

SIMULATION EXAM 12

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

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

1. A surgeon excises a 1.4 cm benign intradermal nevus from the patient's right shoulder with 0.3 cm margins. What is the excised diameter for code selection?

- A. 1.4 cm
- B. 2.0 cm
- C. 1.7 cm
- D. 2.6 cm

2. A patient has four lacerations requiring repair: a 3.0 cm simple repair on the left forearm, a 2.0 cm simple repair on the right forearm, a 4.5 cm intermediate repair on the right forehead, and a 3.5 cm intermediate repair on the chin. The forearms are in the same simple repair grouping. The forehead and chin are in the same intermediate repair grouping. How should these be reported?

- A. Four separate repair codes
- B. One simple repair code for 5.0 cm and two separate intermediate repair codes
- C. One code for all four wounds combined
- D. One simple repair code for 5.0 cm and one intermediate repair code for 8.0 cm

3. A physician performs a shave removal of a 0.9 cm raised benign lesion from the patient's anterior chest. No full-thickness excision is performed. What determines the code selection for a shave removal?

- A. The lesion diameter and the anatomical location
- B. The excised diameter including margins
- C. The depth of the subcutaneous excision
- D. The wound repair classification required

4. A surgeon performs a pedicle flap procedure where a skin and subcutaneous tissue flap is elevated from the abdomen, transferred to the hand to cover a defect, and the pedicle (blood supply attachment) is left intact. The pedicle will be divided in a second procedure. What type of flap is this?

- A. Free flap with microvascular anastomosis
- B. Adjacent tissue transfer (local flap)
- C. Distant pedicle flap (tube or delayed flap)
- D. Split-thickness skin graft

5. A patient undergoes Mohs surgery on a recurrent squamous cell carcinoma of the nasal tip. Two stages are required: stage 1 with 5 tissue blocks and stage 2 with 3 tissue blocks. No blocks exceed the 5-block limit in any stage. How should this be coded?

- A. 17311 × 2
- B. 17311 × 1, 17312 × 1
- C. 17311 × 1, 17312 × 1, 17315 × 3
- D. 17311 × 1, 17315 × 3

6. A surgeon performs debridement of a chronic wound on the patient's right heel. The debridement extends through the skin and subcutaneous tissue down to exposed bone. Which depth determines the debridement code?

- A. Bone — the deepest tissue level debrided determines the code
- B. Subcutaneous tissue

- C. Skin only
- D. Muscle

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

7. A surgeon performs an arthroscopic loose body removal and an arthroscopic partial synovectomy of the right knee during the same session. Each procedure has a separate CPT code. The diagnostic arthroscopy is bundled. How should the two surgical procedures be reported?

- A. Only the synovectomy code; the loose body removal is bundled
- B. Only the loose body removal code; the synovectomy is bundled
- C. A single comprehensive arthroscopy code covering both
- D. Both codes — the loose body removal and the synovectomy — with appropriate modifiers per NCCI guidelines

8. A patient undergoes closed treatment of a fifth metacarpal fracture (boxer's fracture) with manipulation and application of a splint. The treating physician provides all follow-up care. During the global period, the patient returns for a splint change. How should the splint change be coded?

- A. With a separate splint application code
- B. With the fracture code and modifier 76
- C. It is included in the fracture treatment global package; no separate code is reported
- D. With an E/M code only

9. An orthopedic surgeon performs an open reduction with internal fixation of a displaced supracondylar femur fracture using a locking plate and screws. In CPT, the plate and screws used for internal fixation are classified as what?

- A. Durable medical equipment (DME)

- B. Implantable hardware included in the procedure or coded with appropriate implant codes
- C. External fixation devices
- D. Separately reportable supply codes on every claim

10. A patient undergoes arthrocentesis (aspiration) of the left knee joint. During the same encounter, the physician also injects a corticosteroid into the same knee joint. CPT provides codes for aspiration and/or injection. How should this combined service be coded?

- A. With a single code for aspiration and/or injection of a major joint; the aspiration and injection are combined into one code
- B. With separate codes for the aspiration and the injection
- C. With the aspiration code only; the injection is bundled
- D. With the injection code only; the aspiration is bundled

11. A surgeon performs a total ankle arthroplasty (total ankle replacement) on a patient with severe post-traumatic arthritis. This is the patient's first ankle replacement. Which type of arthroplasty code should be reported?

- A. Revision total ankle arthroplasty
- B. Ankle fusion (arthrodesis) code
- C. Partial ankle arthroplasty
- D. Primary total ankle arthroplasty

12. A surgeon performs spinal decompression at L4-L5 via laminectomy. During the same session, the surgeon also performs a posterolateral fusion at L4-L5 with posterior instrumentation (pedicle screws). How many distinct surgical components are coded?

- A. One — a single combined code covers everything
- B. Two — the decompression and the fusion; instrumentation is bundled

- C. Three — the decompression, the fusion, and the instrumentation are each coded separately
- D. Four — the laminectomy, discectomy, fusion, and instrumentation

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

13. A surgeon performs a thoracoscopic (VATS) pleural biopsy for evaluation of a suspected malignant pleural effusion. How should the diagnostic thoracoscopy be coded?

- A. It is not reported separately; it is included in the surgical thoracoscopy biopsy 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

14. A cardiologist performs percutaneous transcatheter closure of a patent foramen ovale (PFO) using a closure device deployed via a catheter advanced from the femoral vein. How does this approach differ from open surgical closure?

- A. Percutaneous closure requires sternotomy; open closure uses a catheter
- B. Percutaneous closure deploys a device through a catheter without open-heart surgery; open closure requires sternotomy and cardiopulmonary bypass
- C. There is no difference; both procedures are identical
- D. Percutaneous closure is used only for atrial septal defects; PFO closure always requires open surgery

15. A patient undergoes insertion of a non-tunneled central venous catheter in the right internal jugular vein for short-term antibiotic administration. The patient is 50 years old. Which of the following correctly describes a non-tunneled catheter?

- A. A catheter with a subcutaneous port accessed by needle
- B. A catheter tunneled under the skin with a Dacron cuff

C. A peripherally inserted catheter advanced to the central venous system

D. A catheter inserted directly into a central vein without subcutaneous tunneling, intended for short-term use

16. A surgeon performs a right pneumonectomy for non-small cell lung cancer. After the pneumonectomy, the pathologist examines the entire lung specimen. At which level of surgical pathology is a total pneumonectomy specimen classified?

A. Level IV (88305)

B. Level V (88307)

C. Level VI (88309)

D. Level III (88304)

17. A patient undergoes a VATS lobectomy (right upper lobe) for lung cancer. No conversion to open thoracotomy is required. How should this be coded?

A. With the VATS lobectomy code

B. With the open thoracotomy lobectomy code

C. With both the VATS and open thoracotomy codes

D. With the VATS code and modifier 22

18. A surgeon performs an endovascular stent graft repair of an infrarenal abdominal aortic aneurysm (EVAR). The procedure involves deployment of a modular bifurcated endograft via bilateral femoral artery access. How does EVAR differ from open AAA repair?

A. EVAR requires a laparotomy; open repair uses a femoral approach

B. EVAR deploys a stent graft through catheters via the femoral arteries without an abdominal incision; open repair requires a laparotomy to directly replace the diseased aortic segment with a surgical graft

C. Both require identical surgical approaches

D. EVAR is only used for thoracic aneurysms

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

19. A patient undergoes a colonoscopy with removal of a polyp using snare technique from the ascending colon and a separate mucosal 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. As a separate code with modifier 51
- C. As a separate code with modifier 25
- D. It is not reported separately; it is included in the surgical colonoscopy codes

20. A surgeon performs a laparoscopic Heller myotomy for achalasia. What does a Heller myotomy accomplish?

- A. It removes the lower portion of the esophagus
- B. It wraps the stomach fundus around the esophagus
- C. It divides the muscle fibers of the lower esophageal sphincter to allow food to pass into the stomach
- D. It dilates an esophageal stricture using a balloon

21. A patient undergoes an EGD with polypectomy of a 1.5 cm gastric polyp by snare technique and injection of epinephrine for hemostasis at the polypectomy site. The hemostasis injection is performed to control bleeding from the polypectomy. How should the hemostasis be coded?

- A. It is not reported separately; the hemostasis performed to control bleeding from the polypectomy site is included in the polypectomy 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

22. A surgeon performs an open repair of a recurrent, incarcerated inguinal hernia on a 65-year-old patient. The repair is performed using mesh. Which factors determine the CPT code?

A. Only the hernia type and the mesh

B. Hernia type (inguinal), initial vs. recurrent, and whether reducible, incarcerated, or strangulated

C. Only the patient's age and gender

D. Only the surgical approach

23. A patient undergoes flexible sigmoidoscopy with snare polypectomy. The endoscope is advanced to the descending colon but does not pass beyond the splenic flexure. How should the diagnostic sigmoidoscopy be coded?

