Medical Coding and Billing Specialist

Instruction Pack 3 | Lessons **21-30**

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Medical Coding and Billing Specialist

Instruction Pack 3

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Answer Key

Medical Coding and Billing Specialist

Lesson 21
Solving Medical Billing Problems

Step 1: Learning Objectives for Lesson 21

When you complete the instruction in this lesson, you will be trained to:

- Correctly process and maintain accurate records on claim reimbursement.

- Describe the steps required to solve problems with insurance companies.

- Explain how to bill patients and handle misunderstandings and problems with providers and patients.

- Discuss the possible approaches to pursue with each type of problem.

- Describe credit and the components of an agreement to furnish credit.

- Explain how to keep your own credit record clean.

- Describe the options available to you if a client owes you money.

- Explain the common forms a medical billing specialist may encounter.

Step 2: Lesson Preview

A perfect world would have perfect people who would always come through. We would never encounter problems or misunderstandings. People wouldn't lose things or forget to complete tasks and pay bills. Of course, we all know we don't live in a perfect world. As a healthcare professional, you should always strive for perfection and expect others to do the same. However, no matter how hard you—and others—try to do a good job, something is bound to go wrong from time to time. Everyone has a bad day now and then.

When a problem occurs, you need to know how to deal with it effectively. If you made the error, accept blame and work to fix the situation. If you are trying to solve a problem that someone else created, you need to work through it constructively. This lesson will demonstrate effective ways to solve problems with insurance companies, providers and patients. After reading the lesson, you will be better prepared to tackle any problem you encounter in your work as a healthcare professional.

This lesson will also demonstrate how to keep an insurance claims log of all the claims you file. In doing so, you'll always know the status of every claim you submit.

Step 3: Managing Patient Accounts

You already know how to process claims and interpret EOBs. Now, you need to learn how to log claims and reimbursement information and bill patients any remaining balances on their accounts.

Processing of Reimbursements

As you prepare and submit claim forms, you should have a procedure in place for tracking each claim. Review the following procedures you'll need to perform for each claim you process:

1. Record the claim on an insurance claims log, such as the example log that follows.

2. Keep two copies of each claim you file. For paper claims, file the two hard copies in different locations. For electronic claims, you'll save each claim twice—once on your computer and once on removable media, such as a flash drive or external hard drive.

3. Establish a pending file for each month of service. This will make 30- and 60-day follow-up an easy process.

4. When a payment is received, record the date and amount paid from the insurance carrier on the log.

INSURANCE CLAIMS LOG*

Filing Date: 04/03/XX

Claim Date	Patient Name	Insurance Carrier	Claim Amount	Follow-up Date	Comments	Date Benefits Paid	Benefits Paid	Write-off Amount	Prior Patient Payment	Patient Responsibility/ Refund (-)	Date; Patient Invoice #/ Check #	Invoice Paid Date
04/01/XX	Alba, Frank	Mtn. States	100.00			04/16/XX	76.00	8.00	0.00	16.00	04/17/XX; Invoice #XXXX	04/25/XX— pd in full
04/01/XX	Carty, Joanne	Green Shield	58.00	05/03/XX	Claim lost— 2nd billing 05/03/XX	05/10/XX	43.00	15.00	0.00	—	—	—
04/02/XX	Salazar, Nikki	Rocky States	236.00			04/25/XX	185.00	36.00	0.00	15.00	04/23/XX; Invoice #XXXX	05/03/XX— pd in full
04/02/XX	Griggs, Mae	Cigna	96.00			04/22/XX	96.00	0.00	0.00	—	—	—
04/02/XX	Martin, Rob	Integrated	150.00			04/25/XX	124.50	15.50	20.00	(-10.00)	04/26/XX; Check #XXXX	—
TOTALS			640.00				524.50	74.50	20.00	21.00		

*This is just one of many possible ways to set up an insurance log. Secondary claims filing also may be included. When you are working, it is likely that you will work with a log that your doctors have developed themselves or you will create one that fits your particular needs.

Claims Log Description

Next, let's review the components you'll see on the insurance claims log:

Filing Date: Date the claim is actually sent to the insurance company. This will generally be the next business day following the claim date.

Claim Date: Date listed in field 24A of the CMS-1500 form.

Patient Name: Name from field 2 of the CMS-1500 form.

Insurance Carrier: Carrier name from field 11c of the CMS-1500 form.

Claim Amount: The amount from field 28 of the CMS-1500 form.

Follow-up Date: Date 30 days after the filing date. (You'll complete this field only when actual follow-up occurs.)

Comments: Fill these in when doing follow-up. For example: claim is lost, the reason claim is delayed, further codes are needed, etc.

Date Benefits Paid: Date when payment is received from the insurance carrier. The payment generally accompanies the EOB. (For course purposes, the date of the EOB will be used as the date benefits were paid.)

Benefits Paid: The amount the insurance carrier has reimbursed for services the physician charged. This amount is often different from the amount billed, due to disallowed amounts, copayments, coinsurance, non-covered charges and deductibles. Record only the actual reimbursement from the insurance carrier as the EOB indicates.

Write-off Amount: Amount the provider cannot bill the patient. If the provider is a preferred provider, the patient will not be responsible for any disallowed amounts. (The provider will *write off* any disallowed amounts not billable to the patient.)

Prior Patient Payment: Payment amount from field 29 of the CMS-1500 form (the amount of any deductible and/or coinsurance the patient has paid).

Patient Responsibility/Refund: If the provider is not a preferred provider, the patient will be responsible for any disallowed amount, in addition to any deductible and copayment due. On the other hand, the patient might also be due a refund if he paid more than he was required to pay. (This log indicates any amount overpaid by the patient as a negative amount in parentheses (-).) When figuring any amount due from or to the patient, be sure to include the Prior Patient Payment in your calculations.

Date/Patient Invoice #/Check #: Date of invoice or check issued to the patient, and the number of such invoice or check.

Invoice Paid Date: Date the payment is received from the patient. Notes regarding the payment may also be included here.

Note that the sum of the amounts in the columns entitled *Benefits Paid, Write-off Amount, Prior Patient Payment* and *Patient Responsibility* will equal the figure in the *Claim Amount* column.

When you receive the EOB from an insurance carrier, follow these steps to process it:

1. Enter the date the payment is received and the amount of the payment on the insurance claims log.

2. Compare the EOB with the original claim that you submitted to the carrier. Verify the patient's name, dates of service, services and procedures, and the charges submitted for payment.

3. Determine write-off amounts, as well as any balance due from or refund due to the patient.

Now that you have a better understanding of the claims log, let's pause to complete the following Practice Exercise.

Step 4: Practice Exercise 21-1

Use the following insurance claims log to answer as directed, and write your answers on scratch paper.

1. **Which patient has not yet paid the invoice that was sent?**

2. **Which claim has the insurance company not yet paid?**

3. **What was the follow-up date for that claim?**

4. **Mountain States pays benefits of $289 for Sara Paley and there is no write-off amount. What, if anything, will Sara Paley owe on her bill?**

5. **There is no write-off amount for Mark Green's claim. This indicates that the doctor is not a(n) _____ for Mutual Insurance.**

6. **Mark Green paid his invoice on what date?**

Filing Date: 03/18/XX

Claim Date	Patient Name	Insurance Carrier	Claim Amount	Follow-up Date	Comments	Date Benefits Paid	Benefits Paid	Write-off Amount	Prior Patient Payment	Patient Responsibility/ Refund (-)	Date; Patient Invoice #/ Check #	Invoice Paid Date
3/16/XX	Green, Mark	Mutual	364.00			3/30/XX	258.00	—	20.00	86.00	3/30/XX; Invoice #XXXX	4/30/XX—pd in full
3/16/XX	Stamm, Erick	Mtn. States	153.00			3/25/XX	116.40	21.60	15.00	—	—	
3/17/XX	Paley, Sara	Mtn. States	304.00	4/17/XX	wrong codes; corrected form sent 4/17/XX				15.00			
3/17/XX	Cruz, Felicia	Windy States	217.00			4/01/XX	139.20	43.00	—	34.80	4/1/XX; Invoice #XXXX	
TOTALS												

Step 5: Review Practice Exercise 21-1

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 6: Dealing with Insurance Problems

Generally speaking, insurance companies are very large businesses operating across the nation. Consequently, claims that you file might occasionally be delayed. If you have waited more than 30 days for reimbursement of a claim, you need to inquire about it. To do this, you will need to find a contact who handles claims questions for the insurance company that delayed the reimbursement.

Sometimes this contact is a person, such as a regional representative, who is assigned to your geographical area. Or, the contact might be located at the insurance company's home office. Some insurance companies have entire departments dedicated to answering questions, so you might have a contact telephone number instead of a single contact person's name. In any case, when you contact an insurance company regarding a claim, you should have access to the claim when you call. This enables you to answer any questions the insurance representative may have about the claim.

Why should you get in touch with an insurance company that has delayed reimbursement? There are several very specific situations that require this type of inquiry. The following are some examples.

Insurance Problems

You need to call the insurance company to make an inquiry when any of the following situations occur:

♦ A claim is more than 30 days old, and there has been no explanation and no reimbursement issued.

♦ A claim has been delayed by 30 days or more, and the insurance company has notified you of an ongoing "investigation into the claim."

♦ You believe the reimbursement received is incorrect, or a claim has been denied and you don't understand why.

♦ The explanation of benefits is missing.

The last situation listed—reimbursement is received for a claim you haven't filed—happens more often than you might think. There are legitimate reasons for this. For example, the insurance policy might be in a parent's name and covers the child. If the parent and child have the same last name, this isn't likely to cause any confusion.

However, that isn't always the case. For example, Mary Jones' policy might cover her daughter, Juliann Cervantes. You might have to inquire to find out exactly whom this reimbursement covers if the claim is in Juliann's name at the office, but the insurance company issues reimbursement for Mary Jones (the name on the policy).

After you call the insurance company regarding the claim, you may need to do some follow-up work. You might simply have to resubmit the claim, or you might need to send a *tracer*, which you'll study shortly. If the insurance company has questions about the claim, it might ask for a narrative. The following section describes these activities in more detail.

Following Through on Insurance Problems

When problems arise with insurance claims, you will be expected to deal with them. Let's look at some of the strategies you can use to address these issues.

Resubmitting a Paper Claim

When you **resubmit** an insurance claim, you submit the claim a second time. You'll write "SECOND BILLING" in bold, red letters at the top of the copy you send. Then, resubmit the claim to the insurance company.

Usually, resubmitting a claim will at least get you more information about the status of the original claim. For instance, the insurance company may have reimbursed the patient directly and neglected to notify you. If you resubmit the claim, the company will send you an explanation of the action taken on the original claim. Sometimes, the insurance company sends the patient notice of action on a claim, and the patient ignores it. This leaves you and the provider in the dark. However, your second submission will usually allow you to get involved again and inform you if the patient was paid directly, or if the claim was denied. If the original claim was lost, then the insurance company now has the copy of the claim and can process it.

SECOND BILLING

HEALTH INSURANCE CLAIM FORM

APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE (NUCC) 02/12

| PICA | | | | | | | PICA | |

1. MEDICARE	MEDICAID	TRICARE	CHAMPVA	GROUP HEALTH PLAN	FECA BLK LUNG	OTHER	1a. INSURED'S I.D. NUMBER	(For Program in Item 1)
☐ (Medicare#)	☐ (Medicaid#)	☐ (ID#/DoD#)	☐ (Member ID#)	☐ (ID#)	☐ (ID#)	☐ (ID#)		

2. PATIENT'S NAME (Last Name, First Name, Middle Initial)	3. PATIENT'S BIRTH DATE MM DD YY SEX M ☐ F ☐	4. INSURED'S NAME (Last Name, First Name, Middle Initial)

| 5. PATIENT'S ADDRESS (No., Street) | 6. PATIENT RELATIONSHIP TO INSURED Self ☐ Spouse ☐ Child ☐ Other ☐ | 7. INSURED'S ADDRESS (No., Street) |

| CITY | STATE | 8. RESERVED FOR NUCC USE | CITY | STATE |

| ZIP CODE | TELEPHONE (Include Area Code) ( ) | | ZIP CODE | TELEPHONE (Include Area Code) ( ) |

9. OTHER INSURED'S NAME (Last Name, First Name, Middle Initial)	10. IS PATIENT'S CONDITION RELATED TO:	11. INSURED'S POLICY GROUP OR FECA NUMBER
a. OTHER INSURED'S POLICY OR GROUP NUMBER	a. EMPLOYMENT? (Current or Previous) ☐ YES ☐ NO	a. INSURED'S DATE OF BIRTH MM DD YY SEX M ☐ F ☐
b. RESERVED FOR NUCC USE	b. AUTO ACCIDENT? PLACE (State) ☐ YES ☐ NO	b. OTHER CLAIM ID (Designated by NUCC)
c. RESERVED FOR NUCC USE	c. OTHER ACCIDENT? ☐ YES ☐ NO	c. INSURANCE PLAN NAME OR PROGRAM NAME
d. INSURANCE PLAN NAME OR PROGRAM NAME	10d. CLAIM CODES (Designated by NUCC)	d. IS THERE ANOTHER HEALTH BENEFIT PLAN? ☐ YES ☐ NO If yes, complete items 9, 9a, and 9d.

READ BACK OF FORM BEFORE COMPLETING & SIGNING THIS FORM.
12. PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE I authorize the release of any medical or other information necessary to process this claim. I also request payment of government benefits either to myself or to the party who accepts assignment below.

SIGNED _____ DATE _____

13. INSURED'S OR AUTHORIZED PERSON'S SIGNATURE I authorize payment of medical benefits to the undersigned physician or supplier for services described below.

SIGNED _____

14. DATE OF CURRENT ILLNESS, INJURY, or PREGNANCY (LMP) MM DD YY QUAL.	15. OTHER DATE MM DD YY QUAL.	16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION MM DD YY MM DD YY FROM TO
17. NAME OF REFERRING PROVIDER OR OTHER SOURCE	17a. 17b. NPI	18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES MM DD YY MM DD YY FROM TO
19. ADDITIONAL CLAIM INFORMATION (Designated by NUCC)		20. OUTSIDE LAB? $ CHARGES ☐ YES ☐ NO

21. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY Relate A-L to service line below (24E) ICD Ind.	22. RESUBMISSION CODE ORIGINAL REF. NO.
A. ___ B. ___ C. ___ D. ___ E. ___ F. ___ G. ___ H. ___ I. ___ J. ___ K. ___ L. ___	23. PRIOR AUTHORIZATION NUMBER

24. A. DATE(S) OF SERVICE From To MM DD YY MM DD YY	B. PLACE OF SERVICE	C. EMG	D. PROCEDURES, SERVICES, OR SUPPLIES (Explain Unusual Circumstances) CPT/HCPCS MODIFIER	E. DIAGNOSIS POINTER	F. $ CHARGES	G. DAYS OR UNITS	H. EPSDT Family Plan	I. ID. QUAL.	J. RENDERING PROVIDER ID. #
1								NPI	
2								NPI	
3								NPI	
4								NPI	
5								NPI	
6								NPI	

25. FEDERAL TAX I.D. NUMBER SSN EIN ☐ ☐	26. PATIENT'S ACCOUNT NO.	27. ACCEPT ASSIGNMENT? (For govt. claims, see back) ☐ YES ☐ NO	28. TOTAL CHARGE $	29. AMOUNT PAID $	30. Rsvd for NUCC Use

31. SIGNATURE OF PHYSICIAN OR SUPPLIER INCLUDING DEGREES OR CREDENTIALS (I certify that the statements on the reverse apply to this bill and are made a part thereof.) SIGNED _____ DATE _____	32. SERVICE FACILITY LOCATION INFORMATION a. NPI b.	33. BILLING PROVIDER INFO & PH # ( ) a. NPI b.

NUCC Instruction Manual available at: www.nucc.org   PLEASE PRINT OR TYPE

Another case in which you'll resubmit a claim is when you made a mistake with the original claim. For example, you may have entered the wrong procedure code or perhaps entered the policy number incorrectly. To correct this, you should send the claim again, this time with the words "SECOND BILLING—CORRECTION" written at the top in red ink. This shows the insurance company that it should ignore the first claim and use this new claim for processing.

Electronic resubmissions are handled in a similar fashion. Let's take a look at the details.

Resubmitting an Electronic Claim

There are usually fewer instances when you must resubmit a claim due to errors when submitting claims electronically, such as through a clearinghouse. Clearinghouse software edits claims to identify errors, such as incorrect codes and missing information. With this feature, you'll have the opportunity to correct any errors and supply missing information *before* sending the claim to the insurance company.

However, you'll still encounter situations in which an insurance company will require additional information, such as accident information or a copy of a medical record, in order to process the claim. You can simply resubmit the claim electronically, along with the attached information. Or, in some cases, the health insurance company will request a paper resubmission so that you can indicate that the claim is a second billing.

Finally, electronic billing almost always results in an acknowledgement report of some type. For instance, clearinghouses provide a list of received claims, each with a tracking number to use should someone need to trace a claim.

Sending a Tracer

Just as its name implies, a **tracer** is a form that enables insurance companies to locate missing claims. The tracer contains billing information, such as the patient's name, insured's name, identification number and group number.

When you submit a tracer, it alerts the insurance company that there is a problem with a particular claim. The company then takes the information from the tracer and uses it to search for the claim. After the claim is found, the provider is notified and informed of any action taken.

Filing a Narrative Explanation

Occasionally, the insurance company might ask for a **narrative explanation**, which is a further explanation of procedures, diagnoses or other information on a claim. This additional information is usually required for evaluation purposes as the insurance company tries to decide if a claim will be covered. In order to fulfill this request, you should simply write out a detailed description of the items the insurance company is questioning. On this narrative, you should also include the patient's name, insured's name, policy number and claim number at the top, and then complete the description below that information.

If an insurance company denies a claim, you should check the denial for accuracy, and then bill the patient directly.

Appeals

In certain cases, you might need to appeal an insurance company's decision regarding benefits. If the insurance company's ruling appears to be wrong, you must complete an *appeals letter*. An **appeals letter** is a document that details the claim filed, the action taken and why you consider the reimbursement to be incorrect.

With an appeals letter, you'll need to take into account all the information involved with the claim and use it to dispute the insurance company's action. The provider will supply you with the reason or reasons the reimbursement is incorrect. Be sure to use that information on the appeals letter. When submitting the appeal, address the letter to your contact person at the insurance company.

When you appeal an action by Medicaid, you have between 30 and 60 days from receipt of the denial to file the appeal, depending on the state. Appeals should include a cover letter and copies of the original claim form, any preauthorization forms and the explanation of benefits or remittance advice received. First, the regional fiscal intermediary will review appeals, followed by the Department of Welfare. At each level, an examiner reviews the case and makes a decision.

When you appeal an action by Medicare, you must do so within 60 days of the date you received the notice of denial. Unless you can prove otherwise, Medicare deems that you received the denial notice five days after the date listed on it. If you need more than 60 days to file the appeal, you can request more time from the intermediary at the Medicare office. You will be notified in writing of the extra time granted.

For TRICARE or CHAMPVA, you must resubmit a claim within 90 days of notice that the claim was denied or returned by the claims processor requesting additional information, or if you wish to appeal a decision. If you need more time to correctly resubmit or provide the additional requested information, you must contact the claims processor for your area as noted on the document you received, and request a time extension.

Usually, resubmitting a claim, sending a tracer or filing a narrative explanation is enough to solve most problems with insurance companies. However, sometimes you need to take additional action. You might have to utilize the state insurance commissioner or the court system.

The Insurance Commissioner

State regulations govern insurance companies in all 50 states. Each state has different requirements for insurance carriers, and each carrier must meet these requirements to operate in that state.

Let's say that a company is based in New York. In order to insure clients in Colorado, it must meet the requirements not only for New York, but also for Colorado. This rule applies to every state in which the company operates. An insurance company is considered to be operating in a particular state if it issues any policies covering people who live in that state.

The *state insurance commissioner* oversees these regulations for insurance operations. The **state insurance commissioner** is an official who reviews insurance companies and the companies' business habits and policy language to determine if they may operate in that particular state. The commissioner also helps to solve disputes involving insurance companies.

You should contact the insurance commissioner in your state to discuss any problem with an insurance company that cannot be resolved through the usual channels (resubmissions, tracers, narratives or appeals). Sometimes, the commissioner will step in and mediate the dispute, enabling both sides to come to an agreement.

You should also contact the insurance commissioner in any situation in which you suspect an insurance company is operating illegally. Fraudulent claims, arbitrary denials of benefits, policy cancellations and other actions have all been causes for insurance commissioner investigations. To contact the commissioner in your state, you can search the Internet, usually with the term "Insurance Commission" or a similar listing.

Once in a while, you might even have to go beyond the insurance commissioner and use the court system to settle a dispute with an insurance company. Court cases can be costly and time consuming, so such disputes are usually large, involving a life-or-death situation or, perhaps, a great sum of money. Court cases occur most frequently when a dispute arises over the terms set forth in a policy, rather than over a simple billing inquiry or error.

Rejected Versus Denied Claims

As you explore the medical billing process, it's important to understand the difference between a denial and rejection of a claim. Let's examine these terms in detail.

Insurance companies may return rejected claims (also known as unprocessable claims) to the provider with an explanation of the rejection or unprocessability. Or, the insurance company sends an explanation of the rejection without the returned claim before making any type of coverage determination. As you have learned, incorrect policy numbers or patient birth dates, or submission of a claim to the wrong insurance company, can cause rejections. Once you resubmit the information, rejections are usually resolved.

Denials may occur when the health insurance company receives and processes a claim, but determines that the treatment in question is not a covered benefit of the plan. When claims are denied, the insurance company informs the provider with the explanation of benefits and/or a denial letter. This letter includes denial codes with a message, such as "service not a benefit in enrollee's plan," "denied for lack of medical necessity" or "denied coverage of experimental treatment." Denials can be appealed if the insurance company has made a mistake; some denied claims are indeed overturned.

You've explored various insurance problems in this section, and now it's time to apply what you have learned so far. Let's complete a short Practice Exercise before moving on.

Step 7: Practice Exercise 21-2

On scratch paper, match the term(s) to the correct definition or description.

1. **Inquiry**

2. **Resubmission**

3. **Narrative explanation**

4. **State insurance commissioner**

   a. Sending in a claim a second time with "SECOND BILLING" written at the top
   b. Oversees the state insurance regulations
   c. Asking an insurance company about a delayed claim
   d. A further description of a procedure or other information on a claim

Step 8: Review Practice Exercise 21-2

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 9: Billing Patients

Billing patients is another responsibility of the medical coding and billing specialist. There are different reasons why a provider may need to bill a patient. For one, the patient does not have insurance and did not pay in full at the time of service. This situation would generate a monthly bill to the patient. Another reason may be that a patient does have insurance, but there is a deductible or portion the patient still owes after the carrier has reimbursed its portion of the claim.

Providers often divide their patients' bills into cycles. There are several common billing methods that providers use. Depending on the size of the practice, a provider may divide patients using the alphabet. For instance, Cycle 1 could include patients with last names beginning with the letters A through F. Cycle 1 patients are billed the first week of every month. Cycle 2 might include patients with last names beginning with G through L; bills are generated for these patients the second week of the month. With this method, two more cycles would cover patients whose last names begin with M through Z.

Another billing method is *event billing*. **Event billing** generates a bill every time something on the patient's account is activated. For instance, when a patient has an office visit, a bill is triggered. Or, if the insurance company pays a portion of a patient's claim, a bill is then generated to the patient for the remaining account balance.

Now, let's look at the process of billing the patient with MedLook when there is a balance due or when the patient doesn't have insurance coverage.
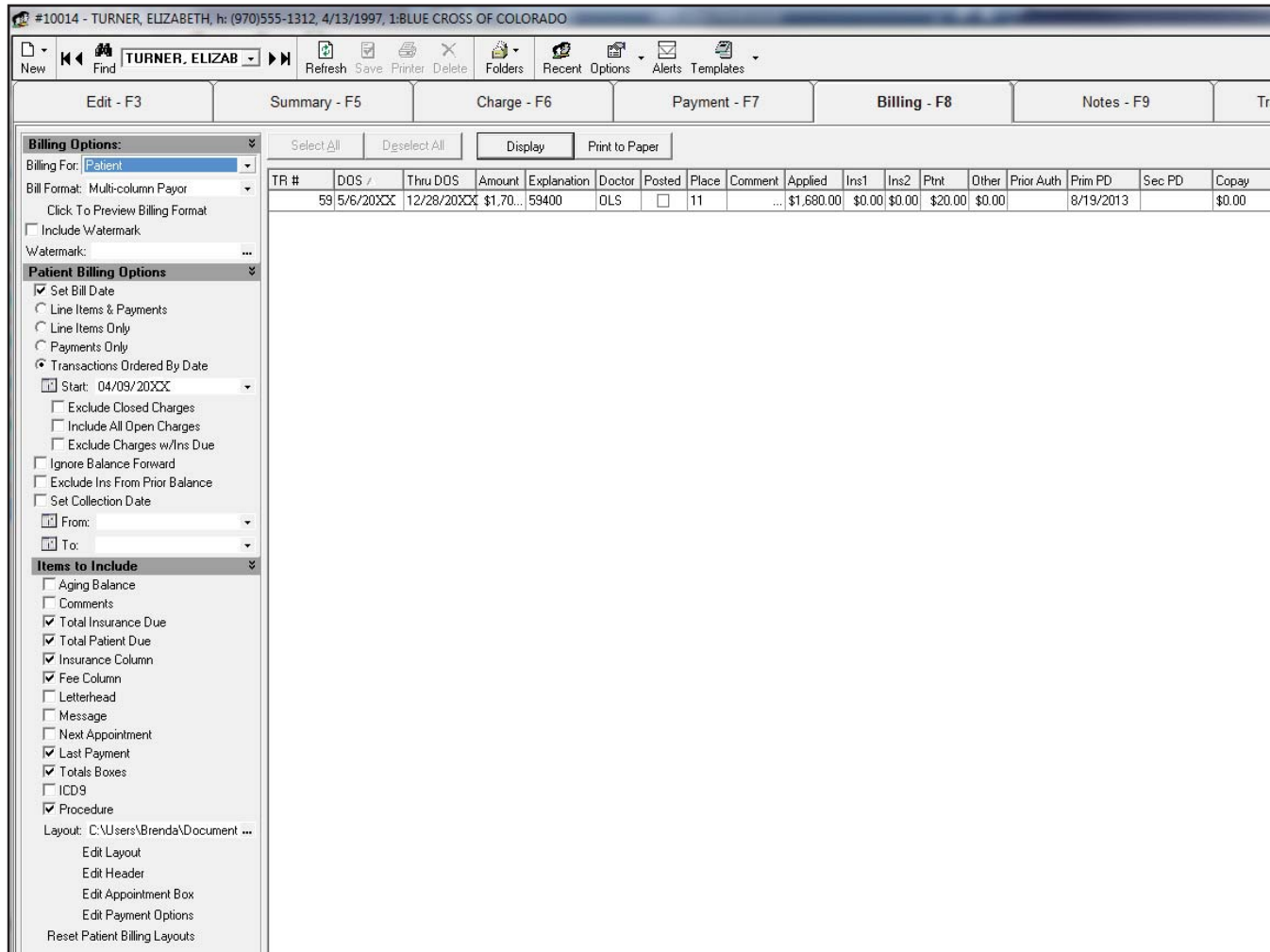
Balance Due

You know that when dealing with claims, you may post a copayment, apply an insurance payment, write off a portion of the charge or apply a payment from the patient for the balance of the charge. This part of the course focuses on patient billing. You may find yourself billing the patient because insurance didn't cover the entire amount, or the patient doesn't have insurance.

In the previous chapter, Elizabeth Turner saw Dr. Olson for a delivery. Blue Cross of Colorado received a claim for the delivery, and the claim was processed. The insurance carrier reimbursed Dr. Olson for $1400.00 and indicated that $280.00 exceeded the usual and customary amount, so this amount was written off. The balance for this service is $20.00, which the patient owes. Therefore, you will send a bill to the patient for the service.

🖐 Hands-on Activity

To begin, locate the *Patient Account* for Elizabeth Turner, and then select the *Billing* tab. You will highlight the 5/6 service and then change the *Billing Options* to *Patient*. Please note, the start date in the billing options must be before the date of service.

A variety of options will appear. If you change these options, you will change the layout of the patient bill. Under *Items to Include*, be sure to check *Letterhead* to include the physician name and address on the bill. Now, click *Display* and you'll see a patient bill similar to the following:

<table>
<tr><td></td><td colspan="2">ACCOUNT NO.</td><td>DATE</td></tr>
</table>

SCOTT OLSON MD

1200 CAROL LANE

BROWN, CO 80001-4790
(970)555-1010

ACCOUNT NO.	DATE
10014	

Payment Options   O Check   O MC   O Visa

Check # _____   MC/Visa# _____

Expiration Date: _____   Signature: _____

ELIZABETH TURNER
131 MULBERRY WAY
AVON, CO 80000

AMOUNT ENCLOSED $ _____

Billed $ **20.00**

Return Above Portion with Payment

DATE	PROCEDURE	DESCRIPTION	FEE	INS	PATIENT	RECEIPTS
05/06/20XX	59400	TOTAL OB	1,700.00	0.00	20.00	
08/19/20XX	Ins.1	Payment				1,400.00
08/19/20XX	Credit					280.00

Total Charges	1,700.00
Total Payments	1,400.00

Patient Obligation	20.00

The specifics of the bill may vary. As long as the codes and amounts match up, you're on the right track. You'll have more practice with this soon, but first, let's take a look at how you deal with situations in which the patient has no insurance.

No Insurance

If the patient doesn't have insurance, you won't submit a CMS-1500 claim form. Instead, you'll create a bill to send to the patient requesting reimbursement for the services. For the *Patient Account*, you'll still enter the demographics and referral/physician, but you'll leave the insurance section blank.

✋ Hands-on Activity

Enter the following information to create a *Patient Account* for Walter Cricket.

Patient: Walter Cricket
Address: 2227 Garden Court, Avon CO 80000
Phone: 970-555-9898
DOB: 7-7-71
Sex: Male
Responsible Physician: Greg North, MD

The *Demographics* and *Referral/Physician* information should look similar to the following:

Demographics	
Account Number	10019
Copy Existing Patient	
Full Name	WALTER CRICKET
Last Name	CRICKET
First Name	WALTER
MI	
Title	
Address	2227 GARDEN COURT
2nd Line	
City	AVON
State	CO
Zip Code	80000
County	
Country	
SSN	
Birth Date	7/7/1971
Sex	Male
Chart Number	10019
Home Phone	(970)555-9898
Work Phone	
Extension	
Mobile	
Fax	
Email	
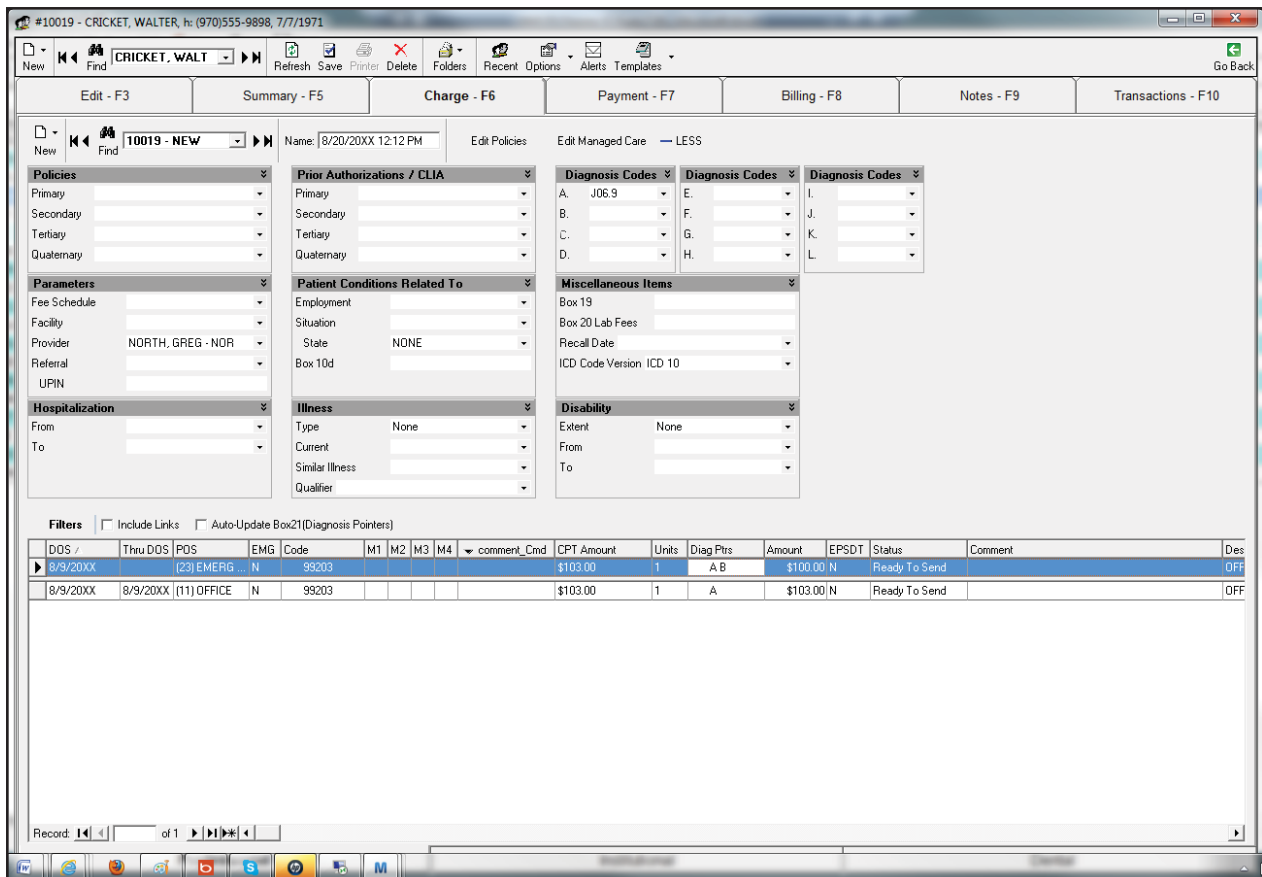
If it does, click *Save* and continue to the *Charge* tab.

To enter the charge, you'll still enter the diagnosis, verify the provider and enter the charge at the bottom of the page.

✋ Hands-on Activity

For the date of service 8/9/XX, Walter was diagnosed with an upper respiratory infection (J06.9) and was charged for 99203. He made no payment at the time of service.

If your *Charge* tab looks similar to the following, click "*enter*" and then *Save*.

Now, you'll send the patient a bill for the services. Select the *Billing* tab. The *Billing Options* should indicate *Billing For Patient*, because insurance isn't an option. Highlight the service date and then click *Display*.

ACCOUNT NO.	DATE
10019	

GREG NORTH MD
800 MEDICAL COURT

BROWN, CO 80001-9898
(970)555-2222

Payment Options   O **Check**   O **MC**   O **Visa**

Check # _____   MC/Visa# _____

Expiration Date: _____   **Signature:** _____

WALTER CRICKET
2227 GARDEN COURT
AVON, CO 80000

AMOUNT ENCLOSED $ _____

Billed $ 0.00

Return Above Portion with Payment

DATE	PROCEDURE	DESCRIPTION	FEE		INS	PATIENT	RECEIPTS
08/09/20XX	99203	OFFICE, NEW PATIENT	103.00		103.00	0.00	

Total Charges	103.00
Total Payments	0.00

Patient Obligation	0.00

The bill indicates the patient owes nothing; however, since the patient does not have insurance, the patient owes the balance. As you can see, billing the patient is fairly straightforward. Let's reinforce what you've learned with the following Practice Exercise.

Step 10: Practice Exercise 21-3

1. **Use the following information to create a bill for Paula Higgins.**

    Patient: Paula Jean Higgins
    Address: 2159 Wynn Lane, Brown CO 80001
    Phone: 970-555-1839
    DOB: October 18, 1986
    Sex: Female
    Responsible Physician: Luke R Johnson, MD
    Date of Service: 9/24/20XX

ICD:	J45.909 Bronchial asthma
CPT:	99212 Office visit, established patient $42.00
	95120 Allergy shot $23.00

2. **Create a bill for Rebecca Bloom for her 12/1/XX service, which was applied to her deductible.**

Step 11: Review Practice Exercise 21-3

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 12: Credit

If you choose to run your own professional healthcare coding and billing service, you will be an independent business person. You will deal with money every day. To understand the financial world, you should know about two very important yet common concepts: *credit* and *collection*. Let's review the ins and outs of credit, including both the lender side of the credit picture, as well as the debtor side.

Let's say you walk into a local department store and pick out a nice outfit. The clerk at the register inquires about how you intend to pay for your purchase. "Will this be cash or charge?" the clerk asks. You pull out your credit card and hand it to the clerk. You have just charged your purchase and used credit.

You use credit when you receive goods or services in exchange for a promise to pay later. **Credit** is a merchant's acceptance of your promise to pay later for goods or services you receive immediately. Some people may think that only large companies can extend credit—companies or banks that issue credit cards, for example. The reality, however, is much different. Many small, local stores and businesses issue credit to consumers. For example, a local hardware store might have credit accounts for contractors. The office supply store might extend credit to local businesses.

Consumers charge billions of dollars in purchases every year. In one form or another, countless businesses issue credit—not only the largest department store in New York City, but also the little mom-and-pop shop in the smallest tourist town. You might have a credit card issued by a bank. Or perhaps you use department store or gasoline credit cards. In any case, if you operate an independent, professional healthcare billing service, you will need to decide if you will extend credit and, if you do, to whom.

The person or business who issues the credit is called the **creditor**. The person or business who receives credit is called the **debtor**. Creditors and debtors often set out the terms that the credit must follow. These terms are part of a **credit agreement**, which includes the method and amount of payment required, payment due dates and consequences for missed payments or other problems. The credit agreement also includes its procedures for cancellation. This agreement is very important for both the creditor and debtor, because it sets the terms for repayment of the debt.

Currently, you are probably on the debtor side of most credit agreements. However, that might not always be the case. In your career, you might allow providers to pay monthly for the medical claims you file. Each week, you'll submit the claims, but because you extend the provider credit, you do not require him to pay immediately. Instead, you send him an invoice at the end of the month listing the total amount he needs to pay. This arrangement makes you a creditor.

Your Credit Report

Credit is a large part of everyone's life—at least, nearly everyone's. You use credit. Your neighbors use credit. Your parents and friends use credit. You probably use credit for the car and appliances you buy, as well as the house in which you live. You have a credit history if you have ever charged goods or services, used a credit card or bought a car through a loan from a finance company.

Your credit history, compiled in your **credit report**, lists all of your credit accounts and your payment history with those accounts. There are three agencies that compile and keep these credit reports—TransUnion, Experian and Equifax. Any time you apply for credit, the creditor will pull your credit report. This is the case whether you are applying for a new bank card, a department store credit card or an automobile loan. It indicates that the company considering whether to loan you the money you requested is reviewing a copy of your credit report.

Your credit report will show the company how much money you owe, as well as your history regarding debt repayments. It is important to keep your credit report clean—which means paying your bills on time. You might not think it matters if a bill is 10 days late. However, the company you paid late might report that information to the agencies that maintain your credit report; this will become part of your report for a minimum of three years. This type of information, such as late payments, bankruptcies or defaults, is known as **negative credit information**.

How can a potential creditor tell from your credit report how you made your payments? That is actually a simple procedure. The creditor pulls your credit report and reviews it. Usually, the report will list each credit account you have, and then, under each account, your payment history will appear. The report uses codes to indicate payments. For example, an *A* might mean that you made a payment on time. A *B* could indicate the payment was 10-29 days late. A *C* might show that the payment was 30-59 days late. Or an *X* could mean that you missed the payment completely. (These abbreviations are for illustration only. The actual codes used on your credit report might be different.) Let's take a look at an example.

Both Harry Anyone and Lynn Nobody want to buy a new car. They have been at their jobs for the same amount of time. They make about the same amount of money each month. However, the staff at the automobile finance company reviews each person's credit reports, and they see the following:

CREDIT REPORT

Harry Anyone

123 Anystreet

Anytown, US 00001

Credit Accounts:

AnyBank Credit Card
Amount owed:---------------- $3,000

Payment history
(the last 36 months) --- Last month

AAAAABAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAA

CREDIT REPORT

Lynn Nobody

123 Nostreet

Nowhere, US 00002

Credit Accounts:

NoBank Credit Card
Amount owed:---------------- $3,000

Payment history
(the last 36 months) --- Last month

AABBBBBAAAAAAABAAXAABAA
ABBAABBBBAABA

If you interpret the *A* codes to mean *on time* and the *B* codes to mean *late*, which applicant do you think is more likely to get a loan—Harry or Lynn? Harry would have a much easier time, don't you think? This is why it is so important to have a clean credit record. You will find it is easier to obtain credit for your purchases if you strive to keep a clean credit record by making payments on time.

If your credit is not clean, don't give up hope. Finance companies do not usually reject people with less than perfect credit records. These candidates, known as credit risks, end up paying higher interest rates and, in some cases, making larger down payments.

You are entitled to see your credit report. In fact, you can request one free copy every year from the three credit reporting agencies—Experian, Equifax and TransUnion. Search the Internet for the address of each agency. As a rule, you should request and review your credit report every year to make sure there are no errors. Estimates indicate that 75 percent of credit reports contain at least one error. If there is an error, you need to write to the credit agency and request proof of the debt in question. If the agency cannot prove you are responsible for the debt listed, it must remove it from your credit report.

When you run your own business, a clean credit history can help you secure the financing you need for new equipment, such as office furniture, computers and other necessities. As you can see, your own credit history can affect your personal life, as well as your professional career.

Step 13: Delinquent Accounts

Imagine that Dr. John Randolph uses your healthcare professional billing service and pays you with a company check. However, when you deposit the check in your account, your bank sends it back to you, marked with "Insufficient Funds."

Louise Baker also uses your healthcare professional coding and billing service. However, for the past two months, you haven't received any payment for your services.

Take a look at these two examples. Which account—John's or Louise's—would you consider delinquent? The answer is that both accounts are delinquent. A **delinquent account** is any account for which the debtor has failed to live up to the credit agreement.

John paid with a check that did not clear his bank, so he failed to make his payment. Right now, his account is just as delinquent as it would be if he hadn't made any payment at all. Louise's account is a little different. She has made no attempt to make a payment on her credit account with your business. How should you handle these two situations? Well, let's look at John's bad check first, and then move on to Louise's nonpayment.

Handling Returned Checks

The next time you shop, look around at the cash registers. You will probably see signs that state some variation of this: "There will be a charge for all returned checks." This statement warns customers who write checks that, in addition to the amount on the check, the store will collect an extra $20 for each check that is returned by the bank.

When a check is returned, it means that, for some reason, the bank from which the check was drawn has refused to honor it. Any time a check is returned, the merchant loses the amount of money for which the customer wrote the check. Say, for example, that Nancy goes to deposit the day's money for Nancy's Bait Shop. Included in her deposit is $400 in cash and a check for $45. The bank returns the check for $45. Instead of a deposit totaling $445, Nancy's Bait Shop now has a credit of only $400. You can imagine how returned checks can cause problems for a business. Why would a bank return a check? There are several reasons, which you'll discover in a moment.

You may encounter a problem with a client who has paid with a check that does not clear. To solve the problem, you should probably begin by contacting the client directly to arrange to receive payment. You can also try to redeposit the returned check and hope that there is enough money in the bank to cover it. If all else fails, you can send the check to a collection agency or file a court action.

