Medical Coding Introduction

Unit: Career Exploration and Planning

Problem Area: Medical Coding

Lesson: Medical Coding Introduction

Student Learning Objectives.

Instruction in this lesson should result in students achieving the following objectives:

1. **Decipher medical coding.**
2. **Explain the impact of accurate medical coding on the healthcare system.**

Resources.

The following resources may be useful in teaching this lesson:

E-unit(s) corresponding to this lesson plan. CAERT, Inc. http://www.mycaert.com.

"Coder Productivity Benchmarks: A Special Report," *HCPro*. Accessed Aug. 17, 2018. http://www.hcpro.com/content/238552.pdf.

Gooch, Kelly, and Morgan Haefner. "14 Things to Know About Medical Coding," *Becker's Hospital CFO Report*. Accessed Aug. 17, 2018. https://www.beckershospitalreview.com/finance/14-things-to-know-about-medical-coding.html.

"ICD-10 Codes," *AAPC*. Aug. 17, 2018. https://www.aapc.com/icd-10/icd-10-codes.aspx.

"ICD-10 for Academic: Why ICD-10 Matters," *AHIMA (American Health Information Management Association)*. Accessed Aug. 17, 2018. http://www.ahima.org/topics/icd10/academic.

"Measuring Coding Accuracy and Productivity in Today's Value-Based Payment World," *Journal of AHIMA*. Accessed Aug. 17, 2018. http://journal.ahima.org/2017/11/03/measuring-coding-accuracy-and-productivity-in-todays-value-based-payment-world-sponsored/.

"Medical Coding & Billing Made Easy," *Find-A-Code*. Accessed Aug. 17, 2018. https://www.findacode.com/.

"Practice Facilitation Handbook: Module 5. Mapping and Redesigning Workflow," *AHRQ (Agency for Healthcare Research and Quality)*. Accessed Aug. 17, 2018. http://www.ahrq.gov/professionals/prevention-chronic-care/improve/system/pfhandbook/mod5.html.

"The Web's Free 2018 ICD-10-CM/PCS Medical Coding Reference," *ICD10Data.com*. Accessed Aug. 17, 2018. http://www.icd10data.com/.

"What Is Medical Coding?" *AAPC*. Accessed Aug. 17, 2018. https://www.aapc.com/medical-coding/medical-coding.aspx.

Equipment, Tools, Supplies, and Facilities

- ✓ Overhead or PowerPoint projector
- ✓ Visual(s) from accompanying master(s)
- ✓ Copies of sample test, lab sheet(s), and/or other items designed for duplication
- ✓ Materials listed on duplicated items
- ✓ Computers with printers and Internet access
- ✓ Classroom resource and reference materials

Key Terms.

The following terms are presented in this lesson (shown in bold italics):

- CPT
- HIPAA
- ICD-10
- ICD-10-CM
- ICD-10-PCS
- inpatient coding
- medical coding
- medical coding professionals
- medical procedure
- medical record
- outpatient coding
- principal diagnosis
- Superbill
- workflow

Interest Approach.

Use an interest approach that will prepare the students for the lesson. Teachers often develop approaches for their unique class and student situations. A possible approach is included here.

> *Clarify that coding is not new. Provide a short overview of the history of coding. Jacques Bertillon, a French physician, introduced the first medical coding system in 1893. Bertillon presented a "Classification of Causes of Death" to the International Statistical Institute in Chicago, which many countries and cities*

adopted. The Bertillon system distinguished between general diseases and those illnesses localized to specific sites or organs.

Many revisions of this classification system have occurred since the original 44 Bertillon titles. In 1898, the American Public Health Association (APHA) recommended the United States use this system and update it every 10 years. In 1948, the World Health Organization (WHO) assumed responsibility for preparing and publishing the classification system. After many national adaptions, the ICD-10-CM and ICD-10-PCS were initiated in 2015.

The use of a standardized coding system expedites the processing of health insurance claims so that patients and healthcare practitioners can be reimbursed promptly. Proper coding also helps prevent the submission of erroneous or fraudulent insurance claims. Emphasize that coding is a specialized and sensitive occupation that requires one to be extremely accurate and detailed. The occupation of medical coding requires little patient contact.

CONTENT SUMMARY AND TEACHING STRATEGIES

Objective 1: Decipher medical coding.

