Learning Outcomes

**Cognitive Domain**
1. Spell and define the key terms
2. Describe the relationship between coding and reimbursement
3. Name and describe the coding system used to describe diseases, injuries, and other reasons for encounters with a medical provider
4. Explain the format of the ICD-9-CM
5. Give four examples of ways E codes are used
6. Describe how to use the most current diagnostic coding classification system
7. Describe the ICD-10-CM version and its differences from ICD-9

**Psychomotor Domain**
1. Perform diagnostic coding (Procedure 11-1)
2. Utilize medical necessity guidelines (Procedure 11-1)

**Affective Domain**
1. Work with physician to achieve the maximum reimbursement
2. Utilize tactful communication skills with medical providers to ensure accurate code selection.

**ABHES Competencies**
1. Apply third-party guidelines
2. Perform diagnostic and procedural coding
3. Comply with federal, state, and local health laws and regulations
MULTIPLE CHOICE

1. Which most accurately states the purpose of coding?
   a. Coding assists patients in accessing insurance databases.
   b. Coding determines the reimbursement of medical fees.
   c. Coding is used to track a physician's payments.
   d. Coding is used to index patients' claims forms.
   e. Coding identifies patients in a database.

2. A patient signs an advance beneficiary notice (ABN) to:
   a. consent to medically necessary procedures.
   b. assign payment to Medicare.
   c. accept responsibility for payment.
   d. assign responsibility for payment to a beneficiary.
   e. consent to a medically unnecessary procedure.

3. The content of the ICD-9-CM and ICD-10-CM is a(n):
   a. classification of diseases and list of procedures.
   b. statistical grouping of trends in diseases.
   c. clinical modification of codes used by hospitals.
   d. index of diseases.
   e. international document for monitoring coding.

4. Which is true of Volume 3 of the ICD-9-CM and ICD-10-PCS?
   a. It is organized by location on the patient's body.
   b. It is used to code mostly outpatient procedures.
   c. It is an alphabetical listing of diseases.
   d. It is used by hospitals to report procedures and services.
   e. It is an index of Volumes 1 and 2.

5. Physicians' services are reported:
   a. on the UB-04.
   b. on the CMS-1500.
   c. on the uniform bill.
   d. on the advance beneficiary notice.
   e. on bills from health institutions.

6. Which of these would not be considered outpatient coding?
   a. Hospital same-day surgery
   b. Hour-long testing in a hospital CAT scan
   c. Treatment in the emergency room
   d. Observation status in a hospital
   e. Meals and testing during a hospital stay

7. In ICD-10-CM and Volume 1 of the ICD-9-CM, chapters are grouped:
   a. by alphabetic ordering of diseases and injuries.
   b. alphabetically by eponym.
   c. by location in the body.
   d. by etiology and anatomic system.
   e. by surgical specialty.

8. The fourth and fifth digits in an ICD-9-CM code indicate the:
   a. anatomical location where a procedure was performed.
   b. number of times a test was executed.
   c. higher definitions of a code.
   d. code for the patient's general disease.
   e. traumatic origins of a disease (i.e., injury, deliberate violence).

9. An ICD-9-CM V-code or a code from Chapter 20 in ICD-10-CM might indicate a(n):
   a. immunization.
   b. poisoning.
   c. accident.
   d. diagnosis.
   e. treatment.

10. ICD-9-CM V-codes or Chapter 20 in ICD-10-CM are used:
    a. for outpatient coding.
    b. when reimbursement is not needed.
    c. when a patient is not sick.
    d. to indicate testing for HIV.
    e. for infectious diseases.

11. What is the purpose of ICD-9-CM E-codes?
    a. They code for immunizations and other preventive procedures.
    b. They are used to code medical testing before a diagnosis.
    c. They assist insurance companies in making reimbursements.
    d. They indicate why a patient has an injury or poisoning.
    e. They indicate if a procedure was inpatient or outpatient.
12. How is Volume 2 of the ICD-9-CM different from Volume 1?
   a. Volume 2 contains diagnostic terms that are not used in Volume 1.
   b. Volume 2 is organized into 17 chapters rather than 3 sections.
   c. Volume 2 does not contain E-codes, but Volume 1 does.
   e. Volume 2 provides information about the fourth and fifth digits of a code.

13. After finding a code in Volume 2 in ICD-9-CM, you should:
   a. record the code on the CMS-1500.
   b. consult Volume 3 for subordinate terms.
   c. cross-reference the code with Volume 1.
   d. indicate if the code is inpatient or outpatient.
   e. record the code on the UB-04.

