SIMULATION EXAM 16

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

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

1. A surgeon excises a 3.0 cm malignant melanoma from the patient's upper back with 2.0 cm margins. What is the excised diameter for code selection?

A. 5.0 cm

B. 7.0 cm

C. 3.0 cm

D. 4.0 cm

2. A patient has two lacerations requiring repair: a 10.0 cm complex repair on the scalp and a 6.0 cm complex repair on the forehead. Both sites are in the same anatomical grouping for complex repair. How should these be reported?

A. One complex repair code for 16.0 cm combining both wounds

B. Two separate complex repair codes

C. One complex repair code for the largest wound only

D. One intermediate repair code for 16.0 cm

3. A physician performs destruction of 5 benign common warts on a patient's fingers and 8 actinic keratoses on the patient's face during the same encounter. How should the actinic keratosis destruction be coded?

A. 17004

B. 17000 × 8

C. 17110 × 1, 17003 × 7

D. 17000 × 1, 17003 × 7

4. A surgeon performs a split-thickness skin graft to a 25 sq cm wound on the patient's left forearm. The graft is an allograft (cadaveric skin) placed as a temporary biological dressing. How does an allograft differ from an autograft?

A. An allograft is from a different species; an autograft is from the patient

B. An allograft is a permanent graft; an autograft is temporary

C. An allograft is from a human donor (not the patient); an autograft is from the patient's own body

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

5. A physician performs excision of a 2.0 cm benign cyst from the patient's left upper arm with 0.3 cm margins. The wound is closed with simple sutures. What is the excised diameter?

A. 2.0 cm

B. 2.6 cm

C. 2.3 cm

D. 3.2 cm

6. A surgeon performs a tissue expansion procedure. The surgeon inserts a tissue expander beneath the skin of the patient's right breast as the first stage of breast reconstruction following mastectomy. How is the tissue expander insertion coded?

A. With the tissue expander insertion code specific to the anatomical site

B. With a breast reconstruction code

C. With a breast implant exchange code

D. With the mastectomy code and modifier 58

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

7. A surgeon performs arthroscopic meniscus repair (suture) of the medial meniscus and arthroscopic chondroplasty of the medial femoral condyle of the right knee during the same session. Both procedures are permitted per NCCI edits. How should the diagnostic arthroscopy be coded?

A. As a separate code with modifier 59

B. As a separate code with modifier 51

C. As a separate code with modifier 25

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

8. An orthopedic surgeon performs percutaneous fixation of a distal femur fracture using retrograde intramedullary nailing. What type of fracture treatment is intramedullary nailing?

A. Closed treatment without manipulation

B. External fixation

C. Internal fixation — the nail is placed within the medullary canal of the bone to stabilize the fracture

D. Cast application only

9. A patient undergoes an anterior lumbar interbody fusion (ALIF) at L5-S1 performed by an access surgeon (general surgeon) and a spine surgeon. The access surgeon performs only the anterior abdominal exposure to reach the spine, while the spine surgeon performs the discectomy, interbody graft placement, and fusion. How should the access surgeon's work be coded?

A. With the anterior spine exposure/approach code

B. With the fusion code and modifier 62

C. With an E/M code only

D. With the fusion code and modifier 80

10. A patient undergoes injection of a corticosteroid into the right shoulder subacromial bursa. No aspiration is performed. The injection code covers injection and/or aspiration. Which joint size classification applies to the shoulder for injection coding?

A. Small joint

B. Intermediate joint

C. The shoulder is not classified for injection purposes

D. Large joint

11. A patient undergoes a total hip arthroplasty. One year later, the polyethylene acetabular liner is worn and requires replacement, but the acetabular shell and the femoral stem are well-fixed and do not need replacement. What type of procedure is this?

A. Primary total hip arthroplasty

B. Complete revision of all components

C. Partial hip arthroplasty (hemiarthroplasty)

D. Revision total hip arthroplasty — acetabular component revision only (liner exchange)

12. A surgeon performs a percutaneous vertebroplasty at T12 and L1 under fluoroscopic guidance. Vertebroplasty involves injecting bone cement into the fractured vertebral body. How should the second level be coded?

A. With a second primary vertebroplasty code and modifier 59

B. With a second primary vertebroplasty code and modifier 51

C. With an add-on code for each additional level

D. With the first code and modifier 76

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

13. A patient undergoes bronchoscopy with balloon dilation of a tracheal stenosis and separately with bronchial brushing during the same session. How should the diagnostic bronchoscopy be coded?

A. As a separate code with modifier 59

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

C. As a separate code with modifier 51

D. As a separate code with modifier 25

14. A cardiologist performs a diagnostic left heart catheterization with selective coronary angiography. No interventional procedure is performed. How should the catheterization and angiography be coded?

A. With the combined left heart catheterization/coronary angiography code

B. With separate codes for the catheterization and the angiography

C. With only the catheterization code; the angiography is bundled

D. With only the angiography code; the catheterization is bundled

15. A surgeon performs an open thrombectomy of the right femoral artery for acute arterial occlusion. What does an arterial thrombectomy accomplish?

A. It bypasses the blocked artery with a graft

B. It permanently ligates the artery

C. It stents the artery open

D. It removes the blood clot from the artery to restore blood flow

16. A patient undergoes insertion of a peripherally inserted central catheter (PICC line) in the right arm for intermediate-term IV antibiotic therapy. Which factor distinguishes a PICC from a non-tunneled central venous catheter?

A. A PICC is always tunneled; a non-tunneled catheter is not

B. A PICC has a subcutaneous port; a non-tunneled catheter does not

C. A PICC is inserted through a peripheral vein (basilic, cephalic, brachial) and advanced to the central venous system; a non-tunneled catheter is inserted directly into a central vein

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

17. A surgeon performs a mediastinotomy (Chamberlain procedure) with biopsy of an anterior mediastinal mass. The incision is made through a small left parasternal approach. How is a mediastinotomy different from a mediastinoscopy?

A. A mediastinotomy uses an anterior parasternal incision to access the anterior mediastinum; a mediastinoscopy uses a suprasternal incision with a scope to access the superior/middle mediastinum

B. Both procedures are identical

C. A mediastinotomy uses a scope; a mediastinoscopy uses an open incision

D. A mediastinotomy is only for cardiac procedures

18. A patient undergoes a percutaneous coronary intervention (PCI) with drug-eluting stent placement in the left anterior descending artery (LAD). During the same session, a PCI with balloon angioplasty only (no stent) is performed in the left circumflex artery. How should the two interventions be coded?

A. One PCI code for both vessels combined

B. A PCI stent code for the LAD and a PCI angioplasty code for the circumflex with appropriate modifier for the additional vessel

C. Only the stent code; the angioplasty in the second vessel is bundled

D. Two stent placement codes

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

19. A patient undergoes a colonoscopy with removal of a polyp by snare technique from the transverse colon. During the same session, the gastroenterologist also performs a hemorrhoidal banding (rubber band ligation) of internal hemorrhoids through a separate anoscopy. How should the diagnostic colonoscopy and diagnostic anoscopy be coded?

A. Both diagnostic codes are reported separately

B. Only the diagnostic colonoscopy is bundled; the anoscopy is a separate procedure at a different site

C. Both diagnostic codes are bundled into the surgical codes

D. The diagnostic colonoscopy is bundled into the surgical colonoscopy; the hemorrhoidal banding through anoscopy is a separate procedure at a different anatomical site coded independently

20. A surgeon performs a laparoscopic Roux-en-Y gastric bypass for morbid obesity. What does a Roux-en-Y gastric bypass accomplish?

A. It removes a portion of the stomach (sleeve gastrectomy)

B. It places an adjustable band around the stomach

C. It creates a small gastric pouch and bypasses a segment of small intestine, producing both restriction and malabsorption

D. It creates a connection between the stomach and the colon

21. A patient undergoes an EGD with endoscopic placement of a nasogastric decompression tube through the endoscope under direct visualization. How should the diagnostic EGD be coded?

A. As a separate code with modifier 59

B. It is not reported separately; it is included in the surgical EGD code for tube placement

C. As a separate code with modifier 51

D. As a separate code with modifier 25

22. A surgeon performs an open incisional hernia repair with mesh on a patient with a large abdominal wall defect from a previous laparotomy incision. This is the initial repair. For CPT code selection for ventral/incisional hernia repair, does the use of mesh change the code?