A. As a separate code with modifier 59

B. As a separate code with modifier 51

C. As a separate code with modifier 25

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

24. A surgeon performs an open distal pancreatectomy with splenectomy for a pancreatic body tumor. The pancreatectomy code includes the splenectomy when performed as part of the same procedure. How should the splenectomy be coded?

A. It is not coded separately; it is included in the distal pancreatectomy code when described in the code description

B. As a separate code with modifier 51

C. As a separate code with modifier 59

D. With a separate splenectomy code and modifier 22

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

25. A urologist performs a cystoscopy with transurethral incision of a urethral stricture. The diagnostic cystoscopy is bundled. What causes a urethral stricture?

- A. A congenital heart defect
- B. An enlarged prostate gland
- C. Scarring and narrowing of the urethra caused by injury, infection, inflammation, or prior instrumentation
- D. A kidney stone lodged in the ureter

26. A patient undergoes a percutaneous nephrostomy tube placement under fluoroscopic guidance for obstructive uropathy caused by a ureteral stone. What does a nephrostomy accomplish?

- A. It removes a kidney stone using shock waves
- B. It creates a permanent connection between the kidney and the bladder
- C. It bypasses a urinary obstruction by removing the stone transurethrally
- D. It creates a direct drainage pathway from the kidney to the outside of the body through a tube placed percutaneously into the renal pelvis

27. A physician provides complete antepartum care, performs a cesarean delivery, and provides all postpartum care. During the cesarean, the surgeon also performs a bilateral tubal ligation for sterilization. How should the tubal ligation be coded?

- A. It is included in the cesarean delivery code
- B. With a separate tubal ligation code in addition to the global cesarean code
- C. With the cesarean code and modifier 22
- D. With only the tubal ligation code; the cesarean is bundled

28. A surgeon performs a vaginal hysterectomy with enterocele repair on a patient with uterine prolapse and enterocele. The CPT code for the vaginal hysterectomy does NOT include enterocele repair in its description. How should the enterocele repair be coded?

- A. With a separate enterocele repair code in addition to the vaginal hysterectomy code
- B. It is included in the vaginal hysterectomy code
- C. With the vaginal hysterectomy code and modifier 22
- D. With only the enterocele repair code

29. A urologist performs a cystoscopy with injection of botulinum toxin into the detrusor muscle for treatment of neurogenic overactive bladder. The diagnostic cystoscopy is bundled. What does the botulinum toxin accomplish?

- A. It permanently paralyzes the bladder
- B. It destroys the bladder lining
- C. It temporarily relaxes the overactive detrusor muscle to reduce urgency, frequency, and incontinence
- D. It treats bladder cancer

30. A surgeon performs a bilateral adrenalectomy for Cushing's syndrome caused by bilateral adrenal hyperplasia. How should the bilateral nature be reported?

- A. With a single code and no modifier
- B. With the adrenalectomy code and modifier 22
- C. With two separate codes and modifier 51
- D. With the adrenalectomy code and modifier 50 or RT/LT modifiers

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

31. A neurosurgeon performs a craniotomy for excision of a brain tumor in the supratentorial region. The bone flap is replaced. During the same session, the neurosurgeon also places an external ventricular drain (EVD) for CSF monitoring. How should the diagnostic craniotomy be coded in relation to the tumor excision?

- A. As a separate code with modifier 59
- B. The craniotomy is the approach for the tumor excision and is included in the tumor excision code — the craniotomy approach is not separately coded
- C. As a separate code with modifier 51
- D. As a separate code with modifier 25

32. An ophthalmologist performs an enucleation of the right eye (removal of the entire globe) for an intraocular malignancy. What does enucleation accomplish?

- A. Removal of the entire eyeball while preserving the orbital contents (muscles, fat, optic nerve stump)
- B. Removal of only the lens
- C. Removal of the orbital contents including the eyeball
- D. Repair of a retinal detachment

33. A pain management physician performs a sacroiliac (SI) joint injection under fluoroscopic guidance. The injection code does NOT include imaging guidance. How should the fluoroscopic guidance be coded?

- A. It is included in the injection code
- B. With modifier 26 on the injection code
- C. With a separate fluoroscopic guidance code in addition to the injection code
- D. With a radiology consultation code

34. A neurosurgeon performs an anterior cervical corpectomy (removal of a vertebral body) at C5 with placement of a structural bone graft (cage) and anterior cervical plate for stabilization. How does a corpectomy differ from a discectomy?

- A. A corpectomy removes only the disc; a discectomy removes the vertebral body
- B. A corpectomy and discectomy are identical procedures
- C. A corpectomy is performed posteriorly; a discectomy is performed anteriorly
- D. A corpectomy removes the entire vertebral body and adjacent discs; a discectomy removes only the disc material

35. A child undergoes bilateral pressure equalization (PE) tube insertion under general anesthesia. The tympanostomy tubes are placed through myringotomy incisions. How should the myringotomy be coded?

- A. As a separate code for each ear with modifier 50
- B. It is not reported separately; the myringotomy is included in the tympanostomy tube insertion code
- C. As a separate code with modifier 59
- D. As a separate code with modifier 51

36. An ophthalmologist performs a pterygium excision with conjunctival autograft on the right eye. What is a pterygium?

- A. A triangular growth of fleshy tissue on the conjunctiva that can extend onto the cornea and affect vision
- B. A clouding of the crystalline lens
- C. Elevated intraocular pressure
- D. Misalignment of the eyes

Evaluation and Management (Questions 37–42)

37. An established patient presents to the office with three chronic conditions — two are stable and one (diabetes) is worsening with a new complication (diabetic neuropathy). The physician reviews lab results, adjusts insulin dosage, and orders a nerve conduction study. What level of MDM does this support?

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

38. A physician sees a patient in a nursing facility for the first time. The patient was recently admitted to the facility from the hospital. Which E/M code set should be used?

- A. Initial hospital care codes (99221–99223)
- B. Office visit codes (99202–99215)
- C. Initial nursing facility care codes (99304–99306)
- D. Subsequent nursing facility codes (99307–99310)

39. A physician provides a prolonged office visit to an established patient. The total time on the date of service is 70 minutes. Using the time-based pathway, which codes should be reported?

- A. 99215 plus prolonged services add-on code 99417 \times 2 (for the 30 additional minutes beyond the 40-minute threshold)
- B. 99215 only; the additional time is not separately reportable
- C. 99215 plus 99417 \times 1
- D. Two units of 99215

40. A patient is admitted to observation by Physician A. The patient deteriorates and is converted to inpatient status by Physician A on the same calendar date. Which code set should Physician A use?

- A. Observation care codes only
- B. Initial hospital care codes; the observation services are included when the patient is converted to inpatient on the same date
- C. Both observation care and initial hospital care codes
- D. Critical care codes only

41. A physician provides a level 3 established patient office visit (99213) and also performs an in-office spirometry (94010) during the same encounter. Should both services be reported?

- A. No; the spirometry is included in the E/M code
- B. No; only the spirometry is reported
- C. Yes, but only with modifier 59 on the spirometry
- D. Yes; both the E/M and the spirometry are separately reportable services

42. Under the current E/M guidelines, which of the following correctly describes the concept of "total time" for office visit code selection?

- A. Total time includes only face-to-face time with the patient
- B. Total time includes only time spent on medical decision-making
- C. Total time includes all physician activities on the date of the encounter — pre-visit preparation, face-to-face time, and post-visit documentation, ordering, and care coordination
- D. Total time includes only time spent physically examining the patient

Anesthesia (Questions 43–46)

43. An anesthesiologist provides general anesthesia for an open abdominal hysterectomy on a 52-year-old patient with well-controlled hypothyroidism (P2). Total anesthesia time is 105 minutes. The payer uses 15-minute time units and assigns no modifying units for P2. Base units are 6. What is the total unit calculation?

- A. 13 units
- B. 12 units
- C. 14 units
- D. 11 units

44. An anesthesiologist medically directs three concurrent CRNA cases. Which modifier should the anesthesiologist append to each of their claims?

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

45. A patient classified as P4 undergoes anesthesia for emergency repair of a ruptured abdominal aortic aneurysm. The patient has severe cardiomyopathy with an ejection fraction of 15% and is in cardiogenic shock. Which qualifying circumstances code applies for the emergency nature?

- A. 99100 (extreme age)
- B. 99116 (total body hypothermia)
- C. 99135 (controlled hypotension)
- D. 99140 (emergency conditions)

46. An anesthesiologist provides anesthesia for a patient undergoing a total knee replacement. During the procedure, the patient receives a peripheral nerve block (adductor canal block) for postoperative pain management, administered by the same anesthesiologist before general anesthesia induction. How is the nerve block coded?

