CHAPTER 6A
ICD-9-CM Coding

INTRODUCTION
This chapter familiarizes students with coding diseases and conditions using ICD-9-CM. Students will code diagnostic statements and case studies by applying ICD-9-CM coding conventions, principles, and rules.

OBJECTIVES
At the conclusion of this assignment, the student should be able to:
1. Identify the condition in a diagnostic statement that would be considered the main term in the ICD-9-CM Index to Diseases.
2. Locate main terms in the ICD-9-CM Index to Diseases.

INSTRUCTIONS
In each of the following diagnostic statements, underline the condition that would be considered the main term in the ICD-9-CM Index to Diseases.
1. Acute confusion
2. Tension headache
3. Brain stem infarction
4. Allergic bronchitis
5. Bronchial croup
6. Newborn anoxia
7. Acute abdominal cramps
8. Insect bite
9. Radiation sickness
10. Car sickness

ASSIGNMENT 6A.2 Basic Coding

OBJECTIVES
At the conclusion of this assignment, the student should be able to:
1. Locate main terms in the ICD-9-CM Index to Diseases.
2. Identify codes in the ICD-9-CM Index to Diseases and verify them in the Tabular List of Diseases.
### Instructions

Assign codes to the following conditions using the ICD-9-CM Index to Diseases. Be sure to verify the code(s) in the ICD-9-CM Tabular List of Diseases.

1. Herpes zoster
2. Parkinson’s disease
3. Maxillary sinusitis
4. Pneumonia with influenza
5. Hiatal hernia
6. Skene’s gland abscess
7. Skin eruption due to chemical product
8. Infectional erythema
9. Polydactyly of fingers
10. Blindness due to injury

### Assignment 6A.3 Multiple Coding

### Objectives

At the conclusion of this assignment, the student should be able to:

1. Assign ICD-9-CM codes to conditions, using the Index to Diseases and Tabular List of Diseases.
2. Sequence codes in proper order according to ICD-9-CM coding principles and rules.

### Instructions

Assign codes to each condition, and sequence the codes in proper order according to ICD-9-CM coding principles and rules (e.g., manifestation coding rule). Be sure to verify the code(s) in the ICD-9-CM Tabular List of Diseases.

1. Parasitic infestation of eyelid due to pediculus capitis
2. Post-infectious encephalitis due to measles (20 years ago)
3. Peripheral neuropathy in hyperthyroidism
4. Cerebral degeneration due to Fabry’s disease
5. Myotonic cataract due to Thomsen’s disease
6. Acute and chronic conjunctivitis
7. Xanthelasma of the eyelid due to lipoprotein deficiency
8. Cholesteatoma, middle ear and attic
9. Varicose vein with inflammation and ulcer due to pregnancy, patient at 30 weeks
10. Psoriatic arthropathy and parapsoriasis

### Assignment 6A.4 Combination Coding

### Objectives

At the conclusion of this assignment, the student should be able to:

1. Use the Index to Diseases and Tabular List of Diseases to locate ICD-9-CM codes.
2. Interpret ICD-9-CM principles and rules to assign an appropriate combination code.
INSTRUCTIONS

Assign a combination code to each diagnostic statement below, using the ICD-9-CM Index to Diseases. Be sure to verify the code(s) in the ICD-9-CM Tabular List of Diseases.

1. Diabetes with ketoacidosis
2. Detached retina with giant tear
3. Rheumatic fever with heart involvement
4. Acute lung edema with heart disease
5. Atherosclerosis of the extremities with intermittent claudication
6. Emphysema with acute and chronic bronchitis
7. Acute gastric ulcer with perforation and hemorrhage
8. Diverticulosis with diverticulitis
9. Acute and chronic cholecystitis
10. Fractured fibula (closed) with tibia

ASSIGNMENT 6A.5 Coding Hypertension

OBJECTIVES

At the conclusion of this assignment, the student should be able to:
1. Interpret the ICD-9-CM hypertension table.
2. Assign ICD-9-CM codes to diagnostic statements that document hypertensive disease.