14. Volume 3 of the ICD-9-CM is organized:
   a. by disease.
   b. by anatomy.
   c. into 17 chapters.
   d. into three sections.
   e. by surgical specialty.

15. One example of an eponym is:
   a. Crohn disease.
   b. bacterial meningitis.
   c. influenza virus.
   d. pruritus.
   e. pneumonia.

16. What is the first step to locating a diagnostic code?
   a. Determine where the diagnosis occurs in the body.
   b. Choose the main term within the diagnostic statement.
   c. Begin looking up the diagnosis in the tabular index.
   d. Consult the CMS-1500 for reimbursement codes.
   e. Use Volume 3 of the ICD-9-CM to find the disease.

17. Which code is listed first on a CMS-1500?
   a. A reasonable second opinion
   b. Relevant laboratory work
   c. Diagnostic tests
   d. The symptoms of an illness
   e. The primary diagnosis

18. How do you code for late effects?
   a. Code for the treatment of the disease that causes late effects.
   b. Code for the disease that is causing the current condition.
   c. First code for the current condition, and then list the cause.
   d. Only code for the current condition.
   e. Only code for the cause of the current condition.

19. You should not code for a brain tumor:
   a. when the patient comes in for an MRI.
   b. after the tumor is confirmed on an MRI.
   c. when the diagnosed patient comes in for treatment.
   d. any time after the patient has been diagnosed.
   e. when the patient seeks specialist care.

MATCHING

Match the following key terms to their definitions.

Grade: __________

<table>
<thead>
<tr>
<th>Key Terms</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. _____ advance beneficiary notice</td>
<td>a. ICD-9-CM codes indicating the external causes of injuries and poisoning</td>
</tr>
<tr>
<td>21. _____ audits</td>
<td>b. conditions that result from another condition</td>
</tr>
<tr>
<td>22. _____ conventions</td>
<td>c. general notes, symbols, typeface, format, and punctuation that direct and</td>
</tr>
<tr>
<td>23. _____ cross-reference</td>
<td>guide a coder to the most accurate diagnosis code</td>
</tr>
<tr>
<td>24. _____ E-codes</td>
<td>d. the condition or chief complaint that brings a person to a medical facility for treatment</td>
</tr>
<tr>
<td>25. _____ eponym</td>
<td>e. a procedure or service that would have been performed by any reasonable physician under the same or similar circumstances</td>
</tr>
<tr>
<td>26. _____ etiology</td>
<td>f. a document that informs covered patients that Medicare may not cover a certain service and the patient will be responsible for the bill</td>
</tr>
<tr>
<td>27. _____ inpatient</td>
<td>g. a word based on or derived from a person’s name</td>
</tr>
<tr>
<td>28. _____ International Classification of Diseases, Clinical Modification</td>
<td>h. ICD-9-CM codes assigned to patients who receive service but have no illness, injury, or disorder</td>
</tr>
</tbody>
</table>
### Key Terms Definitions

32. **outpatient**
   - i. the billable tasks performed by a physician

33. **primary diagnosis**
   - j. refers to a medical setting in which patients are admitted for diagnostic, radiographic, or treatment purposes

34. **service**
   - k. an investigation performed by government, managed health care companies, and health care organizations to determine compliance and to detect fraud

35. **specificity**
   - l. a system for transforming verbal descriptions of disease, injuries, conditions, and procedures to numeric codes

36. **V-codes**
   - m. refers to the cause of disease

### SHORT ANSWER

37. Why is the ICD-10-PCS not used at a hospital’s emergency department?

   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________

38. What is the title of the new edition of the ICD manuals?

   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________

39. You are reading a patient’s chart and notice that it is marked with an E-code. However, the patient has experienced no physical injuries. Why might an E-code be used in this situation?

   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________

40. You ask a veteran medical assistant for advice on coding, especially how to go about finding a diagnosis with more than one word. Her response is, “Find the condition, not the location.” What does she mean by this?

   __________________________________________________________________________
   __________________________________________________________________________
   __________________________________________________________________________
41. What is listed first in the diagnosis section of the CMS-1500? What does it represent?

42. If a construction worker falls from a ladder and suffers an ankle fracture, what supplemental code is used for ICD-9-CM? What supplemental code is used for ICD10-CM?

