition as if it exists — confirmed and suspected diagnoses are coded the same way in the inpatient setting** In the inpatient setting, conditions documented as "probable," "suspected," "likely," "questionable," or "possible" are coded as if they exist. This is a key difference from outpatient coding, where only confirmed diagnoses (or signs/symptoms if unconfirmed) are coded. The inpatient guideline recognizes that the full diagnostic workup may not be complete at the time of coding.

76. **B. D (subsequent encounter)** The 7th character "D" indicates a subsequent encounter — the patient is receiving routine care during the healing phase after the initial treatment. Although the fracture has fully healed, the follow-up visit for the healed fracture still uses "D" because the patient is in the follow-up phase. The "S" (sequela) character would be used only if there were a residual condition caused by the healed injury.

77. **D. With the diabetes code only; hypertension is assumed to be included** The combination code I13 applies only when both hypertension and heart disease AND chronic kidney disease are documented. For the CPC exam, when no causal relationship is documented between hypertension and diabetes alone, both are coded independently with separate codes.

HCPCS Level II

78. **A. The per-unit dosage in the HCPCS code description to calculate the correct number of units based on the amount administered** HCPCS J-codes specify a defined quantity per unit (e.g., "per 40 mg," "per 10 mg"). The coder must verify the per-unit dosage in the code description and calculate the correct number of units based on the total amount administered. If the code specifies 40 mg per unit and 40 mg was administered, one unit is reported. If 80 mg was administered, two units would be reported.

79. **C. A0000–A0999** HCPCS Level II A-codes in the A0000–A0999 range cover ambulance transport services, including ground ambulance, air ambulance, and related supplies. The broader A-code range (A4000–A8999) covers medical supplies. E-codes cover durable medical equipment. J-codes cover drugs. L-codes cover orthotics and prosthetics.

80. **B. Yes; when a valid signed ABN is in place (modifier GA), the provider may bill the patient for the denied service** When a valid, signed ABN was obtained before the service was provided and modifier GA was appended to the claim, the provider may bill the patient for the denied service. The patient was informed of the potential noncoverage, agreed to accept financial responsibility, and chose to receive the service. Without a signed ABN, the provider cannot transfer the cost to the patient.

Coding Guidelines

81. **A. Report only the surgical endoscopy code; the diagnostic endoscopy is bundled** When a diagnostic endoscopy is followed by a surgical endoscopy during the same session on the same anatomical site, only the surgical endoscopy code is reported. The diagnostic examination is bundled into the surgical code. This is the standard endoscopic hierarchy rule that applies across all endoscopic procedures — colonoscopy, EGD, bronchoscopy, cystoscopy, and others.

82. **D. Modifier 78** Modifier 78 (unplanned return to the operating room by the same physician for a related procedure during the postoperative period) is appended when a complication of the original surgery (wound infection) requires a return to the OR for treatment (debridement). Modifier 58 is for planned staged procedures. Modifier 79 is for unrelated procedures. Modifier 24 is for unrelated E/M services.

83. **C. Triangle (▲)** The triangle symbol (▲) in CPT indicates that a code description has been revised from the prior year's edition. The filled circle (●) indicates a new code. The plus sign (+) indicates an add-on code. The circle with a line (Ø) indicates a modifier 51 exempt code. These symbols help coders quickly identify changes when using updated CPT manuals.

84. **B. 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. Modifier 57 would be appropriate only for major procedures with a 90-day global period. The global period of the procedure determines whether modifier 25 or 57 is used.

85. **A. To identify code pairs where the Column 2 code is a component of the Column 1 code and is bundled when reported together** NCCI Column 1/Column 2 edits identify code pairs where the Column 2 code is considered a component of the Column 1 code. When both are reported together for the same patient on the same date by the same provider, the Column 2 code is denied. The modifier indicator determines whether a modifier may be used to bypass the edit when clinically justified.

86. **D. Modifier 79** Modifier 79 (unrelated procedure or service by the same physician during the postoperative period) is appended when a procedure completely unrelated to the original surgery is performed during the 90-day global period. Modifier 58 is for planned staged procedures related to the original surgery. Modifier 78 is for unplanned returns for complications. Modifier 24 is for unrelated E/M services.

87. **C. A code that is never reported as a standalone service and must accompany a designated primary procedure code** Add-on codes (identified with the "+" symbol) are never reported independently — they must always be reported with a designated primary procedure code. They represent additional work performed in conjunction with the primary procedure. Add-on codes are exempt from modifier 51 and are reimbursed at 100% without the multiple procedure payment reduction.