INSTRUCTIONS

Code the following diagnostic statements using the Hypertension table in the ICD-9-CM Index to Diseases. Be sure to verify the code(s) using the ICD-9-CM Tabular List of Diseases.

1. Hypertension, benign
2. Hypertension due to brain tumor, unspecified
3. Malignant hypertension with congestive heart failure
4. Newborn affected by maternal hypertension
5. Hypertensive disease due to pheochromocytoma
6. Chronic venous hypertension due to deep vein thrombosis
7. Malignant labile hypertension
8. Benign renovascular hypertension
9. Secondary hypertension due to Cushing's disease
10. Necrotizing hypertension

ASSIGNMENT 6A.6 Coding Neoplasms

OBJECTIVES

At the conclusion of this assignment, the student should be able to:
1. Interpret the ICD-9-CM Neoplasm table.
2. Assign ICD-9-CM codes to diagnostic statements that document neoplastic disease.
INSTRUCTIONS

Code the following diagnostic statements using the Neoplasm table in the ICD-9-CM Index to Diseases. Be sure to verify the code(s) in the ICD-9-CM Tabular List of Diseases.

1. Carcinoma of the right palatine tonsil
2. Metastatic ovarian cancer to the liver
3. Stomach cancer, primary site
4. Lipoma of muscle of forearm
5. Osteosarcoma of the left femoral head
6. Neurofibromatosis
7. Hodgkin’s sarcoma
8. Chronic lymphocytic leukemia
9. Intrathoracic reticulosarcoma
10. Adenocarcinoma of the rectum and anus

ASSIGNMENT 6A.7 Assigning V Codes (Factors Influencing Health Status and Contact with Health Services)

OBJECTIVES

At the conclusion of this assignment, the student should be able to:
1. Interpret content in the V code supplementary classification of ICD-9-CM.
2. Assign ICD-9-CM V codes to diagnostic statements that document factors influencing health status and contact with health services.

INSTRUCTIONS

Code the following diagnostic statements using the ICD-9-CM Index to Diseases. Be sure to verify the code(s) in the ICD-9-CM supplemental classification for V codes (located in the Tabular List of Diseases). (Assign just the V code to each statement.)

1. Exercise counseling
2. Personal history of alcoholism
3. Counseling for parent-child conflict
4. Screening, cancer, unspecified
5. Follow-up exam, postsurgery
6. Health check, adult
7. Routine child health check up
8. Fitting of artificial eye
9. Flu shot (Vaccination)
10. Family history of breast cancer
OBJECTIVES
At the conclusion of this assignment, the student should be able to:
1. Use the Index to Diseases and Tabular List of Diseases to locate ICD-9-CM codes.
2. Interpret ICD-9-CM principles and rules to assign appropriate codes to burns, fractures, and late effects.

INSTRUCTIONS
Code the following diagnostic statements using the ICD-9-CM Index to Diseases. Be sure to verify the code(s) in the ICD-9-CM Tabular List of Diseases. Do not assign E codes.

1. Second-degree burn, right upper arm and shoulder
2. Burns of the mouth, pharynx, and esophagus
3. Third-degree burn, trunk
4. Open fracture of coccyx with other spinal cord injury
5. Bennett's fracture, closed
6. Fifth cervical vertebra fracture, closed
7. Scarring due to third-degree burn of left arm
8. Hemiplegia due to old cerebrovascular accident (CVA)
9. Arm injury due to car accident 10 years ago
10. Brain damage due to old cerebral abscess

OBJECTIVES
At the conclusion of this assignment, the student should be able to:
1. Use the Index to External Causes of Injury and Poisoning in ICD-9-CM.
2. Interpret ICD-9-CM principles and rules to assign appropriate codes for external causes of injury and poisonings.

INSTRUCTIONS
Code the following diagnostic statements using the ICD-9-CM Index to Diseases and the Index to External Causes. Be sure to verify the code(s) in the ICD-9-CM supplemental classification for E codes (located in the Tabular List of Diseases). Assign the E code only to each statement.