Anticipated Problem: What is medical coding? What are the code classification systems? What are ICD-10 codes? What is the difference between inpatient and outpatient coding?

I. Medical coding

A. ***Medical coding*** is "the transformation of healthcare diagnosis, procedures, medical services, and equipment into universal medical alphanumeric codes." (Source: AAPC at https://www.aapc.com/medical-coding/medical-coding.aspx.) It is a process that accurately assigns codes to the description of a patient's condition and communicates the correct information to insurance companies. Diagnosis codes are retrieved from medical records (physician's notes, lab and X-ray results, etc.). Medical coding is an integral part of the healthcare system and requires the use of thousands of codes to ensure providers have the full picture of a patient diagnosis. It is a specialized occupation that requires the coder to be extremely accurate and detailed-oriented. It plays a crucial role in ensuring health systems, hospitals, and physicians are properly reimbursed for the services they provide.

B. ***Medical coding professionals*** are healthcare employees or contracted services that review clinical records and correctly assign standard codes during the medical billing process: CPT®, ICD-10-CM, and HCPCS system codes. They help ensure

that codes are correctly applied during billing by extracting the information from medical documentation, assigning the correct codes, and creating a claim to be paid by the insurance company. It's the job of a medical biller to process and follow up on claims. Coders are responsible for:

1. Abstracting information from documentation.
2. Assigning appropriate codes.
3. Creating a claim to be paid by the insurance carrier.
4. Transforming healthcare diagnosis, procedures, medical services, and equipment into universal medical alphanumeric codes. These diagnosis and procedure codes are generated from the medical record. A ***medical record*** is a written account of a patient's examination and treatment.
5. Using many classification systems when assigning codes.

C. ***CPT*** (Current Procedural Terminology) is a medical coding classification system: the standard medical code set used to report medical, surgical, and diagnostic procedures and services for payment. All healthcare providers, payers, and facilities use CPT codes. Insurers use the five-character CPT codes to determine the reimbursement practitioners will receive for services provided.

D. ***ICD-10*** (International Classification of Diseases, 10th Revision) is the system used by physicians and other healthcare providers to define, classify, and code the universe of diseases, disorders, injuries, and other related health conditions. ICD-10 went into effect October 1, 2015. The current revision allows for more than 14,400 different codes and permits the tracking of many new diagnoses, compared to ICD-9. With optional subclassifications, the number of codes can be expanded to more than 16,000.

   1. ICD-10 is listed in a comprehensive, hierarchical fashion that allows for:
      a. Easy storage, retrieval, and analysis of health information for evidenced-based decision making
      b. Sharing and comparing of health information between hospitals, regions, settings, and countries
      c. Display of data comparisons in the same location across different periods
   2. The World Health Organization (WHO) publishes the ICD-10 listing of unique alphanumeric (letter and number) codes to identify known diseases and other health problems.
   3. ***ICD-10-CM*** (10th Revision, Clinical Modifications) is an additional listing that assists in the storage and retrieval of diagnostic information. The tool's current revision includes more than 68,000 diagnostic codes, compared to 13,000 in ICD-9-CM. ICD-10-CM diagnosis codes consist of three to seven digits, compared to three to five digits in ICD-9-CM. The increase in the number and length of ICD-10-CM codes allows for greater coding specificity. Physicians, nurses, coders, health information managers, and other healthcare professionals use ICD-10-CM.
   4. ***ICD-10-PCS*** (10th Revision, Procedure Classification System) is a U.S. cataloging system for procedural codes that track various health interventions provided by medical professionals. A ***medical procedure*** is a course of action,

often a test, intended to achieve a result in the delivery of healthcare: determining, measuring, or diagnosing a patient condition or parameter. The system was developed by the CMS (Centers for Medicare and Medicaid Services) in conjunction with 3M Health Information Management to track international morbidity and mortality statistics in a comparable way. ICD-10-PCS provides significant improvements over ICD-9-PCS through more detailed information and the ability for expansion to capture additional advancements in clinical medicine. Improvements include:

a. Much more specificity and clinical information
b. Updated medical terminology and classification of diseases
c. Codes that allow comparison of mortality and morbidity data
d. Better data for:
    (1) Measuring care furnished to patients
    (2) Designing payment systems
    (3) Processing claims
    (4) Making clinical decisions
    (5) Tracking public health statistics
    (6) Identifying fraud and abuse
    (7) Conducting research
e. Four key attributes:
    (1) Completeness—Each procedure has its own code.
    (2) Expandability—New procedure codes are easily added.
    (3) Multiaxial—Each code character has the same meaning across and within body systems.
    (4) Standardized terminology—Codes include definitions for terminology: well-defined terms with no multiple meanings.

