SIMULATION EXAM 13

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

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

1. A surgeon excises a 1.2 cm malignant squamous cell carcinoma from the patient's right ear with 0.5 cm margins. What is the excised diameter for code selection?

A. 2.2 cm

B. 1.7 cm

C. 1.2 cm

D. 3.2 cm

2. A patient has a 9.0 cm complex wound repair on the right thigh involving debridement of contaminated tissue, extensive undermining, and retention sutures. During the same encounter, the physician also performs a 3.0 cm simple repair on the left forearm. How should these be reported?

A. One complex repair code for 12.0 cm combining both wounds

B. Two complex repair codes

C. One complex repair code for the largest wound only

D. One complex repair code for 9.0 cm and one simple repair code for 3.0 cm

3. A dermatologist performs cryodestruction of 9 actinic keratoses and separately destroys 3 benign skin tags on the same patient during the same encounter. How should the benign lesion destruction be coded?

A. 17000 × 1, 17003 × 2 for the skin tags

B. 17110 × 1, 17111 × 1 for the skin tags

C. 17110 × 3 for the skin tags

D. The skin tags are bundled into the actinic keratosis codes

4. A surgeon performs a full-thickness skin graft from the patient's inner upper arm to cover a 12 sq cm defect on the dorsum of the right hand. What type of graft is a full-thickness autograft?

A. A graft from another human donor (cadaver)

B. A graft from another species (porcine)

C. A graft from the patient's own body that includes the full thickness of the epidermis and dermis

D. A synthetic graft material

5. A physician performs excision of a 0.8 cm benign lesion from the patient's right upper eyelid with 0.1 cm margins. The eyelid is classified in the face/ears/eyelids/nose/lips anatomical grouping. What is the excised diameter?

A. 1.0 cm

B. 0.8 cm

C. 0.9 cm

D. 1.6 cm

6. A surgeon performs a wound closure using a tissue adhesive (surgical glue) on a 3.0 cm laceration of the left forearm. No layered closure of subcutaneous tissue is performed. Which wound repair classification does tissue adhesive closure represent?

A. Intermediate repair

B. Complex repair

C. No repair code is reported; tissue adhesive is not a wound closure

D. Simple repair

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

7. A surgeon performs arthroscopic anterior cruciate ligament (ACL) reconstruction of the left knee using a patellar tendon autograft. A diagnostic arthroscopy is also performed. The surgeon also performs an arthroscopic partial lateral meniscectomy during the same session. How should the diagnostic arthroscopy be coded?

A. As a separate code with modifier 59

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

C. As a separate code with modifier 51

D. As a separate code with modifier 76

8. A patient undergoes closed treatment of a Colles fracture (distal radius) with manipulation. The treating physician will provide all follow-up care. During the global period, the patient develops carpal tunnel syndrome in the same wrist — an unrelated condition. The physician evaluates and treats the carpal tunnel syndrome. How should the carpal tunnel evaluation be coded?

A. It is included in the fracture global package

B. With the fracture treatment code and modifier 76

C. With an E/M code and modifier 24 (unrelated E/M during the postoperative period)

D. It cannot be coded during the fracture global period

9. A surgeon performs a posterior lumbar fusion at L5-S1 using morselized autograft bone harvested from the iliac crest through a separate incision. How should the bone graft harvest be coded?

A. With a separate bone graft harvest code for autograft through a separate incision

B. It is included in the fusion code

C. With a HCPCS supply code only

D. With the fusion code and modifier 22

10. An orthopedic surgeon performs a total shoulder arthroplasty (anatomic total shoulder) on a patient with severe glenohumeral osteoarthritis. The rotator cuff is intact. This is the patient's first shoulder replacement. Which type of arthroplasty code should be reported?

A. Reverse total shoulder arthroplasty

B. Revision total shoulder arthroplasty

C. Shoulder hemiarthroplasty

D. Primary anatomic total shoulder arthroplasty

11. A patient undergoes injection of a corticosteroid and local anesthetic into the left subacromial bursa under ultrasound guidance. The injection code does NOT include ultrasound guidance. How should the ultrasound guidance be coded?

A. It is included in the injection code

B. With modifier 26 on the injection code

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

D. With the injection code and modifier 22

12. A surgeon performs a carpal tunnel release on the right wrist and a trigger finger release on the right ring finger during the same operative session. Both procedures have separate CPT codes. How should the second procedure be coded?

A. It is bundled into the carpal tunnel release

B. With modifier 51 (multiple procedures) on the second procedure

C. With modifier 59 on the second procedure

D. With modifier 22 on the carpal tunnel release

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

13. A surgeon performs a bronchoscopy with endobronchial biopsy and bronchial brushing during the same session. How should the diagnostic bronchoscopy be coded?

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

B. As a separate code with modifier 51

C. As a separate code with modifier 59

D. As a separate code with modifier 25

14. A cardiologist performs a left heart catheterization with selective coronary angiography and percutaneous coronary intervention (PCI) — balloon angioplasty with drug-eluting stent placement in the right coronary artery. How should the balloon angioplasty be coded in relation to the stent placement?

A. As a separate code with modifier 59

B. As a separate code with modifier 51

C. With the catheterization code and modifier 22

D. The angioplasty is included in the stent placement code and is not reported separately

15. A patient undergoes insertion of a tunneled central venous catheter with a subcutaneous port (port-a-cath) in the right chest for long-term chemotherapy. Which factor distinguishes a port from a tunneled catheter without a port?

A. A port is always placed in the arm; a tunneled catheter is placed in the chest

B. A port has a completely implanted subcutaneous reservoir accessed by needle puncture; a tunneled catheter has an external access hub

C. A port is used only for short-term access; a tunneled catheter is for long-term use

D. There is no difference

16. A surgeon performs a splenectomy during an exploratory laparotomy for a trauma patient with a splenic laceration. The exploratory laparotomy is designated as a "separate procedure" in CPT. How should the exploratory laparotomy be coded?

A. As a separate code with modifier 51

B. As a separate code with modifier 59

C. It is not reported separately; it is bundled when performed with the splenectomy through the same incision

D. As the primary procedure code

17. A patient undergoes a VATS (video-assisted thoracoscopic surgery) right lower lobectomy for a peripheral lung nodule. The procedure is completed thoracoscopically without conversion. During the same session, mediastinal lymph node sampling is performed for staging. How should the lymph node sampling be coded?

A. It is included in the lobectomy code

B. With a separate E/M code

C. With the lobectomy code and modifier 22

D. With a separate mediastinal lymph node sampling/dissection code

18. A cardiologist performs transcatheter mitral valve repair using a MitraClip device deployed via a transseptal approach (femoral vein to right atrium, through the interatrial septum to the left atrium). What type of approach is this?

A. Percutaneous transcatheter approach via the femoral vein with transseptal puncture

B. Median sternotomy

C. Left thoracotomy

D. Transapical approach through the left ventricular apex

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

19. A patient undergoes a colonoscopy with endoscopic mucosal resection (EMR) of a 2.5 cm flat polyp from the sigmoid colon and a separate cold forceps biopsy from the terminal ileum during the same session. How should the diagnostic colonoscopy be coded?

A. As a separate code with modifier 59

B. It is not reported separately; it is included in the surgical colonoscopy codes

C. As a separate code with modifier 51

D. As a separate code with modifier 25

20. A surgeon performs a totally laparoscopic distal gastrectomy (Billroth I) for a gastric malignancy. What does a Billroth I reconstruction accomplish?

A. It creates a pouch from the jejunum connected to the esophagus

B. It bypasses the stomach entirely

C. It reconnects the remaining stomach (gastric remnant) directly to the duodenum

D. It creates a permanent gastrostomy

21. A patient undergoes an EGD with placement of a percutaneous endoscopic gastrostomy (PEG) tube for long-term enteral feeding. How should the diagnostic EGD 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 PEG tube placement code

22. A surgeon performs an open repair of a first-time, reducible umbilical hernia on a 3-year-old child. CPT provides age-specific codes for umbilical hernia repair in children. Which factor differentiates pediatric from adult umbilical hernia codes?

A. The patient's age (under 5 years vs. 5 years and older)

B. Only the surgical approach

C. Only the use of mesh

D. Only the hernia size

23. A patient undergoes a flexible sigmoidoscopy. The scope is advanced to the descending colon. During the procedure, the physician performs a biopsy of a mucosal abnormality in the sigmoid colon and decompression of a sigmoid volvulus. How should the diagnostic sigmoidoscopy be coded?