43. When would you use a supplemental ICD-9-CM V-code for laboratory examination?

44. What should you do after finding a seemingly appropriate code in the alphabetic listing of ICD-10-CM?

45. If you do not know the medical terminology for a diagnosis for a common problem, what would be a good first plan of action?

46. What is the purpose of additional digits often appended to categories?
ACTIVE LEARNING

47. A reasonable and capable physician believes that a patient needs a chest x-ray to rule out pneumonia. Does the procedure meet the grounds for medical necessity? Why? Why not?

48. A patient comes in complaining of chest pain, and tests are ordered to rule out myocardial infarction. When you enter the codes for this patient encounter, you code that the patient has “acute myocardial infarction.” Why would it be better to code this encounter “chest pain”?

49. George Cregan has been seen by the physician for controlled non–insulin-dependent type 2 diabetes mellitus for about 10 years. While being seen for a routine check of his blood sugar, he complains of numbness and tingling in his left lower leg and foot. An x-ray of both legs is performed because poor circulation in the extremities can be a complication of diabetes. The x-ray confirms the diagnosis of peripheral neuropathy. Which diagnosis code should be listed with the office visit? Which code indicates the reason for the x-ray? Which code should be placed on the CMA-1500 first as the primary diagnosis or reason for the visit?

Determine the main term for the following multiple-word diagnoses.

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Main Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>50. Chronic fatigue syndrome</td>
<td></td>
</tr>
<tr>
<td>51. Severe acute respiratory syndrome</td>
<td></td>
</tr>
<tr>
<td>52. Hemorrhagic encephalitis</td>
<td></td>
</tr>
<tr>
<td>53. Acute fulminating multiple sclerosis</td>
<td></td>
</tr>
<tr>
<td>54. Fractured left tibia</td>
<td></td>
</tr>
<tr>
<td>55. Breast cyst</td>
<td></td>
</tr>
</tbody>
</table>
56. Review the list of circumstances below and place a check mark to indicate whether a patient would be forced, given the circumstance, to sign an ABN. All of the patients below are covered by Medicare.

<table>
<thead>
<tr>
<th>Circumstance</th>
<th>ABN</th>
<th>No ABN</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The patient wishes to receive a service or procedure that is not covered by Medicare.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. The patient is undergoing a regularly scheduled checkup.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. The patient demands to be tested for an illness that the physician considers an impossibility.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. The patient has a badly sprained ankle and wishes to be treated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. The patient is undergoing x-ray imaging per order of a physician.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

57. When it comes to coding, it makes a difference if the patient is seen in an inpatient or outpatient facility. Review the list of places below. Place an I next to those places that are considered “Inpatient” and an O next to those places that are considered “Outpatient.”

- a. __________ Hospital clinic
- b. __________ Health care provider’s office
- c. __________ Hospital for less than 24 hours
- d. __________ Hospital for 24 hours or more
- e. __________ Hospital emergency room

58. Circle the main terms where you will find obstetric conditions.

<table>
<thead>
<tr>
<th>delivery</th>
<th>fetus</th>
<th>pregnancy</th>
<th>labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>baby</td>
<td>obstetrics</td>
<td>puerperal</td>
<td>gestational</td>
</tr>
</tbody>
</table>

59. True or False? Determine whether the following statements are true or false. If false, explain why.

59. Only the first three digits of a code are necessary.

60. One should never code directly from the alphabetic index.

61. The main term describes a condition, not an aspect of anatomy.

62. In the outpatient setting, coders list conditions after the patient’s testing is complete.
A patient calls complaining of pain and swelling in the right hand since awakening this morning. The patient comes in, sees the doctor, and returns to the front desk with an encounter form that states his diagnosis is “gout.” In order to make this diagnosis, the physician would need to know the patient’s uric acid level. You know that the patient just had blood drawn for the test. It is a test that must be sent to an outside lab. Do you still code today’s visit as “gout”? What would you do?

A patient is concerned that her insurance provider will not cover her visit because the diagnosis is for a very minor ailment. She requests that you mark her CMA-1500 with a more severe disorder that demands similar treatment. How would you deal with this situation? What would you tell the patient? How might you involve the physician?

A patient entered the office complaining of abdominal pain that radiates into the right lower quadrant. After examination, the physician decided to order laboratory tests in order to rule out the possibility of appendicitis. Which code should be placed on the CMA-1500 first as the primary diagnosis or reason for the visit? Why?