Reasons Banks Return Checks

1. If a bank returns a check for insufficient or nonsufficient funds, it means there is not enough money in the checking account to cover the amount of money on the check. Usually, the bank stamps the letters NSF across the check. A check has "bounced" when the bank returns it for nonsufficient funds.

2. A bank will return a check to a business when the account is closed. Obviously, if an account has been closed, a business should not be writing checks from that account. The bank will not honor any such check.

3. A bank may return a check if the account holder stops payment on the check, which means the account holder tells the bank specifically not to honor the check. This process costs the account holder money; it is usually reserved for disputes between the check writer and the business. The account holder may also do this if the check is lost. An account holder who suspects a check has been stolen can use the stop payment option to make sure that check does not clear. When a check does not clear an account, no money comes out of the account to cover the check.

4. Finally, a bank will not honor a check if the check is filled out incorrectly or illegibly. For example, the bank can refuse to honor the check if the numerical amount does not match the written amount, if the signature appears altered or forged or if the account number has been changed.

Handling Nonpayments

Remember how Louise ignored her bill and just did not pay at all? This can obviously be a problem for you and your business. Without compensation, you might quickly run out of money. So, how can you go about collecting from Louise? The first course of action is to send a friendly reminder. Think of your own experiences. If you've misplaced a bill, a simple "Have you forgotten?" letter reminds you to send payment. When you send this type of letter, it should read something like the following:

> Dear Louise Baker:
>
> Have our letters crossed in the mail? I am waiting for your payment for my services in June and July. I value your business and am looking forward to working with you more in the upcoming months. If you have not sent out your payment of _____, would you please do so now?
>
> Thank you very much.

This first letter is to the point, but friendly. It simply reminds Louise that she hasn't paid you yet. It makes no threats, and it allows flexibility by raising the possibility that she has already sent the payment. Money is a sensitive subject. People can become very embarrassed if they have to admit they haven't paid their bills. Don't press your delinquent clients too far in the first letter.

However, send a second letter if another two weeks go by and you still haven't received payment. This letter should be a bit more serious and state a consequence for nonpayment:

> Dear Louise Baker:
>
> In reviewing my bills, I noticed your account is more than two months past due. I hope you received my first reminder. This is your second notice in the past two weeks. If there is a problem with my invoice or services, please contact me immediately, and I'm sure we can work things out.
>
> I must stress to you that I need to receive your payment of _____ by (fill in date two weeks from today), or I will be forced to take the next step in my effort to collect. This step can include a collection agency and, as per our contract, significant additional cost to you.
>
> If you have already sent your payment, thank you very much.

You see, this second notice is firm compared to the first, but still doesn't go too far. She now knows exactly what she owes, what to do if she has a problem and what will happen if she doesn't pay her bill.

After two more weeks, you should take the next step in the collection process if you still haven't received payment. The next step could be either contacting a collection agency or initiating a court action.

Step 14: Collection Agencies

Consider the example of Louise's account. Let's say you have tried to contact her, but have not received payment. Her account is now three months overdue, and she has made no effort to explain why. In cases such as this, you might be forced to take more drastic steps beyond cutting off your service to her and sending her letters. You might need to pass her account on to a collection agency.

Using Collection Agencies

Collection agencies are businesses that specialize in collecting unpaid debts for other businesses. Usually, these agencies are under contract to handle the delinquent accounts of a variety of businesses. Collection agencies, and the collection agents they employ, handle all of the contact, follow-up and other financial arrangements for a business delinquent account.

Using a collection agency might seem to be an ideal arrangement for a business that has delinquent accounts—but this isn't always the case. You see, in order to perform their services, collection agents collect a commission for every delinquent account they settle. Ordinarily, this commission comes out of the total debt owed to the business. In a contract with a collection agency, the business agrees to give up a certain percentage of the amount it collects if the collection agency is successful. This percentage can be as high as 50 percent! In other words, if you turn over Louise's delinquent account to a collection agency, you can expect to receive only half of what she owes you. The other half goes to the collection agency to pay for its services. If Louise owes you $500, you would ultimately receive only $250—if the agency is successful in collecting at all.

Keep in mind that even collection agencies can have problems collecting debts. Often, the collection agent contacts the debtor and arranges for that person or business to make monthly payments. Sometimes this arrangement works, and sometimes it doesn't.

When nothing seems to be successful, the collection agency might choose to file a court action against the debtor. You can also file a court action if you do not wish to use a collection agency. Small claims court can be a very effective method of recouping debts.

Step 15: Small Claims Court

In the United States, each state has a small claims court designed for parties to settle disputes without attorneys. Each state has its own rules for small claims court. These rules include the maximum dollar amount for which you can sue; the method you must use to notify the other party (the *defendant*); and the procedures you must follow to file a valid claim.

Filing a Claim

Filing a claim usually requires a filing fee (most likely, less than $100). After paying the fee, you must then serve the person against whom you are filing—the **defendant**. The person filing the action, or suing the defendant, is known as the **plaintiff**. Both the plaintiff and the defendant are **parties** in the lawsuit.

Most states require that you have a responsible person hand-deliver notice of the court action to the defendant, in a process known as **serving** the defendant. Mailing the notice is not acceptable in most states. After the defendant has been served, you'll both appear in court on the set date and present your sides of the case. If the defendant wins, then the lawsuit is dismissed. If the plaintiff wins, the judge orders the defendant to pay compensation to the plaintiff. However, if either party fails to appear, the person who does appear is awarded a *default judgment*. Basically, a **default judgment** means the person who appears wins.

Let's say that you decide to take Louise to court. You file the court action with the county clerk, and then have Louise properly served. The court date is September 21st. On September 21st, you arrive in court and Louise is there, as well. You both present your sides of the case. The judge rules that Louise owes you the money and must pay. You have won the case. The judge then enters a *judgment* in your favor on the court records. This **judgment** outlines how much Louise owes you, and when the court case took place. But how do you collect? You will discover the answer to this question in the next section.

If you lose a small claims court action, you usually cannot take any further action. Also, any person who is served with a small claims court summons can choose to take the case higher, to county court, where attorneys are permitted. This can increase your costs, so be sure of your case if you choose to go in this direction.

Collection agencies usually file in county court and use an attorney to collect delinquent debts. Even if the agency wins, you will still see only about 50 percent of the original debt.

Collecting a Judgment

Once you win a court case, you do not necessarily collect your money right then and there. As you have learned, the judge grants you a judgment. This judgment is your leverage in your fight to collect payment. Depending on your state, you can use the judgment to collect part of the defendant's paycheck. Or, you might be able to force the defendant to sell personal property to pay the judgment. In any case, you must take the judgment a step beyond the courtroom to collect money.

If your state permits, you can use the judgment to get an **order of garnishment**. This order is a legal document requiring the defendant's employer to withhold a percentage of the defendant's pay each month and send that money to you. The withholding will continue as long as the defendant owes money on the judgment and works for that employer. Each time the defendant changes employers, you must get a new order of garnishment.

Now, let's switch gears and look at how to deal with agitated, frustrated or confused patients.

Step 16: Solving Patient Problems

If you work in a medical office, you'll typically deal with patients. This means that you'll see them on good days when they're happy, and on bad days when something is wrong. Sometimes a patient feels fine physically, but has serious concerns regarding her bill. Imagine this common scenario:

Rosita Perez had surgery a month ago and saw the doctor two weeks ago for a follow-up examination. Today she comes into the office holding her bill. When you try to talk to her, she interrupts. "Why are you sending me this? My insurance company should have paid it!" she exclaims.

Medical Coding and Billing Specialist

Now, you know that your billing software will automatically print a bill for an account that has an outstanding balance. The bill is then sent to the responsible party listed for the account. In Rosita's case, her insurance company has been billed but hasn't paid yet, so the bill was generated and sent to Rosita. You need to explain this to her. How should you approach the situation? Remember that Rosita is currently very upset because she has just opened a bill that she didn't plan on receiving or paying—and that can be very stressful for anyone!

The first thing you need to do is *remain calm*! If you allow yourself to become agitated, all you will do is create a completely unworkable situation. If you stay calm, you can first try to soothe Rosita's nerves, and then you can move on to the explanation of her bill. You need to keep in mind that most people don't understand how the entire billing process works. You, as a medical coding and billing specialist, understand the process and will need to explain it—briefly and clearly—to troubled patients.

With this in mind, you should be prepared to deal with difficult issues as agitated patients vent their frustration. However, this should never become an assault on you. After all, the patient is not mad at you; she is mad about the bill. If the venting becomes personal, you should gently guide the conversation elsewhere. Carefully take the patient through the following steps:

1. Take control of the situation by asking to see the bill. Once you have the bill, review it and confirm the situation. Usually, a patient will give you the chance to look at the bill. If the patient won't do this, explain that you cannot help unless you see the item of concern. Always approach the situation from a "how can I help you" point of view. Be on the patient's side.

2. Once you have the patient's attention, explain the specific situation. In Rosita's case, you explain that the insurance company has been billed, but has not paid yet. This triggers the computer to generate and send a bill to the patient. Rosita may want to follow up with the insurance company to find out why payment has been delayed.

3. If patients have questions about their specific insurance policies, refer them to their insurance representatives or agents. You cannot possibly know everything about every patient's coverage, although some patients might think you are responsible for their insurance companies' denials of their claims.

4. Try to step in and see if you can help when an insurance company has paid, but the patient believes the reimbursement is too low. Again, be on the patient's side. Ask if you can call the insurance company on the patient's behalf to confirm the explanation of benefits. Then, get in touch with your insurance contact and follow up promptly.

Overall, the most important thing to remember when dealing with anxious patients is to be on their side. Be an advocate, not an adversary. Set yourself up as the "knight in shining armor," and the patient will see you as an ally, not someone to yell at. Because you have been trained to deal with insurance companies, you are better suited to ask questions about specific claims. Use this knowledge to help patients who have questions and are worried about bills they thought were covered.

Insurance companies and patients are not the only potential sources of problems. You might, from time to time, encounter a problem with a provider. Let's go through the process of dealing with this type of problem.

Step 17: Solving Problems with Providers

Providers are human beings, and human beings occasionally have misunderstandings or conflicting attitudes. When you run into a problem with a provider, you should respond much like you will with patient problems and *stay calm*. No matter what the problem is, a screaming match won't solve anything. An intelligent discussion can quickly deteriorate into a battle if the two parties allow it. However, if you stay calm, you can more effectively deal with any problem because you'll present a professional attitude.

If the provider has a problem with something you're doing, stop doing it. Ask questions if you are unsure about why what you're doing is wrong—you need to know. If you are performing a necessary task, explain why it is important. In any case, listen to what the provider is saying. Sometimes, you might have to accept the provider's instruction, regardless of how you feel about it. After all, it is likely that you work for the provider, whether you are an outside healthcare document specialist or an in-house employee. Both sides may have to compromise. This constant give and take enables both the provider and the medical coding and billing specialist to be comfortable with the working environment.

What would you do if a provider asked you to do something fraudulent? That is a tough situation. Let's consider Jason, a medical coding and billing specialist who works with Dr. King. One day, Dr. King hands Jason a bill and says, "Don't use the surgical package code. I never do because the practice will get more money if everything is billed separately." If Jason does as Dr. King suggests, he will commit fraud. Jason knows this, and explains to Dr. King that he's not comfortable billing things separately—after all, his job is to bill accurately. Jason goes on to say that he's liable if he knowingly submits fraudulent claims. Jason did the right thing—just as you would do if you ever found yourself in this type of situation.

You will also keep a professional attitude by acknowledging your mistakes. If you forgot to file a claim, don't shrug off responsibility by claiming that the insurance company misplaced it. It is important for the provider to know you are trustworthy. You'll compromise your own credibility if you do not take responsibility for your actions, including those that are wrong.

In addition to taking responsibility, be prepared to solve problems. Volunteer to do things that need to be done, as long as you have the ability and the time. Make yourself valuable to the office and to the provider.

Step 18: Professional Liability Insurance

When you begin your career as a professional medical coding and billing specialist, you might be a self-employed contractor with a provider's office or healthcare facility. Or, you might work as an employee for a provider or an outpatient facility. Whatever the case may be, you will be responsible for many decisions related to medical claims.

Therefore, you are partially responsible for financial reimbursement for the medical services that patients receive. Although it's not a daily event, an unintentional but significant error in your work could put you at risk for malpractice in today's healthcare environment of high costs and frequent lawsuits.

This information is not intended to scare you. Unfortunately, however, lawsuits are a growing trend in many professions today. The healthcare profession is no exception. The best defense against a potential lawsuit is to have the proper training and *professional liability insurance*. You've taken the right steps for your education and training, so let's focus on liability insurance next.

Professional liability insurance is insurance that protects you if someone sues you for malpractice. If you are sued, professional liability insurance typically pays for legal fees, court costs, court judgments and even out-of-court settlements. Those who have been sued for medical malpractice will tell you that the investment in liability insurance is worth the cost for the security and peace of mind it provides.

Understand that as an employee, your employer should already have insurance. You won't need to worry about getting your own protection. However, you'll need to arrange for your own liability insurance if you decide to form your own business.

Step 19: Compliance and the Medical Professional

Compliance means ensuring that a company or facility provides and bills for services according to the regulations, laws and guidelines that govern it. The correct handling of medical records is vitally important to compliance.

Elements of Compliance

In addition to following the guidelines in this lesson, a company or facility must protect itself from the risk of prosecution and keep itself on the right course. The provider or office manager typically creates a compliance plan, and the medical coding and billing specialist must follow the plan. Creating a compliance plan involves developing standards of conduct, and then providing education to the company to communicate those standards.

Auditing, monitoring and updating standards of conduct are essential elements of compliance. Specifically, the plan should include statements to address current reimbursement, claims submission and proper documentation of services.

It's also a good practice to become familiar with the major investigative targets of government regulating agencies. Good sources of information about fraud investigations include the annual work plan of the Department of Health and Human Services (HHS), fraud alerts from the Office of Inspector General (OIG) and medical reviews in fiscal intermediaries' provider newsletters.

It is important to take time to carefully document policies and procedures. Documentation acts as a reference for staff members who have never received training on certain issues, or who may not remember the training they had. The actual writing process helps to improve current practices, as each step must be examined as it is documented.

Also, written procedures help distribute important information in situations in which a supervisor or manager is not available. It is always easier to follow the rules if you know what they are and if you understand the consequences for not following them.

Now, let's review what you've learned with a Practice Exercise.

Step 20: Practice Exercise 21-4

Determine the term(s) to complete each sentence, and write your answers on scratch paper.

1. _____ is the merchant's acceptance of your promise to pay later for goods or services you receive immediately.

2. The document listing your credit history is called your credit _____.

3. The document listing your credit history is important to potential _____ who are considering giving you credit.

4. Late payments, bankruptcies and defaults are called _____.

5. People known as credit risks end up paying _____ interest rates.

6. If a debtor fails to live up to his credit agreement, his account is _____.

7. If a check bounces, the bank returns the check with the letters _____ stamped across the check.

8. The person filing the action in small claims court is the _____.

9. The person being sued in small claims court is the _____.

10. In some cases, the defendant's employer withholds a percentage of the defendant's pay each month and sends the money to the creditor. In order to do this, a legal document called a(n) _____ is required.

Step 21: Review Practice Exercise 21-4

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 22: Business Forms

Before you wrap up this lesson you need to study a few examples of common forms that you may encounter as a healthcare professional. Let's take a look!

First, remember that the medical coding and billing specialist is responsible for maintaining the confidentiality of privileged information. Look at the following example of a Business Associate Agreement that an employer may use when she hires a medical coding and billing specialist.

SAMPLE BUSINESS ASSOCIATE AGREEMENT

THIS BUSINESS ASSOCIATE AGREEMENT ("Agreement") is entered into on this _____ day of _____, 20__ (the "Effective Date"), between [your provider office] ("Covered Entity") and _____ ("Business Associate") (each a "Party" and collectively the "Parties").

WHEREAS, Covered Entity will disclose and/or make available to Business Associate Protected Health Information ("PHI") in connection with services provided to Covered Entity by Business Associate, which information is confidential and must be given special protection; and

WHEREAS, Business Associate will have access to and/or create on behalf of and/or receive from Covered Entity Protected Health Information that can be used or disclosed only in accordance with this Agreement and the HHS Privacy Standards Rule;

NOW, THEREFORE, the Parties hereby agree as follows:

1.   **DEFINITIONS**.

1.1   Disclosure. Disclosure shall mean the release, transfer, provision of access to, or divulging in any other manner of information outside the entity holding the information.

1.2   Health Care Operations. Health Care Operations shall have the meaning as set out in its definition in 45 CFR § 164.501, as such provision is currently drafted and as it is subsequently updated, amended, or revised.

1.3   HHS. HHS shall mean the Department of Health and Human Services.

1.4   HHS Privacy Standards Rule. HHS Privacy Standards Rule shall mean the Code of Federal Regulations ("CFR"), Title 45, §§ 160 and 164, as such regulations are currently drafted and as they are subsequently updated, amended, or revised.

1.5   Individual. Individual shall mean the person who is the subject of the Protected Health Information and shall include a person who qualifies as a personal representative in accordance with 45 CFR § 164.502(g).

1.6   Protected Health Information. Protected Health Information shall have the meaning as set out in its definition in 45 CFR §164.501, as such provision is currently drafted and as it is subsequently updated, amended, or revised.

1.7   Secretary. Secretary shall mean the Secretary of Health and Human Services or his/her designated representatives.

1.8   Use. Use shall mean, with respect to individually identifiable health information, the sharing, employment, application, utilization, examination, or analysis of such information within an entity that maintains such information.

2.   **PERMITTED USES AND DISCLOSURES OF PROTECTED HEALTH INFORMATION.**

[2.1   Permitted Uses and Disclosures. The Parties hereby agree that, except as otherwise specified herein, Business Associate may make any and all uses and disclosures of PHI received from, created on behalf of, and/or made available by Covered Entity for the following stated purposes:

        Here list the purposes for which PHI will be used, such as: to file health care claims on behalf of Covered Entity; to properly track the status of such claims; and to generate any necessary documentation for the above.]

          or, if a separate services contract is in place,

[2.1   Permitted Uses and Disclosures. The Parties hereby agree that, except as otherwise specified herein, Business Associate may make any and all uses and disclosures of PHI necessary to perform its obligations under the [name of services agreement].]

3.   **USE AND DISCLOSURE OF PHI FOR MANAGEMENT, ADMINISTRATION, AND LEGAL RESPONSIBILITIES.**

3.1   Use. Notwithstanding the provisions of Section 2 above, Business Associate is permitted to use the PHI in its possession if necessary for its proper management and administration or to fulfill any present or future legal responsibilities of the Business Associate, *provided that* such uses are permitted under applicable Federal and State confidentiality laws.

3.2   Disclosure. Notwithstanding the provisions of Section 2 above, Business Associate is permitted to disclose the PHI in its possession to third parties if necessary for its proper management and administration or to fulfill any present or future legal responsibilities of the Business Associate, *provided that* the Business Associate represents to the Covered Entity in writing that (a) the disclosures are required by law, as provided for in 45 CFR § 164.501 or (b) the Business Associate has received from the third party written assurances regarding its confidential handling of such PHI as required under 45 CFR § 164.504(e)(4).

4.   **OTHER PERMITTED USES AND DISCLOSURES.**

4.1   Data Aggregation Services. Notwithstanding the provisions of Section 2 above, Business Associate is permitted to use and/or disclose PHI to provide data aggregation services, as that term is defined in 45 CFR § 164.501, relating to the Health Care Operations of Covered Entity.

5.   **RESPONSIBILITIES OF BUSINESS ASSOCIATE WITH RESPECT TO PHI.**

5.1   Limits on Use and Disclosure. Business Associate hereby agrees that PHI created on behalf of or provided or made available by Covered Entity shall not be further used or disclosed by Business Associate other than as permitted or required by this Agreement or as otherwise required by law. Except as permitted in Sections 3 and 4 above, Business Associate shall not use or further disclose PHI in a manner that would violate the requirement of the HHS Privacy Standards Rule if done by Covered Entity.

5.2   Reports of Improper Use or Disclosure. Business Associate hereby agrees to report to Covered Entity any use and/or disclosure of PHI that is not permitted or required by this Agreement of which Business Associate becomes aware within __ days of Business Associate's discovery of such unauthorized use and/or disclosure.

5.3   Appropriate Safeguards. Business Associate will establish and maintain appropriate safeguards to maintain the security of PHI and to prevent any use or disclosure of such PHI other than as provided for by this Agreement.

5.4   Subcontractors and Agents. Business Associate hereby agrees that whenever PHI is provided or made available to any of its subcontractors or agents as permitted by this Agreement, Business Associate will require such subcontractors or agents to agree, in writing, to adhere to the same terms, conditions, and restrictions on the use and/or disclosure of PHI that apply to Business Associate pursuant to this Agreement.

5.5   Right of Access of an Individual. At the request of and in the time and manner designated by Covered Entity, Business Associate hereby agrees to make available and provide a right of access to PHI by Covered Entity or the Individual, in accordance with the provisions of 45 CFR § 164.524.

5.6   Amendments to PHI. At the request of and in the time and manner designated by Covered Entity, Business Associate hereby agrees to make PHI available for amendment and to incorporate any amendment(s) to PHI pursuant to 45 CFR § 164.526.

5.7   Accounting of Disclosures. (a) Business Associate agrees to document such disclosures of PHI and information related to such disclosures as would be required for Covered Entity to respond to a request by an Individual for an accounting of disclosures of PHI in accordance with 45 CFR § 164.508. (b) Within 45 days of receiving a written request from Covered Entity, Business Associate hereby agrees to make such information available to Covered Entity as is requested by Covered Entity to permit Covered Entity to respond to a request by an Individual for an accounting of disclosures in accordance with 45 CFR § 164.528.

5.8   Access to Books and Records. Business Associate shall make available to the Secretary its internal practices, books, and records relating to the use and disclosure of PHI received from, or created or received by Business Associate on behalf of, Covered Entity for the purposes of determining Covered Entity's compliance with the Privacy Rule, in accordance with 45 CFR § 164.504(e)(2)(ii)(H).

6.   **RESPONSIBILITIES OF COVERED ENTITY WITH RESPECT TO PHI.**

6.1   Change in Notice of Privacy Practices. Covered Entity agrees to inform Business Associate of any changes in the form of the Notice of Privacy Practices that Covered Entity provides to Individuals pursuant to 45 CFR § 164.520, and agrees to provide Business Associate with a copy of the notice currently in use.

6.2   Change or Withdrawal of Permission. Covered Entity agrees to inform Business Associate of any changes in the form of, or revocation of, permission by an Individual to use or disclose PHI, to the extent such changes may affect Business Associate's use or disclosure of PHI.

6.3   Changes in Requirements. Covered Entity agrees to notify Business Associate of any arrangements permitted or required of Covered Entity under the HHS Privacy Standards Rule that may impact in any manner the use and/or disclosure of PHI by the Business Associate under this Agreement, including, but not limited to, restrictions on use and/or disclosure of PHI as provided for in 45 CFR § 164.522 agreed to by Covered Entity.

6.4   Permissible Requests. Covered Entity shall not request Business Associate to use or disclose PHI in any manner that would not be permissible under the HHS Privacy Standards Rule if done by Covered Entity, except as provided in Sections 3 and 4 above.

7.   **TERM AND TERMINATION.**

7.1   Term. This Agreement shall become effective on the Effective Date and shall continue in effect until all obligations of the Parties have been met, unless terminated as provided in this section.

7.2   Termination of Agreement. Pursuant to 45 CFR § 164.504(e)(2)(iii), Business Associate agrees Covered Entity may immediately terminate this Agreement if Covered Entity determines that Business Associate has violated a material term of this Agreement. Alternatively, Covered Entity may choose to (a) provide Business Associate with __ days' written notice of the existence of an alleged material violation, and (b) afford the Business Associate an opportunity to cure said alleged material violation upon mutually agreeable terms. If mutually agreeable terms cannot be reached within __ days, then Business Associate must cure said violation within __ days to the satisfaction of Covered Entity. If Business Associate fails to cure such violation as set forth in this paragraph, Covered Entity may immediately terminate this Agreement. If neither termination nor cure are feasible, Covered Entity shall report the violation to the Secretary.

7.3   Effect of Termination. Upon the termination of this Agreement, Business Associate agrees to return or destroy or return all PHI received from, or created or received by Business Associate on behalf of, Covered Entity that Business Associate or its subcontractors or agents still maintain in any form, pursuant to 45 CFR § 164.504(e)(2)(ii)(I). Business Associate agrees that it shall not retain any copies of such PHI. Alternatively, if such return or destruction of such PHI is not feasible, then Business Associate agrees to extend the protections of this Agreement to such PHI for as long as necessary and to limit further uses and disclosures to those purposes that make the return or destruction of such PHI infeasible.

8.   **MISCELLANEOUS.**

8.1   Governing Law. This Agreement shall be governed by the laws of the State of
_____.

8.2   Notice. Whenever under this Agreement one Party is required to give notice to the other, such notice shall be deemed given if mailed by First Class United States mail or by express courier, postage prepaid, to such Party's address as given below, and/or via facsimile to the facsimile telephone numbers listed below.

Business Associate:	Covered Entity:
_____	_____
_____	_____
Attention: _____	Attention: _____
Fax: _____	Fax: _____

Each Party may at any time change its address and that of its representative for notice by giving notice thereof in the manner provided above.

8.3   Headings. The headings of this Agreement are included for ease of reference only and shall not enter into the interpretation of this Agreement.

8.4   Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original. Facsimile copies of this Agreement shall be deemed to be originals.

IN WITNESS WHEREOF, each of the undersigned has caused this Agreement to be duly executed in its name and on its behalf effective as of _____, 20__.

BUSINESS ASSOCIATE	COVERED ENTITY
By: _____	By: _____
Print name: _____	Print name: _____
Print title: _____	Print title: _____
Date: _____	Date: _____

The following is an example of a provider's signature authorization form that you can complete, notarize and send to the insurance carrier. This form allows the processing of insurance claims with the use of a signature stamp. A copy is retained for the medical billing specialist and the provider's records.

PROVIDER'S NOTARIZED FACSIMILE OR
STAMP SIGNATURE AUTHORIZATION

State of _____)

_____) ss

County of _____)

_____ being first duly sworn, deposes and says: I hereby authorize the _____ (name of fiscal administrator) to accept my facsimile or stamp signature shown below

_____

Facsimile or Stamp Signature

as my true signature for all purposes under the _____ (name of insurance program) in the same manner as if it were my actual signature, including my agreeing to abide by the full payment concept and the remainder of the certification normally signed by the source of care as it appears on all claim forms.

_____

Signature

Subscribed and sworn to before me this _____ day of _____ 20____.

_____

Notary Public

in and for _____ County, State of _____

    (SEAL)

               My Commission expires _____

Next, you'll see an example of the type of fax cover sheet that you'd use when transmitting patient information. You must use a fax cover sheet to transmit claims data, resubmit an unpaid insurance claim, send further documentation on a claim to insurance carriers or obtain preauthorization for a patient. It is important to protect the patient's confidentiality. Documents containing sensitive information, such as information regarding sexually transmitted diseases, drug or alcohol treatment or human immunodeficiency virus (HIV), should not be faxed.

FAX COVER SHEET

Date: _____   Time: _____   Number of pages
                                             (including cover sheet): _____

To: _____   Fax number: _____

From: _____   Phone: _____

Fax number: _____

This fax transmittal may contain information that is privileged, confidential and exempt from disclosure under applicable law, and is intended only for the use of the identified individual to whom it is addressed. If you have received this transmittal in error, please notify this office immediately by telephone.

If you cannot read this fax, or if pages are missing, please contact this office by telephone.

_____

Instructions to the authorized receiver: Please complete this statement of receipt and return to sender via the above fax number.

I, _____, verify that I have received _____ number of pages, including the cover sheet.

Many insurance carriers will reimburse the patient directly unless otherwise noted on the claim form. This is an example of an authorization form for payment of insurance benefits to be paid directly to the physician. The authorization may be a paragraph included on the encounter form, or it may be a separate form that is maintained in the patient's medical chart. Below are examples of both types.

CONSENT FOR PHYSICIAN REIMBURSEMENT

I request payment of insurance benefits either to myself or to the physician listed on this claim.

_____
Patient or Responsible Party signature

CONSENT FOR PHYSICIAN REIMBURSEMENT

I hereby authorize (insurance carrier's name) to mail insurance benefit payments directly to (physician's name and address) for medical services received for the time period of (specific dates).

_____
Patient or Responsible Party signature

_____
Relationship to patient

_____
Date of signature

Medical Coding and Billing Specialist

Next you'll see an example of a claim tracer form. You'll submit this form to the insurance carrier with a copy of the original claim submitted for payment. The time limit for receiving insurance reimbursement can vary depending on the insurance carrier.

CLAIM TRACER FORM

Date _____

Insurance carrier name _____

Address _____

Patient name _____

Insured's name _____

Policy number _____

Group name/number _____

Date of original claim submission _____   Amount _____

An excessive amount of time has passed since submission of our original claim as described above. We have not received a request for additional information or payment on this claim. Please review the attached copy of the claim and process for payment within seven days.

If there is any difficulty with this claim, please complete one of the items below and return this letter to our office.

Claim pending because _____

Payment of claim in process _____   Date _____

Payment made on claim _____

　　　　　　　　To whom _____   Date _____

Claim denied _____   Reason _____

_____

Additional remarks _____

_____

Thank you for your assistance in this important matter. Please contact our office if you have any questions regarding this claim.

　　　　　　　　　　　　　　The office of (physician's name), MD

Address _____

Phone _____

An appeals letter must accompany all requests for review of the reimbursement received for an insurance claim. The following is an example of an appeals letter. Always attach a copy of the original claim form and a copy of the EOB received from the insurance carrier to the appeals letter.

Provider/Practice Name
Address
City, State ZIP code

Date (Very Important)

Insurance Company
Address
City, State ZIP code

Dear (Contact):

Our office recently received reimbursement in the amount of $ (insert amount) for (insert patient's name) for services on (insert date).

As you can see from the enclosed copy of the Explanation of Benefits, reimbursement was reduced for this claim because the services were found to be (insert reason noted on EOB).

Please review the services provided for (patient's name). (The physician will provide you with a short sentence that you should include here explaining the necessity of treatment.)

Thank you for your attention to this request.

Sincerely,

Your name

Enclosed: EOB
               Original claim

Medical Coding and Billing Specialist

Below, take a look at the example of a letter asking for review of a claim. This letter is appropriate when the insurance carrier has denied the payment and, after adequate research, you believe there may be an error—that the payment should have been approved. Attach to this letter a copy of the original claim form and a copy of the EOB from the insurance carrier.

Provider/Practice Name
Address
City, State ZIP code

Date (Very Important)

Insurance Company
Address
City, State ZIP code

Dear (Contact):

Our office recently received a denied claim for (insert patient's name) in the amount of $ (insert amount) for services on (insert date) from your insurance office.

As you can see from the enclosed copy of the Explanation of Benefits, this claim was denied because (insert reason noted on EOB).

Please review the services provided for (patient's name). (The physician will provide you with a short sentence that you should include here explaining the necessity of treatment.)

If you need additional information, please contact our office. Thank you for your attention to this request.

Sincerely,

Your name

Enclosed: EOB
            Original claim

When a workers' compensation claim becomes 45 days delinquent, you'll need to send a letter to the insurance carrier. Below is a sample of this type of letter.

Provider/Practice Name
Address
City, State ZIP code

Date

Insurance Company
Address
City, State ZIP code

Dear (Contact):

Re:

     Case Number: _____

     Patient: _____

     Date of Injury: _____

     Employer: _____

     Claim Amount: _____

Our records indicate that payment for the above case number remains unpaid.

Please review the services provided for (patient's name). Your cooperation in furnishing us the present status of this claim will be appreciated.

Sincerely,

Your name

Finally, keep in mind that capitation plans reimburse physicians based on the number of patients they see. Managed care plans that utilize this capitation reimbursement system require a simple accounting sheet. Record all patients in one particular plan on one accounting sheet so you can track how many patients the provider sees. The following is an example of a capitation accounting sheet.

CAPITATION ACCOUNTING SHEET

NAME OF PLAN _____

DATE	PATIENT NAME	CHARGES SERVICES/PLAN	PAYMENTS COPAY/CAPITATION

Step 23: Practice Exercise 21-5

On scratch paper, match the following forms with their descriptions.

1. **Consent for physician reimbursement form**

2. **Fax cover sheet**

3. **Employee confidentiality statement**

4. **Authorization form**

    a. Authorization form for payment of insurance benefits to be paid directly to the physician
    b. Confidentiality agreement
    c. Allows insurance claims to be processed with the use of a signature stamp
    d. Form used when transmitting patient information

Step 24: Review Practice Exercise 21-5

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 25: Lesson Summary

By now, you know how to accurately record reimbursements when you receive them and determine amounts to write off or bill to patients. In this lesson, you learned the importance of managing patient records carefully. As you know, using an insurance claims log will enable you to keep track of claim reimbursements, as well as patient billing and reimbursements.

In addition, you discovered that you'll go through your regional representative first, using inquiries, narrative explanations and resubmission of bills to solve problems with insurance companies when they arise. If necessary, you can also contact your state's insurance commissioner to help solve problems. Finally, the court system is available to resolve problems, but that is usually a last resort.

This lesson also illustrates just how important credit is today in the United States. Virtually everyone has used credit in some manner. Department stores, banks and even small, mom-and-pop businesses issue credit and charge goods. And you know that your credit rating is essential to any application for credit. The three credit reporting agencies keep your credit history in a file and release it to potential creditors when you apply for credit. Experts recommend that you should review your credit report at least once a year. These reports, while mostly accurate, can contain errors and omissions, which can harm your credit history.

If you run into a situation in which a person or business owes you money, you should first try to resolve the problem yourself. Use friendly reminders and follow-up letters. However, if those efforts fail, you might have to turn to the services of a collection agency, or even to the legal system.

When you deal with a problem, what you accomplish largely depends on how you approach the situation. For example, you won't accomplish much if you become agitated and angry. However, you can often solve problems quickly and effectively if you remember to stay calm and take control of the situation. When you deal with patients, remember that they don't know as much as you do about the billing process. Be prepared to explain yourself more than once, and use language the patient understands.

Doctors are people, too. You might not care for the manner in which a provider tells you to do something, but you should stay calm and work through the problem. Sometimes, a compromise can be reached; other times, you just have to complete the task as the provider instructs. In any case, approach all problems with a professional attitude. Doing so will enable you to be effective in dealing with whatever problems you encounter in the medical field.

Now, it's time to complete your Quiz. Remember, you may use your textbook as you answer the questions. Good luck!

Step 26: Quiz 21

Once you've mastered the course content, locate this Quiz in your *Online Course* or your *Assignment Pack*. Read and follow the Quiz instructions carefully.

Lesson 22
Resources for the Healthcare Professional

Step 1: Learning Objectives for Lesson 22

When you have completed the instruction in this lesson, you will be trained to:

- Discuss professional organizations pertaining to the medical coding and billing specialist, and explain services they offer.

- Explain credentialing and how it relates to a medical coding and billing specialist.

- Identify helpful print and Internet publications that relate to the healthcare profession.

Step 2: Lesson Preview

Look how far you've come in this course! You began by learning about insurance, including the terminology specific to medical insurance. Then you studied medical terminology—discovering how to break long terms into simple parts that make sense. You also explored medical ethics and legal issues, as well as the basics of medical records.

Next, you learned the basics of anatomy. In addition, you became an "insider" as you discovered how to handle medical records, medical bills, EOBs and claim forms. You had hands-on practice with medical billing software. You'll have the opportunity to use the medical billing software in Practice Exercises as you continue in this course. The more you use the software, the more confidence you'll have.

Now, you will focus on the diagnostic coding aspect of the medical coding and billing specialist's career. Once you understand the organization of the *ICD-10-CM*, you'll go through the manual chapter by chapter to enhance your knowledge.

However, in this lesson, we're going to step back from the "how-to" aspect of your training and take a look at your future career. There are many organizations and resources available to help you succeed. This lesson is chock full of information to help you find the guidance you need. We'll provide information on the professional organizations for medical coding and billing specialists. In addition, we'll discuss credentialing and certification options, and peruse resources that can help you stay abreast of changes in the healthcare field. In fact, you might be surprised at all the help that's out there for you!

Step 3: Associations for the Healthcare Professional

Over the years, several professional organizations have emerged to help healthcare professionals succeed. These organizations provide educational resources, community ties, job support and more. The two main associations are the American Academy of Professional Coders and the American Health Information Management Association. In the following sections, you'll take a look at these associations, as well as others related to the healthcare profession.

American Academy of Professional Coders (AAPC)

The American Academy of Professional Coders (AAPC) was founded in 1988 as the American Academy of Procedural Coders. The goal of the original organization was to provide education, recognition and certification for physician-practice procedural coders. The AAPC also sought to raise the procedural coding standards.

The AAPC specializes in outpatient coding. Today, the AAPC represents coders who work for physicians, clinics, hospitals, outpatient facilities, payers and consulting firms. In all, the AAPC has more than 124,000 members worldwide. Membership is open to not just coders, but to other healthcare information professionals as well.

The AAPC offers the following coding-related services and programs:

- Coding certification exams and study guides

- Examination review classes

- Coding education

- An annual conference

- Local chapters

- AAPC publications

  American Academy of Professional Coders (AAPC)
  2480 South 3850 West, Suite B
  Salt Lake City, UT 84120
  (800) 626-CODE (2633)
  www.aapc.com

American Health Information Management Association (AHIMA)

The American Health Information Management Association (AHIMA) is a membership organization representing more than 67,000 healthcare professionals. It provides reliable and valid information for all areas of health management. AHIMA began in 1928 as the Association of Record Librarians of North America (ARLNA). The purpose of this organization was to "elevate the standards of clinical records in hospitals and other medical institutions." This organization has undergone several name changes over the years. It became AHIMA in 1991. It is recognized as the leading source of "HIM knowledge," a respected authority for rigorous professional certification, and one of the industry's most active and influential advocates in Congress.[1]

AHIMA offers a number of services to their members. Among them are:

- Coding certification exams

- Engage Communities

- Careers Assist: Job Board

- *Journal of AHIMA*

- *The HIM Body of Knowledge*

  American Health Information Management Association (AHIMA)
  233 N. Michigan Avenue, 21st Floor
  Chicago, IL 60601-5809
  (312) 223-1100 or (800) 335-5535
  www.ahima.org

American Medical Association

Since 1847, the American Medical Association (AMA) has had one mission: to promote the art and science of medicine and the betterment of public health.[3] The AMA is an important professional organization in the world of health care. The AMA speaks out on important issues like patient rights and the health of the nation, and also created and maintains the *CPT*. The AMA Web site features a variety of valuable resources. Some of the AMA resources that you might find helpful include:

- CPT code information, including revisions

- AMA research symposium

- *Journal of the American Medical Association (JAMA)*

- AMA Morning Rounds

  American Medical Association (AMA)
  AMA Plaza
  330 N. Wabash Avenue
  Chicago, IL 60611-5885
  (800) 621-8335
  www.ama-assn.org

American Hospital Association

The American Hospital Association (AHA) serves hospitals, healthcare networks, patients and communities. The AHA represents the people and organizations in the development of national healthcare policy.

Some of the AMA resources you might find helpful include:

- Publications covering healthcare legislation

- Research on healthcare services and information management

  American Hospital Association (AHA)
  155 N. Wacker Drive
  Chicago, IL 60606
  (312) 422-3000 or (800) 424-4301
  www.aha.org

Now, let's look at the credentialing available for medical coding and billing specialists.

Step 4: Credentialing

You've probably heard people use the term *credentials*. Most likely, the word came up in a conversation about someone's qualifications for a job. In a market where there are so many people offering similar services, **credentials** help people let customers know they are qualified to do a certain job. There are credentials for teachers, accountants, attorneys and more. There are also credentials for medical coding and billing specialists like you.

Credentialing is a growing trend; it validates your skills and knowledge and sometimes allows for job advancement opportunities. And pay increases! Whether or not you want to be credentialed is up to you. If you don't want to do it now, you can take that leap sometime in the future.

National Healthcareer Association

The National Healthcareer Association (NHA), established in 1989, provides preparation and certification in various healthcare professions. The Certified Billing and Coding Specialist (CBCS) exam focuses on converting a medical procedure and diagnosis into specific codes for submitting a claim for reimbursement. Certification is not necessary for the medical billing profession; however, according to the NHA, benefits to obtaining the CBCS "may include more job opportunities, higher wages and increased job security."[4]

For more information about the CBCS exam through the NHA, visit its Web site at http://www.nhanow.com.

American Academy of Professional Coders

According to the American Academy of Professional Coders, more than 90,000 healthcare professionals around the country hold AAPC certifications. The AAPC offers certifications in medical coding, auditing, compliance and practice management. You'll review the requirements of the coding and billing certifications.

Certified Professional Coder (CPC)

The Certified Professional Coder (CPC) is the American Academy of Professional Coder's main coding certification, with the focus on diagnostic and procedural codes for outpatient services. In addition to the codes, the CPC's abilities include knowledge of coding rules and regulations including compliance and reimbursement.

Full CPC credentialing requires two years of coding experience. However, the successful completion of this course counts as one year of coding experience! You're almost halfway there.

Certified Professional Coder-Hospital Outpatient (CPC-H)

Another credential offered by the AAPC is the Certified Professional Coder-Hospital Outpatient (CPC-H). This credential focuses on outpatient facilities such as ambulatory surgical centers or hospital outpatient coding and billing departments. In addition to coding the diagnosis and procedures for outpatient settings, this exam also focuses on reimbursement procedures, such as fee updates and how to complete the UB-04.

Just like the regular CPC credential, a CPC-H should have at least two years of coding experience. The successful completion of this course counts as one year of coding experience.

Certified Professional Coder-Payer (CPC-P)

The Certified Professional Coder-Payer (CPC-P) demonstrates a coder's aptitude, proficiency and knowledge of coding guidelines and reimbursement methodologies for all types of services from the payer's perspective, which is the insurance company. Claims reviewers, utilization management, auditors, benefits administrators, billing service, provider relations, contracting and customer service staff can each benefit their practices with the CPC-P credential.

The CPC-P certification exam certifies that the successful candidate has the knowledge and skills to adjudicate provider claims effectively. The exam tests the examinee's basic knowledge of coding-related payer functions with emphasis on how those functions differ from provider coding. The relationship between coding and payment functions will be explored in depth.

The CPC-P exam consists of two parts, testing coding accuracy and reimbursement methodologies. The Medical Coding Concepts section tests the examinee's understanding of medical terminology, anatomy and diagnostic and procedural coding concepts. The Reimbursement Methodologies section covers physician reimbursement, inpatient payment systems, outpatient payment systems, health insurance concepts and HIPAA.[5]

AAPC Apprentice Certifications

Many new coders have the education and basic knowledge to pass the medical coding certification exams, but not the required amount of experience. This is common with entry-level coders. To help these people out, the AAPC has an apprentice status.

If you successfully pass the medical coding certification exam but don't have the required two years of medical coding experience, you will be awarded the apprentice status, which is identified by an "A" on the certificate. Like other certifications, you will have to complete Continuing Education Units (CEUs). When you have completed the required work experience and submit documentation for that work, your credentials are upgraded to the full CPC, CPC-H or CPC-P!

Certified Professional Biller (CPB)

The AAPC also offers a Certified Professional Biller (CPB) examination to those that handle all aspects of the revenue cycle. Abilities must include a firm understanding of different types of insurance plans, rules and regulations, and the billing process, as well as a knowledge of medical coding guidelines.

American Health Information Management Association

AHIMA offers three coding certification exams: Certified Coding Associate (CCA), Certified Coding Specialist (CCS) and Certified Coding Specialist—Physician-based (CCS-P).