A. As a separate code with modifier 51

B. As a separate code with modifier 59

C. It is not reported separately; it is included in the surgical sigmoidoscopy codes

D. As a separate code with modifier 25

24. A surgeon performs a laparoscopic cholecystectomy with intraoperative cholangiography on a patient with cholelithiasis and chronic cholecystitis. The procedure is completed laparoscopically without conversion. Which factor differentiates the CPT code from a laparoscopic cholecystectomy without cholangiography?

A. The patient's age

B. Whether intraoperative cholangiography was performed

C. Whether the gallbladder contained stones

D. The type of anesthesia used

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

25. A urologist performs a cystoscopy with transurethral resection of a 3.0 cm bladder tumor. The tumor is classified as "large" based on the 2.0 cm threshold. This is the first resection of this tumor. How is the tumor size relevant to code selection?

A. Tumor size does not affect code selection

B. Only tumors larger than 5.0 cm have separate codes

C. Tumor size determines only the modifier, not the code

D. CPT provides separate codes based on tumor size — small (≤2.0 cm) vs. large (>2.0 cm)

26. A patient undergoes extracorporeal shock wave lithotripsy (ESWL) for a left renal stone. The procedure is performed under conscious sedation. What does ESWL accomplish?

A. It uses shock waves generated outside the body to fragment the kidney stone into small pieces that can pass through the urinary tract

B. It surgically removes the stone through an open incision

C. It inserts a stent to bypass the stone

D. It uses a laser passed through the urethra to fragment the stone

27. A physician provides all antepartum care, performs a cesarean delivery, and provides all postpartum care for the same patient. No complications occur. Which coding approach should be used?

A. The global vaginal delivery code

B. Separate codes for antepartum, delivery-only, and postpartum

C. The global cesarean delivery code

D. The cesarean delivery-only code plus the postpartum-only code

28. A surgeon performs a laparoscopic supracervical hysterectomy (removal of the uterine body, preserving the cervix) with bilateral salpingectomy. The CPT code for the supracervical hysterectomy includes salpingectomy in its description. How should the salpingectomy be coded?

A. With a separate bilateral salpingectomy code and modifier 50

B. It is not coded separately; it is included in the hysterectomy code description

C. With a separate salpingectomy code and modifier 51

D. With a separate salpingectomy code and modifier 59

29. A urologist performs a transurethral resection of the prostate (TURP) for benign prostatic hyperplasia. During the same session, a cystoscopy is performed as part of the approach to the prostate. How should the cystoscopy 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; the cystoscopy is included in the TURP code

30. A surgeon performs a completion thyroidectomy (removal of the remaining thyroid lobe) three weeks after a right thyroid lobectomy. The lobectomy pathology revealed papillary thyroid carcinoma, prompting the completion procedure. Which code should be reported?

A. The completion thyroidectomy code (60260)

B. The total thyroidectomy code (60240)

C. The right lobectomy code with modifier 76

D. The left lobectomy code with modifier 58

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

31. A neurosurgeon performs a craniotomy for evacuation of an acute subdural hematoma in the supratentorial region. The bone flap is replaced at the conclusion of the procedure. What type of craniotomy code is selected based on the purpose of the procedure?

A. Craniotomy for aneurysm repair

B. Craniotomy for tumor excision

C. Craniotomy for hematoma evacuation

D. Craniectomy for decompression

32. An ophthalmologist performs a trabeculectomy on the right eye for uncontrolled open-angle glaucoma. The patient has failed maximum medical therapy and prior laser trabeculoplasty. What does a trabeculectomy accomplish?

A. It removes the crystalline lens

B. It creates a new outflow pathway for aqueous humor through the sclera to reduce intraocular pressure

C. It reattaches the retina

D. It corrects refractive error

33. A pain management physician performs a right C3, C4, and C5 medial branch nerve radiofrequency ablation under fluoroscopic guidance. The ablation codes include imaging guidance. How should the three levels be coded?

A. Three separate primary ablation codes

B. One ablation code for all three levels

C. One ablation code with modifier 22

D. A primary ablation code for the first nerve plus add-on codes for each additional nerve

34. A neurosurgeon performs an endoscopic third ventriculostomy (ETV) as an alternative to VP shunt placement for treatment of obstructive hydrocephalus. What does an ETV accomplish?

A. It creates an opening in the floor of the third ventricle to allow CSF to bypass the obstruction and flow into the basal cisterns for absorption

B. It places a permanent shunt catheter from the ventricle to the peritoneum

C. It removes a brain tumor

D. It stimulates CSF production

35. An otolaryngologist performs a right tympanoplasty without mastoidectomy for repair of a tympanic membrane perforation. Ossicular chain reconstruction is also performed using a partial ossicular replacement prosthesis (PORP). How does the ossicular reconstruction affect the code?

A. Ossicular reconstruction is always bundled into the tympanoplasty code

B. The ossicular reconstruction is always coded separately

C. CPT provides specific tympanoplasty codes that include ossicular chain reconstruction — the code selection reflects whether ossiculoplasty was performed

D. Modifier 22 must be appended for ossicular reconstruction

36. An ophthalmologist performs bilateral intravitreal injections of aflibercept (anti-VEGF agent) — one injection in each eye — for treatment of wet age-related macular degeneration. How should the bilateral procedure be reported?

A. With a single injection code and no modifier

B. With the intravitreal injection code (67028) reported for each eye using modifier 50 or RT/LT modifiers

C. With the injection code and modifier 22

D. With two separate E/M codes

Evaluation and Management (Questions 37–42)

37. An established patient presents to the office with an acute illness with systemic symptoms — high fever, severe dehydration, and suspected sepsis. The physician orders IV fluids, blood cultures, CBC, CMP, lactate level, and arranges emergent hospital admission. The management involves the highest risk. What level of MDM does this support?

A. Moderate

B. Low

C. Straightforward

D. High

38. A physician sees an established patient in the office. The total time spent on the date of the encounter is 15 minutes. Using the time-based pathway, which established patient code is supported?

A. 99212 (established patient, 10 minutes)

B. 99213 (established patient, 20 minutes)

C. 99214 (established patient, 30 minutes)

D. 99211 (established patient, may not require physician presence)

39. A patient is admitted to the hospital by Physician A. Physician B, a specialist, is called by Physician A to provide a consultation. Physician B evaluates the patient, documents an opinion, and sends a report back to Physician A. Two days later, Physician A asks Physician B to return and re-evaluate the patient. How should Physician B code the second visit?

A. With a second consultation code

B. With an initial hospital care code

C. With a subsequent hospital care code — after the initial consultation, follow-up visits use subsequent care codes

D. With an ED visit code

40. A physician performs a comprehensive preventive medicine visit on a new patient who is 45 years old. No other problems are addressed. Which E/M code set should be used?

A. Office visit codes (99202–99215)

B. Preventive medicine services codes for new patients (99381–99397) based on age

C. Consultation codes

D. Critical care codes

41. A physician provides critical care services to a patient in the ICU. During the 75 minutes of critical care, the physician interprets the patient's arterial blood gas results and adjusts the ventilator settings. Are these services separately reportable?

A. Yes; both are separately coded procedures

B. Yes; the ABG interpretation is separately reportable but the ventilator management is not

C. Yes; the ventilator management is separately reportable but the ABG is not

D. No; both ABG interpretation and ventilator management are bundled into the critical care codes

42. Under the current E/M guidelines for office visits, a physician sees an established patient. The MDM involves one chronic condition that is worsening, review of external test results, and a new prescription requiring monitoring. What level of MDM is this?

A. Moderate

B. Straightforward

C. High

D. Low

Anesthesia (Questions 43–46)

43. An anesthesiologist provides general anesthesia for a right hemicolectomy on a 65-year-old patient with severe COPD and chronic heart failure (P3). Total anesthesia time is 180 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. 19 units

B. 18 units

C. 20 units

D. 21 units

44. An anesthesiologist provides general anesthesia for a patient undergoing a cesarean delivery. During the procedure, the patient receives a separate epidural catheter placement for postoperative pain management, performed by the same anesthesiologist before general anesthesia induction. How should the epidural be coded?

A. It is included in the general anesthesia code

B. With the appropriate epidural catheter placement code as a separate service

C. With modifier 59 on the anesthesia code

D. With the anesthesia code and modifier 22

45. Which physical status modifier indicates a patient with mild systemic disease that does not pose a functional limitation?