E. Inpatient and outpatient coding is one of the most important aspects of medical coding and highlights and underscores the unique and significant coding differences between inpatient and outpatient visits. Procedure coding uses different classification sets that are unique for inpatient versus outpatient visits and have different coding guidelines to ensure proper reporting.

1. ***Inpatient coding*** is a review of the entire medical record for the length of stay and selection of the principal diagnosis. The ***principal diagnosis*** is the condition that prompted admission to the hospital: the chief reason for an inpatient stay. For example, a patient might present with symptoms of dehydration and be admitted for gastroenteritis. In this example, gastroenteritis is the principal diagnosis. Coders also select the secondary diagnoses for all of a patient's coexisting conditions. Inpatient coding is typically more complex because the patient records are typically long and very detailed.
2. ***Outpatient coding*** is a review of the medical record that focuses on the date of service and selection of the first-listed diagnosis code and secondary diagnoses to support the services provided. Outpatient coding characterizes most

coding done in the healthcare industry. All coding for doctors' offices, clinics, outpatient-care facilities, etc., is classified as outpatient coding.

Teaching Strategy: *Many techniques can be used to help students master this objective. Prior to the lesson, ask students what they already know about medical coding. Then, use VM–A to portray a timeline of the ICD and its revisions. Use VM–B to describe the four key attributes of the ICD-10-PCS. Use VM–C to illustrate the code structure of the medical and surgical section. Use VM–D to illustrate medical coding for a wrist fracture. Use VM–E to illustrate an example of the ICD Logical Hierarchy. [NOTE: A YouTube video entitled "ICD-10 Basics: ICD-10 Format," at https://www.youtube.com/watch?v=BsRs6QLEZ6A, explains the ICD-10 format.] Assign LS–A.*

Objective 2: Explain the impact of accurate medical coding on the healthcare system.

Anticipated Problem: What skills are required of a medical coder? What is a medical coder's typical workflow process? How does accurate medical coding impact the healthcare system?

II. Medical coding accuracy

A. ***HIPAA*** (Health Insurance Portability and Accountability Act) is the statute that protects health insurance coverage and patient confidentiality and created standards for electronic medical record transactions. Medical coding falls under many state and federal guidelines, including HIPAA. Medical coding is one of the most critical components of medical practices. Coding accurately is not easy.

1. Coders must carefully read notes from doctors and nurses to precisely determine the services received by patients.
2. Coders must also understand private payer policies and government regulations to code accurately. By some estimates, inaccurate or incomplete coding costs doctors thousands of dollars each year in lost payments. Without competent coders, providers run the risk of losing revenue.

B. Medical coding skills requirements include:

1. *Accuracy:* Accuracy is critical to patient safety, rapid payment, and efficient operations. Many providers measure coder productivity. A common industry standard is 95 percent accuracy.
2. *Skills:* Medical coding requires skilled professionals who can read, interpret, record, and track complex medical information quickly, maintain patient confidentiality, and give strong attention to detail. Coders complete an average of 15 to 18 records per day. [NOTE: Average charts completed per day will vary, especially based on whether a chart is inpatient or outpatient.]
3. *Insurance Contract Knowledge:* Medical practitioners are bound by contracts with insurance companies that spell out negotiated rates for various medical procedures and treatments. Accurate coding ensures that practices are in contractual compliance.

4. *Diagnostic Code Knowledge:* In today's fee-for-service medical environment, physicians are increasingly required to list underlying conditions, untreated diagnoses, and preconditions. Having the proper medical coding ensures that insurers have all the diagnostic codes required for appropriate payment.
5. *Data*: Coding is also critical for demographic assessments and studies of disease prevalence, treatment outcomes, and accountability-based reimbursement systems.