A. No; mesh does not change the CPT code for ventral/incisional hernia repair

B. Yes; there are separate codes for repair with and without mesh

C. Yes; modifier 22 is always required when mesh is used

D. Yes; a separate mesh implantation code is always reported

23. A patient undergoes ERCP with sphincterotomy and balloon sweep of the common bile duct for stone extraction. During the same session, the physician also places a pancreatic duct stent. The diagnostic ERCP is bundled. How should the three surgical procedures be coded?

A. Only the sphincterotomy code; the other procedures are bundled

B. Only one ERCP code covering all procedures

C. Two codes — the sphincterotomy and the stent placement; the balloon sweep is bundled into the sphincterotomy

D. Three separate surgical ERCP codes — sphincterotomy, stone extraction (balloon sweep), and pancreatic stent placement — each with its own code

24. A surgeon performs a total proctocolectomy with creation of a permanent ileostomy for a patient with familial adenomatous polyposis (FAP). The patient is not a candidate for an ileal pouch-anal anastomosis. What does a permanent ileostomy accomplish?

A. It connects the ileum to the rectum

B. It creates an internal pouch for stool storage

C. It brings the end of the ileum through the abdominal wall to create a permanent stoma for fecal diversion

D. It reconnects the colon to the anus

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

25. A urologist performs a cystoscopy with retrograde pyelography of the right kidney. The retrograde pyelography involves injection of contrast through a ureteral catheter to visualize the renal collecting system. The diagnostic cystoscopy is bundled. What does retrograde pyelography accomplish?

A. It provides fluoroscopic imaging of the renal pelvis and ureters by injecting contrast retrograde through a ureteral catheter placed via cystoscopy

B. It measures kidney function using a radiotracer

C. It removes a kidney stone

D. It biopsies the renal pelvis

26. A patient undergoes a laparoscopic radical prostatectomy for prostate cancer. During the same session, the surgeon performs a bilateral pelvic lymph node dissection for staging. How should the lymph node dissection be coded?

A. It is included in the radical prostatectomy code

B. With a separate bilateral pelvic lymph node dissection code

C. With the radical prostatectomy code and modifier 22

D. With a lymph node biopsy code

27. A physician provides all antepartum care, performs a cesarean delivery, and provides all postpartum care. During the cesarean, the surgeon discovers and repairs a uterine dehiscence from a prior cesarean scar. The uterine repair is an integral part of the cesarean closure. How should the uterine repair be coded?

A. With a separate uterine repair code and modifier 51

B. With a separate uterine repair code and modifier 59

C. With the cesarean code and modifier 22

D. It is not coded separately; the uterine repair is integral to the cesarean delivery procedure

28. A surgeon performs a robot-assisted laparoscopic radical cystectomy with ileal conduit urinary diversion for bladder cancer. How is the robotic assistance coded?

A. With a separate robotic surgery code

B. With the open radical cystectomy code plus a robotic modifier

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

D. With the laparoscopic code plus modifier 22

29. A patient undergoes a transurethral microwave thermotherapy (TUMT) for treatment of BPH. What does TUMT accomplish?

A. It uses microwave energy delivered transurethrally to heat and destroy obstructing prostate tissue, relieving bladder outlet obstruction

B. It surgically removes the entire prostate

C. It places a permanent stent in the prostatic urethra

D. It uses ultrasound to fragment prostate tissue

30. A surgeon performs a parathyroidectomy — excision of a single parathyroid adenoma. Intraoperative parathyroid hormone (PTH) monitoring is performed to confirm successful removal. How should the intraoperative PTH monitoring be coded?

A. It is included in the parathyroidectomy code

B. With a separate intraoperative PTH rapid assay code (83519) — the laboratory test is reportable independently of the surgical procedure

C. With the parathyroidectomy code and modifier 22

D. With an E/M code for the monitoring

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

31. A neurosurgeon performs a laminoplasty at C3-C6 for treatment of multilevel cervical spinal stenosis with myelopathy. What does a laminoplasty accomplish compared to a laminectomy?

A. A laminoplasty removes the lamina entirely; a laminectomy hinges it open

B. A laminoplasty and laminectomy are identical procedures

C. A laminoplasty is performed only on the lumbar spine

D. A laminoplasty hinges the lamina open on one side to expand the spinal canal while preserving the posterior bony arch; a laminectomy completely removes the lamina

32. An ophthalmologist performs a pars plana vitrectomy for removal of a vitreous hemorrhage obscuring the view of the retina. What does a vitrectomy accomplish?

A. It removes the crystalline lens

B. It creates a drainage pathway for aqueous humor

C. It removes the vitreous gel from the interior of the eye, clearing the visual axis and allowing access to the retina

D. It corrects strabismus

33. A pain management physician performs a spinal cord stimulator trial — a temporary percutaneous placement of trial stimulator electrodes in the epidural space for a 7-day evaluation period. How should this be coded?

A. With the permanent implantation code

B. With the trial/temporary percutaneous electrode placement code

C. With an epidural injection code

D. With the pulse generator implantation code

34. A patient undergoes a carpal tunnel release and the surgeon also performs a neurolysis (external decompression) of the ulnar nerve at the Guyon canal on the same wrist during the same session. How should the ulnar nerve neurolysis be coded?

A. With a separate nerve decompression code for the ulnar nerve at the wrist

B. It is included in the carpal tunnel release code

C. With the carpal tunnel code and modifier 22

D. With a nerve repair code

35. An otolaryngologist performs a revision mastoidectomy with tympanoplasty for recurrent cholesteatoma of the right ear. How does a revision mastoidectomy differ from a primary mastoidectomy?

A. A revision mastoidectomy is simpler than a primary procedure

B. There is no difference; both are coded identically

C. A revision mastoidectomy requires less extensive bone removal

D. A revision mastoidectomy involves operating in a previously surgically altered field with scar tissue, distorted anatomy, and potentially absent landmarks — it is often more complex and has a different CPT code

36. An ophthalmologist performs a YAG laser capsulotomy on the right eye for posterior capsule opacification occurring after previous cataract surgery. What does a YAG capsulotomy accomplish?

A. It removes a secondary cataract

B. It treats glaucoma by opening the drainage angle

C. It creates an opening in the opacified posterior capsule using a laser to restore clear vision

D. It corrects refractive error

Evaluation and Management (Questions 37–42)

37. An established patient presents to the office with two stable chronic conditions (hypertension and hyperlipidemia) and one acute, uncomplicated condition (acute sinusitis). The physician reviews lab results, prescribes an antibiotic, and adjusts the statin dose. What level of MDM does this support?

A. Straightforward

B. Low

C. High

D. Moderate

38. A physician provides initial observation care to a patient placed in observation status after an emergency department evaluation by a different physician. The observing physician evaluates the patient and determines the plan of care. Which E/M code set should be used?

A. Initial observation care codes (99218–99220)

B. Initial hospital care codes (99221–99223)

C. ED visit codes (99281–99285)

D. Subsequent observation codes (99224–99226)

39. A physician provides care coordination services to a chronically ill patient throughout the month. The physician's clinical staff spends 45 minutes during the month on non-face-to-face care coordination activities including medication management, communication with specialists, and care plan updates. Which code category covers this service?

A. Critical care codes

B. Hospital discharge codes

C. Preventive medicine codes

D. Chronic care management codes (99490)

40. An established patient presents to the office. The physician determines that both an E/M service and a diagnostic ultrasound-guided joint injection (intermediate joint, 10-day global period) are needed. The E/M is significant and separately identifiable from the pre-injection evaluation. Which modifier is appended to the E/M?

A. Modifier 57

B. Modifier 59

C. Modifier 25

D. Modifier 51

41. A physician provides subsequent hospital care to an inpatient on the second day of admission. The patient has been improving and the physician provides a low-level follow-up visit. Which code range covers subsequent hospital care?

A. 99218–99220 (initial observation)

B. 99231–99233 (subsequent hospital care)

C. 99221–99223 (initial hospital care)

D. 99238–99239 (hospital discharge)

42. Under the current E/M guidelines, which of the following correctly describes how risk of complications and/or morbidity or mortality affects MDM?

A. Risk is one of three MDM elements — it considers the risk of the management options selected, including drug therapy requiring intensive monitoring, decisions about hospitalization, and decisions about surgery

B. Risk is not considered in MDM

C. Risk is only relevant for critical care services

D. Risk is only relevant when surgery is performed

Anesthesia (Questions 43–46)

43. An anesthesiologist provides general anesthesia for an open abdominal aortic aneurysm repair on a 70-year-old patient with severe coronary artery disease and prior CABG (P3). Total anesthesia time is 240 minutes. The payer uses 15-minute time units and assigns 1 modifying unit for P3. Base units are 15. What is the total unit calculation?