Certified Coding Associate (CCA)

The Certified Coding Associate (CCA) is an entry-level coding credential. If you are a new coder without much experience, you can immediately demonstrate your mastery of entry-level coding skills by earning the CCA. Earning a CCA also demonstrates a commitment to coding. It is a good starting point for coding credentials.

To take the CCA certification exam you must have a U.S. high school diploma or equivalent educational background. It is recommended that you have completed a formal coding training program, such as the one you're completing! It is also recommended, although not required, that you have experience in hospital-inpatient and ambulatory-care medical coding. AHIMA notes that previous examination results indicate that persons who have three or more years of coding experience are more likely to pass the exam.

To download a free, comprehensive *Certified Coding Associate Handbook*, go to AHIMA's Web site. This handbook also explains the CCA exam process in detail.

Certified Coding Specialist (CCS)

Certified Coding Specialists (CCS) are skilled professional coders with solid experience classifying medical data from patient records, generally from a hospital setting. A CCS must be an expert in the diagnostic and procedural coding systems. She must also be fluent in medical terminology, disease processes and pharmacology.

Examples of CCS level work include preparing coded data for Medicare and Medicaid recipients on the behalf of hospitals and medical providers. This data is also used by researchers and public health officials to monitor patterns and explore new interventions.

The CCS certification exam evaluates the individual's proficiency in coding. On top of entry-level coding skills, the CCS exam covers some information management skills. You would consider getting a CCS certification after you have experience in coding inpatient records. Experience coding the hospital portion of ambulatory surgery and emergency department care is also helpful. AHIMA recommends at least three years of experience before taking the CCS exam.

Certified Coding Specialist—Physician-based (CCS-P)

Another type of credentialing offered by AHIMA is the Certified Coding Specialist—Physician-based (CCS-P). Those with a CCS-P credentialing have expertise in physician-based settings. This can include doctors' offices, group practices, specialty centers and multi-specialty clinics. CCS-P coders have in-depth experience with diagnostic and procedural codes. They also are experts in health information documentation.

With the growth of managed care, the future looks good for this specialty. So if you develop solid experience and proficiency coding in a doctor's office, clinic or similar setting, you might want to consider obtaining the CCS-P certification to attest to your ability.

Here is a final note regarding the AHIMA certifications. According to AHIMA, "the CCA exhibits coding competency in any setting, including both hospitals and physician practices. The CCS and CCS-P exams demonstrate mastery level skills in an area of specialty: hospital-based for CCSs and physician practice-based for CCS-Ps."[6]

Step 5: Practice Exercise 22-1

Determine the term(s) to complete each sentence, and write your answers on scratch paper.

1. _____ are skilled professional coders with solid experience classifying medical data from patient records.

2. _____ is recognized as one of the industry's most active and influential advocates in Congress.

3. The _____ exam focuses on converting a medical procedure and diagnosis into specific codes for submitting a claim for reimbursement.

4. The AMA speaks out on important issues like _____ and the health of the nation.

5. The _____ exam tests the student on diagnostic and procedural codes, compliance and reimbursement policies.

6. In addition to coding the diagnosis and procedures for outpatient settings, the _____ exam also focuses on reimbursement procedures, such as fee updates and how to complete the UB-04.

7. The goal of the _____ is to provide education, recognition and certification for physician-practice procedural coders.

8. _____ coders have in-depth experience with diagnostic and procedural codes. They also are experts in health information documentation.

Step 6: Review Practice Exercise 22-1

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 7: Healthcare Resources

Whether you're just embarking on your healthcare career or are an experienced medical coding and billing specialist, you will need to be up-to-date on healthcare developments. You will always rely on resources to help you find information on healthcare issues. Why are resources so important? It is not humanly possible to remember every diagnostic or procedural code or claim rule. Resources serve a number of functions:

- Reference books allow you to store the information you don't use every day.

- Resources can provide you with the information right now, when you need it.

- Resources serve as a valuable support system if you are working independently or don't otherwise have much contact with other people where you work.

The professional organizations you just learned about will be very helpful to you in your new career. Now, we'll provide some resources from these professional organizations and others! Consider them as a starting point from which to develop your own pool of healthcare resources. They will give you a good idea of what's available.

AAPC Publications

Members of the AAPC, receive various publications to keep up-to-date on healthcare trends. These publications include:

- *Cutting Edge* is a monthly print publication that is written by and for members of the AAPC. Articles include issues facing the coding industry and updates on emerging trends and concerns. Members of the AAPC can subscribe to the coding news magazine.

- *Healthcare Business Tips and Resources* is a newsletter distributed by e-mail once a month to AAPC members. It includes summaries and links to important articles.

- *BillingInsider* is an e-newsletter available to members and nonmembers. Topics relate to the billing side of the medical practice.

AHIMA Publications

AHIMA provides both online and in print publications relating to the healthcare field. These publications include the *Journal of AHIMA* and *Perspectives in HIM*. In addition, members have access to an online tool for healthcare professionals.

The *Journal of AHIMA* is a monthly journal that includes both coding-specific and general health information management related articles. It also includes tips for on-the-job solutions and practical guidance on regulations, policies and procedures. This journal is available to nonmembers by subscription.

Perspectives in Health Information Management (HIM) is a scholarly, peer-reviewed research journal that aims to advance health information management practice and encourage interdisciplinary collaboration between healthcare professionals and others in disciplines supporting the advancement of the management of health information.[9] It's an online journal that is free to members and nonmembers.

AHIMA e-Newsletters

AHIMA e-newsletters are primarily for members of AHIMA. You can find a complete listing of the e-newsletters on the AHIMA Web site.

- *Academic Advisor* is a quarterly e-newsletter for HIM educators.

- *CodeWrite* is a monthly e-newsletter containing coding, reimbursement and compliance information.

- Members receive *AHIMA Advantage* electronically six times each year. This publication includes healthcare and AHIMA news. In addition, members receive *AHIMA Advantage E-Alerts* weekly, which deliver news summaries on industry, AHIMA and government news related to healthcare.

American Medical Association

The AMA produces the *CPT Assistant*, the *Journal of the American Medical Association* and a slew of coding reference material, including express reference cards, specialty coding references and electronic data files of technical coding manuals.

The *CPT Assistant* is a monthly newsletter only available to AMA members. It provides detailed articles, commentaries and updates to keep your claims system running.

The *Journal of the American Medical Association* (*JAMA*) has been published continuously since 1883. It is an international peer-reviewed general medical journal published 48 times per year.[10] Its objective includes publishing original, important, valid, peer-reviewed articles on a diverse range of medical topics.

American Hospital Association

The *Coding Clinic* is quarterly publication that provides official coding guidelines and advice. A subscription allows you to access past issues for updates about coding-specific conditions or procedures.

OptumInsight

OptumInsight, previously Ingenix, publishes many of the coding manuals. In addition, OptumInsight offers a comprehensive mix of coding, billing, reimbursement and compliance products in a wide array of formats and services. These include Web-based tools, books, desktop software and print and electronic updates.

Among the many publications that might be of particular interest to you as a medical coding and billing specialist are:

- *Coder's Dictionary*. This dictionary is written by coders for coders. It includes definitions for medical nomenclature, eponyms, new technology and acronyms.

- *DRG Expert*. The nation's DRG information experts bring you this annual book organized by Major Diagnostic Category (MDC) for accurate assignment of DRGs and maintenance of the highest level of data quality. This book is for those who need to either accurately assign DRGs or verify DRG information.

- *Uniform Billing Expert*. This reference tool assists in managing the constant changes to Medicare billing and reimbursement. It provides information about UB-04 billing rules and requirements.

- *Outpatient Billing Expert*. This reference applies to hospital outpatient departments and free-standing ambulatory surgical centers. It provides guidance to improve reimbursement and reduce denied claims.

- *Coder's Desk Reference for Diagnoses*. This reference allows you to better understand the clinical meanings behind codes. It provides coding tips and includes coding scenarios to demonstrate the application of the codes.

- *Coder's Desk Reference for Procedures*. This manual helps you identify the differences between CPT codes that seem very similar.

You can access an online catalog of Optum products and services at www.optumcoding.com. You can also call 1-800-464-3649, option 1, to request a print catalog.

OptumInsight
2525 Lake Park Blvd.
Salt Lake City, UT 84120
(801) 464-3649
www.optumcoding.com

Just Coding

The Just Coding Web site provides answers to coding questions, access to coding articles and discussion groups, a free e-newsletter, job opportunities and a number of links to other helpful Web sites. Among the useful tools and links are the following:

- Continuing Education credits via articles, quizzes or Webcasts.

- Coding and reimbursement updates.

- Boot Camps, conferences and Webcasts.

- Coding guidance, practice questions and expert analysis.

- CPC practice exam and Job Board.

HCPro, Inc.
75 Sylvan Street
Suite A-101
Danvers, MA 01923
(800) 650-6787
www.justcoding.com

National Institute of Health

The National Institute of Health is the steward of medical and behavioral research for the United States. NIH funds scientific studies at universities and research institutions across the country. NIH is made up of 27 Institutes and Centers, each with a specific research agenda, often focusing on particular diseases or body systems.

If you visit the NIH Web site search for "medical coding," you will find a wide range of resources. There are publications, reports and research documents available—all related to coding. In the field of medical coding, the impact of ongoing medical research is great. The coding manuals are constantly being updated and revised to reflect new information that becomes available in medicine. The NIH is one of the primary resources for the details of such research.

> National Institute of Health (NIH)
> 9000 Rockville Pike
> Bethesda, MD 20892
> (301) 496-4000
> www.nih.gov

Other Resources

A number of other companies and organizations provide a variety of healthcare professional resources. Here are a few that you might want to check out as you develop your network of resources.

For The Record

For The Record is published biweekly and provides reliable information on a range of health information issues. The subscription is free to some members of AHIMA. The magazine is available in print, digital or both. For more information, visit the Web site at www.fortherecordmag.com or call (800) 278-4400.

Advance for Health Information Professionals

Advance for Health Information Professionals offers a free e-newsletter that provides an editorial advisory board, hands-on help and CCS prep information. You'll also receive notices on free Advance Job Fairs and job postings. The Web site for this publication is http://health-information.advanceweb.com. To subscribe by phone, call (800) 355-1088.

The Coding Institute

The Coding Institute is a national newsletter publishing company. This group offers a wide range of medical specialty newsletters, coding bulletins, audio conferences, video coding series, CDs, print transcripts and online discussion groups. Contact *The Coding Institute* for information about free, sample newsletters at (800) 508-2582 or www.codinginstitute.com.

RAmEX Ars Medica, Inc.

RAmEX Ars Medica, Inc. distributes medical multimedia materials for professionals, including healthcare document specialists. Resources include medical CD-ROMs, medical videos, medical books, medical journals, medical slides, medical audio tapes and other medical software covering a broad range of medical fields and topics. You can find out more about RAmEX Ars Medica products by visiting the Web site at www.ramex.com or calling (800) 633-9281.

Online Medical Dictionaries

If you have Internet access, perhaps you've discovered the handiness of online dictionaries. Many of them are even free! In particular, the medical dictionaries listed below can be an excellent source of information and support. Some of these Web sites include a variety of medical information and resources in addition to the dictionary. Take a few minutes to visit each Web site and bookmark them for future reference.

- www.online-medical-dictionary.org

- www.medical-dictionary.com

- www.medic8.com/MedicalDictionary.htm

- www.medicinenet.com

Step 8: Practice Exercise 22-2

On scratch paper, identify the healthcare resource with the company or organization where you can find it.

1. *BillingInsider*

2. *CPT Assistant*

3. *Coding Clinic*

4. *Coder's Desk Reference for Diagnoses*

5. *Perspectives in HIM*

6. *Coder's Desk Reference for Procedures*

7. *Cutting Edge*

Step 9: Review Practice Exercise 22-2

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 10: Lesson Summary

You've probably heard the expression "the more you know, the more you'll grow." When it comes to the healthcare profession, that saying is exactly right. In this profession, you must keep up-to-date with coding regulations, medical advances and professional trends. The resources in this lesson are your Yellow Pages, grape vine and encyclopedia—all rolled into one. Whether you're searching for information on the latest dictation style, coding changes or claims updates, these resources are a great place to start. As you explore these resources and network with other medical coding and billing specialists, you'll no doubt find other sources of information that you like.

Don't feel overwhelmed. There's more information in these resources than anyone could read through. What's important is that you know where to begin your search if you have any questions. You've learned a lot so far, so keep up the good work!

One final note: Web site addresses and phone numbers change frequently. The addresses and numbers listed in this lesson were current at the time of printing, but they may change in the future. You may want to keep a list of your favorite resources, and update the contact information regularly.

Step 11: Quiz 22

Once you've mastered the course content, locate this Quiz in your *Online Course* or your *Assignment Pack*. Read and follow the Quiz instructions carefully.

Endnotes

[1] *AHIMA Facts*. American Health Information Management Association. Web. 28 June 2012.

[2] *Welcome to AHDI*. Association for Healthcare Documentation Integrity. Web. 17 July 2012.

[3] *About the American Medical Association (AMA)*. American Medical Association. Web. 28 June 2012.

[4] *Billing and Coding Specialist Certification (CBCS)*. National Healthcareer Association. Web. 28 June 2012.

[5] *Certified Professional Coder-Payer (CPC-P*)*. AAPC. Web. 28 June 2012.

[6] *Certified Coding Associate (CCA)*. American Health Information Management Association. Web. 28 June 2012.

[7] *Credentialing Candidate Guide*. Association for Healthcare Documentation Integrity, 2013. Web. 22 October 2013.

[8] *Credentialing Candidate Guide*. Association for Healthcare Documentation Integrity, 2013. Web. 22 October 2013.

[9] *About the Journal*. American Health Information Management Association. Web. 28 June 2012.

[10] *About JAMA*. American Medical Association. Web. 28 June 2012.

Lesson 23
Introduction to *ICD-10-CM* and Chapter 1

Step 1: Learning Objectives for Lesson 23

When you complete the instruction in this lesson, you will be trained to:

- Describe the history and development of the diagnostic coding system.

- Explain the role of medical coding.

- Explain the organization of the *ICD-10-CM* manual and distinguish among the *ICD-10-CM Conventions*.

- Explain the *General Coding Guidelines* and the steps to select the correct ICD-10-CM code.

- Determine the process of selecting the principal diagnosis and explain instances in which additional diagnosis codes are necessary.

- Describe the various guidelines for outpatient services.

- Identify and explain examples of certain infectious and parasitic diseases.

- Explain the general notes that relate to Chapter 1 of the *Tabular List* in the *ICD-10-CM* manual.

- Apply the *Chapter-Specific Guidelines* as they relate to certain infectious and parasitic diseases.

- Identify the diagnoses and assign the final codes for documented disorders and diseases.

Step 2: Lesson Preview

Now that you have a good understanding of the resources available to the healthcare professional, you're probably eager to move on to actually assigning codes! Well, before you do that, you need to know about the history of diagnostic coding and how your *ICD-10-CM* manual is organized.

If you haven't yet borrowed or purchased the current *ICD-10-CM* manual, now is the time! You'll begin to use it in this lesson as we discuss the manual's organization.

In this lesson, you will learn about the conventions and guidelines that appear in the front of the book. These will assist you with accurate coding. Then, after examining the steps to selecting the ICD-10-CM code, you'll also learn how to determine the principal and secondary diagnosis codes.

In addition, we'll review the content of the 21 chapters of the *Tabular List* of the *ICD-10-CM* manual to show you how to code the conditions within each chapter. First, you will study with the contents of Chapter 1, *Certain Infectious and Parasitic Diseases*.

Now, let's begin with the history of diagnostic coding.

Step 3: History of the International Classification of Diseases

The history of the ICD system dates back to the 1600s in England! The ICD system came to the United States in the mid-1700s. This classification of diseases was originally used to track mortality statistics to determine how many people died of different diseases.

In the 17th century, the statistical study of diseases began with the work of John Graunt on the *London Bills of Mortality*. The *Bills* was initially a list of the number of burials. Graunt added to the *Bills* to include the cause of those deaths. He tabulated and studied data from the annual bills from 1629 through 1660, and published *Natural and Political Observations Made upon the Bills of Mortality* in 1662. This publication is considered one of the forerunners of today's international mortality classifications.

In 1837, the General Register Office of England and Wales found its first medical statistician, William Farr. Farr labored to secure an improved classification, as well as international uniformity. In 1853, the first International Statistical Congress (ISC) asked Farr to prepare an internationally applicable, uniform classification of causes of death.[1] Although this classification was never universally accepted, the general arrangement survived as the basis for the *International List of Causes of Death*.

Later, the International Statistical Institute created a committee, chaired by Dr. Jacques Bertillon, to prepare a classification of causes of death. The report was presented in 1893, and the Bertillon Classification of Causes of Death, as it was first called, received general approval. Several countries adopted it at that point. Jesus E. Monjaras first used the classification in the Americas for the statistics of San Luis de Potosi, Mexico.[2]

In 1900, the first international conference for the revision of the *Bertillon* or *International List of Causes of Death* convened. Representatives from 26 countries attended, and adopted the first of the *ICD*s, or *International Classification of Diseases*. It was determined that the classifications should be revised every 10 years. Therefore, the succeeding conferences were held in 1909, 1920, 1929 and 1938, and a new version of the *ICD* was adopted at each.[3]

The WHO

The World Health Organization (WHO) is the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends.[4] In 1946, the United Nations gave the responsibility of the ICD to the WHO, which issued the sixth and subsequent revisions in 1948, 1958 and 1967.

The ICD is the international standard diagnostic classification. It classifies diseases and other health problems recorded in many types of vital records, including death certificates and health records.[5]

The World Health Organization published the 9th Revision, International Classification of Diseases (ICD-9) in 1977. In 1979, the United States adopted the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) based on the ICD-9. The clinical modification expanded the number of diagnosis codes, and developed a procedural coding system, making the ICD-9-CM specific to the United States.

Why Code?

Through the years, the number of people who go to the doctor regularly has increased. This increase has occurred for several reasons:

- People live longer and require more health care services.

- Technological advances offer more options for better health care.

- People have better access to health care than ever before.

The medical coding and billing specialist translates medical information in to numeric and alphanumeric codes. The provider's office uses this coded information for a number of purposes. A primary use of medical codes is to communicate to the insured the reason for the patient's medical visit. Thus, the diagnosis code communicates to the insurance payer the reason the physician provided medical services for the patient.

Another use for medical coding is as a statistics-gathering tool for research, grants and financial analysis. Hospitals use coding to index their records according to diseases and operations. By indexing—or organizing—records this way, hospitals can consistently store and retrieve data. Coding is useful for reporting medical diagnostic trends to agencies that track this information. Thanks to coding, the American Cancer Society can access accurate cancer statistics.

As you can see, the coding system is a common language that the medical community uses as a standard communication device. Using this coding system correctly is important. You know by now that if a code is used that does not match the services performed, the claim will be rejected. In addition, use of correct codes is required by law.

Originally, medical coding was used to allow access to medical records for easy retrieval of information for medical research, education and administration. Today, coding is also used to:

- Facilitate payment of medical services.

- Study patients' use of healthcare facilities.

- Study the cost of health care.

- Research the quality of health care.

- Determine healthcare trends.

- Plan for future healthcare needs.

ICD-10

After 30 years, the *ICD-9* needed to be replaced. The terminology and classification of some conditions were outdated and/or obsolete. The outdated codes produced inaccurate and limited data. And, limits of the categories resulted in an increasing lack of specificity. Finally, the *ICD-9-CM* hindered comparisons with international data. It was clear that the next version needed to be flexible enough to adjust for emerging diagnoses and procedures, and exact enough to identify precise diagnoses and procedures.

In 1989, the WHO prepared the *International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10)*, which was released in 1994. The United Kingdom adopted it in 1995, followed by the Nordic countries of Denmark, Finland, Iceland, Norway and Sweden from 1994 through 1997. Each year, another country adopted the ICD-10: France (1997), Australia (1998), Belgium (1999), Germany (2000) and Canada (2001). On January 15, 2009, the U.S. Department of Health and Human Services (HHS) released the final rule for implementation of the *International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM)* and the *International Classification of Diseases, 10th Revision, Procedural Classification System (ICD-10-PCS)*. The final rule established the upcoming ICD-10 (both CM and PCS) transition.

To read about the *ICD-10* Final Rule, visit: http:edocket.access.gpo.gov/2009/pdf/E9-743.pdf.

Now that you understand the history and development of the diagnostic coding system, let's pause for a quick review.

Step 4: Practice Exercise 23-1

Determine the term(s) to complete each sentence, and write your answers on scratch paper.

1. The *ICD* was originally used to track _____.

2. The *Bertillon Classification of Causes of Death* was first used in _____.

3. In 1946, the United Nations gave the responsibility for the *ICD* to the _____.

4. The United States adopted the *International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM)*, based on the *ICD-9*, in _____.

5. A primary use of medical codes is to _____ to the insured the reason for the patient's medical visit.

6. Medical coding is a _____ tool for research, grants and financial analysis.

7. The outdated ICD-9-CM codes produced _____ and _____ data.

Step 5: Review Practice Exercise 23-1

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 6: *ICD-10-CM Official Guidelines*

Are you ready to become familiar with the *ICD-10-CM*? Great! Grab your manual and let's go!

Let's start at the beginning—you will find the *ICD-10-CM Official Guidelines for Coding and Reporting* at the front of your *ICD-10-CM* manual. Within the *Official Guidelines*, you'll find the following sections:

- *Conventions for the ICD-10-CM*

- *General Coding Guidelines*

- *Chapter-Specific Coding Guidelines*

- *Selection of Principal Diagnosis*

- *Reporting Additional Diagnoses*

- *Diagnostic Coding and Reporting Guidelines for Outpatient Services*

The Uniform Hospital Discharge Data Set (UHDDS) establishes the definition and guidelines for the *Selection of Principal Diagnosis*. The data set also provides guidelines for *Reporting Additional Diagnoses*. These sections of the *Official Guidelines* offer instructions for both processes. However, it is important to note these guidelines apply to *inpatient* admissions, which include non-outpatient settings, such as acute care, short-term care, long-term care and psychiatric hospitals; home health agencies; rehabilitation facilities; nursing homes and more. At this time, you will focus on diagnostic coding that applies to the *outpatient* setting; therefore, the guidelines in the inpatient sections of the *Official Guidelines* will not apply.

Now turn to the front of your *ICD-10-CM* manual to review the *Conventions for the ICD-10-CM*.

Conventions for the ICD-10-CM

According to the *ICD-10-CM*, "*The ICD-10-CM conventions are general rules for use of the classification, independent of the guidelines. These conventions are incorporated within the Index or Tabular List as instructional notes.*"[6] You will find the *Conventions for the ICD-10-CM* at the front of the manual. The Centers for Medicare and Medicaid Services (CMS) and the National Center for Health Statistics (NCHS) provide these guidelines to accompany and complement the conventions and instructions you'll find within the *ICD-10-CM*. Keep in mind that the Cooperating Parties for the *ICD-10-CM*—the American Hospital Association (AHA), the American Health Information Management Association (AHIMA), CMS and NCHS—have approved these guidelines. And, the Health Insurance Portability and Accountability Act (HIPAA) adopted these diagnosis codes for all healthcare settings and require you to adhere to the guidelines.

Step 7: Organization of the Manual

The *ICD-10-CM* also contains an *Alphabetic Index to Diseases* and a *Tabular List of Diseases and Injuries,* which is usually called just the *Tabular List.* Let's take a look at the contents of each.

Alphabetic Index to Diseases

The *Alphabetic Index to Diseases* is divided into four parts: the *Index to Diseases and Injuries*, the *Neoplasm Table*, the *Table of Drugs and Chemicals* and the *Index to External Causes.* You will learn more about the *Neoplasm Table*, the *Table of Drugs and Chemicals* and the *Index to External Causes* when you look at each specific chapter. Next, you will examine the *Index to Diseases and Injuries* so that you'll understand how to use it correctly.

Index to Diseases and Injuries

The *Index to Diseases and Injuries*, also called simply the *Index*, is an alphabetical list of terms and their corresponding codes. The *Index to Diseases and Injuries* is arranged in alphabetic order by *main term* and *subterms*, and it includes *nonessential modifiers*.

Main Terms

The first important skill to develop in medical coding is the ability to identify main terms for the diagnosis in a *medical statement*. A **medical statement** is the information a doctor documents in a patient's medical record, such as, "The patient is diagnosed with abdominal pain." You'll assign codes for the patient's chief complaint or symptoms when there is no other definitive diagnosis or cause listed for the condition. When you code a record that contains two or more equal diagnoses, the **principal diagnosis** is the one for which the physician provided the main treatment.

Main terms appear in boldface type in the *Index* of the *ICD-10-CM* and are flush with the left margin of each column for easy reference. The **main terms** represent diseases, conditions, nouns or adjectives, such as the following examples:

Diseases—influenza, bronchitis

Conditions—fatigue, fracture, injury, complication

Nouns—disease, disturbance, syndrome

Adjectives—double, large, kink

Note that anatomical sites, which are locations on the body, are not used for main terms. For example, you will find *bronchial asthma* under the disease term *asthma*, not under the anatomical term *bronchial*. When you look up the term *asthma* in the *Index to Diseases and Injuries*, the first entry you'll find for the main term is as follows:
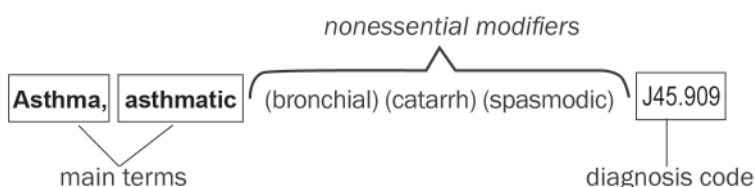
The terms you see in parentheses after the word *asthmatic* are called nonessential modifiers and have no effect on selecting the correct code. You'll learn about nonessential modifiers later in this lesson, when you study the use of punctuation in the *ICD-10-CM*.

Let's practice identifying main terms. Recall the statement, "The patient is diagnosed with abdominal pain." Begin by asking yourself, "What did the doctor document as the problem with the patient?" Well, you know that the patient has abdominal pain. So, where do you begin your search—*abdomen* or *pain*? You know that main terms in the *ICD-10-CM* are not listed under anatomical sites, so you can rule out looking under the term *abdomen*. *Pain* is a condition, so you will look there first. The following is an example of an entry from the *Index* in the *ICD-10-CM*. You can see how the main term *Pain* appears.

main term — **Pain(s)** (*see also* Painful) R52

subterms
- abdominal R10.9
    - colic R10.83
    - generalized R10.84
        - with acute abdomen R10.0
    - lower R10.30
        - left quadrant R10.32
        - pelvic or perineal R10.2
        - periumbilical R10.33
        - right quadrant R10.31
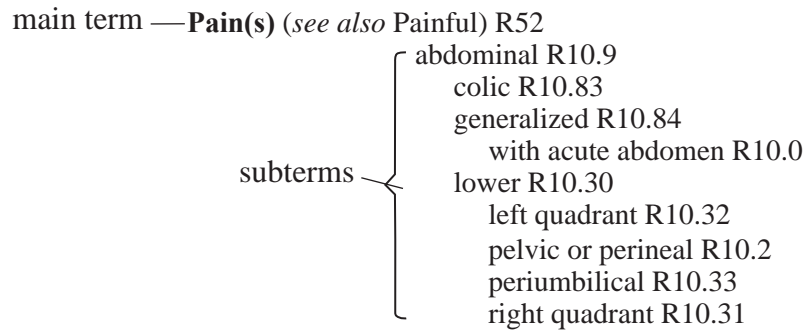
Subterms

In the example, the term *abdominal* describes where the pain is located in the body. Locating *abdominal* is the second step in determining what code to use. Recall that the first step was to identify *Pain* as the main term. In this example, *abdominal* is a subterm. All terms listed below the main terms are called subterms. **Subterms** are modifiers of main terms and are always indented two spaces to the right, just below the main terms. Each subterm has its own line, and all subterms are arranged in alphabetical order. Subterms describe the following three categories:

Site—location on the body

Cause—reason

Clinical type—form

Take a look at the following example: The diagnosis is: *viral infection.* The main term is *infection,* while the subterm is *viral.* In other words, the main term *infection* is a condition. The subterm *viral* is the clinical type or form of infection. You will use *Infection, viral* as the coding pathway. Let's continue!

Tabular List of Diseases and Injuries

This section of the *ICD-10-CM* is arranged numerically within 21 separate chapters according to body system or nature of injury and disease. The *ICD-10-CM* is an alphanumeric classification system divided into "blocks." A valid code may have from three to seven characters, with a decimal between the third and fourth character. If there is not a fourth character, you will not apply the decimal.

X X X → Category

X X X → Subcategory

X → Extension
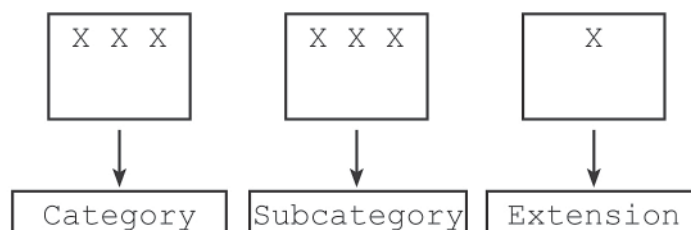
Category

The first three characters of the ICD-10-CM code are considered the **category**. The first character of the three-digit category is a letter. The second and third character of the three-digit category may be numbers or alphabetic characters. The three-digit category is considered the "block" of the code. According to the *ICD-10-CM Conventions*, a three-digit category without further subclassification is equivalent to a valid three-digit code. The following is an example of a valid three-digit code:

A09 Infectious gastroenteritis and colitis, unspecified

Subcategory

The **subcategories** are characters four, five and/or six, all of which may be either letters or numbers. The fourth, fifth and sixth characters of the ICD-10-CM code represent the etiology, anatomical site or severity of the condition.

The following example is a valid four-digit code:

G60.0 Hereditary motor and sensory neuropathy

And next, you'll see a valid five-digit code:

E11.40 Type 2 diabetes mellitus with diabetic neuropathy, unspecified

Finally, the following example represents a valid six-digit code:

H10.401 Unspecified chronic conjunctivitis, right eye

Extension

Certain categories of the *ICD-10-CM* manual have a seventh-character *extension*, which is required as an addition to codes from these categories. The **extension** is the 7th character in the code. According to the ICD-10-CM, the *seventh-character extension must always be the last character in the data field.*

Certain categories in Chapter 19 of the *ICD-10-CM* manual have a seventh-character *extension*, which is required as an addition to codes from these categories. Here, the extension identifies the service as an *initial* or *subsequent encounter*, or a *sequela*. You will find the following information in the notes section of the category:

The appropriate 7th character is to be added to each code from category T16
 A initial encounter
 D subsequent encounter
 S sequela

An **initial encounter** is the first visit for the current condition. A **subsequent encounter** is any visit after the first visit for the current condition. **Sequela** indicates complications or conditions that arise as a direct result of an acute phase of an injury or illness that no longer exists. You'll learn more about a sequela later in this lesson.

Place-holder

The letter "X" is used as a place-holder in the *ICD-10-CM*. According to the *ICD-10-CM Conventions*, the place–holder "X" is used as a fifth- or sixth-character place-holder in certain six- and seven-character codes to allow for future expansion without disturbing the sixth- or seventh-digit structure. This can be confusing, so let's look at an example to understand the concept better. Sometimes, the *ICD-10-CM* provides the place-holder in the *Tabular List*, such as in this example:

> **H93.3 Disorders of acoustic nerve**
>> **H93.3X Disorders of acoustic nerve**
>>> **H93.3X1 Disorders of right acoustic nerve**
>>> **H93.3X2 Disorders of left acoustic nerve**
>>> **H93.3X3 Disorders of bilateral acoustic nerves**
>>> **H93.3X9 Disorders of unspecified acoustic nerve**

Now let's look at an example of the process of building the code using your knowledge of a place-holder.

> Johnny was eating pretzels and decided to see how far he could push one into his ear. Unfortunately, the pretzel broke and a portion is now stuck in his left ear. Johnny's mom takes him to urgent care to have the foreign body removed.

Carol, the healthcare document specialist, receives the dictation for this visit and begins in the *Index* to code the diagnostic portion. Carol knows that a **foreign body** is an object not naturally occurring in the human body. Therefore, she turns to the main term *Foreign body* and uses the subterms *entering through orifice, ear* to locate *T16.-* as the tentative partial code. Carol then turns to the *Tabular List* to find the complete, valid code.

The page looks like this:

> **T16 Foreign body in ear**
>> Foreign body in auditory canal
>>
>>> The appropriate 7th character is to be added to each code from Category T16:
>>>> A initial encounter
>>>> D subsequent encounter
>>>> S sequela
>>
>> **T16.1 Foreign body in right ear**
>> **T16.2 Foreign body in left ear**
>> **T16.9 Foreign body in ear, unspecified ear**

The code provided, *T16.2*, is only four characters, but Carol knows to add the appropriate seventh character to the code. She will add place-holders to expand the code to seven characters: *T16.2XXA*

Step 8: Punctuation, Abbreviations and Notes

The *ICD-10-CM* manual uses punctuation and abbreviations in both the *Index* and *Tabular List*. It's important to understand the meanings so you'll be able to use the manual accurately.

Punctuation

Review the following punctuation symbols.

Brackets [ ]

Brackets are used in the *Tabular List* to enclose synonyms, alternative wording or explanatory phrases. In the *Index*, brackets are used to identify manifestations, which is a condition that is caused by another illness. Consider the following example of what you will see in the *Tabular List*:

D65 Disseminated intravascular coagulation [defibrination syndrome]

Parentheses ( )

You'll find **parentheses** in both the *Alphabetic Index* and *Tabular List* to enclose supplementary words that may or may not be present in the statement of a disease; they do not affect the code number to which they are assigned. For instance, if you locate dumping syndrome in the *Index*, you will find the following:

Syndrome
dumping (postgastrectomy) K91.1
nonsurgical K31.89

Colon:

The *Tabular List* may use a **colon** after an incomplete term that requires an adjective or descriptor. However, the *ICD-10-CM* manual provides descriptions so specific that you will rarely see uses of the colon.

Abbreviations

In the *ICD-10-CM* manual, you will encounter the abbreviations *NEC* and *NOS*, and you need to be familiar with the meaning of each.

NEC means **not elsewhere classifiable** and represents "other specified" in the *ICD-10-CM* manual. You should only assign codes with NEC when the information in the medical record provides detail for which a specific code does not exist.

NOS means **not otherwise specified** and may be interpreted as "unspecified" according to the *ICD-10-CM Conventions*. You'll assign NOS when the information in the medical record is doesn't provide enough information to assign a more specific code.

General Notes

General notes are found in the *Tabular List* and help healthcare document specialists assign codes at the highest level of specificity. It is important to read these notes when you assign the diagnostic code.

Includes Notes—Immediately under certain categories, you'll find a note that further defines, clarifies or provides examples of the contents of a code category.

A21 Tularemia

> INCLUDES deer-fly fever
>> infection due to Francisella tularensis
>> rabbit fever

Inclusion Terms—Under certain codes in the *Index* is a list of inclusion terms, which indicate some of the conditions for which the code may be used. These may be synonyms or provide a list of various conditions included within a code classification.

> **R23.4 Changes in skin texture**
>> Desquamation of skin
>> Induration of skin
>> Scaling of skin

Meanwhile, there are two types of exclusions in the *ICD-10-CM* manual, but they mean very different things. You will need to be sure to note whether *Excludes1* or *Excludes2* is identified.

Excludes1 means "not coded here." In other words, you cannot code the two conditions together. For example, a congenital disease cannot be coded with an acquired form of the same condition. Take a look at the following example of the use of Excludes1.

> **K51.4 Inflammatory polyps of colon**

> EXCLUDES1: *adenomatous polyp of colon (D12.6)*
>> *polyposis of colon (D12.6)*
>> *polyps of colon NOS (K63.5)*

Excludes2, on the other hand, means "not included here." In this case, the Excludes2 notes indicate that the excluded condition is not part of the condition but may be present at the same time—and you may code both conditions if there is adequate documentation.

> **T79 Certain early complications of trauma, not elsewhere classified**

> EXCLUDES2: *acute respiratory distress syndrome (J80)*
>> *complications occurring during or following medical procedures (T80-T88)*
>> *complications of surgical and medical care NEC (T80-T88)*
>> *newborn respiratory distress syndrome (P22.0)*

Instructional Notes

The *Alphabetic Index* uses cross-reference terms to instruct you to look in another place before you assign a code. The cross reference provides possible modifiers for a term or its synonyms. Follow the cross references to the correct code when you don't find the diagnosis under the first term you locate. The types of cross-reference terms you'll encounter include s*ee*; s*ee also*; *and, with* or *without*; and *code first*, *use additional codes* and *code also*.

See

The **see** cross reference points you to another term. You will follow the *see* cross reference to ensure that you assign the correct code to a diagnosis. The following example shows you how to use the *see* cross reference:

> **Roetheln**—*see* Rubella

The *see* cross reference instructs you to go to *Rubella* to locate the correct code for this condition.

See Also

See also indicates that additional information about the term and code is available under the referenced term in another place in the *Index*. The *see also* cross reference gives you an additional diagnosis and code when the main term or subterm is insufficient. The additional information in the *see also* cross reference helps you select the correct code, so follow this instruction to ensure coding accuracy. Review the following examples for the various formats you'll find in the *Index*:

> **Leishmanoid, dermal** (*see also Leishmaniasis, cutaneous*)
> **Narrowing** (*see also Stenosis*)

It is also important to use multiple codes to identify all components of a diagnosis when a single code does not fully describe a given condition. The *see also* cross reference helps you to do this. However, medical record documentation must mention the presence of all elements of any code you use. Always ask the physician involved if you are unsure about assigning multiple codes.

And, With or Without

The *ICD-10-CM Conventions* note that when the term "and" is used in a narrative statement, it may be interpreted as "and/or."

The *ICD-10-CM Conventions* also provide instruction on coding "with." When "with" appears, it should be interpreted to mean "associated with" or "due to." You'll also note that in the *Index*, the word "with" is sequenced immediately following the main term; it's not in alphabetical order.

Code First, Use Additional Codes and Code Also

Multiple coding involves using more than one code to identify a diagnosis as accurately as possible. Several instructional phrases indicate that you are required to use multiple codes.

Code first—This instruction identifies diagnoses that are not principal and are incomplete when they are used alone. You'll find these instructions in the *Tabular List*. First, you'll code the underlying disease, followed by the manifestation. For example, turn to code *N29* in the *Tabular List* of your *ICD-10-CM*. You'll see the instructional note directs you to "code first underlying disease," and then provides possible conditions that may lead to this manifestation.

Use additional codes—Similar to the "code first" instruction, this identifies a diagnosis that may need additional codes to fully describe the situation; however, the codes are secondary, rather than principal, codes. Locate *N30 Cystitis* in the *Tabular List*. The instructional notes tell you to "use additional code to identify the infectious agent." Therefore, if the infectious agent is documented, you'll code the cystitis as the principal diagnosis and the infectious agent as the secondary code.

Code also—This note alerts the coder that more than one code may be required to fully describe the condition, but does not provide sequencing direction. A good example of this situation is found in the *Tabular List* for code *S91 Open wound of ankle, foot and toes*. You'll see a red instructional note directing you to "code also any associated wound infection." So, if the documentation indicates an infection in addition to the wound, you'll code that, as well.

Default Codes

According to the *ICD-10-CM*, the **default code** represents that condition that is most commonly associated with the main term, or is the unspecified code for that condition. You'll find the default code listed first next to the main term.

So far in this lesson, you've learned about the *Conventions for the ICD-10-CM*. Let's take a break and reinforce your knowledge with a Practice Exercise.

Step 9: Practice Exercise 23-2

Select the best answer from the choices provided, and write your answers on scratch paper.

1. **The *ICD-10-CM* manual lists _____ codes.**
   a. fundamental
   b. procedural
   c. treatment
   d. diagnostic

2. **Main terms appear in _____ type.**
   a. italicized
   b. boldface
   c. underlined
   d. Times New Roman

3. **Information in parentheses following a main term is called a(n) _____ and has no effect on selecting the correct code.**
   a. nonessential modifier
   b. essential modifier
   c. subterm
   d. subcategory

4. **In the *Tabular List,* _____ enclose synonyms, alternative wording or explanatory phrases**
   a. parentheses
   b. colons
   c. brackets
   d. semicolons

5. _____ are used to enclose supplementary words.

   a. Parentheses

   b. Colons

   c. Brackets

   d. Semicolons

Determine if each statement is true or false, and write your answers on scratch paper.

6. **An object not naturally occurring in the human body is a foreign body.**

7. **NEC may be interpreted as "unspecified."**

8. **Excludes1 and Excludes2 mean essentially the same thing.**

9. **Inclusion terms may be synonyms or provide a list of various conditions included within a code classification.**

Step 10: Review Practice Exercise 23-2

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 11: General Coding Guidelines

The *General Coding Guidelines* are critical for selecting the correct ICD-10-CM code. As such, it is essential to review these guidelines in detail during the code selection process. Here, you will learn some of the key guidelines, such as the steps to ICD-10-CM codes and coding laterality. However, it is the healthcare document specialist's responsibility to refer to the guidelines when assigning codes. For now, let's start with a look at the process of selecting the correct ICD-10-CM code.

Steps to ICD-10-CM Codes

It is important that you use both the *Alphabetic Index* and *Tabular List* to locate and assign each code. The *Alphabetic Index* does not always provide the complete code, so it is necessary to refer to the *Tabular List* to read the instructional notes and verify the code before you assign it. Review the following list of key steps for assigning ICD-10-CM codes, and take note of the particular order in which you'll follow them.

1. Locate the main term in the *Alphabetic Index*.
2. Refer to any subterms under the main term.
3. Look at the punctuation, abbreviation and general notes that may apply.
4. Note the tentative code.
5. Locate the tentative code in the *Tabular List*.
6. Review the general notes, includes and excludes notes.
7. Assign the valid code to its highest levels of specificity.

To Code or Not to Code

The diagnosis is the determination of the nature of a disease, injury or congenital defect. The role of the healthcare document specialist is to translate the physician's written diagnoses for patients into alphanumeric codes. However, you do not code conditions when it is uncertain if they really exist. In other words, don't code a condition until the physician has determined it to be the diagnosis.

Unconfirmed diagnoses, also known as **uncertain diagnoses**, are suspected conditions, such as those that contain words like *suspicion of*, *probable* or *likely*. It is important that healthcare professionals do not try to make assumptions or narrow down the choices of categories for a diagnosis. When a definitive diagnosis is not established, the healthcare document specialist will just code the signs and symptoms.

The *General Coding Guidelines* also provide guidance for instances when you need to code signs and symptoms as an integral part of a disease process and when you should not. According to the *ICD-10-CM*, "*signs and symptoms that are associated routinely with a disease process should not be assigned as additional codes, unless otherwise instructed by the classification.*" Let's consider the following example for a better understanding of this concept.

Congestive heart failure (CHF) is a common cause of pleural effusion and pulmonary edema. Pleural effusion is the collection of fluid between the lungs and chest cavity; pulmonary edema is the presence of fluid within the lungs, usually resulting in shortness of breath. Doctors often prescribe diuretics for CHF because they decrease the fluid in the lungs, making it easier for the patient to breathe. Pleural effusion and pulmonary edema are associated with the CHF; therefore, if you have all three listed, you will only code to the CHF.

For now, just take note that Chapter 18 of the *ICD-10-CM* manual contains codes for signs and symptoms. You will return to this subject later in the course.