C. ***Workflow*** is a series of steps that accomplishes a specific task. By mapping a coder's workflow, one can improve processes to increase efficiency, reduce errors, and obtain better outcomes. A sample medical coder workflow includes the following steps:

1. *Step 1:* Workflow is initiated by clinical documentation, and in ICD-10, it must be extremely specific. Insufficient documentation poses the largest disruption to the process.
2. *Step 2:* The documentation from the patient's visit is abstracted and translated into accurate, usable medical codes. This documentation, which also includes demographic information regarding the patient and information about the patient's medical history, is called the Superbill. A ***Superbill*** is an itemized form used by healthcare providers that reflects rendered services. It is the main data source for creation of a healthcare claim for submission to payers (insurances, funds, programs) for reimbursement and contains:
   a. Provider name
   b. Physician name
   c. Patient name
   d. Procedures performed
   e. Diagnosis and procedure codes
   f. Other pertinent medical information
3. *Step 3:* Once completed, the Superbill is transferred, typically through a software program, to a medical biller.
4. *Step 4:* The biller creates the medical claim. He or she is responsible for ensuring that the claim meets the standards of compliance, both for coding and for format. Although, the accuracy of the coding process is generally left to the coder, the biller does review the codes to ensure that the coded procedures are billable. Whether a procedure is billable depends on the patient's insurance plan and the regulations laid out by the payer.

Teaching Strategy: *Many techniques can be used to help students master this objective. Use VM–F to display a graphic of the entire medical billing process. Use VM–G to provide an overview of a medical coder's basic workflow pattern. Assign LS–B.*

- **Review/Summary.** Use the student learning objectives to summarize the lesson. Have students explain the content associated with each objective. Student responses can be used in determining which objectives need to be reviewed or taught from a different angle. If a textbook is being used, questions at the ends of chapters may also be included in the Review/Summary.

- **Application.** Use the included visual masters and lab sheets to apply the information presented in the lesson.

- **Evaluation.** Evaluation should focus on student achievement of the objectives for the lesson. Various techniques can be used, such as student performance on the application activities. A sample written test is provided.

- **Answers to Sample Test:**

Part One: Matching

1. e
2. a
3. f
4. d
5. c
6. b

Part Two: Completion

1. World Health Organization (WHO)
2. inpatient
3. outpatient
4. medical record
5. medical coding
6. contracts
7. HIPAA (Health Insurance Portability and Accountability Act)
8. Superbill

Part Three: Short Answer

1. The four key attributes of ICD-10-PCS and a brief description of each are:
   a. Completeness—Each procedure has its own code.
   b. Expandability—New procedure codes are easily added.
   c. Multiaxial—Each code character has the same meaning across and within body systems.
   d. Standardized terminology—Codes include definitions for terminology: well-defined terms with no multiple meanings.

2. Answers will vary but should include the following roles medical coding professionals play: Medical coders help ensure that codes are correctly applied during billing by extracting the information from medical documentation, assigning the correct codes, and creating a claim to be paid by the insurance company.
3. Answers will vary but should include the following differences between inpatient and outpatient coding: Inpatient coding reviews the entire medical record for the length of stay and selects the principal diagnosis. It is typically more complex (than outpatient coding) because it involves longer patient records. Outpatient coding focuses on the date of service and selects the first-listed diagnosis code and secondary diagnoses to support the services provided. Outpatient coding characterizes most of coding done in the healthcare industry.
4. Answers will vary but should include that medical coding is critical to:
   a. Patient safety
   b. Rapid payment
   c. Efficient operations

Sample Test

Name _____

Medical Coding Introduction

Part One: Matching

Instructions: **Match the term with the correct definition.**

a. CPT
b. ICD-10
c. ICD-10-CM
d. ICD-10-PCS
e. medical procedure
f. principal diagnosis

_____1. A course of action, often a test, intended to achieve a result in the delivery of healthcare: determining, measuring, or diagnosing a patient condition or parameter

_____2. A medical coding classification system: the standard medical code set used to report medical, surgical, and diagnostic procedures and services for payment

_____3. The condition that prompted admission to the hospital: the chief reason for an inpatient stay

_____4. A U.S. cataloging system for procedural codes that track various health interventions provided by medical professionals

_____5. An additional listing that assists in the storage and retrieval of diagnostic information

_____6. The system used by physicians and other healthcare providers to define, classify, and code the universe of diseases, disorders, injuries, and other related health conditions

Part Two: Completion

Instructions: **Provide the word or words to complete the following statements.**

1. ICD-10 (International Classification of Diseases) codes are published by the _____.

2. A review of the entire medical record for the length of stay and selection of the principal diagnosis is called _____ coding.