A. 31 units

B. 30 units

C. 33 units

D. 32 units

44. A CRNA provides anesthesia without medical direction by an anesthesiologist. The CRNA independently manages the entire case. Which modifier should the CRNA append?

A. Modifier AA

B. Modifier QX

C. Modifier QZ

D. Modifier QY

45. An anesthesiologist provides anesthesia for a patient undergoing a total thyroidectomy. The patient has a BMI of 52 and poorly controlled Type 2 diabetes with peripheral neuropathy (P3). No emergency or extreme age conditions exist. Which qualifying circumstances codes apply?

A. 99140 (emergency conditions)

B. None — no qualifying circumstances codes apply in this scenario

C. 99100 (extreme age)

D. 99116 (total body hypothermia)

46. In the anesthesia payment formula, base units are determined by which factor?

A. The specific surgical procedure being performed — each anesthesia CPT code has an assigned base unit value reflecting the complexity of the anesthetic

B. The length of the procedure

C. The patient's physical status

D. The geographic location

Radiology (Questions 47–52)

47. A patient undergoes an MRI of the lumbar spine without contrast followed by with gadolinium contrast. How should this be coded?

A. MRI lumbar spine without contrast only

B. MRI lumbar spine with contrast only

C. Two separate MRI codes

D. MRI lumbar spine without contrast followed by with contrast (single combination code)

48. A radiologist interprets an X-ray of the left hand (3 views) performed at an outside urgent care center. The radiologist was not present at the urgent care and did not supervise the technologist. Which modifier should the radiologist append?

A. Modifier TC

B. Modifier 59

C. Modifier 26

D. No modifier

49. A patient undergoes a whole-body bone scan (nuclear medicine) two weeks after starting treatment for metastatic prostate cancer. The scan shows a generalized increase in radiotracer uptake throughout the skeleton (a "flare" phenomenon). In nuclear medicine, what is the most common radiotracer used for bone scans?

A. Technetium-99m MDP (methylene diphosphonate)

B. FDG (fluorodeoxyglucose)

C. Iodine-131

D. Thallium-201

50. In radiation oncology, which code covers the design of treatment ports, selection of treatment modalities, and determination of the number of treatment sessions?

A. Dosimetry (77300)

B. Treatment planning (77261–77263)

C. Treatment delivery (77385–77386)

D. Treatment management (77427)

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

A. CTA uses MRI technology, not CT

B. CTA and standard CT with contrast are identical

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

D. CTA is timed to capture images during the peak arterial or venous phase of contrast enhancement, providing detailed vascular imaging; standard CT provides general tissue contrast

52. A patient undergoes a PET/CT scan for restaging of previously treated non-Hodgkin lymphoma. The PET/CT combines metabolic PET imaging with anatomical CT imaging. How are the PET and CT components typically coded?

A. With a single combined PET/CT code

B. With only the PET code; the CT is bundled

C. With separate PET and CT codes, unless a combination code exists in the specific clinical context

D. With only the CT code; the PET is bundled

Pathology and Laboratory (Questions 53–58)

53. A physician orders a hepatic function panel (80076) and a GGT (gamma-glutamyl transferase, 82977) on the same specimen. GGT is NOT a component of the hepatic function panel. How should these be reported?

A. The hepatic function panel code plus the individual GGT code

B. Only the hepatic function panel; the GGT is bundled

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

D. The hepatic function panel code with modifier 22

54. A pathologist examines a thyroid lobectomy specimen from a patient with a suspicious thyroid nodule. At which level of surgical pathology is a thyroid lobectomy classified?

A. Level III (88304)

B. Level IV (88305)

C. Level VI (88309)

D. Level V (88307)

55. A laboratory performs both a rapid influenza antigen test (87804) and a separate influenza NAAT (87502) on the same patient on the same date. The rapid test was negative, and the NAAT was ordered as a confirmatory test. How should these be coded?

A. Only the NAAT code; the rapid test is bundled

B. Only the rapid test code; the NAAT is bundled

C. One combined code for both tests

D. Both codes — the rapid antigen test and the NAAT are different tests with different methodologies and different CPT codes

56. A patient undergoes a Pap smear. The cytotechnologist screens the slide and identifies abnormal cells. The pathologist reviews the abnormal slide and provides a definitive interpretation. How is the pathologist's review coded?

A. It is included in the Pap smear screening code

B. With an E/M code

C. With a separate physician interpretation code for the cytopathology

D. With a surgical pathology code

57. A laboratory performs molecular testing — next-generation sequencing (NGS) of a solid tumor specimen for a 50-gene panel to guide targeted cancer therapy. Where are molecular pathology/genomic sequencing codes found in CPT?

A. In the Chemistry section

B. In the Molecular Pathology/Genomic Sequencing Procedures section of the Pathology and Laboratory chapter

C. In the Medicine section

D. In the Surgery section

58. A pathologist performs immunohistochemistry on a breast cancer specimen: ER (estrogen receptor), PR (progesterone receptor), HER2/neu, and Ki-67. These are four antibody stains. How should the IHC be coded?

A. 88342 × 1 for the first antibody plus 88341 × 3 for each additional antibody

B. One IHC panel code for breast cancer markers

C. 88342 × 4

D. 88341 × 4

Medicine (Questions 59–64)

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

A. With chemotherapy infusion codes (96413–96415)

B. With hydration codes (96360–96361)

C. With an E/M code only

D. With the initial therapeutic infusion code (96365) for the first hour plus the additional hour add-on code (96366)

60. An adult patient (age 22) receives one vaccine injection — the meningococcal conjugate vaccine (1 component) — at an office visit. The physician provides face-to-face counseling about the vaccine. How should the administration be coded?

A. 90460 × 1 (pediatric component-based code with physician counseling)

B. 90472 × 1 (additional injection code)

C. 90471 × 1 (adult injection-based code, first vaccine)

D. No administration code; it is included in the vaccine product code

61. A patient undergoes a tilt table test for evaluation of recurrent syncope. The test involves placing the patient on a motorized tilt table, tilting to an upright position, and monitoring heart rate and blood pressure response. Which Medicine subsection contains the tilt table test code?

A. Cardiovascular diagnostic services

B. Neurology

C. Allergy and immunology

D. Pulmonary function testing

62. A therapist provides 22 minutes of therapeutic exercise (97110) and 8 minutes of manual therapy (97140) during the same physical therapy session. Using the 8-minute rule, how many total timed units are reported?

A. 3 units

B. 2 units — 1 unit of 97110 and 1 unit of 97140 (total 30 minutes supports 2 timed units)

C. 1 unit of 97110 only

D. 4 units

63. A cardiologist performs a transesophageal echocardiogram (TEE) with Doppler and color flow during a cardiac surgical procedure to evaluate valve function after mitral valve repair. The cardiologist provides the interpretation. How should this be coded?

A. With a transthoracic echocardiogram code

B. With a standard ECG code

C. With an E/M code only

D. With the intraoperative TEE code (93355) — a specific code for TEE performed during cardiac surgery

64. An ophthalmologist performs a comprehensive eye examination on an established patient and also performs gonioscopy (examination of the anterior chamber drainage angle) during the same visit. Gonioscopy is a special ophthalmological service. How should the gonioscopy be coded?

A. It is included in the comprehensive examination code

B. With the examination code and modifier 22

C. With a separate gonioscopy code (92020) in addition to the examination code

D. With only the gonioscopy code; the examination is bundled

Medical Terminology (Questions 65–68)

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

A. Surgical removal

B. Visual examination using an instrument

C. Surgical repair

D. Inflammation

66. Which combining form refers to the kidney?

A. Ren/o or nephr/o

B. Cyst/o

C. Ureter/o

D. Urethr/o

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

A. One

B. Few

C. Half

D. Many or excessive

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

A. Slow heart rate

B. Irregular heart rhythm

C. Rapid heart rate

D. Absent heart rate

Anatomy (Questions 69–72)

69. The left anterior descending (LAD) coronary artery supplies blood to which wall of the heart?

A. The posterior wall

B. The anterior wall and interventricular septum

C. The inferior wall

D. The right atrial wall

70. Which anatomical structure produces bile?

A. The liver

B. The gallbladder

C. The pancreas

D. The spleen

71. The Achilles tendon connects which muscle group to the calcaneus (heel bone)?

A. The quadriceps

B. The hamstrings

C. The anterior tibialis

D. The gastrocnemius and soleus (calf muscles)

72. The vitreous humor fills which part of the eye?

A. The anterior chamber (between the cornea and iris)

B. The posterior chamber (between the iris and lens)

C. The vitreous cavity (the large space behind the lens)

D. The subconjunctival space

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

73. A patient presents with a Type 2 diabetic foot ulcer of the right great toe with underlying osteomyelitis. Under ICD-10-CM, how should the diabetes with complications be coded?