Acute and Chronic Conditions

To accurately code *acute* and *chronic* conditions, you must understand the terminology. An **acute condition** is short and severe, while a **chronic condition** continues over a long period of time or recurs frequently. Sometimes, both an acute condition and a chronic condition coexist and no single code exists to accurately code both conditions together. In this situation, you'll code the acute condition as the principal diagnosis and the chronic condition as the secondary, or coexisting, diagnosis.

Let's walk through the following example. The physician documents acute and chronic thyroiditis. First, look in your *ICD-10-CM* manual's *Index* for *Thyroiditis*. Then, locate the subterms *acute* and *chronic*. You will find codes *E06.0 Acute thyroiditis* and *E06.5 Chronic thyroiditis*. Go to the *Tabular List* to verify these codes. You will code the acute condition first, listing code *E06.0,* and then code *E06.5.*

Keep in mind that you may code and report chronic conditions as many times as the patient receives care for the condition.

Combination Code

A **combination code** is a single code that classifies two diagnoses. Often, you'll encounter a combination code when the diagnosis is associated with a manifestation or complication. Multiple coding is not necessary when the combination code fully identifies the diagnostic condition.

Sequela (Late Effects)

Sequela (also known as late effects) are residual conditions that occur after the acute phase. When you code sequela, you'll generally assign two codes: the condition or nature of the sequela is sequenced first, followed by the sequela code. Sometimes, the sequela code has been expanded to include the manifestation or residual effect, and you'll need only one code.

In coding sequela, there is no time limit between the acute phase and the late effect. In other words, some period of time can pass between the acute phase of a condition and the point at which the sequela condition is diagnosed.

Impending or Threatened Condition

An **impending** or **threatened** condition is a condition that has not yet happened. In most cases, if it didn't happen, you will not code it. You will determine the final diagnosis or just code the signs and symptoms. However, the *ICD-10-CM* manual does contain some codes for impending or threatened conditions. Turn to your *Index* and locate *Impending* and *Threatened* as the main terms to review the conditions that apply here.

>**Impending**
>>coronary syndrome I20.0
>>delirium tremens F10.239
>>myocardial infarction I20.0
>
>**Threatened**
>>abortion O20.0
>>>with subsequent abortion O03.9
>>
>>job loss, anxiety concerning Z56.2
>>labor (without delivery) O47.9
>>>after 37 completed weeks of gestation O47.1
>>>before 37 completed weeks of gestation O47.0-
>>
>>loss of job, anxiety concerning Z56.2
>>miscarriage O20.0
>>unemployment, anxiety concerning Z56.2

If the condition has a subterm under *Impending* or *Threatened*, you will assign the code provided. If the subterm is not listed, you'll code the underlying condition, or signs and symptoms.

Laterality

Laterality simply means identifying the side affected. If the documentation notes the side, you will assign the character to indicate if the right or left side was affected. If the documentation does not specify a side, you will code as unspecified. However, the insurance payer may not always accept the unspecified code, and the claim may be denied. Sometimes, both the right and left side are affected, which you will code as **bilateral**. In most cases, the final character will have an option of bilateral. Meanwhile, you will assign separate codes for both the right and left side when there is a bilateral condition, and the *ICD-10-CM* manual does not have a character indicating bilateral.

Consider the following example from the *Tabular List* for *pingueculitis*:

> H10.81 Pingueculitis
> > H10.811 Pingueculitis, right eye
> > H10.812 Pingueculitis, left eye
> > H10.813 Pingueculitis, bilateral
> > H10.819 Pingueculitis, unspecified eye

By now, you have learned the steps to accurate ICD-10-CM coding, examined when to code and when not to code certain conditions and established the sequencing rules for acute and chronic conditions. You have discovered when a combination code may be appropriate and how to code late effects. You also know that impending and threatened are main terms that you can code for certain conditions. You wrapped up this section by learning about laterality, which concludes the highlights from *General Coding Guidelines*.

The *Chapter-Specific Coding Guidelines* appear next in the *Official Guidelines* section. You'll explore these guidelines as you walk through the *Tabular List*, chapter by chapter. As you've learned, the *Selection of Principal Diagnosis* and *Reporting Additional Diagnoses* apply to inpatient diagnostic coding. For now, let's forge ahead with the *Official Guidelines—Diagnostic Coding and Reporting Guidelines for Outpatient Services*.

Step 12: Outpatient Coding Guidelines

Hospital employees and providers who code and report hospital-based outpatient services and provider-based office visits will refer to *Section IV, Diagnostic Coding and Reporting Guidelines for Outpatient Services* to assist with accurate coding. As with the other sections of the *Official Guidelines*, it is important to read and understand the entire section when assigning diagnostic codes. Some of the key information will be highlighted as you continue with this lesson.

Coexisting Conditions

As you know, the principal diagnosis is the one for which the physician provided the main treatment. In some cases, the physician has not established or confirmed a definitive diagnosis; therefore, you'll code the symptoms, or what brought the patient in for services. In the outpatient setting, it may take more than one visit before a diagnosis is confirmed.

At times, a patient may have **coexisting conditions**, which are conditions that are present in addition to the principal diagnosis. As you might guess, there are guidelines for coding these coexisting conditions in the outpatient setting. You will code all documented conditions that coexist at the time of the visit if they affect patient care, treatment or management. Let's take a look at an example for a better understanding of this concept.

> Rick made an appointment with his PCP due to progressive knee pain and swelling. That morning, Rick woke up with a sore throat and is concerned that he may have strep throat. The physician performs a rapid strep test that is negative for strep throat. He recommends salt water gargles and running a humidifier to assist with symptoms of the sore throat. After examining the knee, the physician diagnoses Rick with chronic arthritis of the knee and prescribes anti-inflammatory pain medication to help treat the pain and inflammation.

Again, you will code all documented conditions that coexist at the time of the visit and require care or affect the patient's care. Therefore, in this scenario, you'll code both the chronic arthritis of the knee *and* the sore throat, as the conditions coexist and require care at the same encounter.

In contrast, you will not code the condition if it no longer exists or was previously treated. For instance, Luke was diagnosed with strep throat a month ago. He was prescribed antibiotics and took the full course of medication. Now, his mother brings him in to see the physician because Luke has a sore throat. A rapid strep test indicates he is negative for strep throat. Luke is diagnosed with only a sore throat, because the strep is a condition that no longer exists.

Diagnostic Services

At certain times, there may be an order for a diagnostic test based on signs or symptoms to help determine the appropriate principal diagnosis in an outpatient setting. The following are some guidelines to keep in mind when coding diagnostic services:

- If the physician has confirmed a diagnosis based on the results of the diagnostic test, that diagnosis should receive a code.

- If the diagnostic test did not provide a diagnosis or was normal, codes apply for the signs and/or symptoms that prompted the order for the test. Code the signs/symptoms as additional diagnoses if they do not have other explanations or are not related to the confirmed diagnosis.

- Do not code the diagnosis if the results of the diagnostic test are normal and the referring physician documents an unconfirmed diagnosis (probable, suspected or questionable).

By now, you have a good understanding of the format and conventions of the *ICD-10-CM*, so it is time to learn the functions of the manual. Next, you will begin to work through each chapter of the *Tabular List* methodically, and you'll have plenty of practice along the way. For example, each chapter of the *ICD-10-CM* manual is divided into blocks. Each block contains a group of closely related conditions. These blocks of information will be defined and the important references in the *Tabular List* will be highlighted. Then, you will begin the step-by-step process of diagnostic coding for sample dictations and scenarios!

By the time you finish these diagnostic coding lessons, you'll use your *ICD-10-CM* manual with ease and confidence! You'll know where to look when you need assistance as you code, and you'll have these materials to use as a reference tool during the remainder of the course and in your career in the healthcare field.

Let's pause to complete another Practice Exercise before moving on to the first chapter of the *Tabular List*.

Step 13: Practice Exercise 23-3

Determine if the statement is true or false, and write your answers on scratch paper.

1. **The first step in *ICD-10-CM* coding is to locate the code in the *Tabular List*.**

2. **After locating the tentative code in the *Tabular List*, read the general notes.**

3. **Unconfirmed diagnoses are coded in outpatient settings.**

4. **Signs and symptoms that are routinely associated with a disease process should not be assigned as additional codes unless instructed by the classification.**

5. If you must code an acute and chronic condition with two separate codes, list the acute code as primary, followed by the chronic code.

6. The _ICD-10-CM_ forbids the use of combination codes.

7. A late effect is a residual condition that occurs after the acute phase.

8. You should never code impending and threatened conditions, as they are unconfirmed diagnoses.

9. Laterality simply means to code bilateral.

Step 14: Review Practice Exercise 23-3

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

> Keep one thing in mind as you code the Practice Exercises and scenarios throughout the following ICD-10-CM coding lessons: for now, we are focusing _only_ on ICD-10-CM codes—_not_ CPT (or procedure) codes. You will see physician notes and documentation about specific procedures in some of the scenarios we use just because we want you to practice with authentic examples. But remember that you will code only the diagnoses during these lessons. You will have plenty of time and lots of practice combining procedural and diagnostic codes in later lessons, after you've become more familiar and comfortable with the ICD-10-CM codes.

Step 15: Certain Infectious and Parasitic Diseases (A00-B99), Part 1

Infectious and parasitic diseases are generally caused by a bacterium, virus, fungus or animal parasite. Occasionally, their cause may be unknown. These infections can be transmitted from a host organism, or they are simply created within the human body. Examples of the infectious and parasitic diseases in this chapter include food poisoning, bubonic plague, HIV, warts and thrush.

First, let's start by reviewing the notes at the beginning of this chapter in the _Tabular List_. At the top of the page, just under the chapter title, you will see that this chapter includes _diseases generally recognized as communicable or transmissible._ You'll also see a note that directs you to use an _additional code to identify resistance to antimicrobial drugs_ (Z16.-) when the documentation supports it. You also have Excludes1 and Excludes2 notes to review.

As you will recall, the Excludes1 note means "not coded here." The conditions have mutually exclusive codes and cannot be reported together. For instance, you will not code the following conditions with a code from this chapter:

● _certain localized infections—see body system-related chapters_

● _infectious and parasitic diseases complicating pregnancy, childbirth and the puerperium (O98.-)_

● _influenza and other acute respiratory infections (J00-J22)_

Excludes2 indicates that it may be acceptable to use both the code and the excluded code together if there is supporting documentation. For example, you may code carrier or suspected carrier of infectious disease *(Z22.-)* or infectious and parasitic diseases specific to the perinatal period *(P35-P39)* in addition to a code in Chapter 1 as long as there is documentation for it.

Now, let's take a look at some of the blocks within Chapter 1. As you work through this lesson, the general notes will be highlighted. In addition, there are plenty of coding examples so that you can try your hand at coding the conditions and diseases in Chapter 1 of the *Tabular List*.

Intestinal Infectious Diseases (A00-A09)

Intestinal infectious diseases occur in the intestines. Infectious organisms or parasites cause these diseases, which include cholera, shigellosis, food poisoning, Escherichia coli (E coli) and infectious diarrhea.

Take a look at the *Intestinal Infectious Diseases (A00-A09)* section in your *ICD-10-CM* manual and review the information provided. Remember to look for punctuation, abbreviations and general notes to assist you as you assign accurate codes. You'll also see that there are quite a few general notes in this section of the *ICD-10-CM* manual. Are you starting to realize the importance of the detailed information in the *ICD-10-CM* manual as you code?

Now, put your *ICD-10-CM* manual to work. Imagine that a patient is diagnosed with S*almonella sepsis*. To begin your search for the accurate code, start with the *Index to Diseases and Injuries* and work through the basic coding steps presented previously. To find the main term, remember to ask yourself, "What is the problem?" The problem is sepsis, so locate *Sepsis* in the *Index*. Next, ask yourself, "What type of septicemia does the physician believe it is?" If you answered *Salmonella*, you're on the right track! Using the coding pathway of *Sepsis, Salmonella,* you'll locate the tentative code of *A02.1*.

But you're not done yet! Remember, this code is only a tentative code. Once you find the code in the *Index*, you must always locate the code in the *Tabular List* to determine the highest level of specificity. So, locate *A02.1* in the *Tabular List*. The description provided in the *Tabular List* for *A02.1* is *Salmonella sepsis*. There are no additional notes, so you will assign code *A02.1* for the diagnosis. Nice work!

Tuberculosis (A15-A19)

The second section in Chapter 1 of the *Tabular List* is *Tuberculosis (A15-A19)*. **Tuberculosis (TB)** is an infectious disease that the genus *Mycobacterium* causes. At one time, tuberculosis was one of society's most deadly diseases, but the invention of new drugs has steadily decreased the spread of this disease since the 1950s. Nevertheless, a total of 10,521 TB cases were reported in the United States in 2011.[7] Small, rounded lesions (tubercles) and tissues that begin to resemble cheese are characteristics of the disease. Tuberculosis can affect any organ, although it usually occurs in the lungs.

What does the *Tabular List* tell you about coding tuberculosis? Let's take a look. You'll see that this section includes infections due to Mycobacterium tuberculosis and Mycobacterium bovis. However, the Excludes1 indicates that you cannot code congenital tuberculosis, nonspecific reaction to test for tuberculosis without active tuberculosis, pneumoconiosis associated with tuberculosis, positive PPD, positive tuberculin skin test without active tuberculosis, sequelae of tuberculosis or silicotuberculosis with codes in this block. You'll find code selections listed after each excluded item.

Now, let's use the following dictation to put into practice what you have just learned:

Pathology Report
CHIEF COMPLAINT
Productive cough, rule out tuberculosis.

LABORATORY FINDINGS
Sputum was positive for AFB by microscopy. PPD was positive. Hct 25, MCV 72, total protein 5.8; iron studies pending.

IMPRESSION
Acute miliary tuberculosis.

Your first step is to determine the main term and then locate that term in the *Index*. The condition is *Tuberculosis*. Now, what type of tuberculosis is this? If you said *miliary*, then you're on the right track! The listing in the *Index* provides you with the coding pathway: *Tuberculosis, miliary, acute*. The tentative diagnostic code indicated is *A19.2*. Locate this code in the *Tabular List*. The documentation does not state whether the condition is affecting a single specified site or multiple sites, so you will assign code *A19.2*, which codes for unspecified.

Certain Zoonotic Bacterial Diseases (A20-A28)

Zoonotic bacterial diseases are those transmitted from animal to person under natural conditions. Diseases in this section include the plague, deerfly fever and anthrax. The bubonic plague is the most common, acute and severe form of the plague; it is characterized by lymphadenopathy, chills, fever and headache.

Other Bacterial Diseases (A30-A49)

The *Other Bacterial Diseases* (*A30-A49*) category includes leprosy, diphtheria, whooping cough, scarlet fever, tetanus and *sepsis*.

Before you look at sepsis in more detail, try to locate the correct code for *laryngeal diphtheria*. As usual, you'll begin in the *Index* with the main term *Diphtheria*. The subterm is *laryngeal*, which describes the type of diphtheria. The coding pathway of *Diphtheria, laryngeal* indicates *A36.2* as the tentative code. Turn to the *Tabular List* and locate *A36.2* to determine the highest level of specificity. Based on the information here, you will assign the ICD-10-CM code *A36.2* for this condition.

Sepsis

Sepsis is the presence of various infectious organisms in the blood or tissue. *Septicemia* is a common form of sepsis. **Septicemia** is a systemic infection associated with organisms in the bloodstream. So, septicemia is sepsis, but sepsis does not have to be septicemia. Sepsis can cause acute or multiple organ dysfunction, which is known as **severe sepsis**.

If the physician documents *generalized sepsis* or *septicemia*, you'll assign code *A41.9*, which identifies it as a bacterial disease. Likewise, if the physician documents *Streptococcal sepsis*, you'll use a code from code block *A40*, which also indicates a bacterial disease. On the other hand, you'll code *R65.2* along with the appropriate sepsis code if severe sepsis or sepsis with acute or multiple organ dysfunction is documented. This code appears in the signs and symptoms area of the *Tabular List*.

The *Chapter-Specific Coding Guidelines* contain an abundance of information regarding septic shock, severe sepsis and sepsis with infection. However, these codes all come from the signs and symptoms chapter, so you'll learn about those in more detail in a later lesson, rather than in the infections chapter.

For now, turn in the *Tabular List* to code blocks *A40, Streptococcal sepsis* and *A41 Other sepsis.* You'll find general notes directing you to code first a number of conditions that may occur with this particular condition. You'll also see a number of conditions that you cannot code with blocks *A40* or *A41*, as those conditions are mutually exclusive. Finally, *A41 Other sepsis* contains various conditions that you may code in addition to this condition if the documentation identifies them.

Infections with a Predominantly Sexual Mode of Transmission (A50-A64)

This section of codes focuses on infections with a predominately sexual mode of transmission, more commonly known as *sexually transmitted diseases*. **Sexually transmitted diseases**, or **STDs**, are infections generally acquired by sexual contact. The organisms that cause sexually transmitted diseases may pass from person to person in blood, semen or vaginal and other bodily fluids.[8] Conditions within this code set include congenital, early and late *syphilis*; gonococcal infections; chlamydia; trichomoniasis; and herpes simplex infections.

Before you examine the details of syphilis, let's take a look at what the *Tabular List* tells you about this code section. You'll see that you will not code HIV, nonspecific and nongonococcal urethritis or Reiter's disease with codes from this section, as they are excluded.

Syphilis is a chronic infectious disease usually transmitted through sexual contact. Typically, in the primary stage of syphilis, a painless sore called a chancre appears, although multiple sores may be present. Without treatment, the chancre may last up to a week and then heal. However, without treatment, the infection could progress to the next stage. The secondary stage is characterized by skin rash and widespread lesions. The signs and symptoms of secondary syphilis will resolve with or without treatment, but without treatment, the infection may progress to late syphilis. Late syphilis is a hidden stage that begins with primary and secondary signs, and symptoms then disappear. The infection can remain in the body for years, damaging the internal organs and tissues. This damage may be serious enough to cause death.

A pregnant woman who has syphilis can spread the disease through the placenta to the fetus, resulting in congenital syphilis. This condition is a severe disability and often life-threatening infection in infants after birth.

Now, turn again to your *ICD-10-CM* manual for some coding practice in this section. Use the following dictation sample:

SUBJECTIVE
A 19-year-old female is seen in the emergency department complaining of a sore on her buttocks. The sore was noted about 13 days ago.

OBJECTIVE
Anus was examined. Blood tested positive for syphilis.

ASSESSMENT
Primary anal syphilis.

PLAN
Patient discharged with prescription for antibiotics.

To code this scenario, you'll begin with the main term *Syphilis* in the *Index*. The subterms *primary* and *anal* will direct you to *A51.1* as the tentative code. To determine the highest level of specificity, locate that code in the *Tabular List*. There are no general notes to detour you from this code, so you will list *A51.1* as the accurate code for the dictation.

Other Spirochetal Disease (A65-A69)

A **spirochete** is a spiral-shaped bacterium that causes conditions such as *yaws, pinta* and *Lyme disease*. The *Tabular List* notes that leptospirosis and syphilis are excluded from this code section.

Yaws is an infection that mainly affects the skin and bones. It frequently occurs throughout the poor subtropical and tropical areas of the world; children typically acquire yaws more often than adults. About three or four weeks following infection, an itchy, raspberry-like growth appears. Then, scratching spreads the infection.

Pinta is a disease that occurs in some remote villages in tropical Africa. It is unknown how the disease spreads. Small spots surrounding a large spot appear on the face, neck, buttocks, hands or feet of the infected person. About one to 12 months later, red skin patches appear. They eventually turn blue, then brown and, finally, white.

Lyme disease is an inflammatory disease transmitted to humans through the bite of infected ticks, causing fever, headache, fatigue and skin rash. If left untreated, the infection spreads to the joints, heart and nervous system.

Other Diseases Caused by Chlamydiae (A70-A74)

Chlamydia is a sexually transmitted disease characterized by a burning sensation during urination, tenderness or pain and discharge. Open your *ICD-10-CM* manual to review the *Tabular List* for this section. You'll see that the sexually transmitted chlamydial disease is excluded, and you should assign a code from the code range *A55-A56* instead. This code section only applies to the diseases chlamydiae causes, such as chlamydia conjunctivitis or trachoma, which is a common cause of blindness worldwide, according to the World Health Organization.[9]

Rickettsioses (A75-A79)

Rickettsia is a type of parasitic organism. These organisms invade the cells of another life form, usually arthropods (lice, fleas, ticks and mites) and multiply. Arthropods can then transmit rickettsia to rodents, dogs and even humans through saliva from a bite or feces deposited on a small break in the skin. The codes in this section are fairly simple and straightforward to use.

Viral and Prion Infections of the Central Nervous System (A80-A89)

This section focuses on viral diseases of the central nervous system that parasites or infective organisms do *not* cause. Symptoms of these diseases are fever, sore throat, headache and vomiting, often with stiffness of the neck and back. Conditions within this section include poliomyelitis, rabies, encephalitis and viral meningitis. However, this code section does *not* include postpolio syndrome *(G14)*, sequelae of poliomyelitis *(B91)* or sequelae of viral encephalitis *(B94.1)*.

Take a look at code block *A81 Atypical virus infections of the central nervous system*. You'll see that you need to use an additional code to identify dementia with or without behavioral disturbances.

Arthropod-borne Viral Fevers and Viral Hemorrhagic Fevers (A90–A99)

Next, you'll find diseases that parasites and infective agents cause. These are diseases such as yellow fever, mosquito-borne viral encephalitis, tick-borne viral encephalitis and *West Nile fever*. **West Nile fever**, also known as **West Nile virus infection**, is mosquito-borne and may cause fatal inflammation of the brain, the lining of the brain or the lining of both the brain and spinal cord. The *Tabular List* instructs you to use additional codes to specify neurologic manifestations or other conditions when you apply codes *A92.32* or *A92.39* for West Nile virus infection.

Now, see if you can determine the correct code or codes for the following sample dictation.

SUBJECTIVE
A 54-year-old male has just returned from a trip to Asia and complains of fever, headache, lethargy, conjunctivitis and lower back pain.

OBJECTIVE
Lab tests indicate serological detection of IgM and IgG antibodies.

ASSESSMENT
Sandfly fever.

PLAN
The Centers for Disease Control and Prevention will be contacted for treatment.

To accurately code this condition, begin with the main term *Fever* in the *Index to Diseases and Injuries*. Once you locate *Fever*, you'll find the subterm *sandfly* for the tentative code of *A93.1*. After checking the *Tabular List* for general notes, you'll assign *A93.1* as the correct code for this dictation.

Whew! That's quite a lot of information. Let's pause for some hands-on practice to reinforce what you've learned.

Step 16: Practice Exercise 23-4

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Gastroenteritis due to salmonella caused by food poisoning**
   ICD-10-CM: _____

2. **Infection due to Bacteroides**
   ICD-10-CM: _____

3. **Infiltrative pulmonary tuberculosis**
   ICD-10-CM: _____

4. **Rabbit fever with conjunctivitis**

    ICD-10-CM: _____

5. **Group B streptococcal sepsis**

    ICD-10-CM: _____

6. **Cardiovascular syphilis**

    ICD-10-CM: _____

7. **Viral encephalitis**

    ICD-10-CM: _____

8. **West Nile fever**

    ICD-10-CM: _____

9. **Lyme disease**

    ICD-10-CM: _____

10. **Gonococcal cystitis**

    ICD-10-CM: _____

Step 17: Review Practice Exercise 23-4

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 18: Certain Infectious and Parasitic Diseases (A00-B99), Part 2

You're about halfway through the first chapter of the *Tabular List*. Are you feeling more confident with the coding process? Let's continue by exploring the next part of Chapter 1. Keep up the good work!

Viral Infections Characterized by Skin and Mucous Membrane Lesions (B00-B09)

Conditions within this code section include diseases that cause skin rashes, such as smallpox, *chickenpox*, *herpes zoster*, herpes simplex, measles and *rubella*. You'll find that coding from this section is fairly straightforward, but there are a few helpful facts about some of these diseases to keep in mind as you code:

● **Chickenpox** is also known as *varicella*.

● **Herpes zoster** is an infection that tends to cease after a definite period of time. It causes unilateral skin eruptions along affected nerves.

● **Rubella** is an acute but usually benign infection that causes fever, sore throat and rash.

Other Human Herpesviruses (B10)

A quick reminder of the meaning of Excludes2 is necessary, because this code section has quite a few of them listed. You'll recall that Excludes2 indicates that the excluded condition is not part of the condition, but may be present at the same time. You can code both conditions if there is supporting documentation. Now, let's explore the conditions within this section of codes.

The **human herpesvirus 6** (**HHV-6**) is usually an asymptomatic infection. However, it can cause problems when the immune system is compromised by disease, as in AIDS patients, or by deliberate immune suppression, as in organ transplant patients. Closely related to HHV-6, **human herpesvirus 7** (**HHV-7**) is believed to cause seizures and other central nervous system symptoms in children. **Human herpesvirus 8** (**HHV-8**) contributes to the development of Kaposi sarcoma, an otherwise rare form of cancer that sometimes affects AIDS patients, and to some B-cell lymphomas.

Viral Hepatitis (B15-B19)

Viral hepatitis has several categories. **Hepatitis A** often occurs in areas of poor hygiene and low socioeconomic standards. This form of hepatitis is transmitted via the fecal-oral route. **Hepatitis B** is transmitted through contaminated needles, syringes, instruments and blood products. This form of hepatitis also spreads through intimate contact. **Hepatitis C** is the most common form of post-transfusion hepatitis. Finally, **Hepatitis E** (**HEV**) is usually transmitted through contaminated water.

Turn to the code section *B15-B19* in the *Tabular List* and review the notes provided for accurate coding. Note that you will not code sequelae of viral hepatitis (*B94.2*) with codes from this code section. However, if the dictation notes cytomegaloviral hepatitis (*B25.1*) or herpesviral [herpes simplex] hepatitis (*B00.81*), you will code the condition in addition to your code selection from this code section.

Now, let's try coding a condition from this section. Locate the diagnosis code for hepatitis B with a hepatic coma. You will find the main term *Hepatitis* in the *Index to Diseases and Injuries*. Once you locate the main term, find the subterms *B, with hepatic coma* and you will reach the tentative code of *B19.11*. You'll then turn to the *Tabular List* to determine the highest level of specificity. You will assign code *B19.11* for unspecified viral hepatitis B with hepatic coma. Well done!

Human Immunodeficiency Virus [HIV] Disease (B20)

The code block *B20 Human immunodeficiency virus [HIV] disease* includes acquired immune deficiency syndrome [AIDS], AIDS-related complex [ARC] and symptomatic HIV infections. It does not include asymptomatic HIV status *(Z21)*, exposure to the HIV virus (*Z20.6*) or inconclusive serologic evidence of HIV (*R75*). When HIV complicates pregnancy, childbirth or the puerperium, you will assign *O98.7-* first in the code sequencing. Finally, you will use additional codes to identify all manifestations of the HIV infection.

The *Chapter-Specific Coding Guidelines* provide assistance for coding confirmed cases and selecting and sequencing HIV codes. Review the following important points:

- *Z11.4* is the code for a patient who receives HIV testing to determine the HIV status.

- *Z71.7* is the code that applies when a patient returns to receive the HIV test results, and the results are negative. It may also be applied if counseling is provided during the encounter for the test.

- *Z21* is the code that applies when a patient returns to receive HIV test results, and the results are positive but the patient does not present symptoms.

- *B20* is the code to apply when a patient returns to receive HIV test results, and the results are positive and the patient is asymptomatic.

In addition, when a physician sees the patient for an HIV-related condition, you will list code *B20* as the principal diagnosis. However, if the condition is not related to HIV, you'll list *B20* as an additional diagnosis. For example, when coding an ankle sprain for a patient with confirmed HIV, you'll list the code for the ankle sprain first, followed by *B20*.

Now, take a look at the following dictation and consider how you would code the diagnosis.

SUBJECTIVE
A 24-year-old established patient is seen at the clinic for a 2-week history of flu-like symptoms including fever, headache and tiredness. The patient history indicates weight loss and an enlarged lymph node, x 3 months. Social history consists of intravenous drug abuse.

OBJECTIVE
After a comprehensive examination, HIV antibody and Western blot tests were ordered.

ASSESSMENT
Symptoms are consistent with HIV. Results of the HIV antibody and Western blot tests confirm the patient is HIV positive.

PLAN
The patient is provided with a prescription for Retrovir.

Once again, use your *ICD-10-CM* manual to practice. Locate the coding pathway *Human, immunodeficiency virus (HIV) disease (infection)* and you'll find code *B20*. Since the patient is experiencing symptoms, you will *not* code to *asymptomatic status*, but you'll note the tentative code as *B20*. After checking the code with the *Tabular List*, you will assign *B20* as the accurate diagnosis for this dictation.

Other Viral Diseases (B25-B34)

Codes within this section include *cytomegaloviral* disease, mumps, infectious mononucleosis and viral conjunctivitis.

Cytomegalovirus (**CMV**) is a common virus from the herpesvirus family that infects people worldwide, but is usually harmless and rarely causes illness. A healthy immune system can keep the virus dormant in the body. Individuals with weakened immune systems—including cancer patients on chemotherapy, organ transplant recipients and those with HIV—are at increased risk for the infection. In these individuals, it can result in more serious, potentially life-threatening illnesses, with fever, pneumonia, liver infection and anemia. You'll see that the *Tabular List* instructs you to avoid coding congenital CMV infection (*P35.1*) or CMV mononucleosis (*B27.1-*).

Mycoses (B35-B49)

Mycoses are diseases, such as *dermatophytosis*, *candidiasis* and *coccidioidomycosis*. **Dermatophytosis** is a common fungal infection of the skin, hair and nails. **Candidiasis** is a fungal infection that usually occurs in the mucous membranes or on moist skin. Meanwhile, inhalation of dust particles that contain arthrospores causes **coccidioidomycosis**. This disease is a self-limiting respiratory infection; the primary form is known as San Joaquin fever, desert fever or valley fever. Many do not discover they suffer from mycoses until diseases, such as those just mentioned, become active because of the fungus.

Histoplasmosis is a fungal infection that primarily affects the lungs. Many people living in areas where the infection is common, such as the eastern and central United States, test positive for the infection, but present no symptoms.[10] If the infection spreads from the lungs to other organs, it is known as disseminated histoplasmosis. Disseminated histoplasmosis may be fatal if left untreated. The risk of this condition is increased for patients with chronic lung disease, cancer, AIDS or other forms of immune system suppression.

Now, find code block *B39 Histoplasmosis* in your manual to see the instructions the *Tabular List* provides to assist you with accurate coding. You will *code first associated AIDS (B20)*. Also, you must identify any associated manifestations with an additional code.

Let's wrap up this section with an example. Imagine that you are the medical coding and billing specialist for a pediatrician. You have the following situation to code:

> An office visit takes place for an established patient with oral thrush. A detailed history and problem focused examination are documented. The pediatrician prescribes an antifungal agent for oral thrush and instructs the patient's parent to have the patient return if the problem persists.

As usual, turn to the *Index* to begin your search with the main term *Thrush*. The subterm *oral* indicates the tentative code *B37.0*. Turn to the *Tabular List* to verify the code, checking the general notes for more information. The code description for *B37.0* indicates *Candidial stomatitis*, but you'll see that it includes *oral thrush*, so you are confident that you have the correct code.

How are you doing at this point? Are you beginning to automatically move through the steps to identify the main term and subterm? Do you use these terms to locate the condition in the *Index to Diseases and Injuries*, and then proceed to the *Tabular List* to determine the degree of specificity and confirm the tentative code you selected? If the process doesn't feel quite automatic yet, be patient—it's only a matter of time until you'll code more easily, without having to think about each step you take. Let's continue!

Protozoal Diseases (B50-B64)

Protozoa are single-celled organisms that are too small to be seen with the naked eye. According to the *Tabular List*, this code section excludes amebiasis (*A06.-*) and other protozoal intestinal diseases (*A07.-*).

Malaria is the deadliest of the protozoal diseases, characterized by fever, chills and flu-like symptoms. Left untreated, patients may develop severe complications that can result in death. In 2010, an estimated 655,000 people died of malaria, most of them young children in sub-Saharan Africa.[11]

Trypanosomiasis is also known as the sleeping sickness. Symptoms begin with fever, headache and joint pain. Without early treatment, the infection can involve multiple organs, including the heart and the kidneys. Finally, the organism crosses the blood-brain barrier, causing typical symptoms of confusion, daytime somnambulism and nighttime insomnia.[12]

Helminthiases (B65-B83)

Helminthiases are infections associated with worms. Diseases within this category include tapeworms, hookworms and other intestinal parasites. For example, **echinococcosis** is an infection that larval forms of tapeworms cause. Direct contact with infected feces transmits this disease. Most people with echinococcosis are asymptomatic until cysts form, which then cause pain, occlusion or organ dysfunction.

Pediculosis, Acariasis and Other Infestations (B85-B89)

Pediculosis is an infestation of the hairy parts of the body with eggs, larvae or adult forms of lice or pediculus. Pediculus reside in the head (Pediculus capitis), pubic area (Phthirus pubis) or other parts of the body (Pediculus humanus). The organism crawls over the body and feeds on human blood, causing severe itching.[13]

Scabies is a skin disease caused by a mite that burrows into the upper layer of skin where it lives and lays its eggs. Characteristics of this disease include intense itching and a pimple-like skin rash.

Sequelae of Infectious and Parasitic Diseases (B90-B94)

You'll recall that sequelae describe the conditions that result after the acute phase of an illness or injury has ended. Coding sequela generally requires two codes: the condition or nature of the sequela is sequenced first, followed by the sequela code itself. You'll find an extensive note at the beginning of this code section, as well as directions to code the first condition resulting from (sequela) the infections or parasitic disease.

Bacterial and Viral Infectious Agents (B95-B97)

As the *Tabular List* notes indicate, "*These categories are provided for use as supplementary or additional codes to identify the infectious agent(s) in the disease classified elsewhere.*"

For instance, imagine that a patient is diagnosed with extensive cellulitis of the abdomen wall, and the infectious organism is identified as *Staphylococcus aureus*. In this case, you will code the cellulitis of the abdomen wall, followed by the code to identify the infectious organism.

> L03.311 Cellulitis, abdominal wall

> B95.61 Infection, staphylococcal, unspecified site, as cause of disease classified elsewhere, aureus

The final code section for Chapter 1 of the *Tabular List* contains two codes. *Other infectious disease (B99.8)* and *Unspecified infectious disease (B99.9)* only apply if the documentation does not provide adequate information for a more specific code.

As you're learning, use of the *ICD-10-CM* manual gets easier with practice. The more you use it and learn to read the general notes provided, the easier diagnostic coding will become! You'll gain confidence as you practice your coding skills. For now, let's take a few moments to review the final portion of this lesson with the following Practice Exercise.

Step 19: Practice Exercise 23-5

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Pneumocystis carinii pneumonia with AIDS**

   ICD-10-CM: _____

   ICD-10-CM: _____

2. **Measles with otitis media**

   ICD-10-CM: _____

3. **German measles**

   ICD-10-CM: _____

4. **Infectious mononucleosis with meningitis**

   ICD-10-CM: _____

5. **Hand, foot and mouth disease**

   ICD-10-CM: _____

6. **Fungal infection of the foot**

   ICD-10-CM: _____

7. **Desert fever**

   ICD-10-CM: _____

8. **Hookworm disease**

   ICD-10-CM: _____

9. **Norwegian scabies**

   ICD-10-CM: _____

10. Coding/Billing Challenge

Use the following encounter form and dictation to create a CMS-1500 version 02/12 claim form using MedLook.

Donald Allen, MD NPI: 0304851124 **Michael Shell, MD** NPI: 0189218600	**Springtown Clinic** **1824 Park Avenue** **Springtown, CO 80002-1824** **970 555-1834** **EIN: 86-8990600** **NPI: 0304455166**	☑ 11 Physician Office ☐ 12 Private Residence ☐ 22 Outpatient Hospital ☐ 23 Hospital Emergency Room Participating Provider ☑Y ☐N

Physician signature: *Donald Allen, MD*

Patient Information

Name	Gregory S. Tucker	**Date of Birth**	9-2-71
Address	1801 Peterson Street	**Sex**	M
City	Springtown **State** CO		
ZIP	80002		
Home Phone	(970) 555-3255		

Insurance Information

Primary Insurance		**Secondary Insurance**	
Name	Mutual Life	**Name**	none
ID#	402-4679	**ID#**	
Group#	LA4832	**Group#**	
Address	PO Box 911	**Address**	
City	Denver	**City**	
State	CO **ZIP** 80111-0911	**State** **ZIP**	
Primary Insured Name	self	**Secondary Insured Name**	
DOB		**DOB**	
Address		**Address**	

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Gregory S. Tucker
Signature of patient (or parent of minor child)

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Signature of patient (or parent of minor child)

Date of Service	*5/8/20XX*		
Diagnosis		**Procedure**	**Charge**
		99213 Office, est. patient	*$69.00*

Medical Coding and Billing Specialist

Name: Gregory S. Tucker
DOB: September 2, 1971
Date of Service: May 8, 20XX

CHIEF COMPLAINT
The patient comes for a routine follow-up appointment.

HISTORY OF PRESENT ILLNESS
This is a middle-aged African American male who comes today for routine follow-up. He has no acute complaints. No neurological deficits or other specific problems. The patient denies any symptoms associated with opportunistic infection.

PAST MEDICAL HISTORY
Immunizations: Up to date.
Current medications: (1) He is on Trizivir 1 tab p.o. b.i.d. (2) Ibuprofen over the counter p.r.n.Medication compliance: The patient is 100% compliant with his meds. He reports he does not miss any doses. Drug intolerance: There is no known drug intolerance in the past.
Illnesses: (1) Significant for HIV. (2) Chronic hepatitis. (3) PPD status was negative in the past. PPD will be placed again today. Treatment adherence counseling was performed by both nursing staff and myself. Again, the patient is 100% compliant with his meds. Last dental exam was in 11/07, where he had 2 teeth extracted.
ALLERGIES: HE HAS NO KNOWN DRUG ALLERGIES.
Nutritional status: The patient eats regular diet and eats 3 meals a day.
Sexual history: He has had no recent STDs, and he is not currently sexually active.
Mental health and substance abuse: No history of substance abuse.

REVIEW OF SYSTEMS: Noncontributory except as mentioned in the HPI.

PHYSICAL EXAMINATION
GENERAL: This is a thinly built male, not in acute distress.
VITAL SIGNS: Blood pressure 132/89 and pulse of 82.
HEAD AND NECK: Reveals bilaterally reactive pupils. Supple neck. No thrush. No adenopathy.
HEART: Heart sounds S1 and S2 regular. No murmur.
LUNGS: Clear bilaterally to auscultation.
ABDOMEN: Soft and nontender with good bowel sounds.
NEUROLOGIC: He is alert and oriented x 3 with no focal neurological deficit.
EXTREMITIES: Peripheral pulses are felt bilaterally. He has no pitting pedal edema, clubbing or cyanosis.
GENITALIA: Examination of external genitalia is unremarkable. There are no lesions.

DATABASE
Most recent labs show hemoglobin and hematocrit of 16 and 46. Creatinine of 0.6. LFTs within normal limits. Viral load of less than 48 and CD4 count of 918.

ASSESSMENT
1. Human immunodeficiency virus, stable on Trizivir.
2. Chronic hepatitis C, stable.

PLAN

Continue his current meds. I have discussed with him in the past about possibility of having to change off of his Trizivir in the future, if he develops resistance, since triple NRTI therapy is not the preferred, but he is not amenable to that at this time. He has excellent viremic control and good CD4 count. We will readdress this with him in the future if his status changes. The patient is to have PPD placed today. He has received his annual influenza vaccination for this season. He will be seen again by the dental clinic for routine evaluation and have labs today including CD4, viral load, RPR, and urinalysis. He will return to our clinic in 6 months. The patient does not want to be seen more often since he has a job that he reports to and cannot miss more days off work. Again this is acceptable since he has excellent viremic control. The patient has been educated regarding his meds and plan. His prognosis is excellent, and he will follow up with us in 6 months.

Step 20: Review Practice Exercise 23-5

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 21: Lesson Summary

What do you think of diagnostic coding so far? Are you beginning to see how everything you learned in previous lessons assists you in the coding process?

Think of how much you've already learned about diagnostic coding! You understand the importance of the *ICD-10-CM Official Guidelines* and the sections within these guidelines. You've spent a great deal of time studying the *Conventions for the ICD-10-CM*, as well. You learned about the punctuation and abbreviations that are important in coding from this manual. Then, you explored the *General Coding Guidelines*, including the steps to ICD-10-CM coding. Finally, you learned the outpatient guidelines to coding. You now have a strong foundation in ICD-10-CM coding.

You continued this lesson by exploring the first chapter of the *ICD-10-CM Tabular List*. You studied the code sections of Chapter 1, as well as some of the diseases within each section. Important notes were highlighted from each section, and these will assist you in accurate coding.

Throughout the lesson, you encountered many examples and Practice Exercises to give you experience with coding as you moved through the material. If you found parts of this lesson challenging, that's understandable! You've covered quite a bit of information, and this was your first true attempt at diagnostic coding. Review those sections of the lesson you found confusing before you continue. You're making progress and doing a great job!

The format of the next few lessons will be similar to this one. As you continue to examine the chapters of the *Tabular List*, you'll have more diagnostic coding practice along the way. Before you move on, complete the Quiz for this lesson to reinforce what you've learned so far in this course. Good luck!

Step 22: Quiz 23

Once you've mastered the course content, locate this Quiz in your *Online Course* or your *Assignment Pack*. Read and follow the Quiz instructions carefully.

Endnotes

1. *The WHO Family of International Classifications*. World Health Organization. 2010. Web. 4 October 2013.

2. *Bertillon J. Classification of the causes of death (abstract)*. In: Transactions of the 15th International Congress on Hygiene Demography. Washington, 1912. Print.

3. *The WHO Family of International Classifications*. World Health Organization. 2010. Web. 4 October 2013.

4. *About WHO*. World Health Organization. 2010. Web. 4 October 2013.

5. *International Classification of Diseases*. World Health Organization. 2010. Web. 4 October 2013.

6. *ICD-10-CM : The Complete Official Draft Code Set*. Salt Lake City: Ingenix, 2013. Print.

7. *Tuberculosis (TB)*.Centers for Disease Control and Prevention, 16 September 2013. Web. 4 October 2013.

8. *Sexually transmitted diseases (STDs)*. Mayo Clinic, 23 February 2013. Web. 4 October 2013.

9. *Water-related Diseases*. World Health Organization, 2013. Web. 4 October 2013.

10. *Histoplasmosis: General Information*. Centers for Disease Control and Prevention, 6 May 2013. Web. 4 October 2013.

11. *Malaria Worldwide*. Centers for Disease Control and Prevention, 9 November 2012. Web. 4 October 2013.

12. *Types of Protozoan Diseases*. eHow Health, 2013. Web. 4 October 2013.

13. *Pediculosis (Lice)*. Medscape, 9 February 2012. Web. 4 October 2013.

Lesson 24
ICD-10-CM Chapters 2 through 6

Step 1: Learning Objectives for Lesson 24

When you complete the instruction in this lesson, you will be trained to:

- Describe the terminology related to neoplasms.

- Describe the terminology related to diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism.

- Identify and explain examples of endocrine, nutritional and metabolic diseases.

- Describe the terminology related to mental, behavioral and neurodevelopmental disorders.

- Describe the terminology related to diseases of the nervous system.

- Explain the general notes that relate to Chapters 2, 3, 4, 5 and 6 of the *Tabular List* in the *ICD-10-CM* manual.

- Apply the *Chapter-Specific Guidelines* as they relate to Chapters 2, 3, 4, 5 and 6 of the *Tabular List*.