- A. It is included in the general anesthesia code
- B. With a diagnostic nerve block code
- C. With the appropriate peripheral nerve block code as a separate service from the general anesthesia
- D. With modifier 59 on the anesthesia code

Radiology (Questions 47–52)

47. A patient undergoes a CT of the cervical spine without contrast to evaluate neck pain after a motor vehicle accident. A CT of the neck (soft tissue) with IV contrast is also performed to evaluate a suspected vascular injury. How should these be coded?

- A. One CT code covering both studies
- B. Two separate CT codes — one for the cervical spine without contrast and one for the neck soft tissue with contrast
- C. One CT code for the most comprehensive study
- D. One CT code with modifier 22

48. A radiologist performs and interprets a screening mammogram in a private imaging center that the radiologist owns. The center employs all technologists and owns all equipment. Which modifier should the radiologist append?

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

49. A patient undergoes a V/Q (ventilation/perfusion) scan to evaluate for pulmonary embolism. CT pulmonary angiography is contraindicated due to severe contrast allergy. Which imaging modality is used for a V/Q scan?

- A. MRI
- B. CT
- C. Ultrasound
- D. Nuclear medicine

50. In radiation oncology, a patient is undergoing external beam radiation therapy. The radiation oncologist evaluates the patient weekly, reviews portal films, and manages treatment-related side effects. Treatment management (77427) is reported per how many fractions?

- A. Per 1 fraction
- B. Per 10 fractions
- C. Per 5 fractions
- D. Per treatment course

51. A patient undergoes a bone density scan (DEXA) of the lumbar spine and bilateral proximal femurs. The study is performed in a physician's office using practice-owned equipment, and the physician interprets the results. Which modifier should be appended?

- A. No modifier; the global service is reported
- B. Modifier 26
- C. Modifier TC
- D. Modifier 50

52. A patient undergoes an ultrasound of the right kidney to evaluate for hydronephrosis. Only the right kidney is imaged — no other abdominal organs are evaluated. Is this a complete or limited abdominal ultrasound?

- A. Complete abdominal ultrasound
- B. Limited abdominal ultrasound — only one organ is evaluated, not all required structures for a complete study
- C. Neither; renal ultrasound has its own specific code
- D. Complete renal ultrasound

Pathology and Laboratory (Questions 53–58)

53. A physician orders a comprehensive metabolic panel (CMP) and a CBC with automated differential (85025) on the same specimen. Do these two tests share overlapping components?

- A. Yes; both include glucose
- B. Yes; both include albumin
- C. Yes; both include hemoglobin
- D. No; the CMP and the CBC with differential have no overlapping component tests

54. A pathologist examines a breast biopsy specimen (needle core biopsy) that does NOT require complete surgical margin assessment. At which level of surgical pathology is this specimen classified?

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

55. A laboratory performs a definitive drug test for opiates identifying 5 specific analytes and a definitive test for cannabinoids identifying 1 analyte on the same specimen. How should the definitive testing be coded?

- A. Two definitive codes — one for opiates (5 analytes) and one for cannabinoids (1 analyte)
- B. Six codes, one for each individual analyte
- C. One definitive code for both drug classes combined
- D. One presumptive code for all drug classes

56. A patient undergoes a Pap smear using liquid-based cytology (ThinPrep). The specimen is screened by automated system with manual rescreening under physician supervision. Which CPT section contains the cytopathology codes?

- A. Medicine section
- B. Pathology and Laboratory section
- C. Surgery section
- D. Radiology section

57. A physician orders a therapeutic drug assay for vancomycin (80202) on a hospitalized patient receiving IV vancomycin for a serious infection. What does the therapeutic drug assay measure?

- A. Whether vancomycin is present or absent in the urine
- B. The DNA sequence of the vancomycin resistance gene
- C. The patient's allergic sensitivity to vancomycin
- D. The blood concentration of vancomycin to ensure it is within the therapeutic range

58. Special stains and immunohistochemistry are both performed on a colon biopsy specimen. The pathologist orders 2 special stains and 6 IHC antibodies. How should the IHC be coded?

- A. 88342×6
- B. One IHC panel code
- C. 88342×1 for the first antibody plus 88341×5 for each additional antibody
- D. 88341×6

Medicine (Questions 59–64)

59. A patient receives an IV push of furosemide (non-chemotherapy therapeutic drug) and a 1-hour IV infusion of an antibiotic (non-chemotherapy therapeutic drug) during the same outpatient encounter. No hydration or chemotherapy is given. According to the infusion hierarchy, which is the initial service?

- A. The IV push of furosemide
- B. The IV infusion of the antibiotic — therapeutic infusion outranks IV push
- C. Both are reported as initial services
- D. Neither; both are reported as add-on codes

60. An adult patient receives three separate vaccine injections at an office visit: influenza (1 component), Tdap (3 components), and pneumococcal (1 component). No physician counseling about the vaccines is provided. How should the administration be coded?

- A. 90471×1 plus 90472×2 (adult injection-based codes: first injection plus two additional injections)
- B. 90460×1 plus 90461×4 (pediatric component-based codes)
- C. 90471×3 (three units of the first injection code)
- D. 90460×3 plus 90461×2

61. A patient undergoes a 48-hour ambulatory ECG (Holter monitor) recording for evaluation of palpitations. The cardiologist reviews the recording and generates a report. Which CPT code range covers extended ambulatory ECG monitoring beyond 24 hours?

- A. 93224–93227 (up to 48-hour Holter codes)
- B. 93000–93010 (standard 12-lead ECG codes)
- C. 93279–93299 (implantable device evaluation codes)
- D. 93241–93248 (external ECG monitoring for more than 48 hours up to 7 days) or the appropriate extended monitoring codes

62. A therapist provides 25 minutes of therapeutic exercise (97110), 15 minutes of gait training (97116), and applies a hot pack (97010, supervised modality) during the same session. Using the 8-minute rule, how many total billable units are reported?

- A. 2 timed units only; the hot pack is not reportable
- B. 2 timed units plus the hot pack unit
- C. 3 units total — 2 timed units (1 of 97110, 1 of 97116) plus 1 supervised modality unit (97010)
- D. 4 units total

63. A psychiatrist provides 50 minutes of psychotherapy to an established patient. No E/M service is provided during the encounter. Which psychotherapy code should be reported?

- A. 90833 (30-minute add-on with E/M)
- B. 90834 (standalone 45 minutes — the 38–52 minute range)
- C. 90836 (45-minute add-on with E/M)
- D. 90837 (standalone 60 minutes)

64. An allergist performs percutaneous (prick) allergy testing using 40 allergen extracts and also performs patch testing using 25 allergen patches during the same session. How should the testing be coded?

- A. 40 units of the percutaneous testing code (95004) plus 25 units of the patch testing code (95044)
- B. 65 units of one combined testing code
- C. One unit of each testing code

D. A comprehensive allergy panel code

Medical Terminology (Questions 65–68)

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

- A. Inflammation
- B. Surgical removal
- C. Pain
- D. Enlargement

66. Which combining form refers to the bone?

- A. My/o
- B. Arthr/o
- C. Neur/o
- D. Oste/o

67. The prefix "bi-" or "bilateral" means which of the following?

- A. One
- B. Two or both sides
- C. Three
- D. Half

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

- A. A deficiency of platelets (thrombocytes) in the blood
- B. An excess of red blood cells
- C. An excess of platelets
- D. A deficiency of white blood cells

Anatomy (Questions 69–72)

69. The pituitary gland is located in which anatomical structure?

- A. The mediastinum
- B. The retroperitoneum
- C. The sella turcica of the sphenoid bone at the base of the brain
- D. The anterior neck

70. Which blood vessels carry oxygenated blood from the lungs back to the heart?

- A. The pulmonary arteries
- B. The superior and inferior vena cava
- C. The coronary arteries
- D. The pulmonary veins

71. The appendix is attached to which part of the large intestine?

- A. Sigmoid colon
- B. Cecum
- C. Ascending colon
- D. Transverse colon

72. The three ossicles of the middle ear are the malleus, incus, and which other bone?

- A. Stapes
- B. Cochlea
- C. Vestibule
- D. Temporal bone

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

73. A patient presents with a deep vein thrombosis (DVT) of the right lower extremity. The physician documents "acute DVT of the right femoral vein." Which ICD-10-CM code feature captures the laterality?

- A. The first character of the code
- B. The 7th character of the code
- C. The fifth or sixth character of the code captures the laterality (right vs. left)
- D. Laterality is not captured in DVT codes

74. A patient is seen for a routine prenatal visit at 32 weeks gestation. The pregnancy is uncomplicated. Which ICD-10-CM code category covers supervision of normal pregnancy?