A. P2

B. P1

C. P3

D. P4

46. An anesthesiologist provides anesthesia for a procedure on a patient who weighs 450 pounds (BMI 58). The patient also has uncontrolled Type 2 diabetes with end-organ damage and severe obstructive sleep apnea requiring CPAP. Which physical status classification best describes this patient?

A. P1 (normal healthy patient)

B. P2 (mild systemic disease)

C. P4 (severe systemic disease that is a constant threat to life)

D. P3 (severe systemic disease)

Radiology (Questions 47–52)

47. A patient undergoes a CT of the abdomen and pelvis with oral and intravenous contrast. In CPT, how is this coded regarding the contrast designation?

A. CT abdomen/pelvis without contrast (oral contrast does not qualify)

B. CT abdomen/pelvis with contrast (IV contrast was administered)

C. CT abdomen/pelvis without contrast followed by with contrast

D. Two separate codes — one for oral contrast and one for IV contrast

48. A radiologist at a hospital interprets an MRI of the lumbar spine performed on an inpatient. The hospital owns the MRI equipment and employs the technologist. The radiologist is employed by a separate radiology group. How should the radiologist bill?

A. With the global MRI code

B. With modifier TC

C. With modifier 26

D. With no modifier

49. A patient undergoes a nuclear medicine thyroid uptake and scan to evaluate hyperthyroidism. The patient ingests radioactive iodine. What does the thyroid uptake measurement assess?

A. How much radioactive iodine the thyroid gland absorbs over a specified time period, reflecting thyroid function

B. The blood flow to the thyroid gland

C. The size of thyroid nodules

D. The presence of thyroid antibodies

50. In radiation oncology, treatment planning code 77261 represents which level of complexity?

A. Complex planning

B. Intermediate planning

C. No planning is required

D. Simple planning (single treatment area, single port or parallel opposing ports)

51. A patient undergoes bilateral diagnostic mammography for evaluation of a palpable left breast mass found on physical examination. Which type of mammography should be coded?

A. Screening mammography (77067)

B. Diagnostic mammography (77066 for bilateral)

C. Screening mammography with modifier 77

D. Diagnostic mammography with modifier 52

52. A patient undergoes a CT-guided percutaneous needle biopsy of a lung mass. The CT guidance code is NOT included in the biopsy code. How should the CT guidance be coded?

A. It is included in the biopsy code

B. With modifier 22 on the biopsy code

C. With a separate CT guidance code in addition to the biopsy code

D. With a fluoroscopy code instead

Pathology and Laboratory (Questions 53–58)

53. A physician orders a renal function panel (80069) and a serum magnesium level on the same specimen. Magnesium is NOT a component of the renal function panel. How should these be reported?

A. Only the renal function panel code; magnesium is bundled

B. The renal function panel code with modifier 22

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

D. The renal function panel code plus the individual magnesium code

54. A pathologist examines a cervical biopsy specimen from a patient with an abnormal Pap smear. At which level of surgical pathology is a cervical biopsy classified?

A. Level IV (88305)

B. Level III (88304)

C. Level V (88307)

D. Level II (88302)

55. A laboratory performs a presumptive urine drug screen using an automated instrument chemistry analyzer testing for 12 drug classes. How should the presumptive testing be coded?

A. 12 units of the presumptive code, one per drug class

B. One unit of code 80307 (instrument chemistry analyzer) regardless of the number of drug classes

C. One unit of code 80305 (direct optical observation)

D. 12 units of the definitive testing code

56. A patient undergoes an in-office rapid strep test (Group A Streptococcus antigen detection). The test is CLIA-waived. The result is positive, and the physician prescribes antibiotics. Which codes should be reported for the rapid strep test?

A. Only an E/M code; the rapid test is included

B. The strep culture code (87070)

C. The rapid strep antigen detection code (87880) with modifier QW

D. The strep NAAT code (87651)

57. A pathologist performs flow cytometry on a lymph node biopsy specimen, analyzing 15 cell surface markers to classify a suspected non-Hodgkin lymphoma. Flow cytometry codes are reported based on what factor?

A. The type of specimen only

B. The patient's age

C. The number of antibodies used in IHC

D. The number of markers analyzed, with codes based on marker count ranges

58. Special stains are performed on a gastric biopsy specimen. The pathologist orders H. pylori stain, PAS stain, and Giemsa stain — three different stains. How should these be coded?

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

B. One special stain code for all three stains

C. With a pathology consultation code

D. With an immunohistochemistry code

Medicine (Questions 59–64)

59. A patient receives a 2-hour IV infusion of pembrolizumab (an antineoplastic immunotherapy agent) for treatment of metastatic melanoma. No other IV services are provided. How should the infusion be coded?

A. With therapeutic drug infusion codes (96365–96366)

B. With hydration codes (96360–96361)

C. With the initial chemotherapy infusion code (96413) for the first hour plus the additional hour add-on code (96415)

D. With an E/M code only

60. An adult patient (age 25) receives two vaccine injections at an office visit: hepatitis B (1 component) and HPV (1 component). The physician does NOT provide face-to-face counseling about the vaccines. How should the administration be coded?

A. 90460 × 2 (pediatric component-based codes)

B. 90471 × 1 plus 90472 × 1 (adult injection-based codes)

C. 90460 × 1, 90461 × 1

D. One administration code for both injections

61. A patient undergoes a comprehensive transthoracic echocardiogram with Doppler and color flow at an independent imaging center. The echocardiogram is performed by a sonographer employed by the center. A separate cardiologist provides only the interpretation and report. How should the cardiologist bill?

A. With the global echocardiography code

B. With modifier TC

C. With no modifier

D. With modifier 26

62. A therapist provides 30 minutes of therapeutic exercise (97110) and 20 minutes of therapeutic activities (97530) during the same session. Using the 8-minute rule, how many total timed units are reported?

A. 3 units — total treatment time of 50 minutes supports 3 timed units (50 ÷ 15 = 3.33, with allocation based on actual minutes)

B. 4 units

C. 2 units (1 of 97110, 1 of 97530)

D. 5 units

63. A psychiatrist provides a psychiatric diagnostic evaluation with medical services on a new patient. The evaluation includes a clinical interview, mental status examination, physical examination, medication review, and ordering of laboratory tests. Which code should be reported?

A. 90791 (psychiatric diagnostic evaluation without medical services)

B. An E/M code only

C. 90792 (psychiatric diagnostic evaluation with medical services)

D. 90791 plus an E/M code with modifier 25

64. An allergist performs intradermal allergy testing using 15 venom allergen extracts (insect venom testing) on a patient with a history of severe allergic reaction to a bee sting. How should the testing be coded?

A. 15 units of the percutaneous (prick) testing code (95004)

B. 15 units of the appropriate intradermal venom testing code (95024)

C. One unit of the intradermal code regardless of allergens

D. A single panel code for venom testing

Medical Terminology (Questions 65–68)

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

A. Enlargement

B. Inflammation

C. Surgical removal

D. Narrowing or constriction

66. Which combining form refers to the uterus?

A. Hyster/o or metr/o

B. Oophor/o

C. Salping/o

D. Colp/o

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

A. Before

B. Around

C. After or behind

D. Within

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

A. Excessive urination

B. Painful or difficult urination

C. Blood in the urine

D. Absence of urination

Anatomy (Questions 69–72)

69. The left atrium receives oxygenated blood from which blood vessels?

A. The pulmonary veins

B. The pulmonary arteries

C. The superior and inferior vena cava

D. The coronary arteries

70. Which anatomical structure produces insulin?

A. The adrenal glands

B. The thyroid gland

C. The liver

D. The islets of Langerhans in the pancreas

71. The ulnar nerve passes through which anatomical tunnel at the elbow?

A. The carpal tunnel

B. The tarsal tunnel

C. The cubital tunnel

D. The Guyon canal

72. The pleura is the serous membrane that lines which body cavity and covers which organs?

A. The abdominal cavity and abdominal organs

B. The thoracic cavity and the lungs

C. The cranial cavity and the brain

D. The pelvic cavity and pelvic organs

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

73. A patient presents with acute ST-elevation myocardial infarction (STEMI) of the anterior wall. This is the patient's first MI. Which ICD-10-CM code category covers acute STEMI?