- Identify the diagnoses and assign the final codes for documented disorders and diseases.

Step 2: Lesson Preview

Now that you have studied the first chapter of the *Tabular List*, you're ready to continue moving through the chapters! In this lesson, you'll work through the next five chapters of the *ICD-10-CM Tabular List*. You'll begin by studying neoplasms and discovering how the notes assist in accurate coding. Then, you'll learn about diseases of the blood and blood-forming organs, as well as certain disorders involving the immune mechanism. Moving to the next chapter, you'll study endocrine, nutritional and metabolic diseases. Next, explore mental, behavioral and neurodevelopmental disorders before wrapping up the lesson by learning about the nervous system.

Again, we'll define each section of codes, review the notes to assist you with accurate coding and provide many examples of the coding process. Are you ready to tackle this next lesson? Grab your *ICD-10-CM* manual, and let's get started!

Step 3: Neoplasms (C00-D49)

Chapter 2 of the *Tabular List* contains codes for *neoplasms*. The *ICD-10-CM* manual places the *Neoplasm Table* in the *Alphabetical Index* at the end of the *Index to Diseases and Injuries*. Remember, it is important to read the notes in the *Alphabetical Index* before coding from this chapter.

The *Tabular List* also contains notes to assist you with accurate coding. For instance, you need to use additional codes to identify use, abuse and dependency of alcohol and tobacco. Read the notes carefully and assign all codes that apply to the situation.

Classification of Neoplasm

The term **neoplasm** refers to any new and abnormal growth. Neoplasms can be classified by behavior, functional activity or morphology. Let's look at each of these in more detail.

Behavior

The following definitions describe the behavior of specific neoplasms.

- **Malignant Primary** refers to the site at which a neoplasm originated.

- **Malignant Secondary** refers to the site or sites to which the neoplasm has spread from the primary site.

- **Ca in situ**, or **Carcinoma in situ**, describes the situation in which tumor cells are undergoing malignant changes but are still confined to the point of origin without invasion of the surrounding normal tissue.

- **Benign** refers to noncancerous growth that does not invade adjacent structures or spread to distant sites, but might displace or exert pressure on adjacent structures.

- **Uncertain** refers to tumors that the pathologist cannot classify as benign or malignant because some features of each type are present.

- **Unspecified Behavior** refers to tumors in which neither the behavior nor the histological type is specified in the diagnosis.

Functional Activity

According to the *Tabular List* in the *ICD-10-CM*, all neoplasms are classified in this chapter, whether they are functionally active or not. An additional code from Chapter 4 may be used to identify functional activity associated with any neoplasm.

For example, you'll code catecholamine-producing malignant pheochromocytoma of the adrenal gland as *C74* with additional code *E27.5*. Meanwhile, you will code basophil adenoma of the pituitary gland with Cushing's syndrome as *D35.2* with additional code *E24.0*.

Morphology [Histology]

As you previously learned, you will code neoplasms primarily by the behavior. However, there are cases in which the morphology (histology) may be included, such as for malignant melanoma and certain neuroendocrine tumors.

The morphology of a neoplasm is determined based on examining abnormal cells from different parts of the body with a microscope, and naming and classifying those cells according to their original tissue type. This classification is possible because most benign tumors and many malignant ones retain some microscopic features of their original tissues. Tumors are named according to the cell type they resemble most. Morphology is typically most useful for research purposes, and you will not code it during this course.

Primary Malignant Neoplasm Overlapping Site Boundaries

Contiguous (**overlapping**) **neoplasms** involve sites that are next to each other. When this is the case, it is incorrect to code each site separately. Contiguous neoplasms should be classified as the subcategory/code *.8* for *overlapping lesion* unless the combination is specifically indexed elsewhere.

For instance, imagine that a patient receives a diagnosis of malignant neoplasm of the internal and external portion of her lower lip. Assigning both codes *C00.1* for the internal lower lip and *C00.4* for the external lower lip is not accurate coding. Using the coding pathway of *Neoplasm, lip, overlapping lesion*, you'll locate code *C00.8 Malignant neoplasm of overlapping sites of lip* for the primary malignancy.

Classification by Primary Site

The **primary site** is defined as the tumor's point of origin. At times, the physician cannot identify the primary site; in these cases, the code *C80.1* applies for *unknown site or unspecified*. You can assign this code whether the site is primary or secondary in nature. When adjunct chemotherapy or radiotherapy follows surgical removal of a primary-site malignancy, you will assign the malignancy code as long as chemotherapy or radiotherapy is actively administered. If a primary malignant neoplasm that surgery removed or radiotherapy or chemotherapy eradicated reoccurs, you will assign the primary malignant code for that site unless the *Index to Diseases and Injuries* directs you otherwise.

The codes in this chapter of the *ICD-10-CM* manual do not include *personal* or *family history* of malignant neoplasms. **Personal history** of a malignant neoplasm means that the past medical condition no longer exists and the patient is not receiving any treatment, but there is the potential for recurrence. **Family history** codes apply when a patient has a family member who had a particular disease, which causes the patient to be at higher risk to develop that disease. You'll code these instances from Chapter 21 instead, which you'll learn about later in the course.

Now, let's explore the sections that make up the *Neoplasms* chapter in the *ICD-10-CM*. Exposure or use of tobacco products often increases the chances of having a neoplasm; therefore, in many of the neoplasm sections, you'll find instructions to use additional codes, if applicable, to identify *exposure to environmental tobacco smoke, exposure to tobacco smoke in the perinatal period, history of tobacco use, occupational exposure to environmental tobacco smoke, tobacco dependence* or *tobacco use*.

Malignant Neoplasms (C00-C96)

Malignant neoplasms often become progressively worse and can eventually result in death. These neoplasms are cancers. Malignant neoplasms are grouped into behavioral categories of *primary* and *secondary*. You'll remember that primary refers to the site at which the neoplasm originated, while secondary refers to the site to which the primary site has spread. You also may see the terms *metastasis* or direct extension documented.

Metastasis is the transfer of a disease from one organ or part to another organ or part not directly connected with it. Only malignant tumor cells have the capacity to metastasize. Malignant cells can spread through the body very quickly. The three main pathways they use are the lymph nodes, the blood and the surface of body cavities. If a person has lung cancer that has metastasized to the brain, the primary malignant neoplasm is the lung, and the secondary malignant neoplasm is the brain. It is possible to have a secondary neoplasm with the primary site unknown.

Let's code for a patient treated for a secondary malignant neoplasm of the lymph gland located in the leg, with the primary site unknown. First, code the secondary neoplasm as the treatment is directed toward that site. Use the *Neoplasm Table* to locate *Neoplasm*, *lymph*, *gland*, *leg* and then move to the *Malignant Secondary* column for the tentative code of *C77.4*. Now, code the primary neoplasm. You are no longer looking under the subterm *lymph*. Locate the subterms *unknown site or unspecified* in the *Neoplasm Table*; then, move to the *Malignant Primary* column. The tentative code is *C80.1*. Turn to the *Tabular List* to determine the highest level of specificity for both codes. Finally, you will assign *C77.4* as the principal diagnosis with the coexisting condition of *C80.1*.

Neuroendocrine Tumors (C7A, C7B, D3A)

Neuroendocrine tumors affect hormone-producing cells, and may be present throughout the nervous and endocrine systems. You'll find primary neuroendocrine tumors in section *C7A*, while secondary neuroendocrine tumors appear in block *C7B*. Benign neuroendocrine tumors are within the *D3A* code block.

Most neuroendocrine tumors cannot be described as a specific type of cancer; therefore, they are typically known as *carcinoid tumors*. **Carcinoid tumors** are a slow-growing type of cancer that can arise in several places throughout the body, usually in the gastrointestinal tract (appendix, stomach, small intestine, colon and rectum) and lungs. The American Cancer Society defines carcinoid as the following:

Like most cells of the body, gastrointestinal system neuroendocrine cells sometimes undergo certain changes that cause them to grow too much and form tumors. The tumors that develop from neuroendocrine cells are known as neuroendocrine tumors (or neuroendocrine cancers). There are many varieties of neuroendocrine tumors, but the most common are the carcinoid tumors or carcinoids.

Carcinoid tumors act like the cells from which they originate. They often release certain hormone-like substances into the bloodstream. In about 10 percent of people, carcinoid tumors spread, grow very large and release high amounts of those hormones.[1] The hormones cause symptoms such as facial flushing (redness and a warm feeling), wheezing, diarrhea and a fast heartbeat. Together, these symptoms are known as carcinoid syndrome. Most cancers cause symptoms only in the organs in which they start or to which they spread. However, carcinoid tumors can release substances into the bloodstream that cause symptoms throughout the entire body.

In Situ Neoplasms (D00-D09)

The term *in situ* means "in place." Carcinoma in situ describes tumor cells that are undergoing malignant changes but are still confined to the site of origin without invasion of surrounding normal tissues. The physician will specifically state the behavior of the neoplasm as *in situ* if you need to code this type of neoplasm.

Turn to this section in the *Tabular List* to see what conditions it includes. You'll see Bowen's disease, erythroplasia, grade III intraepithelial neoplasia and Queyrat's erythroplasia are included in this section.

Benign Neoplasms (D10-D36)

Benign neoplasms are noncancerous growths. They do not invade adjacent structures or spread to distant sites, but they might displace or exert pressure on adjacent structures. Benign tumors always remain localized and never metastasize. To understand the morphological classification of benign neoplasms, consider what you know about medical terminology. The suffix *-oma* is a word part that means *tumor* or *neoplasm*.

For example, **adenoma** is a benign neoplasm of epithelial cells. Again, you do not need to memorize such terms because the *Index to Diseases and Injuries* is available to assist you. When you look up the main term *Adenoma* in the *Index*, it directs you to *see also Neoplasm, benign, by site*. The cross-reference instructs you to turn to the *Neoplasm Table* and locate the site, and then find the correct code in the *Benign* column.

Imagine that you are coding a report with the diagnosis of papilloma of the larynx. First, locate the main term *Papilloma* in the *Index to Diseases and Injuries*. Note that the *Index* directs you to *see also Neoplasm, benign, by site*. Again, turn to the *Neoplasm Table* and locate *Neoplasm, larynx, NEC*. Once you find the term, move to the *Benign* column to determine that code *D14.1* is the tentative code. Check the code *D14.1* in the *Tabular List* to determine it's at the highest level of specificity, and assign that code.

Neoplasms of Uncertain Behavior, Polycythemia Vera and Myelodysplastic Syndromes (D37-D48)

The note in the *Tabular List* indicates that categories *D37-D44* and *D48* classify by site neoplasms of uncertain behavior. This means the physician cannot confirm the neoplasms as malignant or benign based on histology.

Polycythemia vera is a blood disorder in which the bone marrow makes too many red blood cells, and the numbers of white blood cells and platelets also increase. This condition is rare and usually develops slowly. In fact, a patient may have the condition for years without noticing signs or symptoms. Often, polycythemia vera will appear during a blood test that a patient has for some other reason. Without treatment, polycythemia vera can be life-threatening. However, with proper medical care, many people experience few problems related to this disease.[2] Code *D45* applies for polycythemia vera. The *Tabular List* indicates that code *D45* cannot be coded with familiar polycythemia (*D75.0*) or secondary polycythemia (*D75.1*).

Myelodysplatic syndromes are a group of diseases in which the bone marrow does not make enough healthy blood cells.[3] Code block *D46* contains a variety of codes for this condition. The instructions state that you will *use an additional code for adverse effect, if applicable, to identify drug (T36-T50 with fifth or sixth character 5)*.

Before moving to the next code section, review the following operative report and try to determine the correct code or codes for the diagnosis indicated in the dictation.

PREOPERATIVE DIAGNOSIS
Mass on right breast.

POSTOPERATIVE DIAGNOSIS
Breast neoplasm of uncertain behavior.

PRIMARY PROCEDURE
BREAST BIOPSY.

INDICATIONS FOR PROCEDURE
A 40-year-old female presents with mass on the right breast. Review of recent mammogram indicates the mass is in the upper-outer quadrant.

PROCEDURE
A large-gauge needle is inserted through the skin of the breast into the mass. The needle is removed with the core of breast tissue. Pressure is applied for bleeding. The sample was sent to the pathologist, who was unable to classify the mass as benign or malignant.

To code this operative report, begin at the *Neoplasm Table*. Locate *Neoplasm, breast, upper-outer quadrant* and then move to the *Uncertain Behavior* column, where you'll find the tentative code of *D48.6-*. Turn to this code in the *Tabular List*. You'll see the accurate code must identify the left or right breast, or you'll code as unspecified. The documentation indicates this was the right breast, so you will apply code *D48.61* to this report.

Neoplasms of Unspecified Behavior (D49)

Unspecified behavior refers to tumors in which neither the behavior nor the histological types are specified in the diagnosis. Turn to the *Tabular List* to read the note for code block *D49*. Notice that the note refers to *neoplasms of unspecified morphology and behavior*. To help you code conditions in this group, keep in mind that the words *histology* and *histological* have the same meaning, as do *morphology* and *morphological*.

Sequencing Malignancy Codes

The *Chapter-Specific Coding Guidelines* are essential to review when coding neoplasms. Sequencing varies by complication, anemia and dehydration. The following table provides some general rules for sequencing codes—but this list is not all-inclusive and does not serve as a substitute for reviewing the guidelines as you code.

Treatment Directed Toward:	Principal Diagnosis:
Malignancy	Primary Malignancy
Secondary site	Secondary Malignancy
Anemia associated with malignancy	Primary Malignancy
Anemia associated with adverse effect of chemo- or immunotherapy	Adverse Effect
Anemia associated with adverse effect of radiotherapy	Anemia

You are doing a great job! This completes our review of the *ICD-10-CM* Chapter 2 *Tabular List*. Now, take a moment to review what you have learned with the following Practice Exercise.

Step 4: Practice Exercise 24-1

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Recurrent glioma of cerebrum**
    ICD-10-CM: _____

2. **Metastatic carcinoma of the brain from the lung**
    ICD-10-CM: _____
    ICD-10-CM: _____

3. **Hodgkin's sarcoma**
    ICD-10-CM: _____

4. **Benign neoplasm scalp**
    ICD-10-CM: _____

5. **Fibromyoma of the uterus**
    ICD-10-CM: _____

6. **Coding Challenge**

Pathology Report

SPECIMEN
Biopsy, lesser curvature.

DATE COMPLETED
June 7, 20XX

GROSS DESCRIPTION: Multiple fragments of pale tan tissue, measuring $1 \times 0.6 \times 0.3$ cm in aggregate.

MICROSCOPIC/DIAGNOSIS
Gastric biopsy: Adenocarcinoma.

ICD-10-CM: _____

Step 5: Review Practice Exercise 24-1

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 6: Diseases of the Blood and Blood-forming Organs and Certain Disorders Involving the Immune Mechanism (D50-D89)

Chapter 3 in the *ICD-10-CM* includes many diseases, such as nutritional and hemolytic anemia; bone marrow failure syndromes; coagulation defects; and certain disorders involving the immune mechanism, including Di George's syndrome and sarcoidosis.

The Excludes2 at the beginning of this chapter indicates that it may be acceptable to use both the code and the excluded code together if there is supporting documentation. These conditions are as follows:

- *autoimmune disease (systemic) NOS (M35.9)*

- *certain conditions originating in the perinatal period (P00-P96)*

- *complications of pregnancy, childbirth and the puerperium (O00-O9A)*

- *congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)*

- *endocrine, nutritional and metabolic diseases (E00-E88)*

- *human immunodeficiency virus [HIV] disease (B20)*

- *injury, poisoning and certain other consequences of external causes (S00-T88)*

- *neoplasms (C00-D49)*

- *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R94)*

Currently, there are no *Chapter-Specific Guidelines* for this chapter of the *Tabular List*, but there is space reserved for future guideline expansion, if necessary. However, you will still find quite a few instructional notes in the *Tabular List* to assist you with accurate coding. Read these notes carefully as you assign codes from this chapter to ensure you have applied all necessary—and correct—codes. Now, let's take a look at the code sections that appear within this chapter of the *ICD-10-CM*.

Nutritional Anemias (D50-D53)

Anemia is any condition in which the number of red blood cells is less than normal. Common signs of anemia include shortness of breath, palpitations of the heart and lethargy. As you review the anemia code section, you will find various types of nutritional anemias, including *iron-deficiency*, *vitamin B12-deficiency* and *folate-deficiency anemia*.

Iron-deficiency anemia is the most common form of anemia and often the simplest to address. A lack of adequate healthy red blood cells leads to this condition. The body cannot produce enough hemoglobin (the substance in red blood cells that allows them to carry oxygen) when there is an insufficient amount of iron in the blood. Tiredness and shortness of breath are common symptoms of iron-deficiency anemia.

Vitamin B12-deficiency anemia is marked by inadequate amounts of vitamin B12 to make the red blood cells that carry blood throughout the body. Eating meat, eggs, milk and cheese provides the body with an adequate supply of vitamin B12. A deficiency can result when a person's digestive system does not absorb vitamin B12 properly. Alternatively, individuals who eat a vegan diet, which often does not provide enough B12-rich foods, may develop a deficiency, as well.

Folate (**folic acid**) is necessary for red blood cell formation and growth. A lack of folic acid in the body results in a decrease of red blood cells, which leads to **folate-deficiency anemia**. This condition may be caused by poor dietary intake of folic acid or certain medications.

Hemolytic Anemias (D55-D59)

Hemolytic anemia is a condition in which there are not enough red blood cells in the blood due to the premature destruction of red blood cells.[4] Anemia due to enzyme disorders, thalassemia, *sickle-cell* disorder and acquired hemolytic anemia are a few of the conditions within this section of codes.

Sickle-cell anemia is a disease in which the red blood cells form an abnormal crescent shape. It is a genetic condition most prevalent in African and African-American families. Symptoms depend on the amount of abnormal hemoglobin in the blood. Painful episodes known as **crises** occur when high levels of abnormal hemoglobin (at least above 40 percent, but usually higher) are present. The diagnosis of sickle-cell anemia is made on the basis of clinical findings, but the disease can be confirmed only with laboratory tests.

Now, review the following scenario and try to code the final diagnosis.

HISTORY
A 22-year-old African-American male comes to the emergency department with a case of sickle-cell crisis and requests pain medicine. He has never come to this emergency depratment before; he usually goes to the one across town, but he "cannot be bothered with those docs because they never give enough pain medicine." When asked how much pain he has, he states it is a 15/10. The patient is writhing in pain. The doctor assesses the patient and addresses the need for pain control.

PAST MEDICAL HISTORY
Sickle-cell disease, pneumonia. NKDA.
Family history: Sickle-cell trait, hypertension.
Social history: None.

REVIEW OF SYSTEMS
Painful extremities. No fever. No chest pain. No respiratory distress.

PHYSICAL EXAMINATION
GENERAL: Patient writhing in pain.
VITAL SIGNS: Temperature 98.6 °F, heart rate 110, respiration rate 20, blood pressure 135/80.
HEENT: EOMI. PERRL. Clear TM.
CARDIORESPIRATORY: Sinus tachycardia, normal S1/S2, no murmurs, rubs or gallops. Lungs: CTA bilaterally.
ABDOMEN: Soft, nondistended, diffusely tender.
EXTREMITIES: No clubbing, cyanosis, edema. Pain everywhere.
NEUROLOGIC: Grossly intact.

EMERGENCY DEPARTMENT COURSE

An IV was started, and IV morphine was promptly ordered by the doctor and administered by the nurse. The patient's pain was adequately controlled during his two-hour stay in the emergency department. No labs or x-rays were ordered.

ASSESSMENT

Sickle-cell crisis.

PLAN

The patient's painful crisis was appropriately treated. There was no fever and no perceived infection. Consequently, no labs were obtained. The patient was new to this emergency department, and the physician-patient interaction was appropriate. The patient was discharged home on oral pain medication and told to follow up with his primary care physician.

DISPOSITION

Home.

To code this scenario, you'll use the coding pathway *Crisis, sickle-cell* in the *Index*. The tentative code provided is *D57.00*. After checking the code in the *Tabular List,* you'll be confident in assigning *D57.00* to this scenario.

Aplastic and Other Anemias and Other Bone Marrow Failure Syndromes (D60-D64)

Aplastic anemia is a rare type of anemia in which there is a reduction in the number of red, white and platelet cells in the blood. The earliest form of blood cell in the bone marrow is called a **stem cell**. Aplastic anemia is a result of the failure to produce these stem cells. The two major forms of aplastic anemia are *idiopathic aplastic anemia* and *secondary aplastic anemia.*

Idiopathic aplastic anemia, the more common type, is a form of bone marrow failure that has no apparent cause. The only known treatment for this type of anemia is a bone-marrow transplant. The other major form, **secondary aplastic anemia**, is the result of the suppression of bone marrow function from drugs, radiation therapy or viral infections. Secondary aplastic anemias can usually reverse with the removal of the factors that caused the bone marrow suppression in the first place.

Coagulation Defects, Purpura and Other Hemorrhagic Conditions (D65-D69)

Coagulation defect is the failure to form blood clots. If the blood does not clot properly, heavy, hard-to-stop bleeding can occur after an injury. This continual bleeding can damage the internal organs. When you look in the *Tabular List* under code block *D68*, you will see a number of eponyms listed in this code block, such as von Willebrand's disease (*D68.0*) and Rosenthal's disease (*D68.2*). Von Willebrand's disease is characterized either by low levels of certain proteins in the blood or protein in the blood that does not function as it should.

Purpura is marked by purple-colored spots and patches that occur on the skin, organs and in mucus membranes, including the lining of the mouth. Bleeding within underlying tissues causes this condition. The *Tabular List* indicates quite a few conditions that you will not code with code block *D69*.

Other Disorders of Blood and Blood-forming Organs (D70-D77)

Neutropenia, *leukopenia* and diseases of the spleen are a few of the conditions you'll find within this code section. **Neutropenia** is a condition resulting from a decreased number of neutrophils, a type of white blood cell, in the bloodstream, which affects the body's ability to fight off infections. **Leukopenia** is a disease in which the white blood cell count is below normal. Many factors can cause leukopenia, including drugs and environmental chemicals, radiation therapy and certain chronic diseases.

Now, pause to review what you have learned about the conditions that appear within Chapter 3 of the *ICD-10-CM*.

Step 7: Practice Exercise 24-2

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Iron-deficiency anemia secondary to chronic blood loss**
   ICD-10-CM: _____

2. **Addison anemia**
   ICD-10-CM: _____

3. **Hb-Bart's disease**
   ICD-10-CM: _____

4. **Sickle-cell disease with crisis**
   ICD-10-CM: _____

5. **Acquired pancytopenia**
   ICD-10-CM: _____

6. **Von Willebrand's disease**
   ICD-10-CM: _____

7. **Allergic purpura**
   ICD-10-CM: _____

8. Coding Challenge

PREOPERATIVE DIAGNOSIS
Suspect anemia.

POSTOPERATIVE DIAGNOSIS
Biopsy confirms idiopathic aplastic anemia.

PROCEDURE
BONE MARROW BIOPSY.

BRIEF HISTORY
Patient presents with fatigue, SOB upon exertion, nosebleeds and bleeding gums, x 3 months. CBC indicates low RBC, WBC and platelet count.

PROCEDURE
Hip area is cleansed, and local anesthetic is injected into site. Biopsy needle is inserted into the bone. After the core of the needle is removed, the needle is pressed forward and rotated, forcing tiny samples of the bone into the needle. The needle is removed and pressure placed on the biopsy site.

ICD-10-CM: _____

Step 8: Review Practice Exercise 24-2

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 9: Endocrine, Nutritional and Metabolic Diseases (E00-E89)

Chapter 4 of the *ICD-10-CM Tabular List* focuses on diseases and disorders of the endocrine system as well as nutritional and metabolic diseases. As you can imagine, an imbalance in these systems affects the body. This chapter contains codes for conditions such as *hyperthyroidism*, *diabetes*, *obesity* and metabolic disorders.

As you are aware, all neoplasms are classified in Chapter 2. According to the *ICD-10-CM Tabular List*, appropriate codes in this chapter may be used as additional codes to indicate functional activity by neoplasms and ectopic endocrine tissue. In addition, these codes may apply for hyperfunction and hypofunction of endocrine glands associated with neoplasms or other conditions classified elsewhere.

Finally, Excludes1 in this section indicates that transitory endocrine and metabolic disorders specific to newborn (*P70-P74*) should not be reported with a code from this chapter.

Disorders of Thyroid Gland (E00-E07)

The **thyroid gland** is one of the endocrine glands, normally situated in the lower part of the front of the neck. The thyroid gland has two lobes, one on either side of the trachea. This gland secretes and stores thyroid hormones. Inadequate iodine levels often cause the gland to grow larger than normal, a condition known as a **goiter**. Goiters are usually painless and do not require treatment unless the size makes it difficult to swallow or breathe.

Hyperthyroidism is a condition in which an overactive thyroid gland is producing an excessive amount of thyroid hormones that circulate in the blood. **Thyrotoxicosis** is a harmful condition caused by an excess of thyroid hormones from any cause. For instance, thyrotoxicosis can result from an excessive intake of thyroid hormone or from overproduction of thyroid hormones by the thyroid gland.[5] It is important to be aware that both physicians and patients often use these words interchangeably.

Diabetes Mellitus (E08-E13)

Diabetes mellitus is a chronic syndrome of insufficient insulin production that leads to the body's inability to metabolize carbohydrates, protein and fat. The disease has a genetic component, but its development also depends on the individual's environment and lifestyle, including diet, weight and exercise habits. The diabetes mellitus codes are combination codes that include the type of diabetes mellitus, the body system affected and the complications affecting the body system. Diabetes mellitus occurs in two major forms: *type 1* and *type 2*.

Type 2 diabetes, code block *E11*, is the result of a problem in the way the body produces or uses insulin. This is the most common form of diabetes. Family history and genetics play a large role in the development of type 2 diabetes. Low activity levels, poor diet and excess body weight—especially around the waist— significantly increase the risk for type 2 diabetes.

If the documentation indicates that a type 2 diabetic patient uses insulin on a long-term basis, you will also assign code *Z79.4 Long-term (current) use of insulin*. You *will not* use code *Z79.4* if the patient takes insulin *temporarily* to bring the type 2 diabetes under control.

Type 1 diabetes, code block *E10*, is a chronic disease that occurs when the pancreas does not produce enough insulin to properly control blood sugar levels. In type 1 diabetes, the body cannot make its own insulin; therefore, the patient must take insulin every day. For this reason, the condition is also known as insulin-dependent diabetes. In the past, type 1 diabetes was known as juvenile onset diabetes because, although it can affect any age, it is most often diagnosed in children, adolescents or young adults. According to the guidelines, the age of a patient should not determine the type of diabetes. Instead, the physician must document the type. If the type of diabetes is not documented, you will default to the type 2 diabetes mellitus codes.

Secondary diabetes mellitus is defined as a diabetic condition that does not result from genetics or environmental conditions; it is always caused by another condition or event. Codes within the code blocks *E08 Diabetes mellitus due to underlying conditions* and *E09 Drug or chemical induced diabetes mellitus* identify complications or manifestations associated with secondary diabetes mellitus. You'll find rules for sequencing secondary diabetes and its causes in the *Chapter-Specific Guidelines*, as well.

Now, let's use the *ICD-10-CM* manual to practice coding the diseases you have just examined. Imagine that a type 1 diabetic patient is diagnosed with ketoacidosis. Begin your search for the accurate code in the *Index to Diseases and Injuries*. Use *Diabetes, type 1, with, ketoacidosis* as the coding pathway. What did you find? Your tentative code provided is *E10.10*. Turn to the *Tabular List* to verify the code. Since there is no documentation of a coma, you will assign *E10.10* as the accurate code for this diagnosis.

Diabetes is a challenging disease to code, so let's try another example. This time, let's code a patient with manifestations that result from the diabetes. You are the medical coding and billing specialist for an ophthalmologist, and you must code the following dictation:

SUBJECTIVE
A 64-year-old male with a history of type 2 diabetes complains of cloudy, obstructed vision.

OBJECTIVE
Exam of the eye reveals snowflake-shaped opacity.

ASSESSMENT
The physician determines the patient has diabetic cataracts and suggests outpatient surgery.

PLAN
The extracapsular cataract is removed with insertion of an intraocular lens. The patient is instructed to return for follow-up treatment.

The patient complains of cloudy, obstructed vision, but you will *not* code symptoms if a final diagnosis is provided. The physician's assessment reveals diabetic cataracts as the problem. You'll use *Diabetes, type 2, with, cataracts* as the coding pathway to find the tentative code of *E11.36*. As usual, you'll turn to the *Tabular List* to verify the code before you assign it as the final code for this example. Another fine job!

Following the diabetes codes, you'll find code sections for disorders of other endocrine glands, malnutrition and other nutritional deficiencies. Most of these conditions are fairly straightforward to code, so let's move on to the next section of Chapter 4.

Overweight, Obesity and Other Hyperalimentation (E65-E68)

Obesity is an increase in body weight beyond the limitations of skeletal and physical requirements, as the result of excessive accumulation of fat in the body. **BMI**, or **Body Mass Index**, is an assessment of weight based on height, and it estimates whether or not a patient is at a healthy weight. The definition of **overweight**, in comparison, is a BMI between 25 and 29.9. A person is considered obese if he has a BMI equal to or higher than 30. A person is **morbidly obese**, or **severely obese**, if his BMI is higher than 40.[6]

The information for BMI is typically documented by other clinicians involved in the care of the patient, rather than the primary care physician. Therefore, according to the *General Coding Guidelines*, the assignment of BMI may be based on medical records from clinicians who are not the patient's primary provider. A dietitian, for example, may document the BMI rather than the physician, but the physician can use the documentation from the dietitian to determine BMI. However, the physician must document any associated diagnosis of overweight or obesity. Also, keep in mind that you will only report the BMI codes as secondary diagnoses.

Metabolic Disorders (E70-E88)

The last section of codes in this chapter applies to metabolic disorders. Any condition that is considered abnormal in relation to metabolism appears in this section. Some diseases in this chapter are *albinism*, volume depletion, acidosis and hypokalemia.

You'll see in the *Tabular List* that this section of codes should not be coded with androgen insensitivity syndrome, congenital adrenal hyperplasia, Ehlers-Danlos syndrome, hemolytic anemias attributable to enzyme disorders, Marfan's syndrome or 5-alpha-reductase deficiency. Alternative codes are provided.

Albinism is a rare, inherited disorder in which melanocytes are present but do not form melanin. People with albinism have pale skin and white hair. Their eyes are pink because the retina lacks pigmentation. Individuals with this condition are at high risk for sunburn and skin cancer, and they must avoid the sun as much as possible. There is no treatment for albinism. To code for albinism, turn to the main term *Albinism, albino* in the *Index to Diseases and Injuries*. You'll see the tentative code *E70.30* for the disorder of albinism. Be sure to determine the highest level of specificity in the *Tabular List* before you assign the code.

You're making great progress! Before you move on to *Mental, Behavioral and Neurodevelopmental Disorders*, let's test what you've learned about Chapter 4 of the *ICD-10-CM* with the following Practice Exercise.

Step 10: Practice Exercise 24-3

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Postsurgical hypothyroidism**

    ICD-10-CM: _____

2. **Type 1 diabetic hypoglycemic coma**

    ICD-10-CM: _____

3. **Primary hyperparathyroidism**

    ICD-10-CM: _____

4. **Polycystic ovaries**

    ICD-10-CM: _____

Medical Coding and Billing Specialist

5. Coding/Billing Challenge

Use the following encounter form and dictation to create a CMS-1500 version 02/12 claim form using MedLook.

Luke R. Johnson, MD	Laura K. Knott, MD	Charles Peterson, MD
NPI: 0657490049	NPI: 0405891109	NPI: 0275695402

Medical Care Center
100 South Main
Brown, CO 80001-9898
(970) 555-1111

Physician signature: *Laura K. Knott, MD*   ☑ 11 Physician Office
Group NPI: 06-65544004   ☐ 12 Private Residence
EIN: 99-7653456   ☐ 22 Outpatient Hospital
CLIA#: CM8402   ☐ 23 Hospital Emergency Room
Participating Provider ☑Y ☐N

Patient Information

Name	Bonnie K. Schmidt	**Date of Birth**	June 25, 1962
Address	1810 Bluegrass Drive	**Sex**	F
City	Springtown **State** CO		
ZIP	80002		
Home Phone	970-555-9041		

Insurance Information

Primary Insurance		**Secondary Insurance**	
Name	Health Services Inc.	**Name**	CHAMPVA
ID#	560-1113	**ID#**	635-00-7213
Group#	208	**Group#**	
Address	PO Box 324	**Address**	4500 Cherry Creek Drive
City	Springtown	**City**	Denver
State	CO **ZIP** 80002-0324	**State**	CO **ZIP** 80222-0009
Primary Insured Name	Bonnie	**Secondary Insured Name**	Richard J. Schmidt
Relation to Patient	self	**Relation to Patient**	spouse
		DOB/Sex	Sept 15, 1962 Male
		Address	1810 Bluegrass Drive
		City	Springtown **State** CO
		ZIP	80002
		Phone	970-555-9041

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Bonnie K. Schmidt
Signature of patient (or parent of minor child)

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Richard J. Schmidt
Signature of patient (or parent of minor child)

Date of Service *10/17/XX*		
Diagnosis	**Procedure**	**Charge**
	99213 Office visit, Est. Patient	*$69.00*

Today's Charge	$69.00
Cash/Check	$5.00
Balance	$64.00

Name: Bonnie K. Schmidt
DOB: June 25, 1962
Date of Service: October 17, 20XX

SUBJECTIVE
At a regular office visit, patient complains of constipation, nausea and vomiting, with abdominal pain, excessive thirst and muscle weakness. Patient is currently receiving treatment for thyroid cancer.

OBJECTIVE
An expanded problem focused examination is performed. The physician orders labs and an EKG, which are taken at the office. Results from the blood draw indicate elevated calcium level, and, on the EKG, a shortened Q-T interval.

ASSESSMENT
The patient has acute hypercalcemia resulting from the thyroid cancer, primary malignancy.

PLAN
Orders for immediate hydration (3L/day) and diuretic administration.

Step 11: Review Practice Exercise 24-3

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 12: Mental, Behavioral and Neurodevelopmental Disorders (F01-F99)

A **mental disorder** is any clinically significant behavioral or psychological syndrome characterized by the presence of distressing symptoms or significant impairment of function. Chapter 5 of the *Tabular List* includes the diagnosis codes for a broad range of mental, behavioral and neurodevelopmental disorders. In a moment, you will examine some of the code sections that appear within this chapter.

First, let's look at another resource. A frequently used set of codes comes from the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*, which American Psychiatric Publishing, Inc., publishes. When you assign codes for mental disorders, you'll use both books for reference, but ultimately use the *ICD-10-CM* manual to assign codes. As a student in this course, you do *not* need the *Diagnostic and Statistical Manual of Mental Disorders*. You'll use the *ICD-10-CM* manual exclusively to assign this type of diagnosis in this course.

Meanwhile, you'll see that this chapter includes disorders of psychological development, but excludes those symptoms, signs and abnormal clinical laboratory findings, not elsewhere classified (*R00-R99*). This means that you can assign both the codes from this chapter as well as codes from *R00-R99*, as long as the documentation supports doing so.

Now, let's look at some of the disorders you'll find within this chapter and discover how to use the *ICD-10-CM* to successfully code the conditions!

Mental Disorders due to Known Physiological Conditions (F01-F09)

Before you begin to review the specific disorders of this code section, open your *ICD-10-CM* manual to read the note provided, as follows:

This block comprises a range of mental disorders grouped together on the basis of their having in common a demonstrable etiology in cerebral disease, brain injury, or other insult leading to cerebral dysfunction. The dysfunction may be primary, as in diseases, injuries, and insults that affect the brain directly and selectively; or secondary, as in systemic diseases and disorders that attack the brain only as one of the multiple organs or systems of the body that are involved.

Code blocks *F01*, *F02* and *F03* indicate **dementia**, which involves a general loss of intellectual abilities related to impairment of memory, judgment and abstract thinking, as well as changes in personality. In many cases, you'll note whether the dementia code specifies with or without behavioral disturbances. These behavioral disturbances include aggressive, combative and/or violent behavior, as well as wandering away. If the documentation does not indicate any behavioral disturbances, you will not code to it.

One of the most common forms of dementia is **vascular dementia**, which is caused by chronic reduced blood flow to the brain. Stroke is usually the cause of this reduction in blood flow to the brain. The *Tabular List* directs you to code first the underlying physiological conditions or sequelae of cerebrovascular disease.

Dementia in other diseases classified elsewhere (*F02*) indicates manifestation codes. Remember, according to the *ICD-10-CM Coding Guidelines*, certain conditions have both an underlying etiology as well as manifestations due to the underlying etiology. Therefore, the manual instructs you to code the underlying condition first, followed by the manifestation. You will revisit this code category when you learn more about Alzheimer's disease in an upcoming lesson.

In addition, presenile dementia or psychosis and senile dementia and psychosis are also conditions you'll encounter in the code block *F03 Unspecified dementia*. Let's try coding from this block with an example of depressed senile dementia. First, go to the *Index to Diseases and Injuries* and locate the main term *Dementia*. The subterms you'll use are *senile, depressed or paranoid type*. You will quickly find the code *F03*. Note this tentative code and then turn to the *Tabular List* to determine the highest level of specificity. You'll see that you have selected the correct code for this diagnosis.

Mental and Behavioral Disorders due to Psychoactive Substance Use (F10-F19)

Conditions in this code section are the result of *chemical imbalances* in patients. **Chemical imbalances** may be due to alcohol intoxication or withdrawal, or may represent disorders that consumption of drugs causes. The *Tabular List* directs you to use an additional code for blood alcohol level, if applicable, for code block *F10 Alcohol related disorders.*

Within this chapter, coding *use*, *abuse*, *dependency* and *remission* requires a firm understanding of the terminology. **Use** is the act of taking a substance such as alcohol or drugs. **Abuse** is any harmful use of the substance. **Dependency** occurs when an individual is addicted to the substance. When the physician dictates use, abuse or dependency of the same substance, you'll only assign one code. Review the following table to determine the hierarchy of these conditions.

Documentation	Code
Use + Abuse	Abuse
Abuse + Dependence	Dependence
Use + Abuse + Dependence	Dependence
Use + Dependence	Dependence

Remission is the period during which the patient no longer uses, abuses or is dependent on a substance. According to the *Chapter-Specific Guidelines*, the selection of codes for *in remission* requires the provider's clinical judgment and must be clear in the documentation. Now that you have a better understanding of this code section, let's move on to mood disorders.

Mood [Affective] Disorders (F30-F39)

A **manic episode** is not an actual disorder in itself, but instead is part of a type of *bipolar disorder*. A manic episode is characterized by periods of time during which an elevated, expansive or notably irritable mood is present, lasting for at least one week.[7] **Bipolar disorder**, also known as manic depression, is a brain disorder that causes unusual shifts in mood, energy and activity levels with the ability to continue to carry out daily tasks.[8] Meanwhile, in a **hypomanic episode**, there is a distinct period of persistently elevated, expansive or irritable mood that typically lasts at least four days and is clearly different from the person's usual mood. During this episode, three or more of the following symptoms are present:

● Inflated self-esteem or grandiosity

● Decreased need for sleep

● More talkative than usual

● Racing thoughts

● Distractibility

● Increase in goal-directed activity

● Excessive involvement in pleasurable activities with painful consequences

It is not up to the medical coding and billing specialist to determine if the severity of the patient's condition is mild or moderate, or if the episode should be considered hypomanic. The physician must document this information for accurate coding, or you will code as unspecified.

Anxiety, Dissociative, Stress-related, Somatoform and Other Nonpsychotic Mental Disorders (F40-F48)

You'll find *phobias*, anxiety disorders, *post-traumatic stress disorder* and dissociative disorders in this code section of Chapter 5. A **phobia** is a type of anxiety disorder involving a strong, irrational fear of something that poses little or no actual danger. Examples of specific, isolated phobias include fear of spiders (**arachnophobia**), thunderstorms, bridges or flying.

Post-traumatic stress disorder (**PTSD**) can occur after an individual sees or experiences a traumatic event that involves the threat of injury or death. For example, the terrorist attacks of September 11, 2001, may have caused PTSD in people who were involved, those who saw the towers fall and those who lost relatives and friends.[9] The documentation for PTSD may indicate that it is acute or chronic. You'll recall that an acute condition is short and severe, while chronic conditions continue over a long period of time or recur frequently. In coding the diagnosis of acute and chronic PTSD, you'll assign both *F43.11* and *F43.12* to accurately identify the condition.

Behavioral Syndromes Associated with Physiological Disturbances and Physical Factors (F50-F59)

Eating disorders, sleep disorders and sexual dysfunction are a few of the behavioral syndromes you'll encounter within this code section.

Eating disorders do not include feeding disorders in infancy or childhood, but they do include *anorexia nervosa* and *bulimia nervosa*. **Anorexia nervosa** is not simply a loss of appetite, but instead, a condition of restricted eating due to concerns about being overweight. **Bulimia nervosa** involves periods of overeating followed by purging, sometimes through self-induced vomiting or use of laxatives. Eating disorders can cause heart, digestive, musculoskeletal and kidney problems, and may even result in death.

Insomnia involves difficulty falling asleep or staying asleep, while **hypersomnia** is excessive sleepiness. People with hypersomnia have trouble staying awake during the day, and may even fall asleep at any time—while at work or while driving the car!

You'll find *Disorders of adult personality and behavior (F60-F69)* as the next code block in this chapter. Conditions found here are fairly straightforward to code, so you're ready move on to the next code block.

Intellectual Disabilities (F70-F79)

Intellectual disabilities include significantly sub-average general intellectual functioning associated with impairments in adaptive behavior, which manifests during the child's developmental period. The *Tabular List* instructs you to code first any associated physical or developmental disorders. Intellectual disabilities are classified as mild, moderate, severe, profound or unspecified. In addition, the ICD-10-CM codes indicate IQ levels to correlate with each classification.

Nice work! You have just completed another chapter in the *Tabular List*, so it's time to review with a Practice Exercise.

Step 13: Practice Exercise 24-4

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Alcoholic delirium**

   ICD-10-CM: _____

2. **Borderline schizophrenia**

   ICD-10-CM: _____

3. **Obsessive-compulsive disorder**

   ICD-10-CM: _____

4. **Anorexia nervosa**

   ICD-10-CM: _____

5. **Kleptomania**

   ICD-10-CM: _____

6. **Mild mental subnormality**

   ICD-10-CM: _____

Medical Coding and Billing Specialist

7. **Coding/Billing Challenge**

Use the following encounter form and dictation to create a CMS-1500 version 02/12 claim form using MedLook.

Luke R. Johnson, MD
NPI: 0657490049

Laura K. Knott, MD
NPI: 0405891109

Charles Peterson, MD
NPI: 0275695402

Medical Care Center
100 South Main
Brown, CO 80001-9898
(970) 555-1111

Physician signature: *Charles Peterson, MD*
Group NPI: 06-65544004
EIN: 99-7653456
CLIA#: CM8402

- ☑ 11 Physician Office
- ☐ 12 Private Residence
- ☐ 22 Outpatient Hospital
- ☐ 23 Hospital Emergency Room

Participating Provider ☑Y ☐N

Patient Information

Name	Shelly Diane Reynolds
Address	4575 Dixon Court Apt. 7
City	Yampa **State** CO
ZIP	80004
Home Phone	970-555-6996

Date of Birth March 17, 1999
Sex F
Guarantor: Nicole Reynolds
4575 Dixon Court Apt. 7
Yampa, CO 80004

Insurance Information

Primary Insurance
Name Medicaid
ID# 47324
Group#
Address PO Box 1461
City Denver
State CO **ZIP** 80206-1461
Primary Insured Name Shelly Reynolds
Relation to Patient Self
Employer

Secondary Insurance
Name none
ID#
Group#
Address
City
State **ZIP**
Secondary Insured Name
Relation to Patient
Employer

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Nicole Reynolds
Signature of patient (or parent of minor child)

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Signature of patient (or parent of minor child)

Date of Service	5/1/20XX	
Diagnosis	**Procedure**	**Charge**
	99213 *Office visit, Est. Patient*	$69.00

Name: Shelly D. Reynolds
DOB: March 17, 1999
Date of Service: May 1, 20XX

SUBJECTIVE
This patient is brought in by her mother because of a change in the daughter's behavior. The mother notes hyperactivity, outbursts and over-involvement in activities. Patient notes she has been sleeping little and has been involved in sexual promiscuity. She denies medication, recreational or OTC drugs.