- A. O09 (Supervision of high-risk pregnancy)
- B. O80 (Encounter for full-term uncomplicated delivery)
- C. Z34 For routine prenatal visits, the Z34 category covers supervision of normal first pregnancy and O09 covers other pregnancy supervision.
- D. Z34 (Encounter for supervision of normal pregnancy)

75. In ICD-10-CM, a patient has both acute and chronic pancreatitis documented. How should these be coded?

- A. Only the chronic pancreatitis code
- B. Both codes — acute pancreatitis and chronic pancreatitis — with the acute condition sequenced first
- C. Only the acute pancreatitis code
- D. A single combination code for both

76. A patient undergoes a lumpectomy for breast cancer. The pathology report confirms invasive ductal carcinoma of the right breast. Which ICD-10-CM chapter contains the code for the malignant neoplasm?

- A. Chapter 2 (Neoplasms — C00–D49)
- B. Chapter 14 (Diseases of the genitourinary system)
- C. Chapter 21 (Factors influencing health status)
- D. Chapter 19 (Injury, poisoning)

77. A coder is assigning a diagnosis for a patient with a personal history of breast cancer who is now cancer-free and presents for routine surveillance mammography. Which code category represents the personal history?

- A. C50 (Malignant neoplasm of breast — active cancer)
- B. Z12.31 (Encounter for screening mammogram)
- C. Z85.3 (Personal history of malignant neoplasm of breast)
- D. Z80.3 (Family history of malignant neoplasm of breast)

HCPCS Level II (Questions 78–80)

78. A patient receives an infusion of bevacizumab (Avastin) 400 mg IV for cancer treatment. The HCPCS J-code for bevacizumab specifies 10 mg per unit. How many units of the J-code should be reported?

- A. 1 unit
- B. 10 units
- C. 4 units
- D. 40 units

79. A Medicare patient is fitted with bilateral hearing aids. Medicare does not cover routine hearing aids. Which HCPCS modifier indicates the service is a statutory exclusion?

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

80. A patient receives a standard walker for home use after hip surgery. Which HCPCS Level II code range covers walkers and other mobility devices?

- A. E0100–E0159 (within the E-code range for DME — canes, crutches, walkers)
- B. L0000–L9999
- C. J0000–J9999
- D. A0000–A0999

Coding Guidelines (Questions 81–87)

81. A surgeon performs two separate surgical procedures on different anatomical sites through separate incisions during the same operative session. Both have the same global period. The primary procedure has a higher RVU. How should the second procedure be coded?

- A. With only the primary procedure code; the second is bundled
- B. With modifier 59 on the second procedure
- C. With modifier 51 on the second procedure
- D. With modifier 22 on the primary procedure

82. A patient undergoes an unplanned return to the operating room during the 90-day global period for treatment of a hemorrhage at the surgical site (a complication of the original surgery). Which modifier should be appended to the procedure code for the return surgery?

- A. Modifier 58
- B. Modifier 79
- C. Modifier 24
- D. Modifier 78

83. Under the NCCI, when two codes have a Column 1/Column 2 edit with modifier indicator 0, what is the correct action?

- A. The Column 2 code cannot be reported with the Column 1 code under any circumstances; no modifier can bypass the edit
- B. Modifier 59 should be appended to bypass the edit
- C. Modifier 25 should be appended
- D. The edit only applies to outpatient settings

84. A CPT code has a global period designation of "YYY." What does this indicate?

- A. The code has a 90-day global period
- B. The global period is set by the individual MAC (carrier-priced)
- C. The code has a 0-day global period
- D. The code has a 10-day global period

85. A physician performs a screening service covered as a preventive benefit under the ACA. Which modifier identifies the service as a preventive service?

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

86. In CPT, what does the phrase "with or without" in a code description mean?

- A. The code can only be reported if both conditions are met
- B. The code requires a modifier to indicate which condition was present
- C. The phrase is used for informational purposes only
- D. The code applies regardless of whether the named element was performed — both scenarios are captured by the same code

87. A surgeon begins a procedure arthroscopically but must convert to an open approach due to technical difficulties. How should this be coded?

- A. Only the open procedure code; the abandoned arthroscopic approach is not separately coded
- B. Both the arthroscopic and open procedure codes

- C. The arthroscopic code with modifier 53
- D. The arthroscopic code with modifier 22

Compliance and Regulatory (Questions 88–90)

88. Which federal statute imposes strict liability (no intent required) for physician self-referrals to entities in which they have a financial relationship for designated health services?

- A. The False Claims Act
- B. The Stark Law (Physician Self-Referral Law)
- C. The Anti-Kickback Statute
- D. HIPAA

89. A compliance program element requires the organization to take prompt corrective action when compliance violations are detected. Which of the following is an appropriate corrective action?

- A. Terminating the compliance program
- B. Ignoring the violation if it is less than \$5,000
- C. Reducing internal auditing to avoid finding more violations
- D. Investigating the violation, quantifying any overpayments, refunding affected payers, retraining staff, and implementing process changes to prevent recurrence

90. Under Medicare, which Place of Service code represents services provided in an ambulatory surgical center (ASC)?

- A. POS 11 (Office)
- B. POS 21 (Inpatient Hospital)
- C. POS 24 (Ambulatory Surgical Center)

D. POS 22 (On-Campus Outpatient Hospital)

Cases — Integrated Coding Scenarios (Questions 91–100)

Case 1 (Questions 91–92):

A 52-year-old patient undergoes excision of a 1.8 cm malignant basal cell carcinoma from the left nasal ala with 0.4 cm margins. The wound is closed with adjacent tissue transfer (rotation flap) measuring 10 sq cm to reconstruct the nasal defect.

91. How should the excision of the basal cell carcinoma be coded?

- A. It is not coded separately; the excision is included in the adjacent tissue transfer code
- B. With a separate malignant excision code and modifier 59
- C. With a separate benign excision code
- D. With the adjacent tissue transfer code and modifier 22

92. The adjacent tissue transfer is performed on the nose, which is in the face anatomical grouping. The defect is 10 sq cm. How should the flap be coded?

- A. With the appropriate wound repair code
- B. With the adjacent tissue transfer code for the face based on the defect size in square centimeters
- C. With a free skin graft code
- D. With a skin biopsy code

Case 2 (Questions 93–94):

A 75-year-old patient with end-stage renal disease on hemodialysis is managed by a nephrologist. The patient is seen 4 times during the month of January. The patient is 75 years old.

93. Which code set covers the monthly management of this ESRD patient?

- A. Four separate E/M office visit codes
- B. Four hemodialysis procedure codes (90935)
- C. The initial hospital care code
- D. ESRD monthly management code for patients 20+ years with 4 or more visits (90960)

94. During one of the monthly visits, the nephrologist evaluates and treats the patient's unrelated acute bronchitis. The bronchitis evaluation is significant and separately identifiable from the ESRD management. How should the bronchitis evaluation be coded?

- A. It is included in the ESRD monthly code; no additional code is needed
- B. With the ESRD monthly code and modifier 22
- C. With a separate E/M code and modifier 25
- D. With an urgent care code

Case 3 (Questions 95–96):

A surgeon performs a right carotid endarterectomy. During the procedure, the surgeon places a temporary shunt to maintain cerebral perfusion while the artery is clamped. The surgeon provides all preoperative, surgical, and postoperative care.

95. How should the temporary shunt placement be coded?

- A. It is included in the carotid endarterectomy code; temporary shunting is not separately reportable
- B. With a separate vascular shunt code

- C. With the endarterectomy code and modifier 22
- D. With a separate bypass graft code

96. The surgeon provides all components of care. Which global package arrangement applies?

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

Case 4 (Questions 97–98):

A 60-year-old patient receives IV chemotherapy: a 2-hour IV infusion of rituximab (antineoplastic agent for lymphoma — note: when used for cancer treatment, rituximab IS coded as chemotherapy), followed by 30 minutes of IV hydration with normal saline.

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

- A. The IV hydration
- B. Both are initial services
- C. The hydration, because it provides supportive care
- D. The rituximab chemotherapy infusion

98. The rituximab is being administered as an antineoplastic agent for lymphoma treatment. Which code range should be used for the administration?

- A. Therapeutic drug infusion codes (96365–96368)
- B. Hydration codes (96360–96361)
- C. Chemotherapy administration codes (96413–96417)

D. Moderate sedation codes (99151–99157)

Case 5 (Questions 99–100):

A patient undergoes a diagnostic colonoscopy. The gastroenterologist advances the scope to the cecum. No polyps, masses, or abnormalities are found. The patient is a 55-year-old with no symptoms, presenting for a routine screening.