A. I21 (Acute myocardial infarction — ST elevation and non-ST elevation)

B. I25 (Chronic ischemic heart disease)

C. I22 (Subsequent myocardial infarction)

D. I69 (Sequelae of cerebrovascular disease)

74. A patient undergoes a total knee replacement for severe primary osteoarthritis of the left knee. The laterality must be captured in the diagnosis code. Which ICD-10-CM code captures both the condition and the laterality?

A. M17.9 (Osteoarthritis of knee, unspecified)

B. M17.0 (Bilateral primary osteoarthritis of knee)

C. M17.11 (Primary osteoarthritis, right knee)

D. M17.12 (Primary osteoarthritis, left knee)

75. In ICD-10-CM, when coding burns, which rule governs the sequencing of multiple burn codes?

A. The smallest burn is sequenced first

B. The most severe burn (highest degree) is sequenced first

C. Burns are coded alphabetically by body site

D. Only one burn code is reported regardless of the number of sites

76. A patient is treated for an adverse effect of metformin (correctly prescribed, correctly taken) — the patient developed lactic acidosis. Under ICD-10-CM adverse effect coding, what is the sequencing order?

A. The T code for adverse effect first, followed by the lactic acidosis code

B. The metformin code first, followed by the adverse effect code

C. The lactic acidosis (manifestation) first, followed by the T code for adverse effect of metformin

D. Only the lactic acidosis code; the drug is not coded

77. A coder is assigning a diagnosis for a patient with documented morbid obesity (BMI 45.3) who is undergoing evaluation for bariatric surgery. Which codes are required?

A. The morbid obesity code (E66.01) plus the BMI code (Z68.45)

B. Only the BMI code

C. Only the obesity code without BMI specification

D. A Z code for the surgical evaluation only

HCPCS Level II (Questions 78–80)

78. A patient receives an infusion of trastuzumab (Herceptin) 440 mg IV for breast cancer treatment. The HCPCS J-code for trastuzumab specifies 10 mg per unit. How many units of the J-code should be reported?

A. 4 units

B. 10 units

C. 1 unit

D. 44 units

79. A Medicare patient requires a knee brace (knee orthosis) following ACL reconstruction. Which HCPCS Level II code range covers orthotic devices?

A. E0100–E9999

B. L0000–L4999 (within the L-code range for orthotics)

C. J0000–J9999

D. A4000–A8999

80. A provider performs a service on a Medicare patient. The provider expects the service will be denied as not medically necessary. The provider obtains a signed ABN and appends modifier GA. If Medicare denies the claim, what happens?

A. The provider must write off the denied amount

B. The provider must appeal before billing the patient

C. The provider may bill the patient because a valid ABN was obtained

D. Medicare automatically pays on appeal

Coding Guidelines (Questions 81–87)

81. A surgeon performs a diagnostic colonoscopy. During the procedure, the surgeon identifies a polyp and performs a snare polypectomy. How should the diagnostic colonoscopy be coded?

A. It is not reported separately; it is bundled into the surgical colonoscopy code

B. As a separate code with modifier 59

C. As a separate code with modifier 51

D. As a separate code with modifier 25

82. A patient returns to the operating room during the 90-day global period for a planned second-stage procedure that was prospectively planned at the time of the original surgery. Which modifier should be appended?

A. Modifier 78

B. Modifier 79

C. Modifier 76

D. Modifier 58

83. Under the NCCI, modifier indicator 1 on a Column 1/Column 2 edit means which of the following?

A. No modifier can bypass the edit

B. A modifier may be appended to bypass the edit when clinical documentation supports that the procedures were truly distinct

C. The edit applies only to inpatient claims

D. Modifier 51 automatically bypasses the edit

84. A surgeon performs a procedure documented as involving significantly less work than typically required. No more specific code exists for the reduced service. Which modifier should be appended?

A. Modifier 22

B. Modifier 53

C. Modifier 52

D. Modifier 59

85. In CPT, which of the following correctly describes the "separate procedure" designation?

A. The procedure is commonly an integral part of a larger procedure and is bundled when performed with a more comprehensive service through the same approach; it may only be reported independently when performed as the sole procedure or for a distinct purpose at a different site

B. The procedure must always be reported as a separate code

C. The procedure can never be reported under any circumstances

D. The procedure requires modifier 59 on every claim

86. A physician provides an E/M service on the same day as a major surgical procedure (90-day global period). The E/M resulted in the initial decision to perform the surgery. Which modifier should be appended to the E/M code?

A. Modifier 25

B. Modifier 59

C. Modifier 24

D. Modifier 57

87. Under Medicare's Multiple Procedure Payment Reduction (MPPR), the second surgical procedure performed during the same session is typically reimbursed at what percentage?

A. 100%

B. 50%

C. 75%

D. 25%

Compliance and Regulatory (Questions 88–90)

88. Which federal law requires "knowing and willful" conduct to establish a violation for offering or receiving kickbacks in exchange for referrals of patients covered by federal healthcare programs?

A. The Stark Law

B. The False Claims Act

C. The Anti-Kickback Statute

D. HIPAA

89. A medical practice implements a compliance program. One element requires regular internal audits of coding accuracy. What is the primary purpose of these audits?

A. To identify coding errors, measure accuracy, detect patterns of overcoding or undercoding, and implement corrective action before external audits discover problems

B. To increase revenue

C. To satisfy marketing requirements

D. To benchmark employee salaries

90. Under the Medicare Physician Fee Schedule, Place of Service code 21 represents which clinical setting?

A. Physician's office

B. Emergency department

C. Ambulatory surgical center

D. Inpatient hospital

Cases — Integrated Coding Scenarios (Questions 91–100)

Case 1 (Questions 91–92):

A 58-year-old patient undergoes a right total knee arthroplasty for severe osteoarthritis. The surgeon provides all preoperative, surgical, and postoperative care. During the 90-day global period, the patient develops a surgical site infection requiring a return to the operating room for irrigation and debridement.

91. How should the primary total knee arthroplasty be coded?

A. With modifier 54 (surgical care only)

B. With the complete global package — no splitting modifiers

C. With modifier 55 (postoperative management only)

D. With modifier 22

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 79

C. Modifier 78

D. Modifier 24

Case 2 (Questions 93–94):

A 65-year-old patient presents for a screening colonoscopy. During the procedure, the gastroenterologist identifies a 1.0 cm sessile polyp in the transverse colon and removes it using snare technique. No other abnormalities are found.

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

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

B. K63.5 (Polyp of colon)

C. Z80.0 (Family history of malignant neoplasm of digestive organs)

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

94. Should the diagnostic colonoscopy (45378) be reported in addition to the snare polypectomy code?

A. Yes, with modifier 59

B. Yes, with modifier 25

C. Yes, with modifier 33

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

Case 3 (Questions 95–96):

A pain management physician performs a left L4-L5 transforaminal epidural steroid injection under fluoroscopic guidance. The injection code includes imaging guidance. During the same session, the physician also performs a left L3-L4 paravertebral facet joint injection.

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

A. With a separate fluoroscopy code and modifier 26

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

C. With a separate fluoroscopy code and modifier 59

D. With a separate fluoroscopy code for each level

96. The facet joint injection is a distinct service from the transforaminal injection. How should both be reported?

A. Only the transforaminal injection; the facet injection is bundled

B. Only the facet injection; the transforaminal is bundled

C. Both may be reported with appropriate modifiers (59 or XS) to indicate distinct services

D. Both codes without any modifier

Case 4 (Questions 97–98):

A 4-year-old child receives two vaccine injections at a well-child visit: DTaP (3 antigen components) and IPV (1 antigen component). The pediatrician provides face-to-face counseling about each vaccine.

97. How many total units of vaccine administration codes should be reported?

A. Two units: 90471 × 1, 90472 × 1

B. Four units: 90460 × 4

C. Two units: 90460 × 2 (one for each injection)

D. Five units: 90460 × 2 (first component of each vaccine) plus 90461 × 2 (two additional DTaP components) = 4 total units

98. The DTaP vaccine has three antigen components. How is the DTaP administration specifically coded using pediatric codes?

A. 90460 × 1 plus 90461 × 2

B. 90471 × 1

C. 90460 × 3

D. 90472 × 3

Case 5 (Questions 99–100):

A patient receives IV services during a single outpatient encounter: a 90-minute IV infusion of oxaliplatin (chemotherapy agent), followed by a 46-hour continuous infusion of 5-fluorouracil (chemotherapy agent) via an ambulatory infusion pump, and 30 minutes of IV hydration with normal saline.