OBJECTIVE
A comprehensive physical exam does not indicate physical causes for these symptoms. Lab results indicate the thyroid is normal.

ASSESSMENT
Moderate bipolar disorder, single manic episode.

PLAN
Recommend getting more sleep. Patient is prescribed lithium and encouraged to join a support group.

Step 14: Review Practice Exercise 24-4

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 15: Diseases of the Nervous System (G00-G99)

Chapter 6 of the *ICD-10-CM* manual's *Tabular List* contains codes that pertain to the *nervous system*. The **nervous system** regulates almost every activity in the body. The central and peripheral nervous systems comprise the nervous system as a whole. The **central nervous system** (**CNS**) includes the brain and spinal cord; the **peripheral nervous system** (**PNS**) consists of the nerves and ganglia outside the brain and spinal cord.
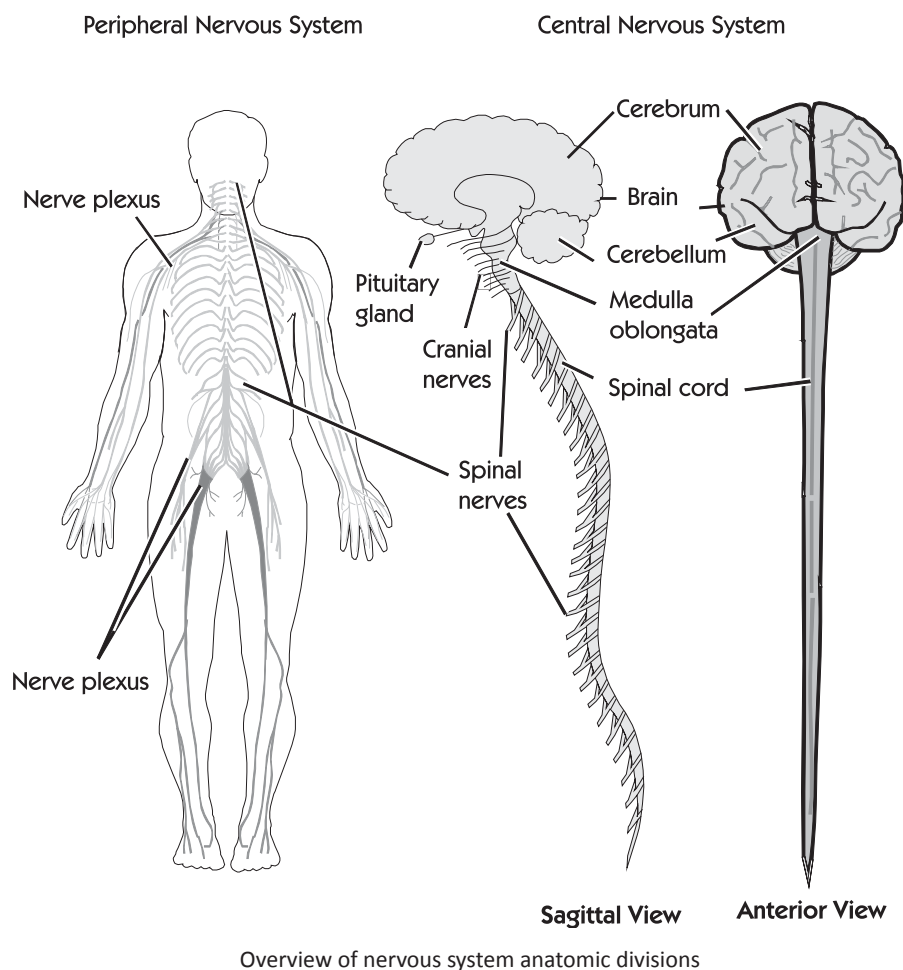
Overview of nervous system anatomic divisions

At the start of this chapter in your manual, you'll see a list of conditions that you're able to code in addition to the codes within the chapter. If there is supporting documentation, it is acceptable to use both the code and the exclusion code together. The conditions for which this applies include the following:

- *certain conditions originating in the perinatal period (P04-P96)*

- *certain infectious and parasitic diseases (A00-B99)*

- *complications of pregnancy, childbirth and the puerperium (O00-O9A)*

- *congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)*

- *endocrine, nutritional and metabolic diseases (E00-E88)*

- *injury, poisoning and certain other consequences of external cause (S00-T88)*

- *neoplasms (C00-D49)*

- *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R94)*

Inflammatory Diseases of the Central Nervous System (G00-G09)

Bacterial meningitis is an inflammation of the *meninges*, caused by a bacterium. The **meninges** are the three membranes—the dura mater, pia mater and arachnoid—that cover the brain and spinal cord.

Code blocks *G01* and *G02* direct you to code first the underlying disease. These are manifestation codes. You'll recall that certain conditions have both an underlying etiology as well as manifestations due to the underlying etiology. You will code both conditions, with the manifestation as the secondary diagnosis.

You will use code blocks *G04* and *G05* for the conditions of *encephalitis*, *myelitis* and *encephalomyelitis*. Note that each of these conditions ends with *itis*. Your terminology knowledge will remind you that this suffix means *inflammation of*. **Encephalitis** is inflammation of the brain; **myelitis** is inflammation of the spinal cord and the bone marrow; and **encephalomyelitis** is inflammation of the brain and spinal cord.

By now, you should have a good understanding of the terminology for this section of codes. So, it is time to give coding a try! Let's code the diagnosis of streptococcal meningitis. You'll begin with the main term *Meningitis* in the *Index to Diseases and Injuries*. Then, use the subterm *streptococcal* to locate the tentative code *G00.2*. You'll verify the code in the *Tabular List*. Code *G00.2* is the correct code for streptococcal meningitis. However, you're not done yet, as you'll find a note directing you to *use additional code to further identify organism (B95.0-B95.5)*. The cause of the disease is streptococcal organism. Locate the main term *Streptococcus, streptococcal* in the *Index*. *B95.5* is the code indicated for streptococcal *as the cause of diseases classified elsewhere*. You'll assign *G00.2* and *B95.5*, in that specific order, to this condition. Well done! You're ready to move to the next section of codes for this chapter.

Systemic Atrophies Primarily Affecting the Central Nervous System (G10-G14)

A **systemic atrophy** is a neurodegenerative disease, which is the process by which tissue deteriorates or loses functional activity. *Huntington's disease* and *amyotrophic lateral sclerosis* are two of the diseases that you'll learn about in more detail in this section.

Huntington's disease, in code *G10*, is a genetic disease involving chronic, progressive mental deterioration and twisting movements of the face, limbs and body. The disease affects normal facial movements, which can cause aspiration and malnutrition. Walking becomes painful or impossible due to deterioration of gait. This disease does not usually appear or show symptoms until individuals are in their middle-aged years. Once symptoms appear, the course of the disease is rapid. Death usually occurs 10 to 20 years after the onset of symptoms.

Amyotrophic lateral sclerosis, or **ALS**, is a disease that became famous when baseball player Lou Gehrig developed it. Since then, the disease has been commonly known as **Lou Gehrig's disease**. Involuntary twitching of the hand muscles is a common early symptom, and the disease can lead to slurring of speech in advanced cases. In the end, patients are immobilized, and death usually results from paralysis of the respiratory muscles. The ICD-10-CM code for this disease is *G12.21*.

Extrapyramidal and Movement Disorders (G20-G26)

Parkinson's disease is a well-known and relatively common disease that creates movement disorders and pathologic changes in the midbrain that affect the involuntary muscle system. The disease results in decreased numbers of dopaminergic neurons in the brain. These neurons produce dopamine, and many symptoms of Parkinson's disease are related to the brain's underproduction of this chemical. For this reason, administration of the drug L-dopa is known to temporarily reduce the effects of Parkinson's in a minority of patients.

G20 is the specific code for this disease, while the code block *G21* codes for *secondary parkinsonism*. **Secondary parkinsonism** is similar to Parkinson's disease, but is caused by medications, another nervous system disorder or another illness. Encephalitis, meningitis and stroke are common disorders that may cause secondary parkinsonism.

Other Degenerative Diseases of the Nervous System (G30-G32)

As the overall population of the United States ages, awareness and predominance of Alzheimer's disease grows. **Alzheimer's disease** is a condition of diffuse atrophy throughout the cerebral cortex. The disease causes a progressive decline in intellectual and physical functions, including memory loss, personality changes and profound dementia. Technically speaking, Alzheimer's disease is a form of dementia, and its true cause is unknown. You studied dementia earlier, so let's apply what you have learned to see how that information helps you in the coding process.

Imagine that you are the medical coding and billing specialist for a nursing home. You need to code the following dictation:

SUBJECTIVE
An 85-year-old rest home resident is seen for evaluation. Patient's wife complains of his memory loss, the staff notes personality changes, and he has been prone to wandering off. The physician reviews the patient's history from the medical records.

OBJECTIVE
A detailed exam is performed.

ASSESSMENT
The patient is diagnosed with early onset Alzheimer's dementia.

PLAN
The patient will be monitored by the staff for signs of increased agitation.

To code this scenario, would you look up *dementia* or *Alzheimer's*? Take a look at each term in the *Index*. What did you discover? When using *Alzheimer's* as the main term, the *Index* redirects you to use the coding pathway *Disease, Alzheimer's*. So, you'll use that as the coding pathway. Now, you'll move down to *early onset*, as it appears in the documentation. Will you code with or without behavioral disturbances? What qualifies as behavioral disturbances? That's right; wandering off equates to a behavioral disturbance. The tentative codes provided are *G30.0 [F02.81]*. Do you remember what the brackets indicate? They indicate that this is a manifestation code, so you will list it as the secondary diagnosis. You will not record the actual brackets, just the code within the brackets. You'll record *G30.0 F02.81* for this scenario. Good work!

Demyelinating Diseases of the Central Nervous System (G35-G37)

A **demyelinating disease** is any condition that results in damage to the protective covering (myelin sheath) that surrounds nerve fibers in the brain and spinal cord. When the myelin sheath is damaged, nerve impulses slow or even stop, causing neurological problems.[10]

The most common demyelinating disease is **multiple sclerosis** (**MS**). About 350,000 people in the U.S. have multiple sclerosis.[11] Usually, the diagnosis of MS occurs between 20 and 50 years of age, but it has also been diagnosed in children and the elderly. Women are twice as likely as men to be affected by multiple sclerosis earlier in life. The disease involves both sensory and motor abnormalities.

The cause of MS is completely unknown, and it currently has no cure. The course of multiple sclerosis is chronic, and it involves periods of intense symptoms followed by periods of remission. Symptoms involving the senses include blurred vision, a loss of the feeling of touch and unusual tingling sensations. The physical symptoms include weakness, difficulty or unsteadiness in walking and urinary- and sphincter-control problems. Currently, physicians treat MS with interferon drugs, which help reduce the frequency of symptoms.

Episodic and Paroxysmal Disorders (G40-G47)

Conditions within this code section include *epilepsy*, *migraines* and other headache syndromes. Let's examine the details of each condition.

Epilepsy is a brain disorder characterized by uncontrolled electrical discharges of neurons that interrupt normal functioning in the brain. Individuals with epilepsy may experience brief periods of unconsciousness, staring spells and even convulsions. Although epilepsy is a chronic condition, it does not usually get worse over time. People with epilepsy can expect to live a normal life span. There is no cure for epilepsy, but seizure-preventing medication can control those symptoms in a majority of persons with the disease. The condition for individuals who do not respond to current medications is known as **intractable epilepsy**.

Open your *ICD-10-CM* manual and locate code block *G40 Epilepsy and recurrent seizures* in the *Tabular List*. The note you see will assist you with coding as intractable:

The following terms are to be considered equivalent to intractable: pharmacoresistant (pharmacologically resistant), treatment resistant, refractory (medically) and poorly controlled.

You'll find this same note with code block *G43 Migraine*. A **migraine** typically causes intense throbbing or pulsing in one area of the head and is commonly accompanied by nausea, vomiting and extreme sensitivity to light and sound.[12] Migraines can be classified as *with* or *without aura*. A **migraine with aura** involves visual disturbances such as flashes of light, zigzagging patterns or even blind spots. These warning symptoms may occur at any time from a few minutes to 24 hours before onset of the headache. **Migraines without aura** are also known as common migraines and do not include visual disturbances. Finally, **status migrainosus** is a debilitating migraine attack lasting for 72 hours or longer. Again, the physician must clearly document status migrainosus for you to code it.

In a later lesson, you will discover when to code a headache when it is a symptom of an unconfirmed diagnosis or uncertain condition. However, a headache itself may be the problem, not just the symptom of another condition. In this case, you will use code block *G44 Other headache syndromes*. These conditions include *cluster*, *tension*, post-traumatic and drug-induced headaches. The Excludes2 indicates that atypical facial pain *(R51),* headache due to lumbar puncture *(G97.1),* migraines *(G43.-)* and trigeminal neuralgia *(G50.0)* will not be coded with this particular code block.

A **cluster** headache is one of the most painful types of headache, and occurs in cyclical patterns or clusters. This type of headache is rare, although it is more common in men and is most common among those between ages 20 and 40. Based on the length of cluster periods and remission periods, the International Headache Society classifies cluster headaches as two types:

- **Episodic**—Cluster headache occurs at least daily for one week to one year, followed by a pain-free remission period lasting at least one month before another cluster period develops.

- **Chronic**—Cluster headache occurs daily for more than a year with no remission or with pain-free periods lasting less than one month.

The most common headache, the **tension headache**, often feels like a tight band wrapped around the head. It may be triggered by neck strain or eye strain. Tension headaches are classified as episodic, chronic or unspecified. Most tension headaches are easy to treat with over-the-counter medications, including aspirin, ibuprofen and acetaminophen.

For people who often rely on pain medications, common drugs such as aspirin, acetaminophen and ibuprofen may actually contribute to headaches rather than easing them. Drug-induced headaches or rebound headaches may involve dull aching, throbbing or pounding, and result from medication overuse. The only way to stop rebound headaches is to reduce or stop taking the pain medication that causes them.

Nerve, Nerve Root and Plexus Disorders (G50-G59)

Nerve, nerve root and plexus disorders exclude current traumatic nerve, nerve root and plexus disorders, neuralgia NOS, neuritis NOS, peripheral neuritis in pregnancy and radiculitis NOS.

Mononeuropathies may affect the upper and lower limbs. **Mononeuropathy** is damage to a single nerve or nerve group that results in loss of movement, sensation or other function of that nerve.[13] The condition is often caused by injury; however, you will not code current traumatic nerve disorders from this section as they are considered injuries. Conditions within this section are due to long-term pressure on a nerve due to swelling, which slows or prevents signals from traveling through the damaged nerves.

Carpal tunnel syndrome is the result of compression of the median nerve beneath the transverse carpal ligament within the narrow confines of the carpal tunnel, which is located at the wrist. A physician may have a patient hold her wrist back in an acute bent position for 60 seconds. This test may result in pain, tingling, numbness and burning sensations in the palmar surface of the thumb, the index finger, the middle finger and part of the ring finger. If it does result in such pain, it is known as a positive Phalen's sign. The physician will diagnose the patient with carpal tunnel syndrome. One treatment for this condition involves resting the hand and wrist for a period of time and avoiding activities that may aggravate symptoms. The physician may splint the wrist to avoid movement that might cause further damage to the nerves.

Now, take a moment to read the following operative report and try coding this condition.

PREOPERATIVE DIAGNOSIS
Median nerve entrapment.

POSTOPERATIVE DIAGNOSIS
Bilateral carpal tunnel syndrome.

PROCEDURE PERFORMED
DECOMPRESSION OF THE MEDIAN NERVE.

BRIEF HISTORY
This 55-year-old female has had bilateral aching pain radiating proximally into the forearm and occasionally proximally to the shoulder, neck and chest. Manual activity exacerbates the pain. She is awakened at night with bothersome pain. These symptoms affect her thumb and three adjacent fingers on both hands. Electromyography determined bilateral median nerve entrapment. The neurologist felt that since the condition was so far advanced, surgery was recommended.

PROCEDURE
Consent forms were signed, and the patient was brought to the procedure room. A general anesthesia was given, and then, local anesthesia was injected into the incision sites on both wrists. The patient was prepped and draped. A 2-inch incision was made on the front of the right wrist. Branches of the median nerve were avoided. The transverse carpal ligament was exposed as the incision was held open with retractors. A guard was passed into the canal and over the top of the nerve, avoiding injury to the nerve. A fine scalpel was used to pass under the ligament and carefully cut through it to relieve the pressure. The incision was closed with fine separate stitches, and a sterile dressing was applied. The same procedure was repeated on the left wrist. After inspection of the median nerve, severe compression was noted bilaterally. The patient tolerated the procedure well and will be released to her husband after she recovers.

Using *Syndrome, carpal tunnel* as the coding pathway, you'll find *G56.0-* listed as the tentative code. Turning to the *Tabular List*, locate the code that indicates the diagnosis applies to each hand, or unspecified. However, there is no bilateral code listed. Now what? You will list one code to indicate the right upper limb and another for the left upper limb. You'll apply *G56.01 G56.02* as the diagnoses for this operative report.

That was a little more challenging, but wonderful practice to ensure an understanding of ICD-10-CM coding. Way to go! The next section, codes *G60-G65*, are fairly straightforward to code, so let's keep moving to the following section.

Diseases of Myoneural Junction and Muscle (G70-G73)

Myasthenia gravis, or **MG**, is a disease of neuromuscular function characterized by fluctuating weakness of certain skeletal muscle groups. It is an autoimmune process that affects the neuromuscular junction by impairing muscle contraction. The cause of MG is unknown. The symptoms of this disease involve fatigue of voluntary muscles. Because the facial muscles are often involved, many people with this condition experience drooping eyelids, fatigue while reading or double vision. The disease tends to spread first to the upper muscles, especially the eyes, face, lips, tongue, throat and neck. Eventually, MG spreads to the entire muscular system, causing immobility. Death often results from paralysis of the respiratory muscles and the diaphragm.

Cerebral Palsy and Other Paralytic Syndromes (G80-G83)

Cerebral palsy is a group of disorders that affect the ability to move and to maintain balance and posture. Cerebral palsy occurs when areas of the brain that control movement and posture do not develop correctly or sustain damage. There are several different types of cerebral palsy, including spastic, athetoid, ataxic and mixed. There is no cure for cerebral palsy, but treatment can improve the lives of patients who have it. Treatments include medications, braces and physical, occupational and speech therapy.[14]

The suffix *plegia* means paralysis or stroke. **Hemiplegia** is paralysis of one side of the body; **quadriplegia** is paralysis of all four extremities; **paraplegia** is paralysis of both legs; and **monoplegia** is paralysis of one limb, either an upper or lower limb. The concept of dominant or non-dominant side is important to understand for accurate coding of this code section.

Dominant or Non-dominant Side

In this code section of the *Tabular List*, you will assign hemiplegia and monoplegia codes to identify the side affected. The physician should document whether the condition affects the dominant or non-dominant side. However, if the documentation does not indicate a side, the *Chapter-Specific Guidelines* provide instruction on code selection.

Ambidextrous refers to the ability of using both hands with equal ease. For an ambidextrous patient, you will default to the right side when coding. According to *Scientific American* magazine, only about 15 percent of people are left-handed.[15] Therefore, if the left side is affected and the provider does not indicate dominant or non-dominant, you will code as *non-dominant*. Since the majority of people are right-handed, you will default to *dominant* if the right side is affected and the provider does not indicate dominant or non-dominant.

Other Disorders of the Nervous System (G89-G99)

The *Chapter-Specific Guidelines* contain many rules for coding from code block *G89 Pain, not elsewhere classified*. You may use codes in block *G89* in conjunction with other codes to provide greater detail about the pain. You'll assign a code from code block *G89* when the pain is specified as acute or chronic, post-thoracotomy, postsurgical or neoplasm-related. However, be sure to read the guidelines carefully to ensure accurate coding when you apply codes from this category.

Let's pause here so you can take a few deep breaths and review the information from this chapter of the *Tabular List* as you complete this Practice Exercise.

Step 16: Practice Exercise 24-5

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Pneumococcal meningitis**

   ICD-10-CM: _____

2. **Spasmodic torticollis**

   ICD-10-CM: _____

3. **Spastic hemiplegia affecting the right dominant side**

   ICD-10-CM: _____

4. **Intractable epilepsy with status epilepticus**

   ICD-10-CM: _____

5. **Bell's palsy**

   ICD-10-CM: _____

6. **Coding Challenge**

SUBJECTIVE
A 30-year-old female is seen for an office consultation to confirm her physician's diagnosis of multiple sclerosis. Patient notes that tingling sensations and weakness in her legs have increased.

OBJECTIVE
The patient history and recent MRI provided by her physician are reviewed by the neurologist. An expanded problem focused examination is performed.

ASSESSMENT
The neurologist confirms the diagnosis of multiple sclerosis.

PLAN
The patient is prescribed a 2-week course of prednisone to reduce her current symptoms. She was also given information on current injectable medications that could reduce the frequency of her exacerbations. A follow-up appointment is to be scheduled to discuss long-term treatment of her MS. A copy of the consultation notes will be sent to her primary care provider.

   ICD-10-CM: _____

Step 17: Review Practice Exercise 24-5

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 18: Lesson Summary

You've made it through the first six chapters of the *ICD-10-CM Tabular List*. Way to go! In this lesson, you studied neoplasms and common diseases of the blood. You discovered the different types of anemia and how to accurately code these conditions. You learned about diabetes mellitus, including the two major types and the manifestations of these diseases. You can identify individuals who are overweight or obese, and explored mental, behavioral and neurodevelopmental disorders. You wrapped up this lesson by learning about diseases of the nervous system, including meningitis, encephalitis, myelitis and encephalomyelitis. You've accomplished a lot!

Before you move on to the next chapter of the *ICD-10-CM Tabular List*, you'll need to complete the Quiz to reinforce what you've learned in this lesson.

Step 19: Quiz 24

Once you've mastered the course content, locate this Quiz in your *Online Course* or your *Assignment Pack*. Read and follow the Quiz instructions carefully.

Endnotes

[1] *Carcinoid Tumour.* HealthAtoZ.info, 2006. Web. 4 October 2013.

[2] *Polycythemia vera.* Mayo Clinic, 13 July 2013. Web. 4 October 2013.

[3] *Myelodysplastic Syndromes Treatment.* National Cancer Institute, 14 May 2010. Web. 4 October 2013.

[4] *Hemolytic Anemia.* PubMed Health, 31 January 2010. Web. 4 October 2013.

[5] *Hyperthyroidism.* MedicineNet.com, 2013. Web. 4 October 2013.

[6] "Obese people face possible high risk of complications from Pandemic (H1N1) 2009." World Health Organization, 30 July 2009. Web. 4 October 2013.

[7] *Manic Episode.* PsychCentral. 1 June 2010. Web. 4 October 2013.

[8] *Bipolar Disorder.* National Institute of Mental Health, 2008. Web. 4 October 2013.

[9] *Post-Traumatic Stress Disorder.* PubMed Health, 8 March 2013. Web. 4 October 2013.

[10] *Demyelinating Disease: What Causes It?* Mayo Clinic, 19 May 2011. Web. 4 October 2013.

[11] *Multiple Sclerosis.* MedicineNet.com, 16 April 2013. Web. 4 October 2013.

[12] *Migraine.* Mayo Clinic, 4 June 2013. Web. 4 October 2013.

[13] *Mononeuropathy.* PubMed Health. 28 August 2012. Web. 4 October 2013.

[14] *Cerebral Palsy.* MedLine Plus. 7 April 2011. Web. 4 October 2013.

[15] "What causes some people to be left-handed, and why are fewer people left-handed than right-handed?" *Scientific American*, 21 June 2004. Web. 4 October 2013.

Lesson 25
ICD-10-CM Chapters 7 through 10

Step 1: Learning Objectives for Lesson 25

When you complete the instruction in this lesson, you will be trained to:

- Identify and explain the anatomy and related diseases of the eye and adnexa.

- Describe the anatomy and terminology of the ear and mastoid process.

- Describe the terminology related to diseases of the circulatory system.

- Explain the anatomy and identify diseases of the respiratory system.

- Explain the general notes related to Chapters 7, 8, 9 and 10 of the *Tabular List* in the *ICD-10-CM* manual.

- Apply the *Chapter-Specific Guidelines* as they relate to Chapters 7, 8, 9 and 10 of the *Tabular List*.

- Identify the diagnoses and assign the final codes for the documented disorders and diseases.

Step 2: Lesson Preview

This lesson will introduce you to the codes in Chapters 7 through 10 of the *ICD-10-CM* manual's *Tabular List*. These chapters encompass the major categories of diseases of the sense organs, as well as the circulatory and respiratory systems.

Are you well rested and ready to expand your understanding of ICD-10-CM coding? Great! In this lesson, as in previous lesson, you'll want to stay focused and divide your study time into reasonable periods. Just as in previous chapters of the *ICD-10-CM* manual, you'll find a lot of detailed information here. However, you'll have as much time as you need to study the material and make sense of it.

Again, all chapters of the *ICD-10-CM* manual are subdivided into discussions about each code section, and refer you often to the *Index to Diseases and Injuries* and the *Tabular List.* And you'll have plenty of Practice Exercises to allow you to apply your coding skills as you learn these concepts! Take a few deep breaths, relax and get ready to code.

Step 3: Diseases of the Eye and Adnexa (H00-H59)

Chapter 7 contains codes for disorders of all parts of the eye—from the eyelid to the optic nerve. In this chapter, you will find codes for disorders of the globe, retina, choroid and iris. You will find diseases such as glaucoma and cataracts, as well as conditions of visual disturbance and blindness. Then, you will discover many diseases that pertain to the appendages of the eye, such as the conjunctiva and optic nerves. The notes will direct you to code the external cause to identify the specific cause of the eye condition, if applicable.

When coding from this chapter, you will use an external cause code to identify the cause of the eye condition when it applied. In most cases, when coding conditions from this chapter, you'll select the final digit to identify the location of the disease or disorder.

Once again, at the beginning of this chapter, you'll find a list of conditions that you may code in addition to the codes in this chapter if there is supporting documentation. The conditions are as follows:

- *certain conditions originating in the perinatal period (P04-P96)*

- *certain infectious and parasitic diseases (A00-B99)*

- *complications of pregnancy, childbirth and the puerperium (O00-O9A)*

- *congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)*

- *diabetes mellitus related eye conditions (E09.3-, E10.3-, E11.3-, E13.3-)*

- *endocrine, nutritional and metabolic diseases (E00-E88)*

- *injury (trauma) of eye and orbit (S05.-)*

- *injury, poisoning and certain other consequences of external causes (S00-T88)*

- *neoplasms (C00-D49)*

- *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R94)*

- *syphilis related eye disorders (A50.01, A50.3-, A51.43, A52.71)*

Keep in mind that accurate coding of this chapter includes identifying the affected eye. The codes are specific to the right eye, the left eye, bilateral or unspecified. For now, let's examine the details of this chapter.

Disorders of Eyelid, Lacrimal System and Orbit (H00-H05)

The **eyelids** are flaps of tissue that join at either side of the eye and cover the eye. **Lacrimal** is the term indicating relation to the glands that produce tears. The *orbit* of the eye should not be confused with the globe, which is also known as the eyeball. The **orbit** is the bone cavity that *contains* the globe, or eyeball. A note in the *Tabular List* alerts you that you should *not* code open wounds or superficial injuries of the eyelids from this section.

A bump on the eyelid is usually a stye, which is technically known as **hordeolum**. This condition is caused by bacteria from the skin that enters the oil gland. Usually hordeolums last a few days, then drain and heal on their own. However, when an oil gland becomes fully blocked, the stye can become a **chalazion**. A chalazion can affect vision if it is large enough. You'll find codes for hordeolum and chalazion in code block *H00*.

Entropion, found in *H02.0-*, is the turning in of the edges of the eyelid so that the lashes rub against the eye surface. In older people, this condition usually results from a spasm or weakening of the muscles surrounding the lower part of the eye. **Ectropion**, on the other hand, is the turning out of the eyelid so that the inner surface is exposed. It is usually caused by the aging process and the weakening of the connective tissue of the eyelid, which causes the lid to turn outward. You'll find the code for this condition in *H02.1-*.

Disorders of the lacrimal system, code block *H04*, do not include congenital malformations. You'll find *dacryoadenitis*, *dacryops*, atrophy and dislocation among the disorders of this system. **Dacryoadenitis** is an inflammation of the lacrimal gland, which is the tear-producing gland. Excessive tearing in the eyes is known as **dacryops**. Meanwhile, **dry eye syndrome** occurs when the eye is unable to maintain a healthy layer of tears to adequately coat it. Take a moment to look at the following example and try coding it.

> A 31-year-old female complains of dry eyes. She has been using over-the-counter eye drops with minimal success. She is diagnosed with dry eye syndrome in both eyes. Lacrimal punctum plugs are discussed with the patient in effort to delay the drainage of tears. Collagen plugs that will dissolve over 4-7 days will be inserted. If the treatment is successful, permanent silicone plugs, which do not dissolve, will be inserted. After the patient consents, local anesthesia is administered at the lacrimal punctum of each eye. Temporary collagen plugs are inserted into the lacrimal punctum of each eye. Patient is to return in 7 days for the insertion of permanent silicon plugs.

The patient is diagnosed with dry eye syndrome in both eyes. Open your *ICD-10-CM* to the *Index*. The coding pathway you'll use is *Syndrome, dry eye*. The tentative code provided is *H04.12-*. However, you need to go to the *Tabular List* to determine the final diagnosis. The dictation indicates the condition affects both eyes, so you'll select the code that indicates *bilateral lacrimal glands*. The code you'll assign is *H04.123*. Nice job!

Now, let's look at disorders that affect the orbit of the eye, which is code block *H05*. You'll see that this excludes congenital malformations of the orbit (*Q10.7*). **Enophthalmos** is the term for recession of the eyeball deep into the eye socket. This condition may be due to *atrophy* of the orbital tissue, trauma or surgery, or the cause may be unspecified. **Atrophy** is the wasting away of body tissue, typically due to the degeneration of cells.

To code enophthalmos from atrophy of the orbital tissue of the left eye, you would locate the main term *Enophthalmos* in the *Index to Diseases and Injuries*. The subterms *due to* and *orbital tissue atrophy* provide *H05.41-* as the tentative code. You'll turn to the *Tabular List* to verify the code. Since you are coding for the left eye, *H05.412* is the correct code for this diagnosis.

You have finished disorders of the eyelid, lacrimal system and orbit, so let's move on. Disorders of the *conjunctiva* are fairly simple. The **conjunctiva** is the thin, transparent tissue that covers the outer surface of the eye. It secretes oils and mucous that moistens and lubricates the eye. Most of these disorders end in *itis*, which indicates inflammation. Now, let's move on to the next code section within Chapter 7.

Disorders of Sclera, Cornea, Iris and Ciliary Body (H15-H12)

The most superficial part of the globe is a relatively thick, white layer of fibrous connective tissue called the **sclera**; it is the white of the eye. The **cornea** is the portion of the sclera that is transparent, allowing light to enter the eye. The **iris** is the colored area of the eye, located behind the cornea. The **ciliary body** includes the muscles and tissues that focus the eye.

Now that you understand the basic anatomy, let's examine the disorders from this section.

Inflammation of the sclera is known as **scleritis**. It may appear in reports as anterior (affecting the visible segment of the eye) or posterior. Posterior scleritis occurs much less frequently than anterior scleritis, but they may occur concurrently.[1] **Brawny scleritis** is a gelatinous-appearing swelling surrounding the cornea with a tendency to involve the periphery of the cornea.[2]

Keratitis is inflammation of the cornea. One type of keratitis is a corneal ulcer, which is an open sore on the cornea. Without treatment, the ulcer can spread to the rest of the eyeball and cause partial or complete blindness in a very short period of time. Let's walk through the following scenario:

> This optometrist sees a new patient who presents with pain, photophobia, conjunctival redness and blurred vision. After a detailed history and exam, the patient is diagnosed with a central corneal ulcer of the right eye. The optometrist provides antibiotics and the patient is advised to return for follow-up care the next day, the third day and the fifth day after the initial visit.

To code this scenario, you'll use *Ulcer, cornea, central* as the coding pathway to locate the tentative code of *H16.01-*. Now, turn to the *Tabular List* to verify the code and code to the highest specificity. The documentation indicates the right eye, so you'll apply *H16.011* to code the scenario.

Disorders of the iris and ciliary body include inflammations, vascular disorders, degenerations, cysts and adhesions. **Iridocyclitis** is an inflammation of the iris and ciliary body. Symptoms of this condition include eye pain and redness, sensitivity to light, watering of the eye and decreased vision. **Iridoschisis** (*H11.25-*) is a rare condition in which the iris is split into two layers.

Disorders of Lens (H15-H18)

The **lens** focuses the incoming light on to the *retina* (which you'll learn more about in the next section). The ciliary body holds the lens in place. If the lens is injured, it can form a cataract. You'll recall that cataracts can be a manifestation of diabetes. A variety of conditions that create a cloudy or calcified lens that obstructs vision are known as **cataracts**. This obstruction can be partial or complete, in one eye or both eyes and in or on the lens. There are many kinds of cataracts, and their etiology (cause and time of occurrence) as well as their morphology (size, shape, location) classify them.

Code block *H15 Age-related cataract* is the most common kind of cataract; it typically affects people over the age of 50. Cataracts in this group are of unknown cause, painless and develop as one ages. Code block *H16 Other Cataract* consists of infantile and juvenile cataracts. The etiology indicates the individual is younger than age 50 with the terms *infantile* and *juvenile*. The morphology further divides this subcategory. Cataracts that result from injury to the eye are known as *traumatic*; these codes appear within code subcategory *H16.1*, and you are directed to use an additional code to identify the external cause.

Disorders of Choroid and Retina (H30-H36)

The **choroid** is the layer of blood vessels and connective tissue between the sclera and retina. Inflammation, scarring and degeneration are common disorders of the choroid.

The **retina** is the light-sensitive layer of tissue at the back of the inner eye. It acts like the film in a camera; images come through the eye's lens and focus on the retina. The retina then converts these images to electric signals and sends them via the optic nerve to the brain.[3] In **retinal detachment**, the light-sensitive layer at the back of the eye separates from the blood supply, causing disruption to vision. Take a moment to consider how you would code the diagnosis of a partial retinal detachment, single break of the right eye.

As usual, you'll begin in the *Index to Diseases and Injuries*. The coding pathway of *Detachment, retina, with retinal; break, single* provides the tentative code *H33.01-*. Assigning the code at this step will leave you with an invalid code. So, you'll go to the *Tabular List*, which provides the complete code *H33.011*, specifically for the right eye.

Retinopathy of prematurity (**ROP**) is the development of abnormal blood vessels in the retina of the eye in a premature infant. You'll find this condition under *H35.1-* in the *Tabular List*. The blood vessels of the retina begin to develop three months after conception and complete their development at the time of normal birth. If an infant is born very prematurely, eye development can be disrupted. The following are the five stages of ROP.[4]

- Stage 1: There is mildly abnormal blood vessel growth.

- Stage 2: Blood vessel growth is moderately abnormal.

- Stage 3: Blood vessel growth is severely abnormal.

- Stage 4: Blood vessel growth is severely abnormal; the retina is partially detached.

- Stage 5: There is total retinal detachment.

Glaucoma (H40-H42)

Glaucoma is a rise in intraocular pressure that restricts blood flow. Open your *ICD-10-CM* to *H40* in the *Tabular List*. You'll see that Excludes1 indicates absolute glaucoma, congenital glaucoma and traumatic glaucoma due to birth injury should not be coded with conditions in this code block. The *Coding Guidelines* direct you to *assign as many codes from category H40 Glaucoma, as needed to identify the type of glaucoma, the affected eye and the glaucoma stage.*

You'll learn about the stages of glaucoma shortly, but first, it's important to understand the types of glaucoma. Glaucoma can be described as *open-angle* or *primary angle-closure*. **Open-angle** means that the drainage angle is open, but the outflow of **aqueous humor**, the watery substance that fills the cavity between the lens and the cornea, is blocked. **Primary angle-closure**, or **closed angle**, means the iris closes the drainage angle and obstructs outflow of aqueous humor. The most common condition is primary open-angle glaucoma. If the condition is something other than this, the physician will document it specifically.

In addition to identifying the type of glaucoma, you will determine the affected eye and the glaucoma stage. Be sure to refer to the *Coding Guidelines* for information on bilateral glaucoma. If the type and stage of glaucoma is different for each eye, you will code for each eye rather than assigning the bilateral character.

Now, in this section of the *Tabular List* you'll see the following box: *One of the following 7th characters is to be assigned to each code in subcategories [various codes] to designate the stage of the glaucoma.* The stage must be documented in the medical record for you to assign the accurate code, but here are the guidelines for a better understanding of the stage.

Stages of Visual Field Loss:[5]

Mild stage glaucoma—Optic nerve abnormalities that are consistent with glaucoma, but no visual field loss on white-on-white perimetry.

Moderate stage glaucoma—Optic nerve abnormalities must also be consistent with glaucoma, and glaucomatous visual field loss must be in one hemifield and not within 5° of fixation.

Severe stage glaucoma—Optic nerve damage consistent with glaucoma, visual field abnormalities in both hemifields and/or visual loss within 5° of fixation.

Indeterminate stage glaucoma—The test so unreliable or uninterpretable that you really are unsure of the level or stage.

Disorders of Vitreous Body and Globe (H43-H44)

The vitreous body is a transparent, gel-like substance that fills the interior of the eyeball. Remember that the globe of the eye is a hollow ball, also known as the eyeball. Prolapse, hemorrhage, crystalline deposits and degeneration are some of the disorders you'll encounter in relation to the vitreous body. Review the following scenario and try to code the condition.

A 62-year-old woman was examined because of dry eye symptoms. Her best-corrected visual acuity was 20/25 OU. Slit-lamp examination disclosed tiny, colorless to white, crystalline deposits distributed throughout both corneas and within all layers of the stroma. The Schirmer test result (under topical anesthesia) was 4 mm OU. Funduscopic examination was normal. The remainder of the ocular examination was unremarkable. The patient is diagnosed with crystalline deposits in vitreous, bilateral.

How did you do with coding the condition? Did you come up with code *H43.23*? If so, you have the correct code! If not, verify the process. First, you'll use the *Index to Diseases and Injuries* to locate the main term *Deposit.* The subterms *crystalline, vitreous (body)* provide the tentative code *H43.2-*. Then, you'll locate the final digit in the *Tabular List* to indicate a bilateral condition. *H43.23* is the accurate code for the diagnosis. Let's continue with several conditions related to the globe.

Endophthalmitis, *degenerative myopia* and hypotomy of the eye are some disorders of the globe. **Endophthalmitis** is a term that describes an inflammation of tissues inside the eye. This inflammation can be caused by bacteria or fungi, but rarely by viruses or protozoa. Locate *H44.0 Purulent endophthalmitis*, in the *Tabular List*, and you'll see that it directs you to use an additional code to identify the organism.

Degenerative myopia, *H44.2*, is quite different from the simple refractive myopia (nearsightedness) that affects many people around the world. **Degenerative myopia** is an extremely high level of nearsightedness that causes a major alteration of the shape or globe of the eye, which may lead to profound vision loss. Degenerative myopia has an incidence of two percent in the United States, and is the seventh leading cause of blindness.[6]

Let's move on to the last code section in Chapter 7 and discuss visual disturbances and blindness.

Visual Disturbances and Blindness (H53-H54)

Eye strain, double vision, color blindness and night blindness are just a few of the visual disturbances included in code block *H53*. Often, people believe that color blindness means an individual can only see in black and white. However, it is extremely rare to be totally color blind with an absence of any color sensation at all. In fact, there are many types and degrees of color vision deficiencies. For instance, **deuteranopia** is considered "green weak," which means discriminating small differences in red, orange, yellow and green hues is difficult. **Protanomaly**, on the other hand, is considered "red weakness." Red, orange, yellow and yellow-green appear pale for individuals with protanomaly. For example, a violet may appear a shade of blue.

The definition of blindness varies in different geographic areas. According to the World Health Organization, for the purpose of international reporting, **blindness** is a profound impairment that may apply to both the blindness of one eye and to the blindness of the individual. Legal blindness in the United States includes severe low vision as part of the definition. A detailed description of the visual impairment will assist with accurate coding.

Blindness is not usually a principal diagnosis, but instead a result of conditions such as cataract, glaucoma or retinopathy. You may code blindness as a secondary diagnosis if it affects the patient's care due to the need for increased assistance.

Nice work in this section! Now, it is time to test what you've learned in so far in this lesson by completing the following Practice Exercise. Then, you'll be ready to move to Chapter 8, *Diseases of the Ear and Mastoid Process.*

Step 4: Practice Exercise 25-1

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Abscess of the left lower eyelid**
   ICD-10-CM: _____

2. **Spastic entropion of the right upper eyelid**
   ICD-10-CM: _____

3. **Sebaceous cyst of the right lower eyelid**
   ICD-10-CM: _____

4. **Pink eye**
   ICD-10-CM: _____

5. **Blepharoconjunctivitis of both eyes**
   ICD-10-CM: _____

6. **Bullous keratopathy, right eye**
   ICD-10-CM: _____

7. **Disseminated retinitis, left eye**

   ICD-10-CM: _____

8. **Stage 4 retinopathy of prematurity, bilateral**

   ICD-10-CM: _____

9. **Coding Challenge[7]**

SUBJECTIVE

A 76-year-old male presented with a persistent swelling over the naso-lacrimal sac and epiphora in the right eye (OD) of several months duration. The left eye (OS) was normal. Visual acuity was count fingers (CF) OD and 6/6 OS. The history revealed that the patient had amblyopia (OD) and had contracted tuberculosis (TB) at 26 years of age. He was on medication for chronic obstructive airways disease (COAD), heart disease and fluid retention. His medications were digoxin and Dyazide.

OBJECTIVE

There was a firm nontender mass over the right nasolacrimal sac. There was no discharge, and a probe could only travel 5 mm down the lacrimal duct. A saline rinse of the duct did not produce saline to the pharynx. The Jones 1 test produced no dye. A diagnosis of a small right dacryocystocele was made. Intraocular pressures (IOPs) in each eye were 15 mmHg by applanation. Slit lamp biomicroscopic examination revealed bilateral iris atrophy in the inferonasal quadrant. A localised cleavage of the iris stroma into two layers was noted. The torn ends of the anterior stromal fibers were floating freely in the anterior chamber. Otherwise the iris appeared normal except for the area of atrophy. The patient was thoroughly assessed for glaucoma using visual field assessment, IOP, gonioscopy, optic nerve assessment and photo documentation. There was no evidence of glaucoma.

ASSESSMENT

Considering the above findings and the patient's age, a diagnosis of idiopathic iridoschisis was made.