99. Which procedure code should be reported?

- A. The diagnostic colonoscopy code (45378)
- B. A surgical colonoscopy code with modifier 52
- C. A sigmoidoscopy code
- D. No procedure code; only an E/M code is appropriate

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

- A. K63.5 (Polyp of colon)
- B. R19.5 (Other fecal abnormalities)
- C. Z87.19 (Personal history of diseases of the digestive system)
- D. Z12.11 (Encounter for screening for malignant neoplasm of colon)

SIMULATION EXAM 12 — ANSWER

KEY WITH EXPLANATIONS

10,000 Series — Integumentary System

1. **B. 2.0 cm** The excised diameter is calculated as lesion diameter plus margins on both sides: $1.4 \text{ cm} + (0.3 \text{ cm} \times 2) = 2.0 \text{ cm}$. The margin is doubled because normal tissue is removed circumferentially around the entire lesion. This 2.0 cm excised diameter determines the correct code within the benign excision range for the shoulder/trunk anatomical grouping.
2. **D. One simple repair code for 5.0 cm and one intermediate repair code for 8.0 cm** Wounds of the same classification in the same anatomical grouping are combined. The two simple repairs on the forearms ($3.0 + 2.0 = 5.0 \text{ cm}$) are in the same grouping and same classification. The two intermediate repairs on the forehead and chin ($4.5 + 3.5 = 8.0 \text{ cm}$) are in the same face grouping and same classification. Different classifications are reported separately.
3. **A. The lesion diameter and the anatomical location** Shave removal codes are based on the lesion diameter and the anatomical site — not the excised diameter. Unlike excision codes, shave removals do not involve margins because the lesion is removed by horizontal slicing without full-thickness excision. No margin calculation is needed.
4. **C. Distant pedicle flap (tube or delayed flap)** A distant pedicle flap involves transferring tissue from a distant body site (abdomen) to a recipient site (hand) while maintaining the blood supply (pedicle) connection to the donor site. The pedicle is divided in a second-stage procedure after the flap establishes a new blood supply at the recipient site. This differs from adjacent tissue transfer (local flap from an adjacent site) and free flaps (completely detached with microvascular reanastomosis).
5. **B. 17311 × 1, 17312 × 1** Code 17311 covers the first stage (up to 5 tissue blocks — stage 1 had exactly 5, within the limit). Code 17312 is reported for each additional stage (stage 2 = 1 unit). No stage exceeded 5 blocks, so code 17315 is not reported. Two stages require one primary code plus one add-on code.
6. **A. Bone — the deepest tissue level debrided determines the code** Wound debridement codes are based on the deepest tissue level debrided. When the debridement extends through skin, subcutaneous tissue, and reaches exposed bone, the bone-depth debridement code is selected. CPT provides separate codes for debridement to skin, subcutaneous tissue, muscle, and bone depth. The deepest level determines the code.

20,000 Series — Musculoskeletal System

7. **D. Both codes — the loose body removal and the synovectomy — with appropriate modifiers per NCCI guidelines** When two distinct surgical arthroscopic procedures are performed on the same joint during the same session, both may be reported if NCCI edits allow. The diagnostic arthroscopy is bundled into the surgical codes. The loose body removal and partial synovectomy are separate surgical services addressing different pathology. The coder must verify current NCCI edits to confirm both are separately reportable.
8. **C. It is included in the fracture treatment global package; no separate code is reported** When the treating physician assumes the global fracture care package, all routine follow-up care including splint changes, cast changes, and cast removal are bundled into the fracture treatment code. The splint change is a routine part of fracture management and is not separately coded during the global period.
9. **B. Implantable hardware included in the procedure or coded with appropriate implant codes** The plate and screws used for internal fixation are implantable surgical hardware. In most settings, the cost of the hardware is included in the facility's payment or is coded with appropriate implant/supply codes depending on the payer. The hardware is not classified as DME (which is for equipment used at home) or external fixation (which is applied outside the body).
10. **A. With a single code for aspiration and/or injection of a major joint; the aspiration and injection are combined into one code** CPT provides codes for arthrocentesis and/or injection by joint size (small, intermediate, major). The code covers aspiration alone, injection alone, or both aspiration and injection performed at the same site during the same encounter. The knee is a major joint. When both are performed on the same joint, a single code captures the combined service.
11. **D. Primary total ankle arthroplasty** This is the patient's first ankle replacement, making it a primary arthroplasty. CPT provides specific codes for primary total ankle replacement. Revision codes would only be used for replacing or modifying a previously implanted prosthesis. Arthrodesis (fusion) eliminates joint motion rather than preserving it with a prosthesis.
12. **C. Three — the decompression, the fusion, and the instrumentation are each coded separately** When laminectomy decompression, spinal fusion, and posterior instrumentation are performed at the same level during the same session, all three are coded as separate components. The laminectomy code covers the decompression. The fusion code covers the biological fusion. The instrumentation code covers the pedicle screw hardware. Each addresses a distinct surgical objective.

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

13. **A. It is not reported separately; it is included in the surgical thoracoscopy biopsy code** Diagnostic thoracoscopy is bundled into surgical thoracoscopy when both are performed during the same session. The pleural biopsy is a surgical thoracoscopic procedure — the diagnostic

examination is included. This follows the same endoscopic hierarchy that applies to bronchoscopy, colonoscopy, and all other endoscopic procedures.

14. **B. Percutaneous closure deploys a device through a catheter without open-heart surgery; open closure requires sternotomy and cardiopulmonary bypass** Percutaneous PFO closure involves advancing a catheter through the femoral vein to the heart and deploying a closure device across the defect without opening the chest. Open surgical closure requires a sternotomy, cardiopulmonary bypass, and direct surgical repair. These are fundamentally different approaches with different CPT codes and different recovery profiles.
15. **D. A catheter inserted directly into a central vein without subcutaneous tunneling, intended for short-term use** A non-tunneled central venous catheter is inserted directly through the skin into a central vein (internal jugular, subclavian, or femoral) without being tunneled under the skin. It is intended for short-term use (days to weeks). A tunneled catheter passes through a subcutaneous tunnel before entering the vein and has a Dacron cuff for long-term stability. A port has a completely implanted subcutaneous reservoir.
16. **C. Level VI (88309)** A total pneumonectomy specimen is classified at Level VI surgical pathology (88309) — the highest complexity level. Level VI specimens require the most extensive pathological examination including evaluation of the entire lung for tumor extent, surgical margins, lymph node involvement, and staging parameters. Pneumonectomy specimens are among the most complex surgical pathology cases.
17. **A. With the VATS lobectomy code** The procedure was completed thoracoscopically (VATS) without conversion to open thoracotomy. CPT provides separate codes for VATS and open lobectomy. When the VATS approach is completed successfully, only the VATS code is reported. The open code would only be used if the procedure were converted to an open approach.
18. **B. EVAR deploys a stent graft through catheters via the femoral arteries without an abdominal incision; open repair requires a laparotomy to directly replace the diseased aortic segment with a surgical graft** EVAR is a minimally invasive endovascular approach that deploys a stent graft inside the aneurysm through catheter access via the femoral arteries. Open AAA repair requires a laparotomy to expose the aorta, clamp the vessel, excise the aneurysm, and replace it with a surgical graft. These represent fundamentally different approaches with different CPT codes.

40,000 Series — Digestive System

19. **D. It is not reported separately; it is included in the surgical colonoscopy codes** When surgical procedures (snare polypectomy and mucosal 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. The standard endoscopic hierarchy applies.

20. **C. It divides the muscle fibers of the lower esophageal sphincter to allow food to pass into the stomach** A Heller myotomy involves surgically dividing the muscle fibers (myotomy) of the lower esophageal sphincter and the adjacent gastric cardia to relieve the functional obstruction caused by achalasia. In achalasia, the LES fails to relax properly, preventing food from passing into the stomach. The myotomy weakens the sphincter and restores passage. A partial fundoplication is often performed simultaneously to prevent reflux.
21. **A. It is not reported separately; the hemostasis performed to control bleeding from the polypectomy site is included in the polypectomy code** When hemostasis (epinephrine injection, cautery, clip placement) is performed at the polypectomy site to control bleeding caused by the polypectomy itself, it is considered part of the polypectomy and is not separately coded. Hemostasis is only separately reportable when performed for a separate, independently bleeding lesion — not for bleeding induced by the primary procedure.
22. **B. Hernia type (inguinal), initial vs. recurrent, and whether reducible, incarcerated, or strangulated** CPT codes for inguinal hernia repair are determined by the hernia type (inguinal), whether the repair is initial or recurrent, and whether the hernia is reducible, incarcerated, or strangulated. The patient's age may also affect code selection (pediatric vs. adult codes). The use of mesh does not change the CPT code for inguinal hernia repair.
23. **D. It is not reported separately; it is included in the surgical sigmoidoscopy code** When a surgical procedure (snare polypectomy) is performed during a sigmoidoscopy, the diagnostic examination is bundled into the surgical code. Only the surgical sigmoidoscopy code is reported. The endoscopic hierarchy applies consistently.
24. **A. It is not coded separately; it is included in the distal pancreatectomy code when described in the code description** When the CPT code for distal pancreatectomy specifically includes splenectomy in its code description, the splenectomy is bundled. The spleen is routinely removed during distal pancreatectomy because of its anatomical proximity to the pancreatic tail and its shared blood supply. The coder must read the complete code description to verify.