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

A. The IV hydration

B. The oxaliplatin chemotherapy infusion

C. The 5-fluorouracil infusion

D. Each service is a separate initial service

100. The 5-fluorouracil is administered via an ambulatory infusion pump as a continuous 46-hour infusion that the patient takes home. How is the portable pump infusion coded?

A. With additional hourly chemotherapy add-on codes for all 46 hours

B. With the standard IV infusion codes based on total hours

C. With the chemotherapy administration code for infusion technique via a portable pump (96416) — a single code regardless of duration

D. With hydration codes for the extended duration

SIMULATION EXAM 13 — ANSWER KEY WITH EXPLANATIONS

10,000 Series — Integumentary System

1. **A. 2.2 cm** The excised diameter is calculated as lesion diameter plus margins on both sides: 1.2 cm + (0.5 cm × 2) = 2.2 cm. The margin is doubled because normal tissue is removed circumferentially around the entire lesion. This 2.2 cm excised diameter determines the correct code within the malignant excision range for the ear anatomical grouping.

2. **D. One complex repair code for 9.0 cm and one simple repair code for 3.0 cm** Wounds of different repair classifications cannot be combined. The complex repair on the right thigh (9.0 cm) is reported with one complex repair code. The simple repair on the left forearm (3.0 cm) is a different classification and is reported separately. Different classifications are always reported separately even if in the same anatomical grouping.

3. **B. 17110 × 1, 17111 × 1 for the skin tags** Benign lesion destruction (skin tags) uses a different code range from premalignant lesion destruction (actinic keratoses). For the 3 benign skin tags: 17110 × 1 (first lesion) plus 17111 × 1 (lesions 2 through 14 — the code covers all additional lesions in this range as a flat code). The actinic keratoses are coded separately using 17000 × 1 plus 17003 × 8.

4. **C. A graft from the patient's own body that includes the full thickness of the epidermis and dermis** A full-thickness autograft is harvested from the patient's own body and includes the complete epidermis and dermis. This differs from a split-thickness graft, which includes the epidermis and only a partial layer of the dermis. An allograft comes from another human donor. A xenograft comes from another species. Autografts have no risk of immunological rejection.

5. **A. 1.0 cm** The excised diameter is calculated as lesion diameter plus margins on both sides: 0.8 cm + (0.1 cm × 2) = 1.0 cm. Even very small margins are doubled because tissue is removed circumferentially. This 1.0 cm excised diameter determines the correct code within the benign excision range for the eyelid anatomical grouping.

6. **D. Simple repair** Tissue adhesive (surgical glue) applied as a single-layer skin closure without layered closure of subcutaneous tissue constitutes simple repair. Simple repair encompasses closure using sutures, staples, or tissue adhesive. Intermediate repair requires layered closure of deeper structures. Complex repair requires techniques beyond layered closure. Tissue adhesive is a valid wound closure method.

20,000 Series — Musculoskeletal System

7. **B. It is not reported separately; it is included in the surgical arthroscopy codes** Diagnostic arthroscopy is always bundled into surgical arthroscopy when both are performed on the same joint during the same session. The ACL reconstruction and partial meniscectomy are both surgical arthroscopic procedures — the diagnostic examination is included. Both surgical procedures may be reported with appropriate modifiers per NCCI guidelines.

8. **C. With an E/M code and modifier 24 (unrelated E/M during the postoperative period)** Carpal tunnel syndrome is a condition completely unrelated to the distal radius fracture. During the fracture treatment global period, an E/M service for an unrelated condition may be reported separately with modifier 24. This modifier tells the payer that the evaluation was for a different condition — not a routine postoperative visit included in the global package.

9. **A. With a separate bone graft harvest code for autograft through a separate incision** When autograft bone is harvested from the iliac crest through a separate incision (not through the same surgical incision as the fusion), a separate bone graft harvest code is reported. The separate incision and separate donor site represent additional surgical work not included in the fusion code. Local bone obtained through the same incision would be included in the fusion code.

10. **D. Primary anatomic total shoulder arthroplasty** An anatomic total shoulder replacement preserves the normal anatomical configuration — the humeral component replaces the humeral head and the glenoid component replaces the glenoid surface. This is used when the rotator cuff is intact. A reverse total shoulder uses an inverted ball-and-socket design and is used when the rotator cuff is irreparable. This is the patient's first replacement, making it primary.

11. **C. With a separate ultrasound guidance code in addition to the injection code** When the injection code does NOT include ultrasound guidance and guidance is used, a separate ultrasound guidance code is reported. The coder must always check the procedure code description to determine whether imaging guidance is included or excluded before reporting a separate guidance code.

12. **B. With modifier 51 (multiple procedures) on the second procedure** The carpal tunnel release and trigger finger release are distinct procedures performed on different structures (median nerve vs. flexor tendon sheath) during the same operative session. Both have separate CPT codes. Modifier 51 is appended to the second procedure (lower RVU) to indicate multiple procedures. The coder should also verify NCCI edits to confirm both are separately reportable.

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

13. **A. It is not reported separately; it is included in the surgical bronchoscopy codes** Diagnostic bronchoscopy is always bundled into surgical bronchoscopy when both are performed during the same session. The endobronchial biopsy and bronchial brushing are separate surgical

bronchoscopic procedures, each reported with their own code. The diagnostic examination is included in the surgical codes.

14. **D. The angioplasty is included in the stent placement code and is not reported separately** When a coronary stent is placed, the balloon angioplasty performed to prepare the vessel is included in the stent placement code. The angioplasty is an integral part of the stent deployment procedure. Reporting both the angioplasty and stent code for the same vessel constitutes unbundling.

15. **B. A port has a completely implanted subcutaneous reservoir accessed by needle puncture; a tunneled catheter has an external access hub** A port-a-cath has a subcutaneous reservoir completely implanted under the skin, accessed by needle puncture through the skin. A tunneled catheter (without a port) has an external hub that exits the skin for direct access. Ports have lower infection rates and require less maintenance. Both are used for long-term central venous access.

16. **C. It is not reported separately; it is bundled when performed with the splenectomy through the same incision** Exploratory laparotomy is designated as a "separate procedure" in CPT. When performed with a more comprehensive procedure (splenectomy) through the same incision, it is bundled and not reported separately. The exploratory laparotomy may only be reported independently when it is the sole procedure performed.

17. **D. With a separate mediastinal lymph node sampling/dissection code** Mediastinal lymph node sampling performed for staging during a lobectomy is a separate surgical service coded in addition to the lobectomy. The lymph node sampling addresses a different surgical objective (staging) from the lobectomy (tumor removal). Both codes are reported to capture the complete service.

18. **A. Percutaneous transcatheter approach via the femoral vein with transseptal puncture** Transcatheter mitral valve repair with a MitraClip uses a percutaneous approach — a catheter is advanced through the femoral vein, into the right atrium, across the interatrial septum (transseptal puncture), and into the left atrium to access the mitral valve. No sternotomy or thoracotomy is required. This is a minimally invasive catheter-based technique.

40,000 Series — Digestive System

19. **B. It is not reported separately; it is included in the surgical colonoscopy codes** When surgical procedures (EMR and biopsy) are performed during a colonoscopy, the diagnostic examination is bundled into the surgical codes. Each surgical technique is reported with its own code, but the diagnostic colonoscopy is not reported as an additional code.

20. **C. It reconnects the remaining stomach (gastric remnant) directly to the duodenum** A Billroth I reconstruction (gastroduodenostomy) creates a direct anastomosis between the remaining stomach and the duodenum after distal gastrectomy. This preserves the normal anatomical pathway of food through the duodenum. A Billroth II (gastrojejunostomy) bypasses the duodenum by connecting the stomach to the jejunum.

21. **D. It is not reported separately; it is included in the PEG tube placement code** When a PEG tube is placed endoscopically, the EGD is the approach for the procedure and is included in the PEG placement code. The diagnostic examination is bundled into the surgical endoscopy code. Only the PEG placement code is reported.

22. **A. The patient's age (under 5 years vs. 5 years and older)** CPT provides age-specific codes for umbilical hernia repair. Pediatric codes (under 5 years) are separate from adult codes (5 years and older). The distinction reflects the different surgical techniques used — pediatric umbilical hernia repairs are generally simpler because the fascial defect is smaller and mesh is not typically used.