PLAN

As the patient could cope with his epiphora, no action was taken to remove the dacryocystocele. It was decided that the patient should be reviewed on a six-month basis for glaucomatous changes.

   ICD-10-CM: _____

Step 5: Review Practice Exercise 25-1

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 6: Diseases of the Ear and Mastoid Process (H60-H95)

Chapter 8, *Diseases of the Ear and Mastoid Process,* contains codes for diseases and disorders of the external, middle and inner ear; the mastoid process; vertiginous syndromes and other disorders of the vestibular system; otosclerosis; and hearing loss. If applicable, you will use an additional external cause code to identify the cause of the ear condition. The conditions that you may code in addition to the codes within this chapter include the following:

- *certain conditions originating in the perinatal period (P04-P96)*

- *certain infectious and parasitic diseases (A00-B99)*

- *complications of pregnancy, childbirth and the puerperium (O00-O9A)*

- *congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)*

- *endocrine, nutritional and metabolic diseases (E00-E88)*

- *injury, poisoning and certain other consequences of external causes (S00-T88)*

- *neoplasms (C00-D49)*

- *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R94)*

There are no *Chapter-Specific Guidelines* for this chapter of the *Tabular List* at this time, but there is space reserved for future guideline expansion if necessary.

Here, just as in Chapter 7, you'll need to determine if the condition affects the right or left side, or instead is bilateral or unspecified, to determine the correct code.

The ear is divided into three different parts:

The external or outer ear

The middle ear

The internal or inner ear
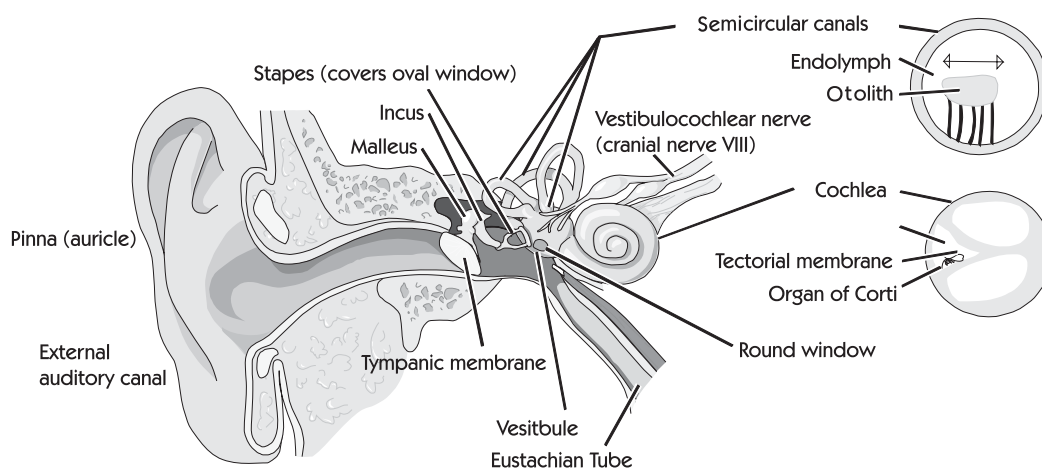
Gross and microscopic anatomy of the ear

Diseases of External Ear (H60-H62)

The part of the ear that you can physically see is actually considered the external ear: the *pinna* and the *external auditory canal*. The **pinna**, or the **auricle**, is the fleshy, cartilage-containing structure that protrudes from the side of the head. The **external auditory canal** is a passage through the temporal bone leading from the pinna to the eardrum.

Otitis externa is an inflammation of the external auditory canal. This inflammation can be caused by an abscess, cellulitis or other infections. **Swimmer's ear** is an infection of the external auditory canal resulting from water remaining in the ear after swimming, creating a moist environment that aids bacterial growth.[8]

Review the following scenario and try to assign the correct diagnosis.

> Daphne, age 13, is seen by her family physician complaining of left ear pain and trouble hearing. The outer ear is red and drainage is coming from the ear. An otoscope is used to examine the ear, and infection is noted. Daphne is diagnosed with swimmer's ear. The doctor prescribes antibiotic ear drops for the next seven days and directs Daphne to keep the ear dry. She is to return if the condition doesn't improve in a week.

How would you code this condition? In the *Index*, you'll use the coding pathway of *Swimmer's, ear* to locate the tentative code *H60.33-*. Then, you'll turn to the *Tabular List* to determine the highest level of specificity. The documentation indicates the left ear, so you'll assign *H60.332* as the diagnosis for this scenario.

Otitis externa may also be the result of other causes besides infection. Actinic, chemical, contact, eczematoid and reactive otitis externa are some of the noninfective conditions you may encounter.

Noninfective disorders of the pinna include acquired deformity and hematoma of the pinna. The *Tabular List* indicates that code subcategory *H61.1 Noninfective disorder of the pinna* excludes cauliflower ear and gouty tophi of the ear. These conditions are fairly straightforward to code, so let's move on to the diseases of the middle ear and mastoid.

Diseases of Middle Ear and Mastoid (H65-H75)

For accurate coding of diseases of the middle ear, it is important to read the notes in the *Tabular List*. You'll see that this code block includes nonsuppurative otitis media with myringitis. You'll also see instructions to use an additional code for any associated perforated tympanic membrane in many of the conditions within this code section. In addition, you need to use an additional code to identify exposure to, history of, dependence or use of tobacco.

Now, let's review some of the anatomy and terminology you'll encounter for diseases of the middle ear. **Media** refers to the middle ear, which is also known as the **tympanic cavity**. It is a small cavity in the temporal bone that lies between the external ear and the inner ear, and contains the tympanic membrane. A tube, the **Eustachian tube**, runs from the floor of the tympanic cavity to connect with the pharynx. In other words, the tympanic membrane connects directly to the air outside your body through the external auditory canal, and to the air in your throat through the Eustachian tube.

Otitis media is an inflammation of the middle ear. **Suppurative** indicates production of pus. **Acute nonsuppurative otitis media** is a brief, relatively severe inflammation of the middle ear without the discharge of pus. Inflammation of the Eustachian tube is known as **Eustachian salpingitis**.

The following dictation is an example of an ENT-Otolaryngology office visit that you may encounter.

Review it carefully and code the diagnosis.

CHIEF COMPLAINT
This 3-year-old female presents today for evaluation of chronic bilateral ear infections.

HISTORY OF PRESENT ILLNESS
Associated signs and symptoms include: cough, fever, irritability and speech and language delay. Patient has had 12 rounds of antibiotics for otitis media. Quality of the pain is throbbing.

PAST MEDICAL HISTORY
Past medical history is unremarkable. No previous surgeries.
Medications: None currently.
ALLERGIES: NO KNOWN MEDICATION ALLERGIES.
Social history: Parent admits child is in a large daycare.
Family history: Parent admits a family history of Alzheimer's disease associated with paternal grandmother.

REVIEW OF SYSTEMS Unremarkable with exception of chief complaint.

PHYSICAL EXAM
VITAL SIGNS: Temp: 99.6 °F. Weight: 38 pounds.
GENERAL: Patient is a 3-year-old female who appears pleasant, in no apparent distress, her given age, well developed, well nourished and with good attention to hygiene and body habits. The child is accompanied by her mother, who communicates well in English.
HEENT: Head: Inspection of head and face shows no abnormalities. Examination of salivary glands shows no abnormalities. Facial strength is normal. Eyes: Pupil exam reveals PERRLA. Ears: Otoscopic examination reveals otitis media bilaterally. Hearing exam using tuning fork shows hearing to be diminished bilaterally. Inspection of left ear reveals drainage of a small amount. Mouth: Inspection of lips, teeth, gums and palate reveals no gingival hypertrophy, no pyorrhea, healthy gums, healthy teeth and no abnormalities. Inspection of the tongue reveals normal color, good motility and midline position. Examination of oropharynx reveals no abnormalities. Examination of nasopharynx normal. Nose: Inspection of nasal mucosa, septum and turbinates reveals no abnormalities. Frontal and maxillary sinuses all transilluminate well bilaterally.
NECK: Neck exam reveals no abnormalities. No neck or supraclavicular lymphadenopathy noted.
CHEST: Chest inspection reveals chest configuration non-hyperinflated and symmetric expansion. Auscultation of lungs reveals clear lung fields and no rubs noted. Heart: Auscultation reveals no murmurs, gallop, rubs or clicks.
NEUROPSYCHIATRIC: Testing of cranial nerves reveals no deficits. Mood and affect normal and appropriate to situation.

LABORATORY FINDINGS
Audiometry test shows conductive hearing loss at 30 decibels and flat tympanogram.

IMPRESSION
Acute otitis media, suppurative without spontaneous rupture.

PLAN
Patient scheduled for myringotomy and tubes, using general anesthesia, as outpatient and scheduled for 08/07/20XX. Preoperative consent form read and signed by parent. Common risks and side effects of the procedure and anesthesia were mentioned. Parent questions elicited and answered satisfactorily regarding planned procedure.

PRESCRIPTIONS
Augmentin Dosage: 400 mg 57 mg/5 mL powder for reconstitution Sig: 1 p.o. q.8 h. Dispense: 1. Refills: 0. Allow Generic: No.

PATIENT INSTRUCTIONS
Patient provided information on ENT procedures in the ear. Dispensed literature on otitis media.

To code this dictation, you'll use *Otitis, media, suppurative, acute* as the coding pathway. A ruptured ear drum is not indicated in the documentation, and recurrent isn't either, so the tentative code is *H66.00-*. The impression doesn't note whether this was in the right, left or both ears. However, if you look at the physical exam section, you'll see that the otoscopic examination reveals otitis media bilateral. Therefore, you'll select the code that corresponds to bilateral. *H66.003* is the accurate code for this condition. Do you see why reading the entire report is essential to accurate coding?

Let's move on to diseases of the *mastoid*. The **mastoid process** is the nipple-like projection of the petrous part of the temporal bone, the part that contains the structures of the internal ear. As you know, *itis* indicates inflammation; therefore, **mastoiditis** is an inflammation of any part of the mastoid process. This condition most often affects children. Acute mastoiditis usually begins as a middle ear infection, or otitis media. In severe cases of this disease, the *mastoid air cells* are fused together. **Mastoid air cells** are numerous small, intercommunication cavities within the mastoid process. You'll find code block *H70* is for mastoiditis and related conditions.

The **tympanic membrane** constitutes the boundary between the external and middle ear. This thin, tense membrane is also known as the drumhead, drum, eardrum and tympanum. Perforation of the tympanic membrane is a common condition that is often associated with otitis media.

Before moving on to the next code section, try your hand at coding the following operative report.

PREOPERATIVE DIAGNOSIS
Protrusion of auricle.

POSTOPERATIVE DIAGNOSIS
Acute mastoiditis.

PROCEDURE PERFORMED
COMPLETE MASTOIDECTOMY.

INDICATIONS FOR PROCEDURE
A 3-year-old patient has a history of otitis media of the right ear that has not responded to multiple treatments of antibiotics. Review of recent CT reveals a fusion of mastoid air cells.

PROCEDURE
The mastoid cortex (a plate of bone on the lateral surface of the mastoid process of the temporal bone) is removed. The fusion of mastoid air cells is exposed. The infected mastoid air cells are removed by a curette and drill. A temporary drain is placed, and the incision is sutured. The patient receives IV antibiotics. No complications are noted.

For outpatient diagnostic coding, you'll code for the postoperative diagnosis, which is acute mastoiditis. Using the *Index to Diseases and Injuries*, you'll find the main term *Mastoiditis* with the subterm *acute* for the tentative code *H70.00-*. In the *Tabular List*, you will locate the code specific to the *right ear*, and assign *H70.001* as the accurate code for this operative report.

Diseases of Inner Ear (H80-H83)

The inner ear is called the **labyrinth** because it is composed of catacomb-like chambers deep within the temporal bone. Bone surrounds the labyrinth completely, protecting it from damage and from vibrations other than those coming from the external ear.

Otosclerosis, found in code block *H80*, is the growth of abnormal, sponge-like bone in the middle ear. This growth prevents the ear from vibrating in response to sound waves, which can result in hearing loss. On rare occasions, the spongy bone growth associated with otosclerosis can spread from the ossicular chain into the cochlea, which is known as **cochlear otosclerosis**.

Disorders of the ear often affect balance. Code block *H81* contains diseases and conditions that include dizziness as a symptom. Open your *ICD-10-CM* manual to the *Tabular List* and note that this code block excludes epidemic vertigo and vertigo NOS. Ménière's disease, which is within this code block, causes hearing and balance dysfunction. Symptoms of Ménière's disease include fluctuating deafness, ringing in the ears and dizziness.

Other Disorders of Ear (H90-H94)

Conditions included within code block *H90* range from *conductive* and *sensorineural hearing loss* to mixed conductive and sensorineural hearing loss. A defective sound-conducting apparatus of the external or middle ear causes **conductive deafness**. Meanwhile, **sensorineural hearing loss** is the result of a defect in nerve conduction.

Now, take a moment to practice your ICD-10-CM skills by coding the following dictation.

PREOPERATIVE DIAGNOSIS
Chronic otitis media with effusion, conductive hearing loss and recurrent acute otitis media.

POSTOPERATIVE DIAGNOSIS
Chronic otitis media with effusion, conductive hearing loss and recurrent acute otitis media, nonsuppurative.

PRIMARY PROCEDURE
BILATERAL MYRINGOTOMIES, INSERTION OF PE TUBES AND PHARYNGEAL ANESTHESIA.

INDICATIONS FOR PROCEDURE
The patient is a 1-year-old with history of chronic and recurrent episodes of otitis media with persistent middle ear effusions resistant to medical therapy.

PROCEDURE
The patient was brought to the operating room and was placed in supine position. General anesthesia was started via face mask technique. Once an adequate level of anesthesia was obtained, the operating microscope was brought, positioned and visualized in the right ear canal. A small amount of wax was removed with a loop. A 4 mm operating speculum was then introduced. An anteroinferior quadrant radial myringotomy was then performed. A large amount of mucoid middle ear effusion was aspirated from the middle ear cleft. Reuter bobbin PE tube was then inserted, followed by Floxin otic drops and a cotton ball in the external meatus. Head was then turned to the opposite side, where a similar procedure was performed. Once again, the middle ear cleft had a mucoid effusion. A tube was inserted to an anteroinferior quadrant radial myringotomy.
Anesthesia was then reversed and the patient was transported to the recovery room having tolerated the procedure well with stable signs.

There are several diagnoses for this dictation. The postoperative diagnoses are chronic otitis media with effusion, conductive hearing loss and recurrent acute otitis media, nonsuppurative. So, let's work through this scenario, step by step:

1. Code chronic otitis media with effusion.
   Start in the *Index* with the main term *Otitis*. The subterms *media, chronic, with effusion* direct you to *see Otitis, media, nonsuppurative, chronic*. The new pathway provides *H65.49-* as the tentative code. The procedure was performed on both ears, so you'll code as *bilateral*; *H65.493* is the code for this condition.

2. Code conductive hearing loss.

   Again, you'll start in the *Index* and locate *Loss, hearing*. The subterms provided do not indicate conductive. However, you are directed to *see also Deafness*. So, try *deafness* as the main term. *Deafness, conductive, bilateral* provides *H90.0* as the tentative code. A quick check with the *Tabular List* verifies that this is a valid code.

3. Code recurrent acute otitis media.

   You'll use the coding pathway of *Otitis, media, nonsuppurative, acute, recurrent* to locate code *H65.19-*. Again, you'll select the code that identifies the condition as *recurrent, bilateral. H65.196* is the accurate code.

4. Sequence and assign the codes.

   You'll recall that when a disease is listed as both acute and chronic, but no single code exists to code both diseases together, you'll code the acute disease as the principal diagnosis and the chronic disease as the secondary, or coexisting, condition. Therefore, you'll assign *H65.196 H65.493 H90.0* to this dictation.

This concludes your ICD-10-CM training for Chapter 8 of the *Tabular List*. You've covered quite a lot of information, and you're doing great so far! Take some time to review this section before completing the following Practice Exercise.

Step 7: Practice Exercise 25-2

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Boil of the right external ear**

   ICD-10-CM: _____

2. **Acute contact otitis externa**

   ICD-10-CM: _____

3. **Nontraumatic hematoma of the right auricle**

   ICD-10-CM: _____

4. **Chronic secretory otitis media of the left ear**

   ICD-10-CM: _____

5. **Bilateral acute eustachian salpingitis**

   ICD-10-CM: _____

6. **Acute myringitis of the right ear**

   ICD-10-CM: _____

7. **Obliterative otosclerosis of the left ear**

   ICD-10-CM: _____

8. **Sudden hearing loss, affecting the left ear**

   ICD-10-CM: _____

9. **Coding Challenge**

PREOPERATIVE DIAGNOSIS
Right tympanic membrane perforation.

POSTOPERATIVE DIAGNOSIS
Right tympanic membrane perforation along with chronic otitis media.

PROCEDURE
RIGHT EAR EXAMINATION UNDER ANESTHESIA.

INDICATIONS FOR PROCEDURE
The patient is a 15-year-old child with history of a right tympanic membrane perforation following tube placement as well as right conductive hearing loss. Exam in the office revealed a posterior superior right marginal tympanic perforation. Risks and benefits of surgery including risk of bleeding, general anesthesia, hearing loss as well as recurrent perforation were discussed with the mother. The mother wished to proceed with surgery.

FINDINGS
The patient was brought to the room, placed in supine position and given general endotracheal anesthesia. The postauricular crease was then injected with 1% Xylocaine with 1:200,000 epinephrine along with external meatus. An area of the scalp was shaved above the ear and then also 1% Xylocaine with 1:200,000 epinephrine injected, a total of 4 mL local anesthetic was used. The ear was then prepped and draped in the usual sterile fashion. The microscope was then brought into view, and examining the marginal perforation, the patient was noted to have large granuloma under the tympanic membrane at the anterior border of the drum. The granulation tissue was debrided as much as possible. Decision was made to cancel the tympanoplasty after debriding the middle ear space as much as possible. The middle ear space was filled with Floxin drops. The patient was awakened from anesthesia, extubated and brought to recovery room in stable condition. There were no intraoperative complications. Needle and sponge count was correct. Estimated blood loss: Minimal.

   ICD-10-CM: _____
   ICD-10-CM: _____

Step 8: Review Practice Exercise 25-2

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 9: Diseases of the Circulatory System (I00-I99), Part 1

Chapter 9 of the *Tabular List* is a very long chapter that focuses on the circulatory system. This is the major body system that includes the heart and blood vessels. As you will learn, many diseases of the heart are closely related. For example, one disease may be the cause of another, or the diseases may occur concurrently with each other. The circulatory system includes so many diseases and related codes; therefore, dividing the chapter into two major sections is necessary. In the first section, you'll learn about *acute rheumatic fever*, *chronic rheumatic heart disease hypertensive* and *ischemic heart disease.* You will have several opportunities to practice coding some diagnoses within these disease categories.

At the beginning of this chapter, you will find a list of conditions that you may be able to code in addition to the codes within the chapter when there is sufficient documentation. These conditions are as follows:

- *certain conditions originating in the perinatal period (P04-P96)*

- *certain infectious and parasitic diseases (A00-B99)*

- *complications of pregnancy, childbirth and the puerperium (O00-O9A)*

- *congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)*

- *endocrine, nutritional and metabolic diseases (E00-E88)*

- *injury, poisoning and certain other consequences of external causes (S00-T88)*

- *neoplasms (C00-D49)*

- *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R94)*

- *systemic connective tissue disorders (M30-M36)*

- *transient cerebral ischemic attacks and related syndromes (G45.-)*

In many of the sections in this chapter, the notes in the *Tabular List* also direct you to use an additional code to identify exposure to tobacco smoke or history, dependence or use of tobacco. People who smoke are more likely to develop hypertension and heart disease, so smoking is a factor in many diseases of the circulatory system. In fact, non-smokers who are exposed to **secondhand smoke** at home or work have an increased risk of heart disease of 25 to 30 percent.[9]

The *Chapter-Specific Guidelines* provide more information on coding conditions from this chapter. Let's take a closer look at these guidelines as you walk through each code section in this lesson.

Acute Rheumatic Fever (I00-I02)

Acute rheumatic fever is a febrile disease that occurs mainly in children or young adults. Rheumatic fever usually appears weeks after the person has experienced untreated or inadequately treated strep throat or scarlet fever. Symptoms of rheumatic fever include fever, joint pain, lesions of the heart, abdominal pain, rash or nodules on the skin and **chorea**, which is the occurrence of irregular, spasmodic, involuntary movements of the limbs or facial muscles. The heart lesions can eventually affect the heart valves and normal blood flow. This typically leads to disease diagnoses in the subsequent section of the *Tabular List*, which focuses on rheumatic heart disease. Because of this relationship, rheumatic fever can be categorized *without mention of heart involvement*, *with heart involvement* or as *rheumatic chorea*. Turn to the *Tabular List* to find more information about coding this condition.

Rheumatic fever with the mention of heart involvement excludes any diagnosis that indicates *chronic heart diseases of rheumatic origin (I05-I09) unless rheumatic fever is also present or there is evidence of reactivation or activity of the rheumatic process.*

Rheumatic chorea, also known as Sydenham's chorea, is an acute but self-limited movement disorder that occurs most commonly in children between the ages of five and 15, and occasionally in pregnant women.[10] In the *Tabular List* for rheumatic chorea, the code excludes chorea NOS and Huntington's chorea.

Chronic Rheumatic Heart Diseases (I05-I09)

As you just learned, rheumatic heart disease is the condition that develops when rheumatic fever damages the heart valves. This resulting condition may be a life-long disease. To avoid contracting rheumatic heart disease, an individual must prevent rheumatic fever from ever occurring.

In this section, you will also find abnormalities of the heart valves, such as *stenosis*, *insufficiency* and other valve diseases. **Stenosis** is a narrowing, or stricture, of the valves. **Insufficiency** indicates a malfunction and/or narrowing of the valves. The narrowing and malfunction of the valves restrict the heart's normal blood flow. These valves are actually flaps, or cusps, within the heart. In this section, you'll find code blocks for rheumatic diseases of the *mitral valve*, the *aortic valve,* the *tricuspid valve,* multiple valves and other rheumatic heart diseases.

Let's briefly review the anatomy of the heart so that you have a solid understanding of how the codes will apply to this system. The **bicuspid valve**, more commonly known as the **mitral valve**, is located between the left atrium and the left ventricle of the heart. The **aortic valve** is positioned between the left ventricle and the ascending aorta. The **tricuspid valve** is located between the right atrium and right ventricle. The **pulmonary valve** lies at the entrance to the pulmonary trunk, leading from the right ventricle.
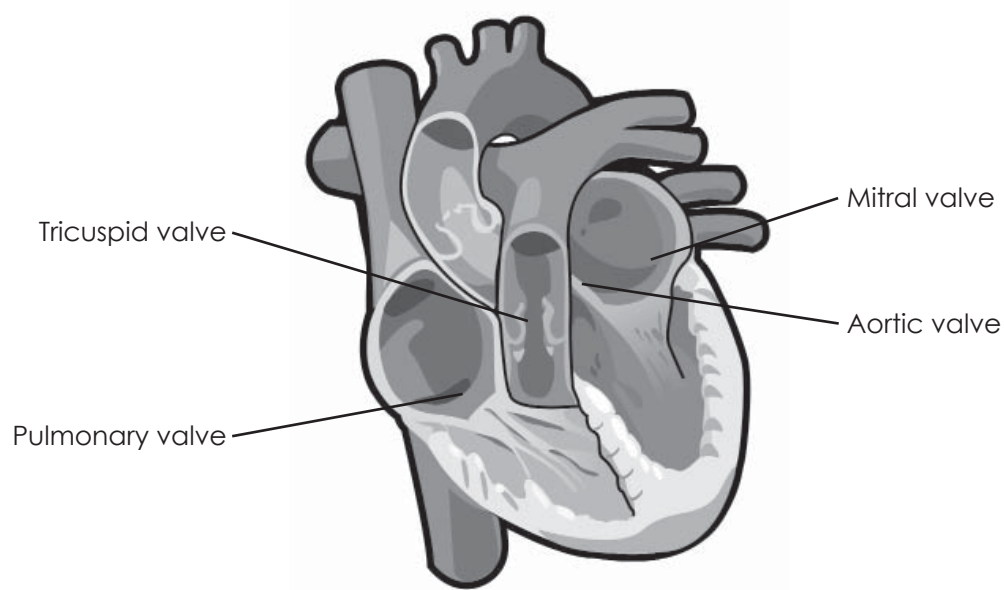
The valves of the heart

Now, you have a better idea of the terminology you'll see within this section. Next, review the following SOAP note and assign the correct diagnosis.

SUBJECTIVE
A 47-year-old male is admitted to the emergency department. He has been feeling fatigued and has had a cough and swollen feet for the past week. Two hours prior to admission, he was awakened by difficulty breathing and chest tightness.

OBJECTIVE
Blood pressure is normal. Patient is afebrile. HEENT normal. Cardiovascular exam notes rumbling apical diastolic murmur with presystolic accentuation. Crackles heard on respiratory exam. Feet are swollen. Chest x-ray, echocardiogram and ECG are ordered. Chest x-ray shows signs of pulmonary edema.

ASSESSMENT
Patient suffers from rheumatic mitral stenosis.

PLAN
He will be admitted by his PCP for additional work-up.

The coding pathway for this diagnosis is fairly straightforward. You'll locate *Stenosis, mitral (valve)* in the *Index*. You'll note the tentative code of *I05.0*. After you confirm this code in the *Tabular List*, you know it is the accurate diagnosis code for this SOAP note. Pretty straightforward, isn't it?

You have a good understanding of rheumatic fever and heart disease, so you're now ready to move on to hypertensive diseases.

Hypertensive Diseases (I10-I15)

Hypertension refers to high blood pressure. The diagnosis of hypertension is confirmed in adults when the average of two or more blood pressure measurements on at least two separate visits reveal a diastolic (bottom number, or denominator) pressure of 90 mmHg or higher or a systolic (top number, or numerator) pressure of 140 mmHg or higher. If the documentation indicates high blood pressure or hypertension identified as arterial, benign, essential, malignant, primary or systemic you will apply code *I10 Essential (primary) hypertension*.

Hypertension can be associated with heart disease, chronic kidney disease or both heart and chronic kidney disease. It may also be identified as secondary hypertension. Let's take a closer look at each of these code blocks.

Certain heart conditions are considered *hypertensive heart disease* (*I11*) when a causal relationship is stated (due to hypertension) or implied (hypertensive). If the physician states heart failure in the dictation, an additional code is required to identify the type of heart failure. Meanwhile, you will code two separate conditions when the documentation for a heart condition notes hypertension, but a causal relationship is *not* indicated.

This section can be a little confusing, so let's take a look at two diagnostic statements for clarification.

- Hypertensive congestive heart failure—the term hypertensive is an implied causal relationship. Therefore, you will assign a code from the block of *I11Hypertensive heart disease*.

- Hypertension with congestive heart failure—does *not* imply a causal relationship. In this case, you will code *I10 Essential hypertension*.

In both situations, you'll assign an additional code to identify the type of heart failure. You'll get some hands-on practice with this concept later in the course. For now, let's move on to hypertension with kidney disease.

Unlike hypertension with heart disease, the *ICD-10-CM* presumes a cause-and-effect relationship between hypertension and kidney disease. This means you should code these combined diagnoses to the group *hypertensive chronic kidney disease* (*I12*) when classified as chronic kidney disease with hypertension. Also, you will identify the stage of the chronic kidney disease and assign the appropriate code from category *N18* as an additional diagnosis.

When a heart condition and a kidney condition both exist, you'll assign a combination code from code group *hypertensive heart and chronic kidney disease* (*I13*). According to the *ICD-10-CM Guidelines*, you should "assume a relationship between the hypertension and the chronic kidney disease, whether or not the condition is so designated." For this category, use an additional code to specify the type of heart failure. Again, you will identify the stage of the chronic kidney disease and assign the appropriate code from category *N18* as an additional diagnosis. Finally, *I13* is a combination code that includes conditions in code category *I11* and *I12*. Therefore, if a patient has hypertension, heart disease *and* chronic kidney disease, you will only apply a code from *I13*, rather than individual codes from *I11* or *I12*.

Secondary hypertension (*I15*) affects about 10 percent of all cases of hypertension. This condition has an identifiable cause that is due to or associated with a variety of primary diseases, such as renal disorders, disorders of the central nervous system, endocrine diseases and vascular diseases. When you code secondary hypertension, you'll also need to consider the underlying disease, sequencing the codes based on the reason for the encounter.

Ischemic Heart Diseases (I20-I25)

Acute or chronic cardiac disabilities that result from an insufficient supply of oxygenated blood to the heart are known as **ischemic heart diseases**. Notes in the *Tabular List* direct you to use an *additional code to identify the presence of hypertension (I10-I15)*. Let's review a bit more terminology related to the heart so that you have a better understanding of the codes from this section.

Coronary artery disease (**CAD**) is a type of heart disease, and **atherosclerosis** is the process by which fatty deposits clog the arteries. When the arteries clog, the heart is unable to get enough oxygen, which causes angina. **Angina pectoris** is the medical term for chest pain or discomfort due to CAD.

The *ICD-10-CM* provides a combination code for atherosclerotic heart disease with angina pectoris, which appears in code block *I25*. When the documentation indicates both conditions, you will assume a causal relationship and assign the combination code rather than coding each condition. However, you will code the two conditions separately if the documentation indicates the angina is due to something other than the atherosclerosis.

Acute Myocardial Infarction

A heart attack, or **acute myocardial infarction** (**AMI**), occurs when the heart continues to beat but there is blockage of blood flow to the heart. AMI identification is by the site where the heart muscle dies or has sustained permanent damage. It may also be identified as a *non-ST segment elevation myocardial infarction* or *ST segment elevation myocardial infarction*.

Non-ST segment elevation myocardial infarction, or **NSTEMI**, does not cause changes on an ECG, but the blood work indicates a heart attack. The extent of the damage to the heart is minimal because the blockage may have been partial or temporary. Meanwhile, a prolonged period of blockage is known as **ST segment elevation myocardial infarction**, or **STEMI**. In this case, a large area of the heart has sustained damage, as the ECG and blood work will indicate. Code *I21.3 ST elevation (STEMI) myocardial infarction of unspecified site* is the default code for myocardial infarction without any other information.

According to the *ICD-10-CM Chapter-Specific Guidelines*, you'll assign the STEMI code if NSTEMI evolves to STEMI. Additionally, you will still code as STEMI if the STEMI converts to NSTEMI due to thrombolytic therapy.

Acute myocardial infarctions are a challenge to code. To help you understand the coding hierarchy for AMIs, review the following summary of the codes you will use:

- *I21*—Use this code category for encounters occurring while the AMI is equal to or less than four weeks old. Care received for the AMI after the four-week time period should receive an aftercare code, rather than using code category *I21*.

- *I22*—Use this code category for subsequent or recurrent AMIs in conjunction with a code from category *I21*.

- *I25.2*—Use this code for old or healed AMIs that do not require any further care.

The four-week rule for coding AMIs can cause diagnosis difficulties for both the coder and the insurance payer. According to *ICD-10-CM* rules, you'll use the acute diagnosis throughout the entire four-week phase of treatment. You will indicate an initial episode of care if the patient is dismissed from the hospital and readmitted with a new AMI during the four-week time period. However, the second admission is a subsequent episode of care if it is related to the previous admission and not to a new AMI.

Before moving on with this lesson, review what you've learned with the following Practice Exercise.

Step 10: Practice Exercise 25-3

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Chronic rheumatic chorea**

    ICD-10-CM: _____

2. **Rheumatic endocarditis**

    ICD-10-CM: _____

3. **Benign essential hypertension**

    ICD-10-CM: _____

4. **Secondary hypertension due to Cushing's disease**

    ICD-10-CM: _____
    ICD-10-CM: _____

5. **Acute STEMI anterolateral myocardial infarction, initial episode**

    ICD-10-CM: _____

6. **Inactive rheumatic fever with myocarditis**

    ICD-10-CM: _____

7. **Coding Challenge**

CHIEF COMPLAINT
Chest pain.

HISTORY OF PRESENT ILLNESS
The patient is a white male who presents with a chief complaint of "chest pain." The patient has a prior history of coronary artery disease. The patient presents today stating that his chest pain started yesterday evening and has been somewhat intermittent. The severity of the pain has progressively increased. He describes the pain as a sharp and heavy pain which radiates to his neck and left arm. He ranks the pain a 7 on a scale of 1-10. He admits some shortness of breath and diaphoresis. He states that he has had nausea and 3 episodes of vomiting tonight. He denies any fever or chills. He admits prior episodes of similar pain prior to his PTCA in 19XX. He states the pain is somewhat worse with walking and seems to be relieved with rest. There is no change in pain with positioning. He states that he took 3 nitroglycerin tablets sublingually over the past 1 hour, which he states has partially relieved his pain. The patient ranks his present pain a 4 on a scale of 1-10. The most recent episode of pain has lasted 1 hour. The patient denies any history of recent surgery, head trauma, recent stroke, abnormal bleeding such as blood in urine or stool or nosebleed.

PAST MEDICAL HISTORY
Hypertension, coronary artery disease, atrial fibrillation, status post PTCA in 19XX. Medications: Aspirin 81 mg daily. Humulin N insulin 50 units in a.m. HCTZ 50 mg daily. Nitroglycerin 1/150 sublingually p.r.n. chest pain.
ALLERGIES: PENICILLIN.
Social history: Denies alcohol or drugs. Smokes 2 packs of cigarettes per day. Works as a banker.
Family history: Positive for coronary artery disease (father and brother).

REVIEW OF SYSTEMS
All other systems reviewed and are negative.

PHYSICAL EXAMINATION
GENERAL: The patient is a 40-year-old white male. The patient is moderately obese, but he is otherwise well developed and well nourished. He appears in moderate discomfort, but there is no evidence of distress. He is alert and oriented to person, place and circumstance. There is no evidence of respiratory distress. The patient ambulates without gait abnormality or difficulty.
HEENT: Normocephalic, atraumatic head. Pupils are 2.5 mm, equal, round and react to light bilaterally. Extraocular muscles are intact bilaterally. External auditory canals are clear bilaterally. Tympanic membranes are clear and intact bilaterally.
NECK: No JVD. Neck is supple. There is free range of motion and no tenderness, thyromegaly or lymphadenopathy noted. Pharynx: Clear, no erythema, exudates or tonsillar enlargement.
CHEST: No chest wall tenderness to palpation. Heart: Irregularly irregular rate and rhythm, no murmurs, gallops or rubs. Normal PMI. Lungs: Clear to auscultation bilaterally.
ABDOMEN: Soft, nondistended. No tenderness noted. No CVAT.
SKIN: Warm, diaphoretic, mucous membranes moist, normal turgor, no rash noted.
EXTREMITIES: No gross visible deformity, free range of motion. No edema or cyanosis. No calf or thigh tenderness or swelling.

COURSE IN EMERGENCY DEPARTMENT
The patient's chest pain improved after the sublingual nitroglycerin and completely resolved with the nitroglycerin drip at 30 ug/min. He tolerated the TPA well. He was transferred to the CCU in a stable condition.

IMPRESSION
Acute inferior transmural myocardial infarction.

    ICD-10-CM: _____

Step 11: Review Practice Exercise 25-3

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 12: Diseases of the Circulatory System (I00-I99), Part 2

Now, let's continue walking through Chapter 9 of the *ICD-10-CM Tabular List* by looking at pulmonary heart diseases.

Pulmonary Heart Disease and Diseases of Pulmonary Circulation (I26-I28)

A **pulmonary embolism** is the closure of the pulmonary artery or branch as the result of a blood clot. This condition may be identified with or without acute **cor pulmonale**, which is failure of the right side of the heart resulting from long-term high blood pressure in the pulmonary arteries and right ventricle of the heart.[11] Septic pulmonary embolism (SPE) is an uncommon disorder that generally presents with an insidious onset of fever, respiratory symptoms and lung infiltrates.[12] In SPE, the blood clot contains microorganisms that cause infection. You'll see in the *Tabular List* for code *I26.90* that you'll code first the underlying infection with SPE.

Other Forms of Heart Disease (I30-I52)

This section includes codes for inflammation, disorders and failures of the heart. Although this group of codes is quite large, you should find that coding these conditions is fairly straightforward once you understand the terminology.

The pericardium is the "sac-like" covering around the heart. When this becomes inflamed, the condition is known as **pericarditis**. In contrast, **endocarditis** is an inflammation of the *inside* lining of the heart, or the endocardium. However, this condition may also involve the heart muscle and/or heart valves in addition to the lining of the heart. When the inflammation is due to an infection, you need to use an additional code to identify the infectious agent for both of the conditions. Previously, you learned about the mitral, aortic and tricuspid valves as they relate to rheumatic diseases. In this section, you'll find nonrheumatic disorders involving these valves.

Keep in mind that endocarditis may also be a manifestation of another disease. Let's look at an example of this situation by reviewing the following sample dictation.[13]

HISTORY OF PRESENT ILLNESS
This is a follow-up visit on this 16-year-old male who is currently receiving doxycycline 150 mg by mouth twice daily as well as hydroxychloroquine 200 mg by mouth three times a day for Q fever endocarditis. He is also taking digoxin, aspirin, warfarin and furosemide. Mother reports that he does have problems with 2-3 loose stools per day since September, but tolerates this relatively well. This has not increased in frequency recently.

The patient recently underwent surgery at Children's Hospital and had, on 10/15/20XX, replacement of pulmonary homograft valve, resection of a pulmonary artery pseudoaneurysm and insertion of Gore-Tex membrane pericardial substitute. He tolerated this procedure well. He has been doing well at home since that time.

PHYSICAL EXAMINATION
GENERAL APPEARANCE: Well-developed, well-nourished, slightly obese, slightly dysmorphic male in no obvious distress.
VITAL SIGNS: Temperature is 98.5, pulse 84, respirations 19, blood pressure 101/57, weight 77.7 kg and height 159.9 cm.
HEENT: Remarkable for the badly degenerated left lower molar. Funduscopic exam is unremarkable.
NECK: Supple without adenopathy.
CHEST: Clear including the sternal wound.
HEART: A 3/6 systolic murmur heard best over the upper left sternal border.
ABDOMEN: Soft. He does have an enlarged spleen; however, given his obesity, I cannot accurately measure its size.
GENITOURINARY: Deferred.
EXTREMITIES: Examination of extremities reveals no embolic phenomenon.
SKIN: Free of lesions.
NEUROLOGIC: Grossly within normal limits.

DATABASE: Doxycycline level obtained on 10/05/20XX as an outpatient was less than 0.5. Hydroxychloroquine level obtained at that time was undetectable. Of note is that doxycycline level obtained while in the hospital on 10/21/20XX was 6.5 mcg/mL. Q fever serology obtained on 10/05/20XX was positive for phase I antibodies in 1/2/6 and phase II antibodies at 1:128, which is an improvement over previous elevated titers. Studies on the pulmonary valve tissue removed at surgery are pending.

IMPRESSION
Q fever endocarditis.

PLAN
1. Continue doxycycline and hydroxychloroquine. I carefully questioned mother about compliance and concomitant use of dairy products while taking these medications. She assures me that he is compliant with his medications. We will, however, repeat his hydroxychloroquine and doxycycline levels.
2. Repeat Q fever serology.
3. Comprehensive metabolic panel and CBC.
4. Return to clinic in four weeks.

The impression is documented as Q-fever endocarditis. Using *Endocarditis, Q fever* as the coding pathway, you'll locate *A78 [I39]* listed as the tentative codes. You know that the bracket indicates that code *I39* is a manifestation code. After verifying each code in the *Tabular List*, you will list each code—but remember that you will never list the code in the brackets first. You will assign *A78 I39* to this dictation.

Myocarditis is an inflammation of the heart muscle. The condition is known as infective myocarditis when the inflammation is caused by viral, bacterial or fungal infections. When coding this condition, you'll use an additional code to identify the infectious agent. This condition may also be the result of an underlying disease. In that case, you'll code the underlying disease first, and then assign *I41 Myocarditis in diseases classified elsewhere* as an additional diagnosis.

Cardiomyopathy is a disease that weakens and enlarges the heart muscle, which makes it harder for the heart to pump blood and deliver it to the rest of the body, resulting in heart failure. There are three main types of cardiomyopathy: *dilated*, *hypotrophic* and *restrictive*. **Dilated cardiomyopathy** is caused by a weakened left ventricle. A thickening of the heart muscle results in abnormal aortic and mitral heart valve function, which is known as **hypotrophic cardiomyopathy**. Finally, **restrictive cardiomyopathy** is a condition in which the walls of the ventricles are rigid, preventing the ventricles from expanding to fill with blood.

Before you wrap up this section, let's take a look at the meanings of *cardiac arrest* and *heart failure*. **Cardiac arrest** is the abrupt loss of heart function, breathing and consciousness, usually as a result of an electrical disturbance in the heart that disrupts its pumping action, stopping the blood flow. Typically, a specific condition causes the cardiac arrest, such as coronary heart disease, AMI, heart failure and cardiomyopathy. In fact, you will code first the underlying condition when there is sufficient documentation.

Heart failure, which is often known as **congestive heart failure** (**CHF**), is a condition in which the heart can no longer pump enough blood to the rest of the body. In the *Tabular List*, you'll find an extensive note on conditions to code first when using the *I50* code block.

Cerebrovascular Diseases (I60-I69)

Cerebrovascular diseases (**CVD**) belong to a group of conditions that relate to any disease that affects an artery that supplies blood to the brain. Nontraumatic intracranial hemorrhage, occlusions and late effects of cerebrovascular disease are some of the conditions you will find in this section.

An **intracranial hemorrhage** occurs when there is bleeding inside the skull, or cranium. There are four basic types of intracranial hemorrhage classified according to where the hemorrhage occurs: *subarachnoid*, *intracerebral*, *subdural* and *extradural*. To locate the ICD-10-CM code for each of these conditions, use the main term *Hemorrhage*, and then the type of hemorrhage as the subterm. Note that these hemorrhages are not caused by trauma, or in other words, are nontraumatic.

Nontraumatic subarachnoid hemorrhages, in code block *I60*, are hemorrhages that are located on the surface of the brain. Another source of subarachnoid hemorrhage is the rupture of congenital aneurysms located along the middle or anterior cerebral arteries or the communicating branches, known as the **Circle of Willis**. These small aneurysms are known as **berry aneurysms**, and they are frequently lethal if not recognized and treated with surgery.

Frontal lobe

Middle cerebral artery

Temporal lobe

Superior cerebellar artery

Pons

Anterior inferior
cerebral artery

Anterior spinal artery

Cerebellum

Circle of Willis:

Anterior cerebral artery

Anterior communicating artery

Internal carotid artery

Posterior
communicating artery

Posterior cerebral artery

Basilar artery

Vertebral artery

Intracranial arterial systemic circulation

Intracerebral hemorrhage is bleeding within the brain resulting from ruptured blood vessels in the head. You'll use code block *I61* for this condition when it's nontraumatic. It is one of the three main mechanisms that can contribute to a stroke. The blood can irritate the brain tissue, causing swelling, or it can collect in a mass, known as a **hematoma**. Either of these conditions can cause pressure on the brain tissues and rapidly destroy them. A CT scan or MRI confirms intracerebral hemorrhages; treatment may range from medication to surgical removal of the hematoma.

Extradural hemorrhages, also known as epidural hemorrhages, are located in the space between the skull and the dura, or the brain lining. These hemorrhages tend to form slowly during a period of several hours. Because they form slowly, the hemorrhages can often be drained before they cause serious consequences. If they are left untreated, however, epidural hemorrhages are fatal.