50,000 Series — Urinary, Reproductive, and Endocrine

25. **C. Scarring and narrowing of the urethra caused by injury, infection, inflammation, or prior instrumentation** A urethral stricture is a narrowing of the urethra caused by scar tissue formation from various etiologies — trauma, infection (gonorrhea), inflammation, prior urological instrumentation or surgery, or radiation therapy. The stricture restricts urine flow and may cause urinary retention. Transurethral incision or dilation is performed to open the narrowed segment.
26. **D. It creates a direct drainage pathway from the kidney to the outside of the body through a tube placed percutaneously into the renal pelvis** A percutaneous nephrostomy involves inserting a drainage catheter through the skin of the back directly into the renal pelvis under fluoroscopic or ultrasound guidance. This creates an external drainage pathway for urine when the normal urinary tract is obstructed. The nephrostomy tube drains urine into an external collection bag.

27. **B. With a separate tubal ligation code in addition to the global cesarean code** A bilateral tubal ligation performed during a cesarean delivery is a separate surgical procedure addressing a different clinical objective (sterilization vs. delivery). It is reported with its own CPT code in addition to the global cesarean delivery code. The tubal ligation is not included in the cesarean code because it is an elective additional procedure.
28. **A. With a separate enterocele repair code in addition to the vaginal hysterectomy code** When the vaginal hysterectomy code does NOT include enterocele repair in its description, the enterocele repair is a separate procedure coded with its own CPT code. The coder must read the complete code description to determine what is included. When a component is not described in the code, it may be separately reportable.
29. **C. It temporarily relaxes the overactive detrusor muscle to reduce urgency, frequency, and incontinence** Botulinum toxin (Botox) injected into the detrusor muscle temporarily paralyzes the overactive muscle fibers, reducing involuntary bladder contractions. This decreases urinary urgency, frequency, and urge incontinence in patients with neurogenic or idiopathic overactive bladder who have failed conservative therapy. The effect is temporary, lasting approximately 6–9 months.
30. **D. With the adrenalectomy code and modifier 50 or RT/LT modifiers** Adrenalectomy codes are unilateral. When performed bilaterally, the procedure is reported with modifier 50 (bilateral) or on separate lines with RT and LT modifiers. Bilateral adrenalectomy for Cushing's syndrome requires removal of both adrenal glands and results in permanent adrenal insufficiency requiring lifelong hormone replacement.

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

31. **B. The craniotomy is the approach for the tumor excision and is included in the tumor excision code — the craniotomy approach is not separately coded** The craniotomy is the surgical approach used to access the brain tumor. The tumor excision code includes the craniotomy approach — the approach and the excision are not coded as separate procedures. A separate craniotomy code is not reported in addition to the tumor excision code. The EVD placement for CSF monitoring may be separately reportable as a distinct procedure.
32. **A. Removal of the entire eyeball while preserving the orbital contents (muscles, fat, optic nerve stump)** Enucleation involves removing the entire globe (eyeball) while preserving the orbital contents — the extraocular muscles, orbital fat, and conjunctiva. An orbital implant is typically placed to restore orbital volume. Exenteration is the more radical procedure that removes the globe and all orbital contents. Evisceration removes the intraocular contents while preserving the scleral shell.
33. **C. With a separate fluoroscopic guidance code in addition to the injection code** When the SI joint injection code does NOT include imaging guidance and fluoroscopy is used, a separate fluoroscopic guidance code is reported. The coder must always check the procedure code

description to determine whether guidance is included or excluded before deciding whether a separate guidance code is appropriate.

34. **D. A corpectomy removes the entire vertebral body and adjacent discs; a discectomy removes only the disc material** A corpectomy involves removing the entire vertebral body along with the discs above and below it, creating a large defect that is reconstructed with a structural bone graft or cage. A discectomy removes only the disc material from the intervertebral space. Corpectomy is a more extensive procedure used for vertebral body tumors, fractures, or multi-level cervical stenosis.
35. **B. It is not reported separately; the myringotomy is included in the tympanostomy tube insertion code** The myringotomy is the access step required to insert the tympanostomy tube — it is inherently included in the tube insertion code. Reporting both a myringotomy code and a tympanostomy code for the same ear constitutes unbundling. The tube insertion code captures the complete service.
36. **A. A triangular growth of fleshy tissue on the conjunctiva that can extend onto the cornea and affect vision** A pterygium is a benign, wedge-shaped growth of fibrovascular tissue that originates on the conjunctiva (typically on the nasal side) and can progressively grow across the cornea, distorting vision. It is associated with UV light exposure and dry, windy environments. Excision with conjunctival autograft reduces recurrence rates compared to simple excision alone.

Evaluation and Management

37. **D. High** Three chronic conditions with one worsening and developing a new complication (diabetic neuropathy) constitutes high-level problem complexity. Reviewing lab results and ordering a nerve conduction study constitutes moderate-to-high data. Adjusting insulin dosage with a new complication constitutes high-risk management. Two of three elements meet the high threshold, supporting 99215.
38. **C. Initial nursing facility care codes (99304–99306)** When a physician sees a patient for the first time in a nursing facility after the patient has been admitted from the hospital, the initial nursing facility care codes (99304–99306) are used. Subsequent nursing facility codes are for follow-up visits. Hospital care codes are for hospital settings. Office visit codes are for office settings.
39. **A. 99215 plus prolonged services add-on code 99417 × 2 (for the 30 additional minutes beyond the 40-minute threshold)** Under the time-based pathway, 99215 requires 40 minutes for an established patient. The physician spent 70 minutes — 30 minutes beyond the 40-minute threshold. Each unit of 99417 covers 15 minutes. The 30 additional minutes support 2 units of 99417 (15 minutes each). Total: 99215 + 99417 × 2.
40. **B. Initial hospital care codes; the observation services are included when the patient is converted to inpatient on the same date** When a patient is admitted to observation and subsequently converted to inpatient status on the same calendar date by the same physician, only

the initial hospital care code is reported. The observation services are rolled into the inpatient admission. Separate observation and inpatient codes are not both reported for the same date by the same physician.

41. **D. Yes; both the E/M and the spirometry are separately reportable services** The office visit E/M and the spirometry are distinct services. Spirometry (94010) is a diagnostic test that is not bundled into the E/M code. Both may be reported on the same date. The spirometry does not require a modifier to be separately reported from the E/M unless specific NCCI edits require one.
42. **C. Total time includes all physician activities on the date of the encounter — pre-visit preparation, face-to-face time, and post-visit documentation, ordering, and care coordination** Under the current E/M guidelines, total time encompasses all physician activities on the date of the encounter — not just face-to-face time. This includes reviewing records before the visit, face-to-face evaluation, and post-visit documentation, test ordering, care coordination, and prescription management.

Anesthesia

43. **A. 13 units** Base units (6) + Time units (105 minutes ÷ 15 minutes/unit = 7.0) + Modifying units (P2 = 0) = 13.0 total units. Physical status P2 (well-controlled hypothyroidism) typically does not add modifying units. The calculation: 6 + 7 + 0 = 13.
44. **B. Modifier QY** Modifier QY indicates medical direction of a CRNA by an anesthesiologist. When the anesthesiologist medically directs one to four concurrent CRNA cases, modifier QY is appended to the anesthesiologist's claims. The CRNA appends modifier QX to their claims. Modifier AA indicates personal performance by the anesthesiologist without CRNA involvement.
45. **D. 99140 (emergency conditions)** An emergency repair of a ruptured AAA qualifies for qualifying circumstances code 99140. The emergency nature of the procedure — where any delay significantly increases the threat to life — adds complexity and risk to the anesthetic. This code is reported as an add-on to the primary anesthesia code and adds modifying units.
46. **C. With the appropriate peripheral nerve block code as a separate service from the general anesthesia** A peripheral nerve block performed for postoperative pain management is a separate service from the general anesthesia provided for the surgical procedure. The nerve block has its own CPT code and is reported in addition to the anesthesia code. The nerve block and the general anesthesia serve different clinical purposes — surgical anesthesia versus postoperative analgesia.