1. Assault by hanging and strangulation
2. Brain damage due to allergic reaction to penicillin
3. Self-inflicted injury by crashing of motor vehicle, highway
4. Exposure to noise at nightclub
5. Struck accidentally by falling rock at quarry
6. Dog bite
7. Accidental poisoning from shellfish at restaurant
8. Foreign object left in body during surgical operation
9. Fall from ladder at home
10. Accident caused by hunting rifle at rifle range
OBJECTIVES

At the conclusion of this assignment, the student should be able to:
1. Use the Index to Procedures and Tabular List of Procedures to locate ICD-9-CM codes.
2. Interpret ICD-9-CM principles and rules to assign appropriate codes to procedures.

INSTRUCTIONS

Code the following procedural statements using the ICD-9-CM Index to Procedures. Be sure to verify the code(s) in the ICD-9-CM Tabular List of Procedures.

1. Culdotomy (female) _______________
2. Cataract extraction with lens implant _______________
3. Insertion of Swan-Ganz catheter _______________
4. Jaboulay operation _______________
5. Esophagogastroduodenoscopy (EGD) with closed biopsy _______________
6. Insertion of vessel-to-vessel cannula (arteriovenous shunt) for renal dialysis; renal dialysis also performed during encounter _______________
7. Insertion of bilateral myringotomy tubes _______________
8. Extracorporeal shock wave lithotripsy (ESWL) of staghorn calculus, left kidney _______________
9. Forceps delivery with partial breech extraction _______________
10. Repair of claw toe by tendon lengthening _______________

OBJECTIVES

At the conclusion of this assignment, the student should be able to:
1. Identify diagnoses in case studies, and locate codes in the ICD-9-CM Index to Diseases.
2. Interpret ICD-9-CM principles and rules to assign appropriate diagnosis codes.

INSTRUCTIONS

Code the following case studies using the ICD-9-CM Index to Diseases. Be sure to verify the code(s) in the ICD-9-CM Tabular List of Diseases. Assign the diagnosis code only for each case study. Do not assign procedure or service codes.

1. PATIENT CASE #1

HISTORY: The patient is an 87-year-old white male who has coronary artery disease, systolic hypertension, exogenous obesity, and peripheral venous insufficiency. He recently had a kidney stone removed. He claims that his only symptom of the stone was persistent back pain. Since the surgery, he has been doing fairly well.

PHYSICAL EXAMINATION: The exam showed a well-developed, obese male who does not appear to be in any distress, but has considerable problems with mobility and uses a cane to ambulate. VITAL SIGNS: Blood pressure today is 158/86, pulse is 80 per minute,
and weight is 204 pounds. He has no pallor. He has rather pronounced shaking of the arms, which he claims is not new. NECK: No jugular venous distention. HEART: Very irregular. LUNGS: Clear. EXTREMITIES: There is edema of both legs.

ASSESSMENT:
1. Coronary artery disease
2. Exogenous obesity
3. Degenerative joint disease involving multiple joints
4. History of congestive heart failure
5. Atrial fibrillation
6. History of myocardial infarction

PLAN: The patient will return to the clinic in four months.

2. PATIENT CASE #2

S: No change in gait instability. When the patient had to lie quietly with neck extended, gait instability was much worse for 20 to 30 minutes after the test. Medications: Warfarin, digoxin, verapamil.


A: Gait disorder with central/peripheral components in the context of cervical spondylosis and peripheral neuropathy.

P: Have patient obtain a B12/folate test. Reassess in one month.

3. PATIENT CASE #3

CHIEF COMPLAINT: Feels tired all the time and has no energy.

HISTORY OF PRESENT ILLNESS: The patient is an 80-year-old man with the following diagnoses: hyperlipidemia, coronary artery disease, cerebrovascular disease, esophageal reflux, and anxiety with depression. The patient was last seen in July of this year for the above problems. The patient is new to our clinic and is requesting follow-up for the fatigue and lack of energy, in addition to the problems noted above.

PHYSICAL EXAMINATION: The patient is 57 inches tall and weighs 184 pounds. Blood pressure is 122/70. Pulse is 60 per minute. Respiratory rate is 18 per minute. HEENT: Basically within normal limits. The patient wears glasses. Hearing aids are present bilaterally. NECK: Supple. Trachea is midline. LUNGS: Clear to auscultation and percussion. HEART: Regular, without murmur or ectopic beats noted. ABDOMEN: Slightly obese and nontender. Bowel sounds were normal. EXTREMITIES: The lower extremity pulses were present. He has good circulation with some very mild edema around the ankles.