A. With a combination code from E11 specifying Type 2 diabetes with a foot ulcer, plus additional codes for the ulcer site/severity and the osteomyelitis

B. Only the osteomyelitis code

C. Only the ulcer code

D. With separate codes for diabetes and the ulcer with no linkage

74. A patient undergoes a CT scan of the abdomen to evaluate abdominal pain. The CT reveals an incidental finding of a 2.0 cm liver cyst. The physician documents both the abdominal pain and the incidental liver cyst. How should these be coded?

A. Only the liver cyst code

B. The abdominal pain code as the first-listed diagnosis, with the liver cyst as a secondary code — the abdominal pain was the reason for the CT

C. Only the abdominal pain code; incidental findings are not coded

D. The liver cyst code as the first-listed diagnosis

75. In ICD-10-CM, a patient has documented chronic obstructive pulmonary disease (COPD) with an acute exacerbation. How should this be coded?

A. Only the acute exacerbation code

B. Only the COPD code without specifying exacerbation

C. With separate codes for COPD and acute exacerbation

D. With a single code from J44 that specifies COPD with acute exacerbation

76. A patient is treated for anaphylaxis due to an adverse effect of penicillin (correctly prescribed and correctly administered). Under ICD-10-CM adverse effect coding, what is the sequencing?

A. The T code for adverse effect of penicillin first, followed by the anaphylaxis code

B. Only the penicillin code

C. The anaphylaxis (manifestation) first, followed by the T code for adverse effect of penicillin

D. Only the anaphylaxis code; the drug is not coded

77. A coder is assigning a diagnosis for a newborn infant born in the hospital by normal spontaneous vaginal delivery with no complications. Which ICD-10-CM code should be reported as the principal diagnosis?

A. Z00.110 (Health examination for newborn under 8 days old)

B. Z38.00 (Single liveborn infant, delivered vaginally)

C. P07.39 (Preterm newborn)

D. Z38.01 (Single liveborn infant, delivered by cesarean)

HCPCS Level II (Questions 78–80)

78. A patient receives an injection of ketorolac (Toradol) 30 mg intramuscularly. The HCPCS J-code for ketorolac specifies 15 mg per unit. How many units should be reported?

A. 2 units

B. 30 units

C. 1 unit

D. 4 units

79. A Medicare patient receives a cervical collar (neck orthosis) after a cervical spine injury. Which HCPCS Level II code range covers cervical orthoses?

A. E0100–E9999

B. J0000–J9999

C. A4000–A8999

D. L0100–L0200 (within the L-code range for orthotics)

80. A provider bills Medicare for a service and appends modifier GA, indicating an ABN was obtained. Medicare denies the service. What is the financial consequence?

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 reconsideration

Coding Guidelines (Questions 81–87)

81. A surgeon performs a diagnostic EGD. During the procedure, the surgeon identifies a bleeding ulcer and performs injection therapy for hemostasis. How should the diagnostic EGD be coded?

A. As a separate code with modifier 59

B. It is not reported separately; it is bundled into the surgical EGD code

C. As a separate code with modifier 25

D. As a separate code with modifier 51

82. A physician performs an E/M service that results in the initial decision to perform a minor surgical procedure (10-day global period) on the same day. The E/M is significant and separately identifiable. Which modifier should be appended to the E/M?

A. Modifier 25

B. Modifier 57

C. Modifier 59

D. Modifier 24

83. Under the NCCI, what is the purpose of the Procedure-to-Procedure (PTP) edits?

A. To establish maximum units per service

B. To determine conversion factors

C. To assign global periods

D. To identify code pairs where one code is a component of the other and should not typically be reported together on the same date by the same provider

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

A. The code has a 90-day global period

B. The code has a 10-day global period

C. The global period concept does not apply to this code — it is not subject to global period rules

D. The code has a 0-day global period

85. Which of the following correctly describes when modifier 76 (repeat procedure by the same physician) should be used?

A. When a procedure is performed at a reduced scope

B. When the same physician repeats the same procedure on the same day — for example, a second chest X-ray performed later the same day by the same physician

C. When the procedure is performed by a different physician

D. When the procedure is performed during the global period of a different surgery

86. In CPT, the semicolon (;) in code descriptions has a specific meaning. What does it indicate?

A. The common portion of the code description shared by indented codes appears before the semicolon; the unique portion appears after the semicolon in each indented code

B. The code has been deleted

C. The code requires a modifier

D. The code is an add-on code

87. A surgeon performs a laparoscopic bilateral salpingo-oophorectomy (BSO). CPT describes the BSO code as a bilateral procedure. How should this be coded?

A. With only one unit of the BSO code and modifier 50

B. With two separate unilateral oophorectomy codes

C. With one unit of the BSO code and modifier 22

D. With one unit of the inherently bilateral BSO code — no laterality modifier is needed because the code description already specifies bilateral

Compliance and Regulatory (Questions 88–90)

88. Under the Stark Law, which of the following is an example of a "designated health service" (DHS) to which the self-referral prohibition applies?

A. Physician office visits

B. Emergency department evaluations

C. Clinical laboratory services

D. Over-the-counter medications

89. A healthcare organization receives a credible allegation of fraud from a whistleblower. Under the False Claims Act, what right does the whistleblower (relator) have?

A. The right to file a qui tam lawsuit on behalf of the government and potentially receive a percentage of any recovery

B. The right to directly prosecute the healthcare organization

C. The right to conduct their own audit of the organization's records

D. No rights; only the government can pursue False Claims Act cases

90. Under Medicare, which entity processes and pays Medicare Part B claims in a specific geographic region?

A. The Office of Inspector General (OIG)

B. The Medicare Administrative Contractor (MAC)

C. The Department of Justice (DOJ)

D. The State Medicaid Agency

Cases — Integrated Coding Scenarios (Questions 91–100)

Case 1 (Questions 91–92):

A 50-year-old patient undergoes excision of a 1.6 cm benign lipoma from the subcutaneous tissue of the posterior neck. The wound is closed with intermediate layered repair.

91. Which code range should be used for the excision of the subcutaneous lipoma?

A. Skin excision codes (11400–11471)

B. Shave removal codes (11300–11313)

C. Skin biopsy codes (11102–11107)

D. Soft tissue tumor excision codes (subcutaneous) in the musculoskeletal section

92. The wound is closed with intermediate layered repair. Should the intermediate repair be coded separately?

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

B. No; intermediate repair is included in subcutaneous tumor excision codes

C. Yes; intermediate and complex closures may be reported separately from subcutaneous tumor excision codes when not included in the excision code

D. Yes, but only with modifier 22

Case 2 (Questions 93–94):

A 58-year-old patient presents to the emergency department with severe chest pain. The ED physician evaluates the patient, diagnoses acute STEMI, and the patient is taken emergently to the cardiac catheterization lab. The cardiologist performs a left heart catheterization with selective coronary angiography and PCI with drug-eluting stent placement in the right coronary artery.

93. Should the diagnostic left heart catheterization with coronary angiography be coded separately from the stent placement?

A. No; the catheterization/angiography is bundled into the stent code

B. Yes; the diagnostic catheterization/angiography and the PCI stent placement are separately reportable with appropriate modifiers if performed for independent diagnostic purposes

C. No; only the stent code is reported

D. Yes; the angioplasty is coded separately from both

94. The patient's diagnosis is acute STEMI. Which ICD-10-CM code category covers acute myocardial infarction?

A. I21 (Acute myocardial infarction)

B. I25 (Chronic ischemic heart disease)

C. I69 (Sequelae of cerebrovascular disease)

D. I10 (Essential hypertension)

Case 3 (Questions 95–96):

A patient receives IV chemotherapy: a 90-minute IV infusion of carboplatin (chemotherapy agent) and a 30-minute IV infusion of paclitaxel (chemotherapy agent — different drug, sequential through the same line) and 60 minutes of IV hydration with normal saline.