Compliance and Regulatory

88. **B. Work RVU** The Work RVU reflects the physician's time, skill, technical expertise, physical effort, mental effort and judgment, and stress associated with performing the service. It is one of three RVU components — along with Practice Expense (overhead costs) and Professional Liability Insurance (malpractice risk). Work RVUs are the same regardless of the place of service.

89. **A. Report the concern to the compliance officer or through the anonymous reporting mechanism** The appropriate first step when a coder identifies a potential billing pattern concern is to report it through the compliance program's established channels — either to the compliance officer directly or through the anonymous reporting mechanism. Internal investigation should precede any external action. Changing codes without communication, ignoring the pattern, or reporting directly to the OIG without internal review would all be inappropriate first steps.

90. **D. Physician's office** Place of service code 11 represents the physician's office — a location other than a hospital, skilled nursing facility, or other institutional setting where the physician or healthcare professional regularly provides services. POS 21 is inpatient hospital, POS 23 is emergency department, and POS 24 is ambulatory surgical center. Correct POS coding affects the payment rate.

Cases — Integrated Coding Scenarios

91. **C. The EGD with biopsy code only; the diagnostic EGD is bundled** When a biopsy is performed during an EGD, only the surgical EGD code (EGD with biopsy) is reported. The diagnostic examination is bundled into the surgical code. Reporting both the diagnostic EGD and the biopsy code constitutes unbundling. The surgical code captures the complete service including the diagnostic component.

92. **B. K22.70 (Barrett's esophagus without dysplasia)** The biopsy confirmed Barrett's esophagus with intestinal metaplasia but no dysplasia. The appropriate ICD-10-CM code is K22.70 (Barrett's esophagus without dysplasia). The GERD may be reported as a secondary diagnosis. The Barrett's esophagus is the confirmed finding from the biopsy and represents the definitive diagnosis from this encounter.

93. **A. Z12.11 (Encounter for screening for malignant neoplasm of colon) as the first-listed diagnosis** The patient presented for a routine screening colonoscopy, making Z12.11 the first-listed diagnosis reflecting the reason for the encounter. The polyp found and removed during the screening is reported as a secondary diagnosis. The family history code (Z80.0) may also be reported as an additional diagnosis to support the screening indication.

94. **D. No; the diagnostic colonoscopy is bundled into the surgical colonoscopy code** The diagnostic colonoscopy is always bundled into the surgical colonoscopy when a surgical procedure (snare polypectomy) is performed during the same session. Only the surgical colonoscopy code (polypectomy by snare) is reported. Reporting both the diagnostic and surgical codes constitutes unbundling.

95. **C. One hernia repair code reported bilaterally with modifier 50 or with RT and LT modifiers** Bilateral inguinal hernia repair is reported using the appropriate hernia repair code with modifier 50 (bilateral procedure) or on two separate lines with modifiers RT and LT. Both repairs are the same type (open, initial, reducible) on the same patient during the same session. The bilateral modifier accurately captures the scope of the procedure.

96. **B. Modifier 57** Modifier 57 (decision for surgery) is appended to the E/M code when the evaluation results in the initial decision to perform a major surgical procedure with a 90-day global period. The inguinal hernia repair has a 90-day global period, making modifier 57 the correct choice. Modifier 25 would only be appropriate for minor procedures with 0-day or 10-day global periods.

97. **A. Neurolysis (nerve destruction)** Radiofrequency ablation is classified as neurolysis — the destruction of nerve tissue to interrupt pain signal transmission. Neurolysis codes (64633–64636 for facet joint medial branch nerves) cover destruction by radiofrequency, chemical, or other thermal methods. A nerve block is a temporary injection. Nerve repair reconnects severed nerves. Neurostimulation delivers electrical impulses without destroying the nerve.

98. **D. With a primary code for the first level and an add-on code for the additional level** Radiofrequency ablation of medial branch nerves uses a primary code for the first facet joint nerve and an add-on code for each additional nerve destroyed in the same spinal region. Two lumbar medial branch nerves (L3 and L4) require one primary code plus one add-on code. This structure is similar to facet joint injection coding.

99. **C. The chemotherapy infusion of doxorubicin** The infusion hierarchy places chemotherapy infusion at the highest level — it is always reported as the initial service when provided. The chemotherapy infusion of doxorubicin (96413) is the initial service. The chemotherapy push of cyclophosphamide is reported as an add-on (96411). The hydration is reported as a secondary service. Only one initial service per encounter.

100. **B. As a secondary/sequential hydration service using the appropriate add-on code** Since the chemotherapy infusion is the initial service, the hydration cannot be reported as an initial service (96360). Instead, it is reported as a secondary/sequential hydration service using the appropriate add-on code. Hydration is the lowest level in the infusion hierarchy and is always a secondary service when chemotherapy or therapeutic infusions are provided on the same date.