Radiology

47. **B. Two separate CT codes — one for the cervical spine without contrast and one for the neck soft tissue with contrast** CT of the cervical spine and CT of the neck soft tissue are different studies evaluating different anatomical structures for different clinical indications. The cervical spine CT evaluates vertebral structures for fracture. The neck soft tissue CT evaluates vascular structures for suspected injury. Both are reported separately with their own codes.

48. **A. No modifier; the global service is reported** When the radiologist owns the imaging center, employs the technologists, and performs both the technical and professional components, the global code is reported without any modifier. Both components are provided by the same entity.
49. **D. Nuclear medicine** A V/Q scan is a nuclear medicine procedure. It uses two radioactive tracers — one inhaled (ventilation) and one injected (perfusion) — to evaluate airflow and blood flow in the lungs. A gamma camera detects the radiation emitted by the tracers. V/Q scanning is the primary alternative to CTPA for diagnosing pulmonary embolism.
50. **C. Per 5 fractions** Treatment management code 77427 is reported per 5 fractions of radiation treatment delivery. Each unit of 77427 covers the physician's supervision and evaluation during 5 treatment fractions. If fewer than 5 fractions remain at the end of the course, modifier 52 is appended for the incomplete unit.
51. **A. No modifier; the global service is reported** When the physician performs and interprets the DEXA scan in their own office using practice-owned equipment, both components are provided by the same entity. The global code is reported without any modifier.
52. **B. Limited abdominal ultrasound — only one organ is evaluated, not all required structures for a complete study** Imaging only the right kidney without evaluating the other required structures (liver, gallbladder, CBD, pancreas, spleen, kidneys, aorta) constitutes a limited study. However, CPT also provides specific renal ultrasound codes (76770–76775) that may be more appropriate when the study is specifically focused on the kidneys. The coder should select the most accurate code for the documented study.

Pathology and Laboratory

53. **D. No; the CMP and the CBC with differential have no overlapping component tests** The CMP measures metabolic and liver chemistry markers. The CBC with differential measures blood cell components (RBCs, WBCs, platelets, differential). These tests analyze completely different analytes with no overlap. Both codes are reported in full without concern for double billing.
54. **C. Level IV (88305)** A breast needle core biopsy NOT requiring complete surgical margin assessment is classified at Level IV surgical pathology (88305). Level IV is the most commonly reported level and covers most diagnostic biopsies. If complete margin assessment were required (as in a lumpectomy for cancer), the specimen would be classified at Level V (88307).
55. **A. Two definitive codes — one for opiates (5 analytes) and one for cannabinoids (1 analyte)** Definitive drug testing codes are reported per drug class, with the specific code selected based on the number of analytes within each class. Two drug classes require two separate codes. The opiate code is selected based on the 5-analyte count, and the cannabinoid code is selected based on the 1-analyte count.
56. **B. Pathology and Laboratory section** Cytopathology codes for Pap smears — including those processed using liquid-based cytology (ThinPrep) with automated screening and manual

rescreening — are located in the Pathology and Laboratory section of CPT. The codes cover both the technical preparation/screening and the physician interpretation.

57. **D. The blood concentration of vancomycin to ensure it is within the therapeutic range** Therapeutic drug assays measure the blood concentration of prescribed medications to optimize dosing and prevent toxicity. Vancomycin has a narrow therapeutic window — levels too low are ineffective against infection, while levels too high cause nephrotoxicity and ototoxicity. Regular monitoring ensures the drug level remains therapeutic.
58. **C. 88342 × 1 for the first antibody plus 88341 × 5 for each additional antibody** Immunohistochemistry is coded per antibody per specimen. Code 88342 is reported for the first antibody, and code 88341 (add-on) is reported for each additional antibody. Six antibodies require 88342 × 1 plus 88341 × 5. The special stains (2 stains) are coded separately with 2 units of the special stain code.

Medicine

59. **B. The IV infusion of the antibiotic — therapeutic infusion outranks IV push** The infusion hierarchy places therapeutic drug infusion above IV push. The antibiotic IV infusion is the initial service because it ranks higher than the IV push of furosemide. The IV push is reported as a push add-on code. Only one initial infusion service per encounter.
60. **A. 90471 × 1 plus 90472 × 2 (adult injection-based codes: first injection plus two additional injections)** For adult patients (or any age without physician counseling), the adult injection-based administration codes are used. Code 90471 covers the first vaccine injection, and 90472 covers each additional injection. Three separate injections = 90471 × 1 + 90472 × 2. The pediatric component-based codes are not used because no physician counseling was provided.
61. **D. 93241–93248 (external ECG monitoring for more than 48 hours up to 7 days) or the appropriate extended monitoring codes** The 93241–93248 codes cover monitoring periods exceeding 48 hours. For exactly 48 hours, the standard Holter codes (93224–93227).
62. **C. 3 units total — 2 timed units (1 of 97110, 1 of 97116) plus 1 supervised modality unit (97010)** The hot pack (97010) is a supervised modality reported as 1 unit regardless of duration. Therapeutic exercise (97110) at 25 minutes qualifies for 1 timed unit (with 10 remaining minutes). Gait training (97116) at 15 minutes qualifies for 1 timed unit. Total timed treatment is 40 minutes supporting 2 timed units. Total billable: 2 timed units + 1 supervised modality = 3 units.
63. **B. 90834 (standalone 45 minutes — the 38–52 minute range)** Fifty minutes of psychotherapy falls within the 38–52 minute range for code 90834 (45-minute session). Since no E/M service was provided, the standalone psychotherapy code is used — not the add-on codes. Code 90837 (60 minutes) would require 53 or more minutes.
64. **A. 40 units of the percutaneous testing code (95004) plus 25 units of the patch testing code (95044)** Percutaneous (prick) and patch allergy tests are different methods with different CPT

codes. Each allergen tested constitutes one unit. The 40 percutaneous tests are reported as 40 units of 95004, and the 25 patch tests are reported as 25 units of 95044. Both methods are reported when performed during the same session.

Medical Terminology

65. **C. Pain** The suffix "-algia" means pain. Common examples include myalgia (muscle pain), neuralgia (nerve pain), arthralgia (joint pain), and cephalgia (headache). "-Itis" means inflammation, "-ectomy" means surgical removal, and "-megaly" means enlargement.
66. **D. Oste/o** The combining form "oste/o" refers to bone. Common terms include osteoporosis (porous bones), osteotomy (incision into bone), osteomyelitis (infection of the bone), and osteoarthritis (degenerative joint disease affecting bone and cartilage). "My/o" refers to muscle, "arthr/o" refers to joint, and "neur/o" refers to nerve.
67. **B. Two or both sides** The prefix "bi-" means two or both sides. Common terms include bilateral (both sides), biceps (two-headed muscle), bifocal (two focal points), and biventricular (both ventricles). "Uni-" means one, "tri-" means three, and "hemi-" means half.
68. **A. A deficiency of platelets (thrombocytes) in the blood** Thrombocytopenia means a deficiency of platelets in the blood, from "thrombocyt/o" (platelet/thrombocyte) and "-penia" (deficiency). Thrombocytopenia increases bleeding risk. Thrombocytosis would be an excess of platelets. Leukopenia is a deficiency of white blood cells. Polycythemia is an excess of red blood cells.

Anatomy

69. **C. The sella turcica of the sphenoid bone at the base of the brain** The pituitary gland is located in the sella turcica — a bony depression in the sphenoid bone at the base of the skull. It is connected to the hypothalamus by the pituitary stalk (infundibulum). The pituitary is the "master gland" of the endocrine system, controlling thyroid, adrenal, and reproductive function. Transsphenoidal surgery accesses the pituitary through the nasal cavity and sphenoid sinus.
70. **D. The pulmonary veins** The pulmonary veins (four total — two from each lung) carry oxygenated blood from the lungs back to the left atrium of the heart. These are the only veins in the body that carry oxygenated blood. The pulmonary arteries carry deoxygenated blood from the right ventricle to the lungs. The vena cava returns deoxygenated blood from the body to the right atrium.
71. **B. Cecum** The appendix (vermiform appendix) is a small, tube-shaped pouch attached to the cecum — the first portion of the large intestine where the ileum joins the colon. The appendix is located in the right lower quadrant of the abdomen. Appendicitis (inflammation of the appendix) is one of the most common surgical emergencies.
72. **A. Stapes** The three ossicles (tiny bones) of the middle ear are the malleus (hammer), incus (anvil), and stapes (stirrup). They form a chain that transmits sound vibrations from the tympanic

membrane to the oval window of the inner ear. The stapes is the smallest bone in the human body. Otosclerosis (fixation of the stapes) is treated with stapedectomy.