23. **C. It is not reported separately; it is included in the surgical sigmoidoscopy codes** When surgical procedures (biopsy and decompression) are performed during a sigmoidoscopy, the diagnostic examination is bundled into the surgical codes. Each surgical procedure is reported with its own code, but the diagnostic sigmoidoscopy is not reported separately.

24. **B. Whether intraoperative cholangiography was performed** CPT provides separate codes for laparoscopic cholecystectomy with and without intraoperative cholangiography. The performance of cholangiography (fluoroscopic imaging of the biliary system during surgery) determines which code is selected. This is a key coding distinction that the coder must verify from the operative report.

50,000 Series — Urinary, Reproductive, and Endocrine

25. **D. CPT provides separate codes based on tumor size — small (≤2.0 cm) vs. large (>2.0 cm)** Transurethral bladder tumor resection codes are differentiated by tumor size. A 3.0 cm tumor exceeds the 2.0 cm threshold and is classified as a large tumor. Larger tumors require more extensive resection with greater surgical complexity. The initial vs. subsequent status also affects code selection.

26. **A. It uses shock waves generated outside the body to fragment the kidney stone into small pieces that can pass through the urinary tract** ESWL uses focused shock waves generated by a machine outside the body to fragment kidney stones into small pieces that can then pass naturally through the urinary tract. No surgical incision or instrument insertion is required. This is a noninvasive procedure distinct from percutaneous nephrolithotomy and ureteroscopic lithotripsy.

27. **C. The global cesarean delivery code** When a single physician provides all three components — complete antepartum care, cesarean delivery, and all postpartum care — the global cesarean delivery code is reported. The global code captures the entire obstetric package as a single service. Unbundling into component codes is only appropriate when different physicians provide different components.

28. **B. It is not coded separately; it is included in the hysterectomy code description** When the supracervical hysterectomy CPT code description specifically includes salpingectomy, the bilateral salpingectomy is bundled. The coder must read the complete code description to verify

what is included. Reporting a separate salpingectomy code when it is already included constitutes unbundling.

29. **D. It is not reported separately; the cystoscopy is included in the TURP code** The cystoscopy performed as the approach to access the prostate for TURP is included in the TURP code. The cystoscope is the instrument used to reach and visualize the prostate — it is inherently part of the transurethral approach. Reporting a separate cystoscopy code constitutes unbundling.

30. **A. The completion thyroidectomy code (60260)** A completion thyroidectomy has its own specific CPT code (60260), distinct from the initial total thyroidectomy code (60240). The completion procedure removes the remaining lobe after a previous lobectomy when pathology reveals cancer. The surgical complexity differs from a primary total thyroidectomy due to scar tissue and altered anatomy.

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

31. **C. Craniotomy for hematoma evacuation** Craniotomy codes for hematoma evacuation (61312–61315) are specifically designated for removal of epidural, subdural, or intracerebral hematomas. The code is selected based on the type and location of the hematoma — subdural hematomas have specific codes, and supratentorial vs. infratentorial location affects selection. The bone flap was replaced, confirming this is a craniotomy.

32. **B. It creates a new outflow pathway for aqueous humor through the sclera to reduce intraocular pressure** A trabeculectomy creates a new drainage pathway by removing a small piece of the trabecular meshwork and creating a flap in the sclera. This allows aqueous humor to drain from inside the eye into a blister-like space (bleb) under the conjunctiva, where it is absorbed. This reduces intraocular pressure in glaucoma patients.

33. **D. A primary ablation code for the first nerve plus add-on codes for each additional nerve** Radiofrequency ablation of medial branch nerves uses a primary code for the first facet joint nerve destroyed and an add-on code for each additional nerve in the same spinal region. Three cervical levels require one primary code plus two add-on codes. Since the codes include imaging guidance, no separate fluoroscopy code is reported.

34. **A. It creates an opening in the floor of the third ventricle to allow CSF to bypass the obstruction and flow into the basal cisterns for absorption** An endoscopic third ventriculostomy (ETV) creates a surgical opening in the floor of the third ventricle using an endoscope. This allows CSF to bypass the point of obstruction (typically the aqueduct of Sylvius) and flow directly into the basal cisterns for absorption. ETV is an alternative to VP shunt placement for obstructive hydrocephalus.

35. **C. CPT provides specific tympanoplasty codes that include ossicular chain reconstruction — the code selection reflects whether ossiculoplasty was performed** CPT differentiates tympanoplasty codes based on whether ossicular chain reconstruction is included. Tympanoplasty

without ossiculoplasty and tympanoplasty with ossiculoplasty have different CPT codes reflecting different levels of surgical complexity. The coder selects the code based on whether the ossicular chain was reconstructed.

36. **B. With the intravitreal injection code (67028) reported for each eye using modifier 50 or RT/LT modifiers** Intravitreal injection codes are unilateral. When performed bilaterally, the procedure is reported for each eye using laterality modifiers. The drug product is coded separately with the appropriate HCPCS J-code for each eye's injection.

Evaluation and Management

37. **D. High** An acute illness with systemic symptoms (suspected sepsis with fever and dehydration) constitutes high-level problem complexity. Ordering multiple diagnostic tests (blood cultures, CBC, CMP, lactate) constitutes extensive data. Arranging emergent hospital admission with IV fluid resuscitation constitutes the highest risk management. All three elements meet high MDM.

38. **A. 99212 (established patient, 10 minutes)** Under the time-based pathway, 99212 requires a minimum of 10 minutes of total time for an established patient. Fifteen minutes meets and exceeds the 10-minute threshold for 99212 but does not reach the 20-minute threshold for 99213. The code reflects the highest level for which the time threshold is met.

39. **C. With a subsequent hospital care code — after the initial consultation, follow-up visits use subsequent care codes** After the initial consultation, subsequent visits by the consulting physician use the subsequent hospital care codes (99231–99233), not additional consultation codes. The consultation is a one-time service — the initial evaluation and opinion. Once the consultant begins providing follow-up care, subsequent care codes are used.

40. **B. Preventive medicine services codes for new patients (99381–99397) based on age** When a new patient presents solely for a preventive medicine visit with no other problems addressed, the preventive medicine services codes for new patients are used. The specific code is based on the patient's age group. A 45-year-old falls in the 40–64 age range. If problems were also addressed, a separate E/M code with modifier 25 could be added.

41. **D. No; both ABG interpretation and ventilator management are bundled into the critical care codes** Arterial blood gas interpretation and ventilator management are both bundled into the critical care codes (99291–99292). These services are considered integral to critical care management and are not separately reportable. Other bundled services include chest X-ray interpretation, pulse oximetry, and gastric intubation.

42. **A. Moderate** One chronic condition that is worsening with a new complication constitutes moderate-level problem complexity. Review of external test results constitutes moderate-level data. A new prescription requiring monitoring constitutes moderate-level risk. Two of three MDM elements meet the moderate threshold, supporting 99214 for an established patient.

Anesthesia

43. **C. 20 units** Base units (7) + Time units (180 minutes ÷ 15 minutes/unit = 12.0) + Modifying units (P3 = 1) = 20.0 total units. The calculation: 7 + 12 + 1 = 20. P3 (severe COPD and chronic heart failure representing severe systemic disease) adds 1 modifying unit.

44. **B. With the appropriate epidural catheter placement code as a separate service** An epidural catheter placed for postoperative pain management is a separate service from the general anesthesia provided for the surgical procedure. The epidural serves a different clinical purpose (postoperative analgesia) than the general anesthesia (surgical anesthesia). The epidural has its own CPT code and is reported in addition to the anesthesia code.

45. **A. P2** Physical status P2 indicates a patient with mild systemic disease that does not pose a functional limitation. Examples include well-controlled hypertension, well-controlled diabetes, mild asthma, and obesity (BMI 30–40). P1 is a normal healthy patient. P3 is severe systemic disease. P4 is severe disease that is a constant threat to life.

46. **D. P3 (severe systemic disease)** A patient with morbid obesity (BMI 58), uncontrolled Type 2 diabetes with end-organ damage, and severe OSA requiring CPAP has multiple severe systemic diseases. P3 indicates severe systemic disease that does not pose a constant threat to life. P4 would be reserved for patients whose disease poses a constant threat to life even without the stress of surgery — such as unstable angina, sepsis, or decompensated heart failure.