ASSESSMENT:
1. Hyperlipidemia
2. Coronary artery disease
3. Cerebrovascular disease
4. Esophageal reflux
5. Anxiety with depression

**PLAN:** The patient will be referred to Psychiatry. I will see him again in three months.

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### 4. PATIENT CASE #4

**HISTORY OF PRESENT ILLNESS:** The patient is an 88-year-old veteran with chronic constipation, mild dementia, and positive PPD test with negative x-ray. He complains of soreness around the anal region and incontinence of stool and sometimes urine.

**PHYSICAL EXAMINATION:** The patient is alert and well-oriented today. Vital signs as per the nursing staff. CHEST: Clear. HEART: Normal sinus rhythm. ABDOMEN: Soft and benign. RECTAL: The anal area and surrounding perianal area is erythematous and there is a tear going from the rectum to the anal region. Slight oozing of blood was noted. Rectal exam was done, and I could not feel any masses in the rectum; however, the exam was painful for the patient.

**ASSESSMENT:** Anal tear with hemorrhoids.

**PLAN:** Sitz bath. Protective ointment around the area. Surgical consult. Give donut ring to the patient to keep pressure off the area.

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### 5. PATIENT CASE #5

**S:** The patient is still having pain in the right hip area. She has a new complaint of pain and pressure in the right orbital area.

**O:** Blood pressure today was 132/82. Pulse was 76 and regular. Temperature was 100.6 degrees. Pain and tenderness in the right frontal sinus region. The eyes appear slightly puffy. Examination of the right hip reveals point tenderness in the region of the head of the femur.

**A:** Sinus pain. Right hip pain; rule out trochanteric bursitis.

**P:** The patient will be sent for a sinus x-ray and right hip x-ray. I suspect the patient has a sinus infection due to the symptoms and fever. If the x-ray of the hip does not reveal any other pathology, will offer cortisone injection to the patient for relief of the right hip pain.

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**ASSIGNMENT 6A.12**

**OBJECTIVES**

At the conclusion of this assignment, the student should be able to:

1. Locate correct ICD-9-CM codes using encoder software.
2. Recognize ICD-9-CM coding conventions.
OVERVIEW
ICD-9-CM is the current coding classification in use in the United States for diagnostic coding and hospital-based procedural coding. Students new to coding typically begin with learning and using a coding manual. However, there are various Web sites that can assist in code assignment. One of these sites is www.ICD9coding.com. This site allows the user to access encoder software for the application of ICD-9-CM codes.

INSTRUCTIONS
Go to the Web site for encoding software at www.ICD9coding.com to access free coding software. Review the diagnoses below, and provide your answer in the space provided.

1. Pneumonia, candidiasis of lung
2. Histoplasmosis, pneumonia NOS
3. Pneumonia, viral NEC
4. Anemia, iron deficiency, unspecified
5. Otitis media, nonsuppurative with stenosis of the eustachian tube
6. Hypertension, essential, benign
7. Diabetes, with ketoacidosis, type II, not stated as uncontrolled
8. Hyperlipidemia, screening
9. Abdominal pain, generalized
10. Sinusitis, chronic, pansinusitis

ASSIGNMENT 6A.13 Multiple Choice Review

1. Codes in slanted square brackets are ______ of other conditions.
   a. eponyms  
   b. manifestations
   c. modifiers  
   d. subterms

2. When coding a late effect, code the ______ first.
   a. acute disease  
   b. main symptom
   c. original cause
   d. residual condition

3. Which is an example of an outpatient setting?
   a. emergency department
   b. nursing home
   c. rehabilitation hospital
   d. residential care facility

4. A concurrent condition that exists with the first-listed diagnosis is a
   a. comorbidity.
   b. complication.
   c. manifestation.
   d. symptom.