ICD-10-CM / Diagnosis Coding

73. **C. The fifth or sixth character of the code captures the laterality (right vs. left)** In ICD-10-CM codes for DVT and many other conditions, laterality is captured in the fifth or sixth character position. The code specifies whether the condition affects the right or left side. For DVT of the right femoral vein, the laterality-specific code provides the most precise classification.
74. **D. Z34 (Encounter for supervision of normal pregnancy)** Routine prenatal visits for an uncomplicated pregnancy are coded using Z34 (encounter for supervision of normal first pregnancy) or the appropriate O09 code for supervision of other normal pregnancies. These codes identify the visit as routine pregnancy supervision. The trimester is specified within the code based on gestational age.
75. **B. Both codes — acute pancreatitis and chronic pancreatitis — with the acute condition sequenced first** When both acute and chronic forms of a condition are documented simultaneously, ICD-10-CM guidelines direct the coder to report both codes with the acute condition sequenced first. The acute condition takes sequencing priority because it represents the more immediate clinical concern.
76. **A. Chapter 2 (Neoplasms — C00–D49)** Malignant neoplasms including invasive ductal carcinoma of the breast are coded in ICD-10-CM Chapter 2 (C00–D49). The specific code from the C50 category identifies the breast site, laterality, and quadrant. Chapter 14 covers genitourinary diseases. Chapter 21 covers factors influencing health status.
77. **C. Z85.3 (Personal history of malignant neoplasm of breast)** When a patient is cancer-free but has a personal history of breast cancer, the Z85.3 code captures the history. This code is used for surveillance visits and supports the medical necessity of ongoing monitoring mammography. The active cancer code (C50) is not used because the patient is in remission. Z12.31 would be the screening indication code.

HCPCS Level II

78. **D. 40 units** The HCPCS J-code for bevacizumab specifies 10 mg per unit. The physician administered 400 mg: $400 \text{ mg} \div 10 \text{ mg/unit} = 40 \text{ units}$. HCPCS drug codes specify a defined quantity per unit, and the total units must reflect the total amount administered.
79. **B. Modifier GY** Modifier GY indicates that the service is a statutory exclusion — a service that Medicare does not cover by law. Routine hearing aids are categorically excluded from Medicare coverage. Modifier GY is distinct from modifier GX (voluntary notice issued for statutory exclusion) and modifier GZ (expected medical necessity denial without ABN).

80. **A. E0100–E0159 (within the E-code range for DME — canes, crutches, walkers)** Walkers and other mobility assistive devices are covered within the E-code range for durable medical equipment. Standard walkers, rolling walkers, and related accessories have specific E-codes. L-codes cover orthotics/prosthetics. J-codes cover drugs. A-codes in the 0000 range cover ambulance services.

Coding Guidelines

81. **C. With modifier 51 on the second procedure** When two distinct procedures are performed on different anatomical sites through separate incisions during the same session, modifier 51 (multiple procedures) is appended to the secondary procedure (lower RVU). This indicates multiple procedures were performed and triggers the appropriate payment reduction. Modifier 59 would be used to bypass NCCI edits, not for standard multiple procedure reporting.
82. **D. Modifier 78** Modifier 78 (unplanned return to the OR for a related procedure during the postoperative period) is appended when a complication (hemorrhage) requires an unplanned return to the operating room during the global period. Modifier 58 is for planned staged procedures. Modifier 79 is for unrelated procedures. Modifier 24 is for unrelated E/M services.
83. **A. The Column 2 code cannot be reported with the Column 1 code under any circumstances; no modifier can bypass the edit** NCCI modifier indicator 0 means no modifier is permitted to bypass the edit. The Column 2 code is permanently bundled into the Column 1 code and can never be reported separately regardless of the clinical circumstances. Indicator 1 would allow a modifier when clinically justified.
84. **B. The global period is set by the individual MAC (carrier-priced)** A global period designation of "YYY" indicates that the global period is determined by the individual MAC (carrier-priced). This means the MAC in each jurisdiction sets the global period for the code, and it may vary by geographic area. This differs from standard designations like "000" (0-day), "010" (10-day), "090" (90-day), and "XXX" (not applicable).
85. **C. Modifier 33** Modifier 33 (preventive services) identifies services that are mandated preventive services under applicable law (ACA). When appended, it signals the payer to waive cost-sharing requirements (copay, coinsurance, deductible) for the covered preventive service.
86. **D. The code applies regardless of whether the named element was performed — both scenarios are captured by the same code** "With or without" in a CPT code description means the code applies whether or not the named element is performed. Both scenarios — with and without the named element — are captured by the same code. The coder does not need to determine which scenario occurred because the code covers both possibilities.
87. **A. Only the open procedure code; the abandoned arthroscopic approach is not separately coded** When a procedure begins arthroscopically but is converted to an open approach, only the

open code is reported. The abandoned arthroscopic approach is not coded separately. This rule applies consistently throughout CPT for all endoscopic-to-open conversions.

Compliance and Regulatory

88. **B. The Stark Law (Physician Self-Referral Law)** The Stark Law is a strict liability statute — no intent to violate is required. If a physician makes a prohibited referral to an entity with which they have a financial relationship, and no exception applies, the referral is illegal regardless of the physician's knowledge or intent. The False Claims Act requires "knowing" conduct. The Anti-Kickback Statute requires "knowing and willful" conduct.
89. **D. Investigating the violation, quantifying any overpayments, refunding affected payers, retraining staff, and implementing process changes to prevent recurrence** Prompt corrective action is a critical element of an effective compliance program. When a violation is detected, the organization must investigate, quantify the impact, make appropriate refunds, retrain involved personnel, and implement systemic changes to prevent recurrence. Ignoring violations, reducing auditing, or terminating the compliance program would all compound the problem.
90. **C. POS 24 (Ambulatory Surgical Center)** Place of service code 24 represents an ambulatory surgical center — a freestanding outpatient surgical facility that is not part of a hospital. ASCs have their own payment methodology under Medicare. POS 11 is physician's office, POS 21 is inpatient hospital, POS 22 is on-campus outpatient hospital.

Cases — Integrated Coding Scenarios

91. **A. It is not coded separately; the excision is included in the adjacent tissue transfer code** Adjacent tissue transfer codes include the excision of the lesion that created the defect. The excision is an integral part of the flap procedure and is not reported separately. This bundling rule applies specifically to adjacent tissue transfer — it differs from free skin grafts, where the excision may be coded separately.
92. **B. With the adjacent tissue transfer code for the face based on the defect size in square centimeters** Adjacent tissue transfer codes are organized by defect size and anatomical location. For the face (nose), the code is selected based on the defect size in square centimeters (10 sq cm). The code captures the entire procedure — excision, flap creation, flap transfer, and donor site closure.
93. **D. 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. Code 90960 covers patients 20 years and older with 4 or more face-to-face visits per month. This per-month code replaces individual E/M visits for dialysis management.
94. **C. With a separate E/M code and modifier 25** When the nephrologist evaluates and treats a condition unrelated to ESRD during a monthly management visit, a separate E/M code may be reported with modifier 25. The acute bronchitis is significant and separately identifiable from the

routine ESRD management. The E/M code captures the additional work for the unrelated condition.

95. **A. It is included in the carotid endarterectomy code; temporary shunting is not separately reportable** Temporary internal carotid shunting performed during a carotid endarterectomy is included in the endarterectomy code. The shunt maintains cerebral perfusion while the artery is clamped and is considered a standard part of the surgical technique. It is not a separately reportable service.
96. **B. No modifier; the complete global package is reported** 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.
97. **D. The rituximab chemotherapy infusion** When rituximab is used as an antineoplastic agent for lymphoma (cancer treatment), it IS coded using the chemotherapy administration codes. The infusion hierarchy places chemotherapy at the highest level — it is always the initial service. The hydration is reported as a secondary service.
98. **C. Chemotherapy administration codes (96413–96417)** When rituximab is administered as an antineoplastic agent for cancer treatment (lymphoma), the chemotherapy administration codes are used. This is different from rituximab used for rheumatoid arthritis (a non-antineoplastic indication), which would use the therapeutic drug infusion codes. The indication (cancer vs. non-cancer) determines the code range.
99. **A. The diagnostic colonoscopy code (45378)** When a colonoscopy is performed and no surgical procedures are needed — no polyps, masses, or abnormalities requiring intervention — only the diagnostic colonoscopy code is reported. The scope reached the cecum (complete colonoscopy), and the examination was thorough but unremarkable.
100. **D. Z12.11 (Encounter for screening for malignant neoplasm of colon)** The patient is a 55-year-old presenting for routine screening with no symptoms. Z12.11 (encounter for screening for malignant neoplasm of colon) is the appropriate first-listed diagnosis for a screening colonoscopy. Since no abnormalities were found, no additional diagnosis codes are needed.