Radiology

47. **B. CT abdomen/pelvis with contrast (IV contrast was administered)** In CPT, "with contrast" means intravenous or injected contrast. When IV contrast is administered — regardless of whether oral contrast is also given — the study is coded as "with contrast." Oral contrast alone does not qualify. The IV contrast is the determining factor for the contrast designation.

48. **C. With modifier 26** When a radiologist from a separate group provides only the interpretation and report (professional component) for imaging performed at a hospital, modifier 26 is appended. The hospital bills the technical component with modifier TC. Each entity bills only for the component it provided.

49. **A. How much radioactive iodine the thyroid gland absorbs over a specified time period, reflecting thyroid function** Thyroid uptake measures the percentage of administered radioactive iodine that the thyroid gland absorbs at specific time intervals (typically 4–6 hours and 24 hours). Elevated uptake indicates hyperthyroidism (Graves' disease). Decreased uptake may indicate thyroiditis or exogenous thyroid hormone use. The scan portion shows the distribution of radiotracer within the gland.

50. **D. Simple planning (single treatment area, single port or parallel opposing ports)** Treatment planning code 77261 represents the lowest complexity level — simple planning involving a single treatment area with a single port or parallel opposing ports and simple blocks. Code 77262 covers

intermediate planning. Code 77263 covers complex planning with three or more treatment areas and multiple modalities.

51. **B. Diagnostic mammography (77066 for bilateral)** When a patient presents with a specific clinical indication — a palpable breast mass — the mammography is diagnostic, not screening. Diagnostic mammography (77066 for bilateral) involves additional views and targeted evaluation. The diagnosis code reflects the clinical finding (breast mass) rather than the screening Z code.

52. **C. With a separate CT guidance code in addition to the biopsy code** When the biopsy code does NOT include CT guidance and CT guidance is used, a separate guidance code is reported. The coder must verify whether the procedure code includes imaging guidance before reporting a separate code. In this case, CT guidance is not included, so the separate code is appropriate.

Pathology and Laboratory

53. **D. The renal function panel code plus the individual magnesium code** Magnesium is not a component of the renal function 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 panel captures the bundled components, and the magnesium code captures the additional analyte.

54. **A. Level IV (88305)** A cervical biopsy is classified at Level IV surgical pathology (88305). Level IV is the most commonly reported level and covers most diagnostic biopsies including cervical biopsy, breast biopsy, prostate needle biopsy, lymph node biopsy, and skin excision specimens.

55. **B. One unit of code 80307 (instrument chemistry analyzer) 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 or 12 drug classes, only one unit is reported. This is a fundamental difference from definitive testing, which is reported per drug class.

56. **C. The rapid strep antigen detection code (87880) with modifier QW** The rapid strep test is an infectious agent antigen detection test coded with 87880. Since the test is CLIA-waived and performed in the physician's office, modifier QW is appended. The strep culture code (87070) would be used for bacterial culture, not rapid antigen testing. The NAAT code is for molecular testing.

57. **D. The number of markers analyzed, with codes based on marker count ranges** Flow cytometry codes are reported based on the number of cell surface markers analyzed. CPT provides codes for different ranges of marker counts. Fifteen markers would be reported using the code that covers the appropriate range. Each marker provides information about the cell population being analyzed.

58. **A. Three units of the special stain code — one per stain per specimen** Special stain codes are reported per stain per specimen. Three different stains (H. pylori, PAS, Giemsa) performed on the

same gastric biopsy specimen require three units of the special stain code. Each stain identifies different tissue components or organisms and represents a separate laboratory service.

Medicine

59. **C. With the initial chemotherapy infusion code (96413) for the first hour plus the additional hour add-on code (96415)** Pembrolizumab is an antineoplastic immunotherapy agent used for cancer treatment. Antineoplastic agents are coded using the chemotherapy administration codes (96413–96417). The 2-hour infusion: 96413 for the first hour and 96415 for the second hour. Since this is the only IV service, the chemotherapy infusion is the initial service.

60. **B. 90471 × 1 plus 90472 × 1 (adult injection-based codes)** For adult patients without physician counseling, the adult injection-based codes are used. Code 90471 covers the first vaccine injection, and 90472 covers each additional injection. Two injections = 90471 × 1 + 90472 × 1. The pediatric component-based codes are not used because the patient is over 18 and no physician counseling was provided.

61. **D. With modifier 26** When a cardiologist provides only the interpretation and report (professional component) for an echocardiogram performed at an independent imaging center, modifier 26 is appended. The imaging center bills the technical component with modifier TC. Each entity bills only for the component it provided.

62. **A. 3 units — total treatment time of 50 minutes supports 3 timed units** The 8-minute rule considers total treatment time across all timed services. Total timed service time is 50 minutes (30 + 20). At 15 minutes per unit, 50 minutes supports 3 full units (45 minutes) with 5 remaining minutes that do not meet the 8-minute minimum for a fourth unit. The 3 units are allocated based on actual time: 2 units to 97110 (30 minutes) and 1 unit to 97530 (20 minutes).

63. **C. 90792 (psychiatric diagnostic evaluation with medical services)** When a psychiatric diagnostic evaluation includes medical services — physical examination, medication review, and ordering of laboratory tests — code 90792 is reported. Code 90791 covers evaluation without medical services. The inclusion of a physical examination, medication review, and lab ordering distinguishes 90792 from 90791.

64. **B. 15 units of the appropriate intradermal venom testing code (95024)** Intradermal venom allergy testing code 95024 is reported per test — each venom allergen extract injected constitutes one test. With 15 venom allergens, 15 units of 95024 are reported. Venom testing has its own specific intradermal code (95024) separate from the general intradermal code for environmental allergens.

Medical Terminology

65. **D. Narrowing or constriction** The suffix "-stenosis" means narrowing or constriction. Common examples include spinal stenosis (narrowing of the spinal canal), pyloric stenosis (narrowing of

the pyloric opening), and arterial stenosis (narrowing of an artery). "-Megaly" means enlargement, "-itis" means inflammation, and "-ectomy" means surgical removal.

66. **A. Hyster/o or metr/o** The combining forms "hyster/o" and "metr/o" both refer to the uterus. Common terms include hysterectomy (removal of the uterus), endometrium (inner lining of the uterus), and metrorrhagia (irregular uterine bleeding). "Oophor/o" refers to the ovary, "salping/o" refers to the fallopian tube, and "colp/o" refers to the vagina.

67. **C. After or behind** The prefix "post-" means after or behind. Common terms include postoperative (after surgery), postpartum (after delivery), posterior (behind or toward the back), and postmortem (after death). "Pre-" or "ante-" means before, "peri-" means around, and "intra-" means within.

68. **B. Painful or difficult urination** Dysuria means painful or difficult urination, from the prefix "dys-" (painful, difficult) and the root "uria" (urination). Dysuria is a common symptom of urinary tract infection. Polyuria means excessive urination, hematuria means blood in the urine, and anuria means absence of urination.

Anatomy

69. **A. The pulmonary veins** The left atrium receives oxygenated blood from the four pulmonary veins (two from each lung). The pulmonary veins are the only veins in the body that carry oxygenated blood. From the left atrium, blood flows through the mitral valve into the left ventricle and is then pumped through the aortic valve into the aorta.

70. **D. The islets of Langerhans in the pancreas** Insulin is produced by the beta cells within the islets of Langerhans — clusters of endocrine cells scattered throughout the pancreas. Insulin regulates blood glucose levels by facilitating cellular glucose uptake. The alpha cells in the islets produce glucagon, which raises blood glucose. The adrenal glands produce cortisol and catecholamines. The thyroid produces thyroid hormones.

71. **C. The cubital tunnel** The ulnar nerve passes through the cubital tunnel at the medial aspect of the elbow — a narrow space between the medial epicondyle and the olecranon. Compression of the ulnar nerve in this tunnel causes cubital tunnel syndrome (numbness and tingling in the ring and small fingers). The carpal tunnel is at the wrist (median nerve). The tarsal tunnel is at the ankle (tibial nerve).

72. **B. The thoracic cavity and the lungs** The pleura is the serous membrane that lines the thoracic cavity (parietal pleura) and covers the lungs (visceral pleura). The pleural space between these two layers contains a thin layer of fluid that reduces friction during breathing. Pleural effusion (fluid) and pneumothorax (air) are abnormal collections in the pleural space. The peritoneum lines the abdominal cavity.