3. A review of medical records that focuses on the date of service and selection of the first-listed diagnosis code and secondary diagnoses to support the services provided is called _____ coding.

4. A written account of a patient's examination and treatment is called a/an _____.

5. "The transformation of healthcare diagnosis, procedures, medical services, and equipment into universal medical alphanumeric codes" is called _____.

6. Medical practitioners are bound by _____ with insurance companies that spell out negotiated rates for various medical procedures and treatments.

7. The statute that protects health insurance coverage and patient confidentiality is called _____.

8. The main data source for creation of a healthcare claim for submission to payers (insurances, funds, programs) for reimbursement is called a/an _____.

Part Three: Short Answer

Instructions: **Answer the following.**

1. List and briefly describe the four key attributes of the ICD-10-PCS.

2. Explain the roles medical coding professionals play?

3. Differentiate between inpatient and outpatient coding.

4. Why does medical coding need to be accurate? List a minimum of three reasons.

ICD TIMELINE

See a graphic example of an ICD Timeline on the Clinical Architecture website at https://clinicalarchitecture.com/wp-content/uploads/2016/01/ICD-10-Timeline.jpg.

1893	First medical coding system introduced by Jacques Bertillon.
1909	ICD-1 was used internationally.
1946	The United Nations delegated ICD-based responsibility to the World Health Organization.
1955	ICD-7 contained mostly corrections and minor updates.
1968	ICD-8 went into effect.
1975	ICD-9 was published, with its implementation becoming formalized in 1979. The number of diagnosis codes was expanded, and the development of a procedural coding system made official headway.
2015	ICD-10 allows for more than 14,400 different codes and permits the tracking of many new diagnoses, compared to ICD-9. With optional subclassifications, the number of codes can be expanded to more than 16,000.

FOUR KEY ATTRIBUTES OF ICD-10-PCS

The development of ICD-10-PCS had as its goal the incorporation of four key attributes:

ICD-10-PCS Key Attribute	Description
Completeness	ICD-10-PCS offers a unique code for each procedure.
Expandability	Structure of ICD-10-PCS allows for easy expansion; new procedure codes are easily added.
Multiaxial	ICD-10-PCS contains independent characters and axes to maintain meaning across various ranges of codes. (E.g., each code character has the same meaning across and within body systems.)
Standardized Terminology	ICD-10-PCS uses well-defined terms with no multiple meanings.

ICD-10-CM CODE STRUCTURE: MEDICAL AND SURGICAL

Every character in ICD-10-CM has a defined meaning. The codes are alphanumeric and may be up to seven characters in length.

Character	Character	Character	Character	Character	Character	Character
1	2	3	4	5	6	7
Section	Body System	Root Operation	Body Part	Approach	Device	Qualifier

- **Characters 1 to 3**: Indicate the category of the diagnosis
- **Characters 4 to 6**: Indicate etiology, anatomic site, severity, or other clinical detail
- **Character 7**: Extension

Alphanumeric Indicators:

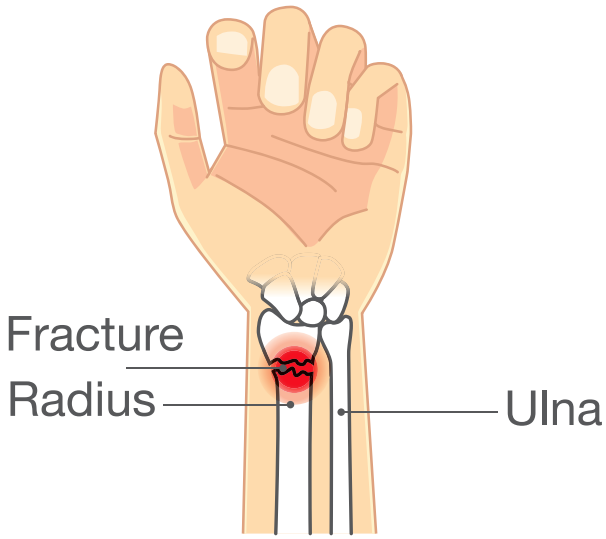
- Character 1 is always alpha; alpha characters may appear elsewhere in the code as well.
- Character 2 is always numeric.
- Characters 3 through 7 may be any combination of alpha and numeric.