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

A. The IV hydration

B. The paclitaxel infusion

C. Each is a separate initial service

D. The carboplatin chemotherapy infusion

96. The paclitaxel is a different chemotherapy drug infused sequentially. How should it be coded?

A. With a second initial chemotherapy code (96413)

B. The paclitaxel is bundled into the carboplatin code

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

D. With a therapeutic drug infusion code (96365)

Case 4 (Questions 97–98):

A surgeon performs a right total knee arthroplasty for osteoarthritis. The surgeon provides all preoperative, surgical, and postoperative care. During the 90-day global period, the patient develops a deep wound infection requiring return to the operating room for irrigation and debridement of the infected joint.

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

A. With the complete global package — no splitting modifiers

B. With modifier 54

C. With modifier 55

D. With modifier 22

98. The I&D for the infected joint is a complication requiring an unplanned return to the OR during the global period. Which modifier should be appended?

A. Modifier 58

B. Modifier 78

C. Modifier 79

D. Modifier 24

Case 5 (Questions 99–100):

A 65-year-old Medicare patient presents for a screening colonoscopy with no symptoms and no personal history of polyps. The gastroenterologist advances the scope to the cecum. No abnormalities are found.

99. Which procedure code should be reported?

A. A surgical colonoscopy code

B. A sigmoidoscopy code

C. An E/M code only

D. The diagnostic colonoscopy code (45378)

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

A. K63.5 (Polyp of colon)

B. R19.5 (Other fecal abnormalities)

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

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

SIMULATION EXAM 16 — ANSWER KEY WITH EXPLANATIONS

10,000 Series — Integumentary System

1. **B. 7.0 cm** The excised diameter is calculated as lesion diameter plus margins on both sides: 3.0 cm + (2.0 cm × 2) = 7.0 cm. Wide margins of 2.0 cm are standard for malignant melanoma. This 7.0 cm excised diameter determines the correct code within the malignant excision range for the trunk anatomical grouping.

2. **A. One complex repair code for 16.0 cm combining both wounds** When multiple wounds are repaired using the same classification (both complex) and are in the same anatomical grouping (scalp and forehead are in the same grouping), their lengths are added together. The two complex repairs total 10.0 + 6.0 = 16.0 cm. A single complex repair code for 16.0 cm is reported.

3. **D. 17000 × 1, 17003 × 7** The actinic keratoses use the premalignant destruction code range. For 8 actinic keratoses: 17000 × 1 (first lesion) plus 17003 × 7 (lesions 2 through 8). The flat code 17004 is only used when 15 or more premalignant lesions are destroyed — at 8 lesions, the individual counting method applies. The benign warts are coded separately with 17110/17111.

4. **C. An allograft is from a human donor (not the patient); an autograft is from the patient's own body** An allograft (homograft) is tissue from another human — typically cadaveric donor skin. An autograft is tissue from the patient's own body. A xenograft is from another species (porcine). Allografts are used as temporary biological dressings because they will eventually be rejected by the recipient's immune system. Autografts are permanent.

5. **B. 2.6 cm** The excised diameter is calculated as lesion diameter plus margins on both sides: 2.0 cm + (0.3 cm × 2) = 2.6 cm. The margin is doubled because tissue is removed circumferentially. This 2.6 cm excised diameter determines the correct code within the benign excision range for the arm anatomical grouping.

6. **A. With the tissue expander insertion code specific to the anatomical site** Tissue expander insertion has its own CPT code and is coded based on the anatomical site. This is the first stage of a staged breast reconstruction. The tissue expander is placed beneath the skin and muscle, and saline is gradually injected over weeks to stretch the tissue before the final breast implant is placed in a second procedure.

20,000 Series — Musculoskeletal System

7. **D. 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 meniscus repair and chondroplasty are both surgical procedures — the diagnostic examination is included. Both surgical codes may be reported with appropriate modifiers per NCCI guidelines.

8. **C. Internal fixation — the nail is placed within the medullary canal of the bone to stabilize the fracture** Intramedullary nailing involves inserting a metal rod (nail) into the medullary canal of the bone to stabilize the fracture from within. This is a form of internal fixation — the hardware is placed inside the bone. The nail provides structural support while the fracture heals. This differs from external fixation (pins connected to an external frame) and plate fixation (screws and plate on the bone surface).

9. **A. With the anterior spine exposure/approach code** When an access surgeon performs only the anterior exposure to reach the spine while a different surgeon performs the actual fusion, the access surgeon reports the anterior approach/exposure code. The spine surgeon reports the fusion, interbody device, and any instrumentation codes. Each surgeon codes their own component of the procedure.

10. **B. Intermediate joint** The shoulder is classified as an intermediate joint for injection/aspiration coding purposes (codes 20605–20606). CPT classifies joints by size: small (fingers, toes), intermediate (temporomandibular, acromioclavicular, wrist, elbow, ankle.

11. **D. Revision total hip arthroplasty — acetabular component revision only (liner exchange)** When only the acetabular liner needs replacement while the acetabular shell and femoral stem remain well-fixed, this is a partial revision — specifically an acetabular component revision. CPT provides different codes based on which components are revised. A liner exchange without shell or stem revision represents the least extensive type of revision arthroplasty.

12. **C. With an add-on code for each additional level** Vertebroplasty codes use a primary code for the first vertebral body and an add-on code for each additional level. Two levels (T12 and L1) require one primary code plus one add-on code. The fluoroscopic guidance is typically included in the vertebroplasty codes.

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

13. **B. It is not reported separately; it is included in the surgical bronchoscopy codes** Diagnostic bronchoscopy is bundled into surgical bronchoscopy when both are performed during the same session. The balloon dilation and bronchial brushing are separate surgical procedures, each with their own code. The diagnostic examination is included in the surgical codes.

14. **A. With the combined left heart catheterization/coronary angiography code** CPT provides a combined code for left heart catheterization with selective coronary angiography. When both are

performed during the same session and no interventional procedure is performed, the combined code captures both services. Separate codes for the catheterization and angiography are not reported.

15. **D. It removes the blood clot from the artery to restore blood flow** An arterial thrombectomy involves surgically opening the artery and removing the blood clot (thrombus) to restore blood flow to the affected extremity. This is typically performed through an arteriotomy using a balloon catheter (Fogarty catheter) that is passed beyond the clot, inflated, and pulled back to extract the thrombus.

16. **C. A PICC is inserted through a peripheral vein (basilic, cephalic, brachial) and advanced to the central venous system; a non-tunneled catheter is inserted directly into a central vein** A PICC line is inserted through a peripheral arm vein and advanced so the tip rests in the central venous system (superior vena cava). A non-tunneled catheter is inserted directly into a central vein (internal jugular, subclavian, femoral). The insertion site and approach are the key differences. Both provide central venous access.

17. **A. A mediastinotomy uses an anterior parasternal incision to access the anterior mediastinum; a mediastinoscopy uses a suprasternal incision with a scope to access the superior/middle mediastinum** A mediastinotomy (Chamberlain procedure) uses a small anterior parasternal incision to directly access the anterior mediastinum — particularly useful for aortopulmonary window lymph nodes not accessible by mediastinoscopy. A mediastinoscopy uses a suprasternal incision and an endoscope to access the pretracheal, paratracheal, and subcarinal lymph nodes in the superior and middle mediastinum.

18. **B. A PCI stent code for the LAD and a PCI angioplasty code for the circumflex with appropriate modifier for the additional vessel** When PCI is performed on two separate coronary vessels during the same session using different techniques (stent in one, angioplasty only in the other), each vessel's intervention is coded separately. The stent code is reported for the LAD, and the angioplasty code is reported for the circumflex with the appropriate modifier for the additional vessel.

40,000 Series — Digestive System

19. **D. The diagnostic colonoscopy is bundled into the surgical colonoscopy; the hemorrhoidal banding through anoscopy is a separate procedure at a different anatomical site coded independently** The diagnostic colonoscopy is bundled into the snare polypectomy per the standard endoscopic hierarchy. However, the hemorrhoidal banding performed through a separate anoscopy is a different procedure at a different anatomical site (anal canal vs. colon) using a different endoscope. The anoscopy and hemorrhoidal banding are reported separately as an independent service.

20. **C. It creates a small gastric pouch and bypasses a segment of small intestine, producing both restriction and malabsorption** A Roux-en-Y gastric bypass creates a small gastric pouch

(approximately 30 mL) from the upper stomach, which is connected to a Roux limb of jejunum, bypassing the remainder of the stomach and the duodenum. This produces weight loss through both restriction (small pouch limits food intake) and malabsorption (bypassed intestine reduces nutrient absorption).