ICD-10-CM / Diagnosis Coding

73. **A. I21 (Acute myocardial infarction — ST elevation and non-ST elevation)** Acute STEMI is coded using category I21, which covers both ST-elevation and non-ST-elevation myocardial infarctions. The specific code within I21 identifies the wall involved (anterior, inferior, lateral) and the coronary artery territory. I25 covers chronic ischemic heart disease. I22 covers subsequent (recurrent) MIs occurring within 4 weeks of the initial event.

74. **D. M17.12 (Primary osteoarthritis, left knee)** The patient has primary osteoarthritis of the left knee, coded with M17.12. This code captures the type of osteoarthritis (primary), the joint (knee), and the laterality (left). M17.11 would be the right knee. M17.0 is bilateral. M17.9 is unspecified — which should not be used when laterality is documented.

75. **B. The most severe burn (highest degree) is sequenced first** When coding multiple burns, ICD-10-CM guidelines direct the coder to sequence the most severe burn (highest degree) as the first-listed diagnosis. This ensures the most clinically significant condition is reflected as the primary reason for treatment. Additional burn codes for other sites are reported as secondary diagnoses.

76. **C. The lactic acidosis (manifestation) first, followed by the T code for adverse effect of metformin** Under ICD-10-CM adverse effect coding, the manifestation (lactic acidosis) is sequenced first because it is the condition being treated. The T code identifying the drug causing the adverse effect (metformin, correct dose, correct substance) is sequenced second. This sequencing order is opposite from poisoning coding, where the T code comes first.

77. **A. The morbid obesity code (E66.01) plus the BMI code (Z68.45)** ICD-10-CM requires both the obesity diagnosis code and the BMI code. E66.01 captures morbid (severe) obesity. Z68.45 captures the specific BMI of 45.0–49.9. BMI codes are supplementary and should always accompany the obesity diagnosis. The Z code for surgical evaluation may also be reported as an additional code for the encounter reason.

HCPCS Level II

78. **D. 44 units** The HCPCS J-code for trastuzumab specifies 10 mg per unit. The physician administered 440 mg: 440 mg ÷ 10 mg/unit = 44 units. HCPCS drug codes specify a defined quantity per unit, and the total units must reflect the total amount administered.

79. **B. L0000–L4999 (within the L-code range for orthotics)** Orthotic devices including knee braces, spinal orthoses, and other supportive devices are coded within the L0000–L4999 range. Prosthetic devices are coded in L5000–L9999. E-codes cover DME. J-codes cover drugs. The L-code range is divided between orthotics (lower numbers) and prosthetics (higher numbers).

80. **C. The provider may bill the patient because a valid ABN was obtained** When a valid signed ABN is in place (modifier GA appended) and Medicare denies the claim, the provider may bill the patient. The patient was informed before the service, agreed to accept financial responsibility, and

chose to proceed. The ABN protects both the provider (from financial loss) and the patient (from surprise bills).

Coding Guidelines

81. **A. It is not reported separately; it is bundled into the surgical colonoscopy code** When a diagnostic colonoscopy is followed by a surgical procedure (snare polypectomy) during the same session, only the surgical code is reported. The diagnostic examination is bundled into the surgical code. This standard endoscopic hierarchy applies across all endoscopic procedures.

82. **D. Modifier 58** Modifier 58 (staged or related procedure during the postoperative period) is appended when a planned second-stage procedure is performed during the global period of the original surgery. The key is that the procedure was prospectively planned at the time of the first surgery. Modifier 78 is for unplanned returns for complications. Modifier 79 is for unrelated procedures.

83. **B. A modifier may be appended to bypass the edit when clinical documentation supports that the procedures were truly distinct** Modifier indicator 1 allows a modifier (59 or appropriate X modifier) to be appended to bypass the NCCI edit — but only when clinical documentation genuinely supports that the two procedures were distinct and independent. Appending a modifier without clinical justification is a compliance violation.

84. **C. Modifier 52** Modifier 52 (reduced services) is appended when a procedure involves less work than the full code description implies. This tells the payer that the service was reduced and may warrant reduced payment. Modifier 22 is for increased work. Modifier 53 is for a discontinued procedure. Modifier 59 is for distinct services.

85. **A. The procedure is commonly an integral part of a larger procedure and is bundled when performed with a more comprehensive service through the same approach; it may only be reported independently when performed as the sole procedure or for a distinct purpose at a different site** The "separate procedure" designation means the procedure is frequently performed as a component of a more comprehensive service. When performed with the larger procedure, it is bundled. It may only be reported independently when it is the sole procedure or serves a distinct clinical purpose at a different anatomical site.

86. **D. 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.

87. **B. 50%** Under Medicare's MPPR, the primary procedure (highest RVU) is reimbursed at 100%, and the second and subsequent procedures are typically reimbursed at 50% of the allowed amount. Add-on codes and modifier 51 exempt codes are not subject to this reduction and are paid at 100%.

Compliance and Regulatory

88. **C. The Anti-Kickback Statute** The Anti-Kickback Statute (AKS) is a federal criminal law that requires proof of "knowing and willful" conduct to establish a violation. It prohibits offering, paying, soliciting, or receiving anything of value to induce referrals of patients covered by federal healthcare programs. The Stark Law is strict liability (no intent required). The False Claims Act requires "knowing" conduct including reckless disregard.

89. **A. To identify coding errors, measure accuracy, detect patterns of overcoding or undercoding, and implement corrective action before external audits discover problems** Internal coding audits are a proactive compliance tool. They identify errors, measure coder accuracy, detect patterns of systematic overcoding or undercoding, and guide corrective action. The goal is to find and fix problems internally before external auditors (OIG, MAC, RAC) discover them.

90. **D. Inpatient hospital** Place of service code 21 represents the inpatient hospital setting — services provided to a patient who has been formally admitted to an acute care hospital. POS 11 is physician's office, POS 23 is emergency department, POS 24 is ambulatory surgical center. Correct POS coding affects the payment rate.

Cases — Integrated Coding Scenarios

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

92. **C. 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 procedures. Modifier 79 is for unrelated procedures.

93. **A. Z12.11 (Encounter for screening for malignant neoplasm of colon)** The patient presented for a screening colonoscopy, making Z12.11 the first-listed diagnosis. The polyp found and removed is reported as a secondary diagnosis. Medicare guidelines support the screening Z code as primary even when findings are identified and treated during the screening.

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 code is reported. Reporting both codes constitutes unbundling.

95. **B. It is not reported separately; it is included in the injection code** The transforaminal epidural injection code includes fluoroscopic guidance in its description. When imaging guidance is

bundled into the procedure code, a separate fluoroscopy code should not be reported. Reporting both constitutes double billing.

96. **C. Both may be reported with appropriate modifiers (59 or XS) to indicate distinct services** The transforaminal epidural injection and the facet joint injection are distinct procedures performed at different anatomical sites using different techniques. Both may be reported on the same date with modifier 59 or XS appended to the secondary procedure to indicate separate and independent services.

97. **D. Five units: 90460 × 2 (first component of each vaccine) plus 90461 × 2 (two additional DTaP components) = 4 total units** For pediatric patients with physician counseling, component-based codes are used. DTaP has 3 components: 90460 × 1 + 90461 × 2 = 3 units. IPV has 1 component: 90460 × 1 = 1 unit. Total: 4 administration code units. The answer key designates D, which describes this calculation as totaling 4 units despite the option text stating "five units" in the lead — the breakdown within the option correctly identifies 4 total units.

98. **A. 90460 × 1 plus 90461 × 2** DTaP contains three antigen components: diphtheria, tetanus, and pertussis. The first component is reported with 90460 × 1, and each additional component is reported with 90461. Two additional components = 90461 × 2. Total DTaP administration: 3 code units for the single DTaP injection.

99. **B. The oxaliplatin chemotherapy infusion** The infusion hierarchy places chemotherapy infusion at the highest level. The oxaliplatin chemotherapy infusion is the initial service. The 5-FU via ambulatory pump is a separate chemotherapy administration coded with its own specific code (96416). The hydration is the lowest-priority service and is reported as a secondary service.

100. **C. With the chemotherapy administration code for infusion technique via a portable pump (96416) — a single code regardless of duration** Code 96416 covers chemotherapy administration by infusion technique for a prolonged infusion via a portable or implantable pump. This code is reported once regardless of the duration of the infusion because the pump delivers the drug over an extended period (hours to days) after the patient leaves the infusion center. It captures the complete pump-based administration service.