Decimal Point:

- All codes require a decimal point after the third character.

ICD-10-CM CODE EXAMPLE: WRIST FRACTURE

Wrist Fracture



The ICD-10-CM code shows more detailed information gained through the added characters. The image in this visual is a diagram of radius bone fracture.

S52	Fracture of forearm
S52.5	Fracture of lower end of radius
S52.52	Torus fracture of lower end of radius
S52.521	Torus fracture of lower end of right radius
S52.521A	Torus fracture of lower end of right radius, initial encounter, closed fracture

THE ICD LOGICAL HIERARCHY: NEOPLASM CODE EXAMPLE

A simple example of the hierarchical nature of the ICD-10-CM structure for a neoplasm code is illustrated in the table. A neoplasm is an abnormal mass of tissue.

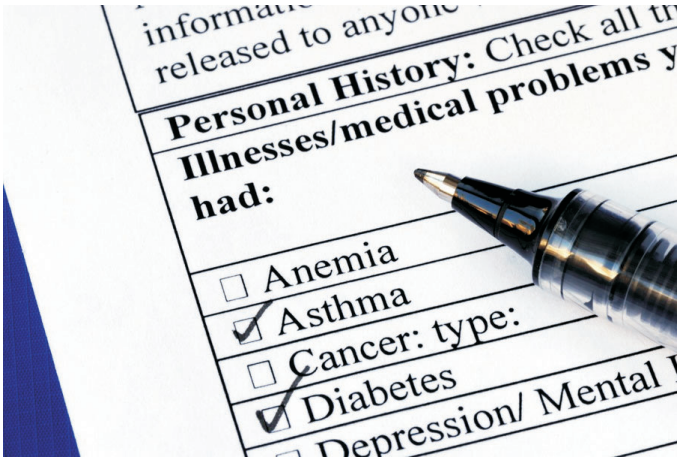
ICD-10-CM	Condition
D30	Benign neoplasm of urinary organs
D30.0	Benign neoplasm of kidney
D30.00	Benign neoplasm of unspecified kidney
D30.01	Benign neoplasm of right kidney
D30.02	Benign neoplasm of left kidney

MEDICAL BILLING PROCESS

The biller creates the medical claim. He or she is responsible for ensuring that the claim meets the standards of compliance, both for coding and for format. Whether a procedure is billable depends on the patient's insurance plan and the regulations laid out by the payer.

MEDICAL CODING WORKFLOW

Workflow is a series of steps that accomplishes a specific task. By mapping a coder's workflow, you can improve processes to increase efficiency, reduce errors, and obtain better outcomes.



A sample medical coder workflow includes the following steps:

- STEP 1: Workflow is initiated by clinical documentation, and in ICD-10, it must be extremely specific. Insufficient documentation poses the largest disruption to the process.
- STEP 2: Abstracting and translating the documentation from the patient's visit into accurate, usable medical codes. A medical coder creates the Superbill, which contains all the necessary information about the provided medical services.
- STEP 3: Once completed, the Superbill is transferred, typically through a software program, to a medical biller.
- STEP 4: The biller creates the medical claim. He or she is responsible for ensuring that the claim meets the standards of compliance, both for coding and for format.

LS–A

Name _____

Medical Coders

Purpose

The purpose of this activity is to introduce the crucial and exciting role medical coders play in medicine.

Objectives

1. Read information about a medical coding career.
2. Select 8 to 10 interesting quotations/statements from the article.
3. Complete the Double-Entry Journal by responding to each quotation/statement with your reactions and thoughts in the journal spaces.