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

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

23. **D. Three separate surgical ERCP codes — sphincterotomy, stone extraction (balloon sweep), and pancreatic stent placement — each with its own code** Each surgical ERCP procedure has its own CPT code. The sphincterotomy, balloon sweep stone extraction, and pancreatic stent placement are three distinct surgical services. The diagnostic ERCP is bundled into the surgical codes. Each surgical procedure is reported separately per CPT guidelines.

24. **C. It brings the end of the ileum through the abdominal wall to create a permanent stoma for fecal diversion** A permanent ileostomy involves bringing the end of the ileum through the anterior abdominal wall and maturing it as a stoma. Intestinal contents drain into an external ostomy pouch. This is performed when the rectum and anus have been removed (proctocolectomy) and the patient is not a candidate for an ileal pouch-anal anastomosis.

50,000 Series — Urinary, Reproductive, and Endocrine

25. **A. It provides fluoroscopic imaging of the renal pelvis and ureters by injecting contrast retrograde through a ureteral catheter placed via cystoscopy** Retrograde pyelography involves cystoscopically placing a catheter into the ureteral orifice and injecting radiopaque contrast material retrograde (upward) into the ureter and renal pelvis. Fluoroscopic images are obtained to visualize the collecting system anatomy. This is used to evaluate ureteral obstruction, stones, tumors, and anatomical abnormalities.

26. **B. With a separate bilateral pelvic lymph node dissection code** The bilateral pelvic lymph node dissection for staging during a radical prostatectomy is a separate surgical service with its own CPT code. It addresses a different objective (staging) from the prostatectomy (tumor removal). Both codes are reported to capture the complete surgical service.

27. **D. It is not coded separately; the uterine repair is integral to the cesarean delivery procedure** When a uterine dehiscence from a prior cesarean scar is discovered and repaired as an integral part

of the cesarean delivery closure, the repair is included in the cesarean code. Closing the uterine incision — including repairing any scar dehiscence encountered during the cesarean — is a standard component of the cesarean delivery.

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

29. **A. It uses microwave energy delivered transurethrally to heat and destroy obstructing prostate tissue, relieving bladder outlet obstruction** TUMT delivers microwave energy through a transurethral catheter to heat the obstructing prostate tissue to temperatures that cause coagulation necrosis. The destroyed tissue is gradually absorbed by the body over weeks to months, relieving the obstruction. TUMT is a minimally invasive alternative to TURP for BPH.

30. **B. With a separate intraoperative PTH rapid assay code (83519) — the laboratory test is reportable independently of the surgical procedure** Intraoperative PTH monitoring is a laboratory test (rapid PTH assay) that is separately reportable from the parathyroidectomy. The PTH level is measured before and after gland removal to confirm that the hypersecreting gland has been successfully excised (PTH should drop by >50%). The lab code is reported by the laboratory performing the assay.

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

31. **D. A laminoplasty hinges the lamina open on one side to expand the spinal canal while preserving the posterior bony arch; a laminectomy completely removes the lamina** Laminoplasty is a motion-preserving technique that expands the spinal canal by creating a hinge on one side of the lamina and an opening on the other side, essentially swinging the lamina open like a door. The posterior bony arch is preserved but repositioned. Laminectomy completely removes the lamina, eliminating the posterior bony covering. Laminoplasty maintains spinal stability better than multi-level laminectomy.

32. **C. It removes the vitreous gel from the interior of the eye, clearing the visual axis and allowing access to the retina** A pars plana vitrectomy involves inserting small instruments through the pars plana (the peripheral part of the ciliary body) to remove the vitreous gel from inside the eye. Removing the vitreous clears the visual axis (in cases of vitreous hemorrhage) and provides surgical access to the retina for repair of detachments, membranes, or other pathology. The vitreous is replaced with saline, gas, or silicone oil.

33. **B. With the trial/temporary percutaneous electrode placement code** A spinal cord stimulator trial involves temporary percutaneous placement of electrodes in the epidural space for a limited evaluation period (typically 3–14 days). This has a specific trial code distinct from the permanent

implantation code. The trial determines whether the patient experiences adequate pain relief before committing to permanent implantation.

34. **A. With a separate nerve decompression code for the ulnar nerve at the wrist** The carpal tunnel release (median nerve decompression) and the ulnar nerve neurolysis at the Guyon canal are distinct procedures on different nerves at different anatomical sites. The ulnar nerve decompression has its own CPT code and is reported separately from the carpal tunnel release with appropriate modifiers.

35. **D. A revision mastoidectomy involves operating in a previously surgically altered field with scar tissue, distorted anatomy, and potentially absent landmarks — it is often more complex and has a different CPT code** Revision mastoidectomy is performed in a previously operated ear with altered anatomy, scar tissue, and absent normal landmarks. This is technically more challenging than a primary procedure. CPT provides specific codes for revision mastoidectomy that reflect this increased complexity. Recurrent cholesteatoma often requires extensive revision surgery.

36. **C. It creates an opening in the opacified posterior capsule using a laser to restore clear vision** A YAG laser capsulotomy creates an opening in the posterior capsule that has become opacified (posterior capsule opacification or "secondary cataract") after previous cataract surgery. The laser disrupts the opacified membrane, allowing light to pass through clearly to the retina. This is an outpatient procedure that restores the visual improvement achieved by the original cataract surgery.

Evaluation and Management

37. **B. Low** Two stable chronic conditions plus one acute uncomplicated condition (sinusitis) constitutes low-level problem complexity. Reviewing labs constitutes limited data. Prescribing an antibiotic and adjusting a statin is low-risk management. The MDM elements support low complexity, coding at 99213 for an established patient.

38. **A. Initial observation care codes (99218–99220)** When a physician admits a patient to observation status and provides the initial evaluation, the initial observation care codes are used. These codes are specific to observation — they differ from initial hospital care codes (for inpatient admission) and ED codes (for emergency department services).

39. **D. Chronic care management codes (99490)** Chronic care management (CCM) code 99490 covers non-face-to-face care coordination services for patients with multiple chronic conditions. Clinical staff time of at least 20 minutes per month is required for the base CCM code. Forty-five minutes of care coordination activities exceeds the minimum threshold and may support additional CCM codes.

40. **C. Modifier 25** Modifier 25 is appended to the E/M code when a significant, separately identifiable E/M service is performed on the same day as a minor procedure (10-day global period). The joint

injection has a 10-day global period. Modifier 57 would only be appropriate for major procedures with 90-day global periods.

41. **B. 99231–99233 (subsequent hospital care)** Subsequent hospital care codes cover follow-up visits to inpatients after the initial admission. Code 99231 covers low-level subsequent care, 99232 covers moderate, and 99233 covers high-complexity subsequent care. These codes are used for each day of follow-up care during the hospitalization.

42. **A. Risk is one of three MDM elements — it considers the risk of the management options selected, including drug therapy requiring intensive monitoring, decisions about hospitalization, and decisions about surgery** The risk of complications and/or morbidity or mortality is one of three MDM elements. It evaluates the risk associated with the management decisions made — not the risk of the patient's condition itself. High-risk management includes drug therapy requiring intensive monitoring, decisions for emergency surgery, and decisions for hospitalization.

Anesthesia

43. **D. 32 units** Base units (15) + Time units (240 minutes ÷ 15 minutes/unit = 16.0) + Modifying units (P3 = 1) = 32.0 total units. The calculation: 15 + 16 + 1 = 32. Open AAA repair has high base units reflecting the complexity of the anesthetic management.

44. **C. Modifier QZ** Modifier QZ indicates a CRNA providing anesthesia services without medical direction by an anesthesiologist. The CRNA independently manages the entire case. Modifier AA is for an anesthesiologist personally performing the service. Modifier QX is for a CRNA under medical direction. Modifier QY is for the anesthesiologist who is medically directing.

45. **B. None — no qualifying circumstances codes apply in this scenario** No qualifying circumstances are present: the patient is not under 1 year or over 70 (99100 does not apply), the procedure is not an emergency (99140 does not apply), total body hypothermia is not used (99116 does not apply), and controlled hypotension is not used (99135 does not apply). The P3 physical status adds modifying units separately from qualifying circumstances codes.

46. **A. The specific surgical procedure being performed — each anesthesia CPT code has an assigned base unit value reflecting the complexity of the anesthetic** Base units are fixed values assigned to each anesthesia CPT code. They reflect the inherent complexity of providing anesthesia for that specific surgical procedure. More complex surgeries (open-heart, neurosurgery) have higher base unit values than simpler procedures (hernia repair). Base units do not change based on time, patient condition, or geography.

Radiology

47. **D. MRI lumbar spine without contrast followed by with contrast (single combination code)** When an MRI is performed first without contrast and then repeated with contrast during the same session, a single combination code is reported. The combination code captures the complete dual-phase study. Two separate codes are not reported.