5. If a patient develops bleeding at the site of operative wound closure, this is a(n)
   a. comorbidity.
   b. complication.
   c. encounter.
   d. manifestation.
6. A 45-year-old patient presents with polyuria and polydipsia. The physician documents “suspected diabetes mellitus.” Which would be reported by the physician’s office on the CMS-1500 claim?
   a. diabetes mellitus
   b. polydipsia only
   c. polyuria only
   d. polyuria and polydipsia

7. On May 1, a patient presents with a blood pressure of 150/90 and is asked to rest for 10 minutes. Upon reevaluation, the blood pressure is 130/80, and the patient is asked to return to the office on May 15 to rule out hypertension. Which would be reported by the physician’s office on the CMS-1500 claim submitted for the May 1 office visit?
   a. benign hypertension
   b. elevated blood pressure
   c. malignant hypertension
   d. rule out hypertension

8. A patient presents with wheezing and a productive cough. The physician records “probable bronchitis, pending chest x-ray results.” X-ray results confirms bronchitis. During this visit, the patient’s glucose is checked to determine the status of his diabetes. The patient reports that his previous indigestion and diarrhea are currently not a problem. Which would be reported by the physician’s office on the CMS-1500 claim?
   a. bronchitis, diabetes mellitus
   b. bronchitis, diabetes mellitus, indigestion, diarrhea
   c. bronchitis, indigestion, diarrhea
   d. productive cough

9. A patient presents complaining of tenderness in the left breast and a family history of breast cancer. Upon examination, the physician discovers a small lump in the left breast. The patient is referred to a breast surgeon and x-ray for mammogram. The physician documents “questionable breast cancer of the left breast.” Which would be reported by the physician’s office on the CMS-1500 claim?
   a. breast cancer
   b. breast lump; breast pain; family history of breast cancer
   c. breast pain; breast cancer
   d. personal history of breast cancer

10. A 19-year-old patient is brought to the emergency room from a fraternity party because of nausea, vomiting, and lethargy. The diagnosis is alcohol poisoning. Which E code should be reported for “alcohol poisoning”?  
    a. accident
    b. assault
    c. therapeutic use
    d. undetermined

11. What general effect will reporting E codes have on CMS-1500 claims processing?
    a. The claim processing will be expedited because the circumstances related to an injury are indicated.
    b. The claim will automatically be denied; the claim should be paid by another payer if an E code is present.
    c. The claim will be automatically paid without difficulty because a higher level of detail has been included.
    d. The provider will receive a higher reimbursement amount due to the specificity of the information on the claim.

12. A neoplasm that is considered life-threatening and has spread outside its margins of origin is called
    a. benign.
    b. in situ.
    c. malignant.
    d. precancerous.
13. ICD-9-CM Index to Diseases has this format indented below the main term. This format of the classification provides quality terms related to the diagnostic information related to the code that is being assigned. What is this format called?
   a. eponyms  
   b. essential modifiers  
   c. nonessential modifiers  
   d. notes

14. The condition “Lyme disease” is an example of a(n)
   a. category.  
   b. eponym.  
   c. manifestation.  
   d. modifier.

15. Four-digit disease codes in ICD-9-CM are called ____________ codes.
   a. category  
   b. classification  
   c. subcategory  
   d. subclassification

16. A severe form of hypertension with vascular damage and a diastolic reading of 130 mm Hg or greater is called ____________ hypertension.
   a. benign  
   b. chronic  
   c. malignant  
   d. unspecified

17. When assigning an ICD-9-CM code from the Neoplasm table, which is referenced first?
   a. anatomic site  
   b. behavior  
   c. category  
   d. specificity

18. The appearance of a pathologic condition caused by ingestion or exposure to a chemical substance properly administered is considered a(n)
   a. accident.  
   b. adverse effect.  
   c. assault.  
   d. poisoning.

19. Begin the search process for an ICD-9-CM diagnosis code by using the ____________.
   a. DRG grouper (software)  
   b. index to diseases  
   c. table of external effects  
   d. tabular list of diseases

20. When coding late effects, the first code reported is the residual condition and the second code is the
   a. etiology.  
   b. manifestation.  
   c. sign.  
   d. symptom.