Materials

- lab sheet
- device with Internet access
- pen or pencil

Procedures

1. Work independently to complete this lab activity.
2. Go to the Becker's Hospital CFO Report website at https://www.beckershospitalreview.com/finance/14-things-to-know-about-medical-coding.html.
3. Read the entire article, and complete the Double-Entry Journal.
   a. LEFT COLUMN: Select 8 to 10 statements/quotations from the article, and record them in the left column of the journal. (NOTE: Should you wish to refer to a particularly large selection, you may paraphrase that information.)

b. RIGHT COLUMN: Record your comments and thoughts about the quotations in the right column of the journal. Think about this column as a response to any or all of the following questions:
   (1) What strikes you about this statement?
   (2) What was your first thought when you read this? And then? And then?
   (3) What does this passage/idea make you think of or remember?
   (4) Do you want to challenge or qualify this author's claim? In what ways do you agree with it? Disagree with it?
   (5) What else have you read/heard/experienced that connects with this author's ideas?
   (6) Does something confuse you or lead to further questions? Explain.
   (7) How do you feel about this?

DOUBLE-ENTRY JOURNAL: 14 Things to Know About Medical Coding

Statement from the Text	Your Thoughts and Comments
1.	
2.	
3.	
4.	
5.	
6.	

Statement from the Text	Your Thoughts and Comments
7.	
8.	
9.	
10.	

4. Participate in a class discussion of the article.
5. Turn your completed lab sheet in to your instructor.

LS–B

Name _____

Practice Medical Coding

Purpose

The purpose of this activity is to use an interactive tool to practice medical coding.

Objectives

1. Read medical documents to assign appropriate codes for medical procedures.
2. Code conditions according to ICD-10 conventions and guidelines.
3. Determine the codes to submit for a medical scenario.

Materials

- lab sheet
- device with Internet access
- pen or pencil

Procedure

1. Locate the ICD-10 codes for each condition listed in the table. A good place to start is the Find-A-Code website at https://www.findacode.com/.
2. TASK #1: Code the following conditions according to ICD-10 conventions and guidelines.

Condition	ICD-10 Code
a. Atrial tachycardia	
b. Irregular astigmatism of both eyes	
c. Shaken infant syndrome, initial encounter	
d. Painful respiration	

Condition	ICD-10 Code
e. Neonatal esophageal reflux	
f. Twin pregnancy, one placenta, two amniotic sacs, third trimester with complication of gestational hypertension	
g. Lisping	
h. Subacute monocytic leukemia, in remission	
i. Neoplasm of uncertain behavior of the nasal cavities	
j. Benign carcinoid tumor of the small intestine	
k. Atypical chest pain due to angina	

3. TASK #2: According to ICD-10 coding conventions and guidelines, determine the codes to submit in the following scenario.

   a. *Scenario:* Because of failing health, Jane's grandfather will be moving in with her in a few months. To understand what type of care is needed, Jane escorted her grandfather to his doctor's appointment for the first time. The doctor told Jane that her grandfather was being treated for mild non-proliferative diabetic retinopathy with macular edema. He has type 2 diabetes and takes insulin daily. He has also developed a diabetic cataract in his right eye.

   b. *Your Response:*

4. Participate in a class discussion to share the ICD-10 codes you recommend.
5. Turn your completed lab sheet in to your instructor.

Practice Medical Coding

Introduce the purpose of this activity as follows:

1. Exposure to an interactive tool that can be used to get practical coding experience
2. Practice determining the correct ICD-10 codes for the conditions listed
3. Exploring various medical procedures that might be encountered in a medical environment
4. Reviewing the process of reading medical documents and assigning appropriate codes for medical procedures.

TASK #1 Table Key

Condition	ICD-10 Code
a. Atrial tachycardia	I47.1
b. Irregular astigmatism of both eyes	H52.213
c. Shaken infant syndrome, initial encounter	T74.4xxA
d. Painful respiration	R07.1
e. Neonatal esophageal reflux	P78.83
f. Twin pregnancy, one placenta, two amniotic sacs, third trimester with complication of gestational hypertension	030.033, 013.3
g. Lisping	F80.0
h. Subacute monocytic leukemia, in remission	C93.91
i. Neoplasm of uncertain behavior of the nasal cavities	D38.5
j. Benign carcinoid tumor of the small intestine	D3A.019
k. Atypical chest pain due to angina	R07.89, I20.9

TASK #2 Table Key

Condition	ICD-10 Code
a. Mild non-proliferative diabetic retinopathy with macular edema	E11.321
b. Type 2 diabetes and takes insulin daily	Z79.4
c. Diabetic cataract in his right eye	E11.36