48. **C. Modifier 26** When a radiologist provides only the interpretation and report (professional component) for imaging performed at an outside facility, modifier 26 is appended. The urgent care center would bill the technical component. The radiologist was not present and did not supervise the technologist.

49. **A. Technetium-99m MDP (methylene diphosphonate)** Technetium-99m MDP is the most widely used radiotracer for bone scans. It accumulates in areas of increased bone metabolic activity (osteoblastic activity) — such as metastatic deposits, fractures, and infections. FDG is used for PET scans. Iodine-131 is used for thyroid imaging and therapy. Thallium-201 was historically used for cardiac perfusion imaging.

50. **B. Treatment planning (77261–77263)** Treatment planning codes cover the physician's design of the radiation treatment — including selection of treatment ports, modalities, beam arrangements, and the determination of the number and frequency of treatment sessions. The complexity level (simple, intermediate, complex) is based on the number of treatment areas and the complexity of the treatment setup.

51. **D. CTA is timed to capture images during the peak arterial or venous phase of contrast enhancement, providing detailed vascular imaging; standard CT provides general tissue contrast** CT angiography involves precisely timing the CT acquisition to coincide with peak contrast concentration in the target vessels. This provides high-resolution vascular imaging that can detect pulmonary emboli, arterial stenosis, and aneurysms. Standard CT with contrast provides general tissue enhancement without specific vascular timing.

52. **C. With separate PET and CT codes, unless a combination code exists in the specific clinical context** PET/CT coding depends on whether CPT provides a combination code for the specific clinical indication. In many contexts, the PET and CT components are reported separately — the PET code captures the metabolic imaging and the CT code captures the anatomical imaging. The coder must check current CPT guidelines for the specific combination applicable to the clinical scenario.

Pathology and Laboratory

53. **A. The hepatic function panel code plus the individual GGT code** GGT is not a component of the hepatic function panel. When all panel components are performed plus an additional test not in the panel, the panel code is reported plus the individual code for the additional test. The panel captures the bundled components, and the GGT code captures the additional analyte.

54. **B. Level IV (88305)** A thyroid lobectomy specimen is classified at Level IV surgical pathology (88305). Level IV covers most diagnostic surgical specimens requiring thorough pathological evaluation. The pathologist must evaluate the thyroid nodule for malignancy, assess margins, and characterize the histologic type.

55. **D. Both codes — the rapid antigen test and the NAAT are different tests with different methodologies and different CPT codes** The rapid influenza antigen test (87804) and the influenza NAAT (87502) are fundamentally different tests using different detection methods — antigen detection versus nucleic acid amplification. Both may be clinically indicated on the same date and are separately reportable with their own codes.

56. **C. With a separate physician interpretation code for the cytopathology** When a pathologist reviews abnormal Pap smear slides identified by the cytotechnologist, the physician's interpretation is coded separately from the initial screening. The screening code covers the cytotechnologist's work. The physician interpretation code captures the pathologist's definitive diagnostic review.

57. **B. In the Molecular Pathology/Genomic Sequencing Procedures section of the Pathology and Laboratory chapter** Molecular pathology codes and genomic sequencing procedure codes are located in their own subsection within the Pathology and Laboratory chapter of CPT. These codes cover gene-specific molecular testing, multigene panels, and next-generation sequencing of tumor specimens for targeted therapy guidance.

58. **A. 88342 × 1 for the first antibody plus 88341 × 3 for each additional antibody** IHC is coded per antibody per specimen. Code 88342 covers the first antibody, and code 88341 (add-on) covers each additional antibody. Four antibodies (ER, PR, HER2, Ki-67) require 88342 × 1 plus 88341 × 3.

Medicine

59. **D. With the initial therapeutic infusion code (96365) for the first hour plus the additional hour add-on code (96366)** Infliximab for Crohn's disease is a non-antineoplastic biologic agent. Non-antineoplastic agents use the therapeutic drug infusion codes (96365–96368), not the chemotherapy codes. The 2-hour infusion: 96365 for the first hour and 96366 for the second hour. Since this is the only IV service, the therapeutic infusion is the initial service.

60. **C. 90471 × 1 (adult injection-based code, first vaccine)** For an adult patient (age 22), even with physician counseling, the adult injection-based codes are used. Pediatric component-based codes (90460–90461) apply through age 18 with physician counseling. A single injection = 90471 × 1. The vaccine product code is reported separately.

61. **A. Cardiovascular diagnostic services** The tilt table test code is located in the Medicine section under cardiovascular diagnostic services. The tilt table test evaluates autonomic cardiovascular

responses to postural change and is used to diagnose neurocardiogenic (vasovagal) syncope, orthostatic hypotension, and POTS (postural orthostatic tachycardia syndrome).

62. **B. 2 units — 1 unit of 97110 and 1 unit of 97140 (total 30 minutes supports 2 timed units)** Total timed treatment is 30 minutes (22 + 8). At 15 minutes per unit, 30 minutes supports exactly 2 units. The 8 minutes of manual therapy meets the 8-minute minimum for 1 unit. The 22 minutes of therapeutic exercise supports 1 unit (with 7 remaining minutes that do not meet the 8-minute threshold for a third unit).

63. **D. With the intraoperative TEE code (93355) — a specific code for TEE performed during cardiac surgery** Intraoperative TEE performed during cardiac surgery has its own specific code (93355) that is distinct from diagnostic TEE codes used outside of surgery. This code captures the real-time monitoring and interpretation of valve function, ventricular function, and surgical results during the cardiac procedure.

64. **C. With a separate gonioscopy code (92020) in addition to the examination code** Gonioscopy (92020) is a special ophthalmological diagnostic service coded separately from the comprehensive eye examination. When both are performed during the same visit, both codes are reported. Gonioscopy is not bundled into the examination code.

Medical Terminology

65. **B. Visual examination using an instrument** The suffix "-scopy" means visual examination using an instrument. Common examples include colonoscopy (visual examination of the colon), bronchoscopy (visual examination of the bronchi), arthroscopy (visual examination of a joint), and endoscopy (visual examination within a body cavity). "-Ectomy" means surgical removal, "-plasty" means surgical repair.

66. **A. Ren/o or nephr/o** The combining forms "ren/o" and "nephr/o" both refer to the kidney. Common terms include renal (relating to the kidney), nephrectomy (removal of the kidney), nephritis (inflammation of the kidney), and nephrology (study of kidney diseases). "Cyst/o" refers to the bladder, "ureter/o" refers to the ureter, and "urethr/o" refers to the urethra.

67. **D. Many or excessive** The prefix "poly-" means many or excessive. Common terms include polyuria (excessive urination), polydipsia (excessive thirst), polycythemia (excessive red blood cells), and polyneuropathy (disease affecting many nerves). "Mono-" or "uni-" means one, "oligo-" means few, and "hemi-" means half.

68. **C. Rapid heart rate** Tachycardia means rapid heart rate, from the prefix "tachy-" (fast/rapid) and the root "cardia" (heart). A heart rate above 100 beats per minute in an adult is considered tachycardia. Bradycardia means slow heart rate. Arrhythmia means irregular heart rhythm.

Anatomy

69. **B. The anterior wall and interventricular septum** The left anterior descending (LAD) coronary artery supplies blood to the anterior wall of the left ventricle and the anterior two-thirds of the interventricular septum. The LAD is the most commonly diseased coronary artery and is often called the "widow-maker" because occlusion can cause a large anterior STEMI.

70. **A. The liver** The liver produces bile, which is essential for digestion and absorption of fats. Bile is produced continuously by hepatocytes and stored in the gallbladder until needed. When food enters the duodenum, the gallbladder contracts and releases bile through the common bile duct into the duodenum. The gallbladder stores bile but does not produce it.

71. **D. The gastrocnemius and soleus (calf muscles)** The Achilles tendon (calcaneal tendon) is the strongest and largest tendon in the body. It connects the gastrocnemius and soleus muscles (the calf muscles) to the calcaneus (heel bone). The Achilles tendon enables plantar flexion of the foot — essential for walking, running, and jumping. Achilles tendon rupture is a common sports injury.

72. **C. The vitreous cavity (the large space behind the lens)** The vitreous humor is a clear, gel-like substance that fills the vitreous cavity — the large space between the lens and the retina in the posterior segment of the eye. It maintains the eye's shape and transmits light to the retina. The anterior chamber contains aqueous humor (between cornea and iris). The posterior chamber contains aqueous humor (between iris and lens).