Your physician employer works with you closely to choose the most appropriate codes. He tells you that he would like for you to code patients who have B₁₂ injections with “pernicious anemia.” You ask if these patients should have a lab work to substantiate that diagnosis, and he says, “don’t worry about that.”

What would you say to him?
67. What would be the possible consequences of such an action?

68. Which of these is an unethical act? Explain why.
   
   a. Coding multiple conditions on the same CMS-1500

   b. Coding an unsupported diagnosis in order to make a service appear medically necessary

   c. Using a supplemental ICD-9-CM V-code or a code from Chapter 20 in ICD-10-CM to better explain the reason for a patient’s visit

   d. Using diagnosis coding search software to more easily access the codes contained in the ICD-9-CM or ICD-10-CM.
# Procedure 11-1 Locating a Diagnostic Code

**Name:** ______________________________  **Date:** __________  **Time:** __________  **Grade:** __________

**Equipment:** Diagnosis, current volume of ICD-9-CM, Volumes 1 and 2 or ICD-10-CM codebook medical dictionary.

**Standards:** Given the needed equipment and a place to work, the student will perform this skill with ____% accuracy in a total of ____ minutes. *(Your instructor will tell you what the percentage and time limits will be before you begin.)*

**Key:**
- 4 = Satisfactory
- 0 = Unsatisfactory
- NA = This step is not counted

<table>
<thead>
<tr>
<th>Procedure Steps</th>
<th>Self</th>
<th>Partner</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Using the diagnosis “chronic rheumatoid arthritis,” choose the main term within the diagnostic statement. If necessary, look up the word(s) in your dictionary.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>2. Locate the main term in the alphabetic index.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>3. Refer to all notes and conventions under the main term.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>4. Find the appropriate indented subordinate term.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>5. Follow any relevant instructions, such as “see also.”</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>6. Confirm the selected code by cross-referencing to the tabular index. Make sure you have added any fourth or fifth digits necessary.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>7. Assign the code.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>8. Your office manager instructs you to assign a diagnosis code to a claim for a patient that you know does not have the diagnosis. Explain how you would respond.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
</tbody>
</table>

**Calculation**

Total Possible Points: ________

Total Points Earned: ________ Multiplied by 100 = ________ Divided by Total Possible Points = ________ %

**Pass/Fail/Comments:**

❑  ❑

Student’s signature ______________________ Date __________

Partner’s signature ______________________ Date __________

Instructor’s signature ____________________ Date __________
WORK PRODUCT 1

Underline the main term in these diagnoses with more than one word. Using a current diagnoses coding book, then code the diagnoses:

1. Sick sinus syndrome
2. Congestive heart failure with malignant hypertension
3. Bilateral stenosis of carotid artery
4. Aspiration pneumonia
5. Massive blood transfusion thrombocytopenia
6. Acute rheumatic endocarditis
7. Acute viral conjunctivitis with hemorrhage
8. *Escherichia coli* intestinal infection
9. Postgastrectomy diarrhea
10. Congenital syphilitic osteomyelitis

WORK PRODUCT 2

Determine the diseases associated with the following ICD-9-CM codes:

1. 555.9
2. 676.54
3. 314.01
4. 726.71
5. 722.93

WORK PRODUCT 3

Determine the supplemental *External Causes of Injury (or Morbidity)* for the following:

<table>
<thead>
<tr>
<th>Description</th>
<th>ICD-9-CM Code</th>
<th>ICD-10-CM Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injured when hot air balloon crashed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin frozen, contact with dry ice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicyclist injured by train in a traffic accident</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injured by fireworks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand slashed by circular saw</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
WORK PRODUCT 4

Grade: ________

Code Sequencing

Kayla Moore, age 38 years, is seen in the clinic today. She has a few chronic conditions but is seen today for fluttering in her chest. Because she is here, and it is time for her regular diabetes checkup, the doctor orders a test to check on her blood sugar. Because Ms. Moore is a breast cancer survivor, in addition she was given a mammogram. Her physician also prescribed a tetanus booster as well, because she has been renovating an old stable and has suffered several small skin punctures over the past few weeks. Her encounter form indicates the following charges:

- An EKG to monitor a previously diagnosed arrhythmia
- Fasting blood sugar for known diabetes
- Mammogram
- Tetanus booster

List the diagnoses in the proper order to be placed on line #21 of the CMS-1500 form.

21.

1. ________ 3. ________

2. ________ 4. ________