ICD-10-CM / Diagnosis Coding

73. **A. With a combination code from E11 specifying Type 2 diabetes with a foot ulcer, plus additional codes for the ulcer site/severity and the osteomyelitis** ICD-10-CM uses combination codes within the E11 category to capture both the diabetes type and the specific complication. The diabetic foot ulcer code links the diabetes to the ulcer. Additional codes from L97 specify the ulcer site and severity, and a code from M86 captures the osteomyelitis. Multiple codes work together to paint the complete clinical picture.

74. **B. The abdominal pain code as the first-listed diagnosis, with the liver cyst as a secondary code — the abdominal pain was the reason for the CT** The abdominal pain was the reason the CT was ordered and is the first-listed diagnosis. The incidentally discovered liver cyst is a secondary diagnosis that should be reported because it was documented by the physician. Incidental findings should be coded when documented, but the primary indication for the study remains the first-listed diagnosis.

75. **D. With a single code from J44 that specifies COPD with acute exacerbation** ICD-10-CM provides combination codes within category J44 that specify COPD with acute exacerbation. A single code captures both the underlying COPD and the acute exacerbation. Separate codes for COPD and exacerbation are not needed when a combination code exists.

76. **C. The anaphylaxis (manifestation) first, followed by the T code for adverse effect of penicillin** Under ICD-10-CM adverse effect coding, the manifestation (anaphylaxis) is sequenced first because it is the condition being treated. The T code for adverse effect of the correctly prescribed and administered drug (penicillin) is sequenced second. This sequencing order is the opposite of poisoning coding, where the T code comes first.

77. **B. Z38.00 (Single liveborn infant, delivered vaginally)** For a newborn born in the hospital, the Z38 code identifying the birth status is reported as the principal diagnosis. Z38.00 specifies a single liveborn infant delivered vaginally. This code is used only for the birth admission. Subsequent encounters for the infant would use health supervision codes.

HCPCS Level II

78. **A. 2 units** The HCPCS J-code for ketorolac specifies 15 mg per unit. The physician administered 30 mg: 30 mg ÷ 15 mg/unit = 2 units. Always verify the per-unit dosage in the specific J-code description.

79. **D. L0100–L0200 (within the L-code range for orthotics)** Cervical orthoses (cervical collars) are coded within the L-code range for orthotics. Specific codes exist for different types of cervical supports — soft, semi-rigid, and rigid. E-codes cover DME. J-codes cover drugs.

80. **C. The provider may bill the patient because a valid ABN was obtained** When modifier GA is appended (indicating a valid ABN was obtained) and Medicare denies the claim, the provider may bill the patient. The ABN informed the patient that Medicare might not cover the service, and the patient agreed to accept financial responsibility before the service was rendered.

Coding Guidelines

81. **B. It is not reported separately; it is bundled into the surgical EGD code** Diagnostic EGD is bundled into surgical EGD when both are performed during the same session. The injection therapy for hemostasis is a surgical EGD procedure — the diagnostic examination is included. The standard endoscopic hierarchy applies.

82. **A. Modifier 25** Modifier 25 is appended to the E/M code when a significant, separately identifiable E/M service is performed on the same day as a minor procedure (10-day global period). The decision to perform a minor procedure uses modifier 25, not modifier 57 (which is reserved for major procedures with 90-day global periods).

83. **D. To identify code pairs where one code is a component of the other and should not typically be reported together on the same date by the same provider** NCCI PTP edits identify code pairs where one service is a component of the other and should not typically be billed separately. The Column 1 code is the comprehensive service, and the Column 2 code is the component service. The modifier indicator determines whether a modifier can be used to bypass the edit when clinically justified.

84. **C. The global period concept does not apply to this code — it is not subject to global period rules** A global period of "XXX" indicates the global period concept does not apply to the code. These are typically E/M services, laboratory tests, and other services where the concept of pre/postoperative care bundled into a surgical package is not applicable.

85. **B. When the same physician repeats the same procedure on the same day** Modifier 76 is used when the same physician performs the same procedure again on the same day. This tells the payer that the repeat was medically necessary and not a duplicate billing error. Modifier 77 is used when a different physician repeats the procedure.

86. **A. The common portion of the code description shared by indented codes appears before the semicolon; the unique portion appears after the semicolon in each indented code** The semicolon in CPT code descriptions is a formatting convention. The text before the semicolon is the common portion shared by the parent code and all indented codes beneath it. Each indented code adds its unique text after the semicolon to complete the code description. Understanding this convention is essential for reading CPT code descriptions correctly.

87. **D. With one unit of the inherently bilateral BSO code — no laterality modifier is needed because the code description already specifies bilateral** When a CPT code description specifically states bilateral salpingo-oophorectomy, the code is inherently bilateral. No modifier 50 or RT/LT modifiers are needed. A single unit of the code captures the complete bilateral procedure.

Compliance and Regulatory

88. **C. Clinical laboratory services** Clinical laboratory services are one of the specifically enumerated "designated health services" (DHS) under the Stark Law. Other DHS include physical therapy, occupational therapy, radiology, radiation therapy, DME, home health, outpatient prescription drugs, and inpatient/outpatient hospital services. The self-referral prohibition applies only to DHS.

89. **A. The right to file a qui tam lawsuit on behalf of the government and potentially receive a percentage of any recovery** Under the False Claims Act, a whistleblower (relator) may file a qui tam lawsuit on behalf of the government against an entity submitting false claims. If the government recovers funds, the relator may receive 15–30% of the recovery depending on whether the government intervenes in the case. This incentivizes fraud reporting.

90. **B. The Medicare Administrative Contractor (MAC)** MACs are private companies contracted by CMS to process and pay Medicare claims within specific geographic jurisdictions. MACs handle claims processing, provider enrollment, appeals, and may develop Local Coverage Determinations (LCDs). Different MACs serve different regions for Part A and Part B claims.

Cases — Integrated Coding Scenarios

91. **D. Soft tissue tumor excision codes (subcutaneous) in the musculoskeletal section** A subcutaneous lipoma is a soft tissue tumor located beneath the skin. The excision is coded using

the soft tissue tumor excision codes in the musculoskeletal section — not the skin excision codes. The anatomical depth of the tumor (subcutaneous vs. subfascial) determines which code range is used.

92. **C. Yes; intermediate and complex closures may be reported separately from subcutaneous tumor excision codes when not included in the excision code** For soft tissue tumor excisions in the musculoskeletal section, intermediate and complex wound closures may be reported separately because the closure is not inherently included in the tumor excision code. Simple closure would be included. The intermediate repair represents additional work.

93. **B. Yes; the diagnostic catheterization/angiography and the PCI stent placement are separately reportable with appropriate modifiers if performed for independent diagnostic purposes** When a diagnostic left heart catheterization with coronary angiography is performed for independent diagnostic purposes (not solely as the approach for the PCI), it may be separately reported from the PCI stent placement. The diagnostic study provided clinical information that guided the interventional decision. Both are reported with appropriate modifiers.

94. **A. I21 (Acute myocardial infarction)** Acute STEMI is coded using category I21. The specific code within I21 identifies the type (ST elevation vs. non-ST elevation) and the wall involved. I25 covers chronic ischemic heart disease. I69 covers sequelae of cerebrovascular disease. I10 covers essential hypertension.

95. **D. The carboplatin chemotherapy infusion** The infusion hierarchy places chemotherapy at the highest level. The carboplatin infusion is the initial service. The paclitaxel (sequential chemotherapy) is reported with the sequential add-on code. The hydration is the lowest-priority service.

96. **C. With the sequential chemotherapy infusion add-on code (96417)** Paclitaxel is a different chemotherapy drug infused sequentially through the same line. Code 96417 (sequential chemotherapy infusion of a new substance) is the appropriate add-on code. A second initial infusion code cannot be reported.

97. **A. 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.

98. **B. Modifier 78** The wound infection is a complication 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) is appended. Modifier 58 is for planned procedures. Modifier 79 is for unrelated procedures.

99. **D. The diagnostic colonoscopy code (45378)** When a colonoscopy is performed and no surgical procedures are needed — no abnormalities found — only the diagnostic colonoscopy code is reported. The scope reached the cecum (complete study), and no interventions were required.

100. **C. Z12.11 (Encounter for screening for malignant neoplasm of colon)** The patient presented for a routine screening colonoscopy with no symptoms and no history. Z12.11 is the appropriate first-listed diagnosis. Since no abnormalities were found, no additional pathology codes are needed.