Skin

Periosteum

Bone

Dura mater

Arachnoid

Pia mater

National Institutes of Health

The dura mater
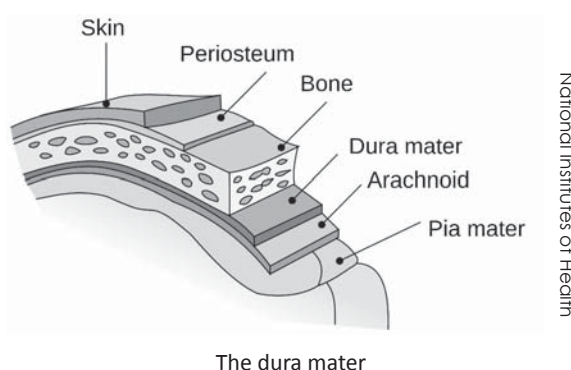
The following example is another operative note to code. You'll probably be able to decipher this note quickly and locate the codes in your manual!

PREOPERATIVE DIAGNOSIS
Intracranial hemorrhage, nontraumatic.

POSTOPERATIVE DIAGNOSIS
Intracranial hemorrhage, nontraumatic subarachnoid hemorrhage from the right middle cerebral artery.

PROCEDURE PERFORMED
CRANIOTOMY.

BRIEF HISTORY
A 76-year-old male complains of headache, weakness, slurred speech and lethargy. Patient does not recall hitting his head. CT confirms subdural hemorrhage.

PROCEDURE
An incision is made in the scalp, and the scalp is peeled away. A bur drill is used to drill into the skull to access the hematoma. The dura mater is then incised to reach the hemorrhage under the dura mater. The hematoma is decompressed, and the bleeding is controlled. The dura is sutured closed, followed by repositioning and suturing of the scalp.

So, how did you do? Did you determine the correct code to be *I60.11*? The coding pathway you'll use is *Hemorrhage, intracranial (nontraumatic), subarachnoid, intracranial, middle cerebral*. Once you have *I60.1-* as the tentative code, apply the final digit from the *Tabular List* to indicate the right side and you'll have *I60.11*, which is a valid and accurate code. Good work!

A cerebral infarction is commonly known as a stroke; it is an interruption of the blood supply to any part of the brain. Locate code block *I63 Cerebral infarction* in your *ICD-10-CM Tabular List*. There, a note directs you to use an additional code, if applicable, to identify the status post administration of tPA (rtPA) in a different facility within the last 24 hours prior to admission to the current facility. This refers to a drug called tissue plasminogen activator (tPA), which dissolves clots and restores blood flow. According to the American Heart Association, current guidelines recommend administration of tPA (rtPA) for acute ischemic stroke within three hours of stroke symptom onset.[14]

The last code block that you will learn about before moving to the next section is *I65*, for *occlusion* and stenosis. **Occlusion** refers to the act of closing or the state of being closed, while stenosis is a narrowing of a passage. The closing or narrowing of the precerebral artery may cause a cerebral infraction, in which case, you'll assign the correct code from the previous code block. However, if the condition does not result in a cerebral infarction, you'll assign a code from this code block, *I65*.

Diseases of Arteries, Arterioles and Capillaries (I70-I79)

This section contains diagnosis codes for *atherosclerosis*, *aortic aneurysms*, *embolisms*, *thrombosis* and a variety of other diseases that pertain to the blood vessels.

The code block *I70* is for atherosclerosis. However, turn to *Atherosclerosis* in the *Index*, and you'll find instructions to see also *arteriosclerosis*. So, what's the difference? **Arteriosclerosis** is a group of diseases characterized by thickening and loss of elasticity of the arterial walls.

The process of atherosclerosis
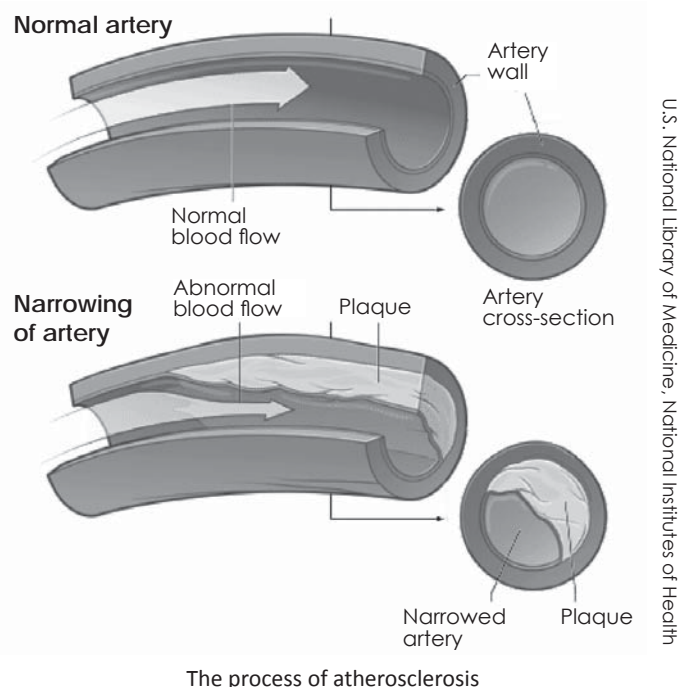
Atherosclerosis is a specific type of arteriosclerosis. This means that atherosclerosis can actually be arteriosclerosis; therefore, you can follow the *see also* cross reference in the *Index* with confidence. **Atherosclerosis** is a condition in which cells that line the arteries are damaged and plaque develops at the site of the damage. These deposits impede or eventually shut off blood flow. This condition can be specific to the aorta, the renal artery or the extremities. Atherosclerosis of the extremities is more common in the legs than in the arms.

An **aneurysm** occurs when the wall of an artery becomes weak and balloons. Most aneurysms occur in the aorta, which is the main artery that carries blood from the heart to the rest of the body. Aortic dissection results when there is a tear or damage to the inner wall of the aorta, causing bleeding into and along the wall of the aorta. Although this condition is life threatening, it can be managed with surgery if the surgery takes place before the aorta ruptures. An aortic aneurysm rupture causes severe pain, massive internal hemorrhage and, without prompt treatment, rapid death. You'll find the specific codes for aortic aneurysms and dissections in code block *I71*.

Arterial embolism and thrombosis are conditions found in code block *I74*. An **embolism** is the resulting condition when a clot or foreign material suddenly blocks an artery. **Thrombosis** is the formation, development or presence of a thrombus, or an aggregation of blood factors. These blood factors are primarily platelets and proteins with entrapment of cellular elements.

Let's walk through the process of coding an aneurysm of the subclavian artery. To begin, locate the main term *Aneurysm* in the *Index to Diseases and Injuries*. The subterm *subclavian* provides the tentative code of *I72.8*. Turn to the *Tabular List* to determine the highest level of specificity and you will find that *I72.8* is the correct code for the condition.

Diseases of Veins, Lymphatic Vessels and Lymph Nodes, Not Elsewhere Classified (I80-I89)

In this section, you will find a variety of conditions pertaining to the veins, lymphatic vessels and lymph nodes. A quick review of terminology is necessary for accurate coding. Let's take a look!

Phlebitis is inflammation of a vein, usually in the leg. When inflammation of a vein is associated with the formation of blood clots, it is called **thrombophlebitis**. Meanwhile, an embolism occurs when a blood clot (thrombosis) blocks the arteries. The blockage may limit or stop blood flow entirely. Deep vein thrombosis (DVT) is a condition in which a blood clot forms in one of the deep veins of the body, usually in the legs. *I82.409* codes to deep vein thrombosis of an unspecified lower extremity.

The *Tabular List* indicates that for code block *I82*, you'll assign codes from *O00-O07* or *O08.7* when phlebitis, thrombophlebitis, embolism or thrombosis is documented as complicating abortion, ectopic or molar pregnancy. And you'll assign codes *O22.-* or *O87.-* if the condition is documented as complicating pregnancy, childbirth and the puerperium. You'll explore these codes in more detail in a later lesson.

Varicose veins are the result of veins that are swollen, twisted and filled with an abnormal collection of blood. In normal veins, the valves in the veins keep blood moving forward, toward the heart. In varicose veins, the valves don't function properly, causing the blood to pool in a vein. You will often encounter varicose veins with ulcers and/or inflammation. Let's take a look at the code selection:

- *I83.0* Varicose veins of lower extremities with ulcer

- *I83.1* Varicose veins of lower extremities with inflammation

- *I83.2* Varicose veins of lower extremities with both ulcer and inflammation

Other and Unspecified Disorders of the Circulatory System (I95-I99)

You'll wrap up this chapter of the *Tabular List* with a discussion of *hypotension*. The condition of abnormally low blood pressure is known as **hypotension**. This condition is covered in code block *I95*. **Orthostatic** or **postural hypotension** refers to a drop in the blood pressure when there is a sudden change in body position. Hypotension that medication causes is **iatrogenic hypotension**.

You've covered quite a lot of information! Before moving on to the respiratory system, reinforce what you've learned with the following Practice Exercise.

Step 13: Practice Exercise 25-4

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Idiopathic primary pulmonary hypertension**

   ICD-10-CM: _____

2. **Wenckebach's phenomenon**

   ICD-10-CM: _____

3. **Cerebrovascular accident two years ago with residual hemiplegia of the right dominant side**

   ICD-10-CM: _____

4. **Arteriolosclerosis of the native arteries of the right leg**

   ICD-10-CM: _____

5. **Varicose veins of the left lower leg**

   ICD-10-CM: _____

6. **Coding/Billing Challenge**

Use the following encounter form and dictation to create a CMS-1500 version 02/12 claim form using MedLook.

Luke R. Johnson, MD
NPI: 0657490049

Laura K. Knott, MD
NPI: 0405891109

Charles Peterson, MD
NPI: 0275695402

Medical Care Center
100 South Main
Brown, CO 80001-9898
(970) 555-1111

Physician signature: *Laura K. Knott, MD*
Group NPI: 06-65544004
EIN: 99-7653456
CLIA#: CM8402

☐ 11 Physician Office
☐ 12 Private Residence
☑ 22 Outpatient Hospital
☐ 23 Hospital Emergency Room
Participating Provider ☑Y ☐N

Patient Information

Name Karen S. Morgan
Address 3751 Ridge Road
City Avon **State** CO
ZIP 80000
Home Phone 970-555-2929

Date of Birth 11/25/41
Sex F

Insurance Information

Primary Insurance
Name Medicare
ID# 770005613A
Group#
Address 600 Grant St.
City Denver
State CO **ZIP** 80203-4791
Primary Insured Name Karen
Relation to Patient self

Secondary Insurance
Name Health Plan Inc.
ID# 561301
Group#
Address PO Box 1667
City Avon
State CO **ZIP** 80000-1667
Secondary Insured Name Karen
Relation to Patient self

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Karen S. Morgan
Signature of patient (or parent of minor child)

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Signature of patient (or parent of minor child)

Date of Service	7-19-20XX		
Diagnosis		**Procedure**	**Charge**
		33208 Insert Pacemaker	$2,400.00

Name: Karen S. Morgan
DOB: January 25, 1941
Date of Service: July 19, 20XX

PREOPERATIVE DIAGNOSIS
Sick sinus syndrome.

POSTOPERATIVE DIAGNOSIS
Sick sinus syndrome.

PRIMARY PROCEDURE
DUAL CHAMBER PACEMAKER AND ATRIAL AND VENTRICULAR LEADS.

INDICATIONS FOR PROCEDURE
This patient has been experiencing increasing episodes of Sick sinus syndrome, which are not able to be controlled with medication. A dual-chamber pacemaker was recommended after discussion with the patient and his family. This gentleman and his family were informed of all potential complications, including infection, hematoma, pneumothorax, hemothorax, myocardial infarction and possibly death. The patient has agreed to the procedure and signed the consent.

PROCEDURE
The patient was admitted to the cardiac catheterization lab and placed on the table. He was prepped and draped in the usual manner. Adequate anesthesia was achieved, and the procedure was started. The pacemaker pocket was created with hemostasis. The pocket was placed in the left infraclavicular area. A 9 French peelaway sheath was used to introduce an atrial and a ventricular lead into their correct position. The leads were sutured and secured. The pulse generator was then connected to the leads. The pocket was prepared for insertion of the generator. The pacemaker and leads were placed in the pocket, and the pocket was closed in two layers. The patient tolerated the procedure well and was discharged to the postanesthesia care unit.

Step 14: Review Practice Exercise 25-4

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 15: Diseases of the Respiratory System (J00-J99)

Chapter 10 of the *Tabular List* contains codes for diseases of the respiratory system. Among the diseases in this chapter are respiratory infections, other diseases of the upper respiratory tract, pneumonia and influenza, *chronic obstructive pulmonary disease* and allied conditions, pneumoconiosis and lung diseases and other diseases of the respiratory system. There is quite a lot to cover!

At the beginning of this chapter you'll find a general note to assist you with accurate coding. The *ICD-10-CM* indicates the following guideline: *When a respiratory condition is described as occurring in more than one site and is not specifically indexed, it should be classified to the lower anatomic site (e.g. tracheobronchitis to bronchitis in J40).*

According to the Office of the Surgeon General, every year, more than 400,000 Americans die from smoking-related illnesses, still the leading preventable cause of death in the United States.[15] Exposure or use of tobacco products often increases the risk of contracting a respiratory disease. Therefore, the *ICD-10-CM* instructs you to use additional codes, if applicable, to identify exposure to environmental tobacco smoke, exposure to tobacco smoke in the perinatal period, history of tobacco use, occupational exposure to environmental tobacco smoke, tobacco dependence or tobacco use.

You may encounter conditions that occur at the same time and yet are not part of the code that appears within this chapter. It is acceptable to list both codes, as long as the documentation supports both conditions. These conditions include the following:

- *certain conditions originating in the perinatal period (P04-P96)*
- *certain infectious and parasitic diseases (A00-B99)*
- *complications of pregnancy, childbirth and the puerperium (O00-O9A)*
- *congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)*
- *endocrine, nutritional and metabolic diseases (E00-E88)*
- *injury, poisoning and certain other consequences of external causes (S00-T88)*
- *neoplasms (C00-D49)*
- *smoke inhalation (T59.81-)*
- *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R94)*

Acute Upper Respiratory Infections (J00-J06)

Acute upper respiratory infections include the common cold, acute sinusitis, acute pharyngitis, acute tonsillitis and acute laryngitis. Do you see a common theme with most of these conditions? The similarity is the term "acute." You will not find chronic conditions in this code block. In addition, you will *not* use this section for chronic obstructive pulmonary disease with acute lower respiratory infection or influenza virus with other respiratory manifestations. A few of the codes have notes that instruct you to use an additional code to identify infectious agents.

Frontal sinus
Nasal cavity
Nasal septum (deep to medial wall)
Concha
Hard palate
Soft palate
Oropharynx
Hyoid bone
Thyroid cartilage (Adam's apple)
Cricoid cartilage
Trachea

Sella turcica
Sphenoid sinus
Nasopharynx
Adenoids
Eustachian tube
Prevertebral soft tissues
Palatine tonsils
Lingual tonsils
Laryngopharynx
Epiglottis
Larynx
False vocal cords
Glottis
Arytenoid cartilage
True vocal cords
Cartilaginous rings
Esophagus

Gross anatomy of the upper respiratory tract

Let's examine some conditions in this block in further detail. An acute inflammation of mucous membranes extending from the nostrils to the pharynx is technically called **acute nasopharyngitis**, but is more often known as the common cold. This condition, found in code block *J00*, encompasses acute rhinitis, coryza, infective nasopharyngitis NOS, infective rhinitis, nasal catarrh and nasopharyngitis NOS. There are many exclusions listed as well. Understanding the difference between *not coded here* and *not included here* is necessary for accurate coding of these conditions. Additionally, keep in mind that an upper respiratory infection is often known as URI—an important acronym to learn and remember. You'll assign code *J06.9* for this condition.

Are you ready to try coding another scenario? Go for it—see how quickly and accurately you can complete the following coding exercise.

CHIEF COMPLAINT
Respiratory distress and fever x 12 hours.

HISTORY OF PRESENT ILLNESS
This 20-month-old Caucasian male began coughing yesterday, late afternoon. Fever and coughing were aggravated in the evening. Patient was given Tylenol and slept well. Today at 8:00 a.m., the patient showed respiratory distress and increased mucous secretion.

PAST HISTORY
The patient experienced similar symptoms 4 months ago, but they were relieved spontaneously. The patient is the product of a normal spontaneous vaginal delivery. Birth weight: 6 pounds 1 ounce.
ALLERGIES: NONE.
Family history: No family history of maternal or paternal diabetes, hypertension or tuberculosis.

REVIEW OF SYSTEMS
Noncontributory.

PHYSICAL EXAMINATION
VITAL SIGNS: Pulse: 168/min. Respiratory rate: 38/min and labored. Temperature: 104.4 °F.
HEENT: Increased nasal discharge. Trachea midline. TMs clear. Pharynx not examined.
NECK: Supple. No jugular venous distention.
CHEST: Heart: Sinus rhythm with tachycardia. No murmurs. Lungs: There is inspiratory wheezing and respiratory retraction bilaterally. Tachypnea is present. There are bilateral bronchi. No areas of consolidation.
ABDOMEN: Soft and flat. No organomegaly.
EXTREMITIES: No venous distention.
NEUROLOGIC: No neurologic deficits. Moves all extremities well.

IMPRESSION
Croup. Rule out epiglottitis.

PLAN
NPO. Lateral neck film to rule out subglottic edema. Thirty percent oxygen mist tent. Racemic epinephrine 0.125 mL in 2.5 mL normal saline. Tylenol p.r.n. for fever. Intubation precautions until radiographic evidence of subglottic edema is excluded.

You won't code for epiglottis, as the dictation indicates "rule out"—which means it is an unconfirmed diagnosis. So, you'll code for the croup. Locate *Croup* as the main term in the *Index to Diseases and Injuries* and you'll find *J05.0* as the tentative code. A quick check with the *Tabular List* confirms this as the correct code for the scenario. Let's move on!

Influenza and Pneumonia (J09-J18)

Influenza, also known simply as the flu, is a viral infection that attacks the respiratory system—the nose, throat and lungs.[16] This should not be confused with the stomach "flu," which is a virus that causes diarrhea and vomiting.

Avian influenza, or bird flu, is caused by a virus that occurs naturally among birds. It is very contagious and can cause illness and death in domesticated bird species such as chickens, ducks and turkeys. According to the CDC, "The risk from avian influenza is generally low to most people, because the viruses do not usually infect humans. However, confirmed cases of human infection from several subtypes of avian influenza infection have been reported since 1997. Most cases of avian influenza infection in humans have resulted from contact with infected poultry."[17]

Meanwhile, swine flu, known as **H1N1 influenza**, is a contagious virus that ranges from mild to severe with symptoms including fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills, fatigue and possibly vomiting or diarrhea. People contract this disease from other people—not from pigs. The swine flu that usually spreads among pigs does *not* often affect people. To distinguish the virus that mainly affects pigs from the virus that affects humans, the CDC refers to this condition as 2009 H1N1 influenza virus, or novel H1N1. Cumulative reports of laboratory-confirmed 2009 H1N1 hospitalizations and deaths for April through October 17, 2009 are 17,283 hospitalizations and 1,004 deaths.[18]

> "The World Health Organization declared the 2009-2010 flu season a pandemic because the novel H1N1 flu (swine flu) had occurred in multiple countries around the world and human infection was widespread."[19]

Both avian and swine influenza are coded *J09.X-*. In this section, the final digit identifies other manifestations with the flu, such as with pneumonia, respiratory or gastrointestinal manifestations.

Let's move to the next set of code blocks in this section. **Pneumonia** is an inflammation of the lungs with **consolidation**, or the process through which the lungs become firm as the air spaces fill with exudates, or fluids. Pneumonia is classified as viral, bacterial or due to other specified organisms. Bacterial pneumonia is treated with antibiotics. However, antibiotics are not effective for viral pneumonia. Determining a viral or bacterial cause for the pneumonia may be difficult, in which case antibiotics will be prescribed to treat the condition in case it *is* bacterial.

Pneumonia comes in many forms. *Lobular* and *lobar pneumonia* can often confuse coders, so let's look at each condition in more detail.

Lobar pneumonia is an acute febrile disease that *Streptococcus pneumoniae* produces; it involves all of a single lobe of the lung. A culture verifies this condition. You will code *J18.9* if the physician notes that the x-ray reveals right lower lobe pneumonia, because the presence or absence of streptococcal bacterium is not known. The physician is simply noting the location of the inflammation.

Lobular pneumonia, code *J18.0*, is primarily known as **bronchopneumonia**, and is an inflammation of the lungs that usually begins in the terminal bronchioles. The lungs become clogged with mucopurulent exudate that forms consolidated patches in adjacent **lobules** (small lobes).

Now that you know the differences between lobular and lobar pneumonia, it's time to demonstrate your coding skills once more.

SUBJECTIVE
A 47-year-old male admitted to the emergency department with complaints of fever, chills and a painful cough that is producing yellow mucus.

OBJECTIVE
Comprehensive examination performed. Respiratory examination reveals crackles. Anterior, posterior and lateral chest x-rays ordered.

ASSESSMENT
Results of x-rays confirm right lower lobe pneumonia.

PLAN
Patient admitted for further work-up.

The patient has pneumonia, located in the right lower lobe. *Lobular* is not documented, and *lobar* is not documented either. A culture was not performed to check for the presence of streptococcal bacterium. Therefore, you simply have the main term *Pneumonia.* This main term in the *Index to Diseases and Injuries* provides the tentative code *J18.9.* You'll determine the highest level of specificity in the *Tabular List*, and then assign this as the correct code. Good work!

Other Acute Lower Respiratory Infections (J20-J22)

Acute bronchitis and *acute bronchiolitis* due to a wide variety of diseases appear in this section of Chapter 10. **Acute bronchitis** is a short-lived inflammation of the main air passages to the lungs, while **acute bronchiolitis** is a severe and sudden onset of an infection of the small air passages of the lungs, called the bronchioles.

You will *not* code chronic obstructive pulmonary disease with acute lower respiratory infections with the codes listed here. Otherwise, this is a very straightforward section, so let's move to other diseases of the upper respiratory tract.

Other Diseases of Upper Respiratory Tract (J30-J39)

You are already familiar with the codes to apply to acute conditions. This section, in contrast, contains codes for chronic conditions. Acute conditions are short and severe, while chronic conditions continue over a long period of time or recur frequently. Try your hand at coding the following operative report.[20]

PREOPERATIVE DIAGNOSIS
Hypertrophy of tonsils and adenoids.

POSTOPERATIVE DIAGNOSIS
Hypertrophy of tonsils and adenoids.

PRIMARY PROCEDURE
TONSILLECTOMY, ADENOIDECTOMY.

ANESTHESIA
General.

BRIEF HISTORY

The patient is 5-1/2 years old. She is here this morning with her mom. She has very large tonsils and she snores at night and gets up frequently at night and does not sleep well. At the office we saw the tonsils were very big.

PROCEDURE

Patient was placed under general anesthetic by the orotracheal route of administration, under Dr. XYZ. Afrin drops were placed in both nostrils. The neck was gently extended and the Crowe-Davis mouth gag inserted. The tonsils and adenoids were very large. The uvula was intact. Adenoidectomy was performed using the adenoid curette with a tonsil sponge placed into the nasopharynx. Tonsillectomy accomplished by sharp and blunt dissection. Hemostasis was achieved with electrocautery, and the tonsil beds injected with 0.25% Marcaine with 1:200,000 epinephrine. Sutures of zero plain catgut next were used to re-approximate the posterior to the anterior tonsillar pillars, suturing these down to the tonsillar beds. Sponge was removed from the nasopharynx. The suction electrocautery was used for pinpoint hemostasis on the adenoid bed. We made sure the cautery tip did not come into contact with the soft palate or the eustachian tube orifices. The nose and throat were then irrigated with saline and suctioned. Excellent hemostasis was observed. An orogastric tube was placed. The stomach was found to be empty. The tube was removed, as was the mouth gag. Sponge and needle counts were reported correct. The child was then awakened and prepared for her return to the recovery room. She tolerated the operation very well.

The postoperative diagnosis is hypertrophy of tonsils and adenoids. Let's start by locating the main term *Hypertrophy* in the *Index*. Next, would you locate the subterm *tonsils* or *adenoids*? You'll find a specific code for hypertrophy of the tonsils and hypertrophy of the adenoids, but you'll also find hypertrophy of the tonsils *with* adenoids. That is what you need, so note the tentative code *J35.3*. After checking with the *Tabular List*, you can confidently assign *J35.3* as the correct code for this operative report.

Chronic Lower Respiratory Diseases (J40-J47)

Chronic obstructive pulmonary disease (**COPD**) is one of the most common lung diseases involving an ongoing obstruction of the airways that makes breathing difficult. Two main forms of COPD are *chronic bronchitis* and *emphysema*. **Chronic bronchitis** is typically a long-term cough with mucus; **emphysema** is a condition of the lungs that destroys them over time. Most people with COPD have a combination of both conditions. Please note that you will not code bronchitis due to chemicals, gases, fumes and vapors with codes from this section, but you can code cystic fibrosis *(E84.-)* if documented.

Asthma, found in code block *J45*, is a condition associated with recurrent attacks of dyspnea and wheezing due to spasmodic contractions of the bronchi. The choices for severity of asthma are intermittent, mild persistent, moderate persistent and severe persistent. Review the following chart for a better understanding of this terminology:

Asthma Severity	Frequency of Daytime Symptoms
Intermittent	Less than or equal to two times per week
Mild Persistent	More than two times per week
Moderate Persistent	Daily; may restrict physical activity
Severe Persistent	Throughout the day; frequent severe attacks that limit the ability to breathe

Asthma may also be described as uncomplicated, with *acute exacerbation* and *status asthmaticus*. According to the *Chapter-Specific Guidelines*, an **acute exacerbation** is a worsening or decompensation of a chronic condition. Note the word "acute" is in parentheses in the *Index* and *Tabular List*. This means it may or may not be present in the statement of a disease without affecting the code assignment. Meanwhile, a particularly severe episode of asthma that does not respond to therapeutic measures is known as **status asthmaticus**. The physician will specifically document "status asthmaticus" if you need to code it—you should not draw conclusions based on any other documentation.

Now, if a patient has asthma with COPD, you'll assign just one code. Turn to the *Index* and locate the main term *Asthma*, followed by the subterms *with, chronic obstructive pulmonary disease*. You'll see that the tentative code is *J44.9*. Turn to this code in the *Tabular List*. You'll see that *asthma with chronic obstructive pulmonary disease* is included under the heading *J44 Other chronic obstructive pulmonary disease.*

Now that you know the basics, you're ready to code a diagnosis based on the following SOAP note:

SUBJECTIVE
A 12-year-old male presents with a cough for several days. He claims albuterol is not helping the cough. He denies any real wheezing with this current illness. His asthma symptoms have been under control this winter. He has not had a fever with this coughing episode.

OBJECTIVE
He is alert and pleasant. HEENT is unremarkable. He has a very slight inspiratory crackle and end-expiratory wheeze in his larger airways. Inspiratory breath sounds are clear. No signs of respiratory distress. Heart without murmur.

ASSESSMENT
Asthmatic bronchitis.

PLAN
Reviewed his asthma regimen and refilled his Advair Diskus. He continues on Singulair daily as well as Claritin-D. Recommend he use the albuterol 1-2 inhalations q. 4-6 h. for the next couple of days until cough subsides. Also put him on Zithromax suspension with a double dose on the first day. He is to return if symptoms continue. This young man has a very good grasp on his asthma, and he is using a peak flow meter appropriately. Peak flows have been about 100 mL lower than normal.

This SOAP note requires that you assign only one code. To code the diagnosis, first locate the main term *Bronchitis* in the *Index to Diseases and Injuries*. Now, locate the subterm *asthmatic* and you'll find the tentative code *J45.9*. When you verify this code in the *Tabular List*, you'll see that *J45.9* is an invalid code; additional digits are required. Under *Unspecified asthma* you'll see that this code includes *Asthmatic bronchitis NOS*. You're on the right track with *J45.90*, but it is still not a valid code. *Exacerbation* or *status asthmaticus* are not in the documentation, which means you'll select *Unspecified asthma, uncomplicated* and assign code *J45.909* for this diagnosis. Do you see why verifying a code in the *Tabular List* is so important? You don't want to skip steps in the coding process or you might assign an invalid code.

Lung Diseases Due to External Agents (J60-J70)

First, it's important to note that asthma (*J45.-*) and malignant neoplasm of bronchus and lung (*C34.-*) are conditions that may be coded with this section of codes when documented.

Pneumoconiosis is an inflammation that commonly leads to fibrosis of the lungs. Inhalation of dust in certain occupations typically causes this disease. Pneumoconiosis characteristics include pain in the chest, a cough with little or no expectoration, dyspnea, reduced thoracic excursion and, sometimes, cyanosis and fatigue after slight exertion. The three types of pneumoconiosis you will most likely encounter in coding are *coal workers' pneumoconiosis, asbestosis* and *silicosis*.

Coal workers' pneumoconiosis, formerly known as "**black lung**" **disease**, used to be a deadly killer among miners. You'll find this in code block *J60*. With increased health standards in the industry, the incidence of coal workers' lung disease has greatly decreased, although it has not been eliminated. Sometimes known as **anthracosis**, this condition essentially refers to lungs that have filled with coal dust. Prolonged inhalation of dust that is rich in carbon particles and other earth minerals causes the disease. There is no effective treatment, and the disease usually runs a slow but steady course toward lung failure.

Asbestosis is the name for the lung disease that results from exposure to asbestos. When an individual inhales asbestos fibers, the shorter and smaller fibers may pass the mucous membranes and reach the lungs. Once the fibers enter the alveoli, macrophages seize them and the process results in extensive pulmonary fibrosis.

Silicosis is the most widespread and oldest of all known occupational diseases. This environmentally induced lung disease is the result of inhalation of tiny silica crystals that occur in the dust that sand blasting, mining and stone cutting generate. Fibronodular lesions in the lung tissue characterize silicosis. Respiratory conditions that fumes, vapors and aspiration of various other substances cause are examples of other lung diseases; they are conditions that appear in this section of the *Tabular List*. For the most part, locating these diagnostic codes is fairly straightforward.

Other Respiratory Diseases Principally Affecting the Interstitium (J80-J84)

The **interstitium** is a lace-like network of tissue that extends throughout both lungs providing support to the alveoli.[21] Diseases you'll encounter within this section include *acute respiratory distress syndrome*, pulmonary edema, pulmonary eosinophilia and other interstitial pulmonary diseases.

Acute respiratory distress syndrome (**ARDS**) is a condition that causes lung swelling and fluid buildup, usually as a result of shock, surgery or trauma. Symptoms usually develop within 24 to 48 hours of the original injury or illness. The fluid buildup makes the lungs heavy and stiff, and causes shortness of breath and labored breathing. Treatment for ARDS focuses on providing support for the failing respiratory system by means of mechanical ventilation or a breathing machine. It is also important to treat the underlying condition that caused the ARDS.

Take a look at the following example.

> Roxanne presents to the ED complaining of shortness of breath and labored breathing. She was diagnosed with pneumonia by her family physician 2 days ago. Physical exam indicates low blood pressure and cyanosis. Chest auscultation indicates crackles, suggesting fluid in the lungs. Her physician orders a chest x-ray, CBC and arterial blood gasses. Results of the x-ray and labs indicate acute respiratory distress syndrome due to pneumonia. To avoid damage to the lungs, the physician recommends a mechanical ventilator to deliver high doses of oxygen and continuous pressure. Roxanne is admitted to the ICU for treatment of ARDS as well as the pneumonia.

Since Roxanne is admitted for the ARDS, you will code that as the principal diagnosis, followed by pneumonia. Let's start with ARDS. In the *Index* you'll use *Syndrome, respiratory, distress, acute* as the coding pathway to locate tentative code *J80*. The *Tabular List* confirms this code. Then, locate *Pneumonia* in the *Index*. You'll verify the tentative code *J18.9* in the *Tabular List*. Finally, you'll assign *J80 J18.9* to the example.

Before moving to the next section, let's briefly consider a few other conditions in this category so that you'll have a better understanding of the coding process. **Pulmonary edema** involves excessive fluid in the lungs, making breathing difficult. **Pulmonary eosinophilia** occurs when there is an increase in the number of eosinophils, a type of white blood cell, causing swelling and inflammation in the lungs.

Suppurative and Necrotic Conditions of the Lower Respiratory Tract (J85-J86)

An **abscess** occurs when tissue becomes infected and the body's immune system tries to fight it, resulting in an enclosed collection of liquefied tissue known as pus. **Necrosis**, or **gangrene**, is a localized death of tissue. When you code either abscess or necrosis, you'll use an additional code to identify the infectious agent according to the *Tabular List* notes.

Pyothorax, code block *J86*, occurs when pus accumulates in the pleural cavity. This is different from an abscess because it does not create an enclosed wall of tissue to keep the bacteria from spreading. Instead, the pus forms into sacs that line the pleura, scarring the cavity and severely impairing lung function.

Other Diseases of the Pleura (J90-J94)

Pleural effusion is the buildup of fluid between the layers of tissue that line the lungs and chest cavity. Sometimes, pleural effusion is an integral part of the underlying disease. When this is the case, you'll assign a code only for the underlying disease. Congestive heart failure (CHF), for example, does not exist without some degree of pleural effusion. So, in most cases, if CHF and pleural effusion are the diagnoses, you'll code only the CHF.

Pneumothorax is the presence of air or gas in the pleural cavity, which results in a collapsed lung. *Spontaneous tension pneumothorax*, code *J93.0*, is a condition in which air leaking from the lung into the lining causes the lung to collapse. Keep in mind that there are a number of conditions that you should *not* code with this condition: congenital or perinatal pneumothorax, postprocedural air leak or pneumothorax, traumatic pneumothorax, tuberculosis pneumothorax or pyopneumothorax. Let's continue with the next section!

Intraoperative and Postprocedural Complications and Disorders of Respiratory System, Not Elsewhere Classified (J95)

There are quite a few codes included in this section dealing with the respiratory system. Let's focus on *ventilator associated pneumonia*. **Ventilator associated pneumonia** is defined as pneumonia occurring more than 48 hours after a patient has been intubated and received mechanical ventilation.[22] Sometimes, the documentation will clearly identify that the pneumonia is a complication that results from the mechanical ventilator. In this case, you will assign code *J95.851 Ventilator associated pneumonia*. However, you will *not* assign *J95.851* if the patient has pneumonia and also happens to be on a mechanical ventilator, but there is no documentation supporting ventilator associated pneumonia.

Chapter 10 of the *Tabular List* is not very long, but it involves a large amount of information about the codes it contains. Before wrapping up this lesson, let's pause and review what you've learned.

Step 16: Practice Exercise 25-5

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Klebsiella pneumonia**

   ICD-10-CM: _____

2. **Acute pneumococcal bronchitis**

   ICD-10-CM: _____

3. **Chronic maxillary sinusitis**

   ICD-ICD-10-CM: _____

4. **Chronic asthmatic bronchitis with acute exacerbation**

   ICD-10-CM: _____

5. **Acute respiratory distress syndrome**

   ICD-10-CM: _____

6. Coding/Billing Challenge

Use the following encounter form and dictation to create a CMS-1500 version 02/12 claim form using MedLook.

Christine Jones, MD
1414 Swallow Street
Brown, CO 80001-9898
(970) 555-1514

☐ 11 Physician Office
☐ 12 Private Residence
☐ 22 Outpatient Hospital
☑ 23 Hospital Emergency Room

Physician signature: *Christine Jones, MD*

Participating Provider ☑Y ☐N

EIN: 33-0457789
NPI: 0203048901

Patient seen at Weston Hospital

Patient Information

Name	Marco Paul Sanchez	**Date of Birth**	8-21-37
Address	2621 Kings Court	**Sex**	male
City	Brown **State** CO		
ZIP	80001		
Home Phone	970-555-1643		

Insurance Information

Primary Insurance		**Secondary Insurance**	
Name	Medicare	**Name**	none
ID#	325001926A	**ID#**	
Group#		**Group#**	
Address	600 Grant Street	**Address**	
City	Denver	**City**	
State	CO **ZIP** 80203-4791	**State** **ZIP**	
Primary Insured Name self		**Secondary Insured Name**	

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Marco P. Sanchez
Signature of patient (or parent of minor child)

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

_____
Signature of patient (or parent of minor child)

Date of Service	*11/3/20XX*	
Diagnosis	**Procedure**	**Charge**
	31603 Emergency tracheostomy	*$1,690.00*

Name: Marco P. Sanchez
DOB: August 21, 1937
Date of Service: November 3, 20XX

PREOPERATIVE DIAGNOSIS
Acute and chronic respiratory failure.

POSTOPERATIVE DIAGNOSIS
Same.

PRIMARY PROCEDURE
TRACHEOSTOMY.

PROCEDURE
Following informed consent of the patient's family, the patient was brought to the operating room and placed supine on the table. After adequate induction of general anesthesia and application of appropriate monitoring devices, the patient was prepped and draped for the procedure.

The neck was marked and injected with 5 mL of 1% Xylocaine and epinephrine. A scalpel was used to create a horizontal incision through the skin. Cautery was used to control bleeding, and the muscles were split down to the level of the thyroid isthmus. Blunt dissection was used to dissect between the thyroid isthmus, and it was divided.

The cricoid cartilage was identified, and the cricoid hook was placed. The inner space between the second and third thyroid cartilage was then incised, and scissors were then used to enlarge the incision. A #8 Shiley tracheostomy tube was placed into the trachea. The cuff was then inflated, and the incision was sutured. The patient tolerated the procedure well and was transferred back to the ICU.

Step 17: Review Practice Exercise 25-5

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 18: Lesson Summary

You've come a long way and should be proud of your accomplishments! You've studied four more chapters of the *ICD-10-CM Tabular List*. Let's do a quick review.

You learned that Chapter 7 contains codes for disorders of all parts of the eye—from the eyelid to the optic nerve. While you explored these disorders, you also walked through a quick review of the anatomy of the eye. As you know, a firm understanding of anatomy is necessary for accurate coding!

You reviewed anatomy and terminology in Chapter 8, as well. Then, you studied diseases and disorders of the external, middle and inner ear; the mastoid process; vertiginous syndromes; otosclerosis; and hearing loss.

Chapter 9 focuses on the circulatory system, which is a major body system that included the heart and blood vessels. You studied the chapter in two parts due to the many diseases and related codes. You now have the foundation of knowledge to code diseases and disorders for this chapter.

Finally, you discovered the many diseases and disorders related to the respiratory system. You reviewed the anatomy and terminology to assist in accurate coding from Chapter 10 of the *ICD-10-CM Tabular List*.

Take a moment to reflect on all that you have learned so far in this lesson. If necessary, go back and read sections that you found challenging. You may even want to complete the Practice Exercises one more time. Then, once you're ready, continue by completing the next Quiz. You'll do great!

Step 19: Quiz 25

Once you've mastered the course content, locate this Quiz in your *Online Course* or your *Assignment Pack*. Read and follow the Quiz instructions carefully.

Endnotes

[1] *Scleritis in Emergency Medicine.* Medscape, 16 June 2011. Web. 4 October 2013.

[2] *Brawny scleritis.* Biology Online, 3 October 2005. Web. 4 October 2013.

[3] *Retinal Detachment.* MedLinePlus, 22 May 2011. Web. 4 October 2013.

[4] *Retinopathy of prematurity.* MedlinePlus, 4 May 2011. Web. 4 October 2013.

[5] "New Medicare Diagnosis Codes Apply to Stages of Glaucoma Severity," *Ocular Surgery News.* Healio, 25 July 2011. Web. 4 October 2013.

[6] *The Posterior Stephyloma of Pathologic Myopia.* PubMed.gov, 1977. Web. 4 October 2013.

[7] Pesudovas, Konrad and Schoneveld. "Iridoschisis: A Case Report and Review of the Literature. PMC, 13 July 2001. Web. 4 October 2013.

[8] *Swimmer's Ear.* Mayo Clinic, 9 July 2013. Web. 4 October 2013.

[9] *Smoking & Tobacco Use.* Centers for Disease Control and Prevention. 12 September 2013. Web. 4 October 2013.

[10] *Sydenham's Chorea.* MedlinePlus, 28 August 2012. Web. 4 October 2013.

[11] *Cor Pulmonale.* PubMed Health. 30 May 2013. Web. 4 October 2013.

[12] Rossi, Goodman, and Franquet. "Nonthrombatic Pulmonary Emboli," *The American Journal of Roentgenology and Radium Therapy, 174*.6 (2000): 1499-1508. Web. 4 October 2013.

[13] *Endocarditis.* Mayo Clinic, 11 August 2011. Web. 4 October 2013.

[14] "Expansion of the Time Window for IV tPA Treatment of Acute Ischemic Stroke with Intravenous Tissue Plasminogen Activator," *Stroke 40*, (2009): 2945-2948. Web. 4 October 2013.

[15] *U.S. Surgeon General Celebrates 'World No Tobacco Day 2005' as Part of 'The Year of the Healthy Child.* U.S. Department of Health & Human Services, 31 May 2005. Web. 4 October 2013.

[16] *Influenza (Flu).* Mayo Clinic, 21 February 2013. Web. 4 October 2013.

[17] *Avian Influenza (Bird Flu).* Centers for Disease Control and Prevention, 21 November 2010. Web. 4 October 2013.

[18] *Updated CDC Estimates of 2009 H1N1 Influenza Cases, Hospitalizations and Deaths in the United States, April 2009– April 10, 2010.* Centers for Disease Control and Prevention, 14 May 2010. Web. 4 October 2013.

[19] *Swine Flu (H1N1 flu).* Mayo Clinic, 10 August 2012. Web. 4 October 2013.

[20] *Tonsillectomy.* Mayo Clinic, 4 August 2012. Web. 4 October 2013.

[21] *Interstitial Lung Disease.* Mayo Clinic, 9 July 2011. Web. 4 October 2013.

[22] Koenig and Truwit. "Ventilator-Associated Pneumonia: Diagnosis, Treatment, and Prevention," *Clinical Microbiology Reviews 19*.4 (2006): 637-657. Web. 4 October 2013.

Lesson 26
ICD-10-CM Chapters 11, 12 and 13

Step 1: Learning Objectives for Lesson 26

When you complete the instruction in this lesson, you will be trained to:

- Assess diseases of the digestive system.

- Identify the anatomy, terminology and diseases of skin and subcutaneous tissue.

- Describe the terminology related to diseases of the musculoskeletal system and connective tissue.

- Explain the general notes that relate to Chapters 11, 12 and 13 of the *Tabular List* in the *ICD-10-CM* manual.

- Apply the *Chapter-Specific Guidelines* as they relate to Chapters 11, 12 and 13 of the *Tabular List*.

- Identify the diagnoses and assign the final codes for the documented disorders and diseases.

Step 2: Lesson Preview

In this lesson, you'll encounter a broad variety of diagnoses with many tips to help you select the correct codes. You will begin with the digestive system, which doesn't appear to be a long chapter but contains quite a lot of information. Then, you will explore various diseases and conditions of the skin, muscles, bones and connective tissue. You will also examine one of the larges chapters, diseases of the musculoskeletal system and connective tissue.

Moreover, you will discover how to find and confirm the correct codes for the many disorders and diseases in this chapter. As always, you will have the opportunity to apply what you learn as you code the sample scenarios and Practice Exercises throughout the lesson. So, let's continue our journey through the *ICD-10-CM* manual and diagnostic coding!

Step 3: Diseases of the Digestive System (K00–K954), Part 1

The digestive system consists of the organs associated with the ingestion, digestion and absorption of food. Think about it this way—you'll progress through Chapter 11 of the *Tabular List* in the same sequence that food moves through your body. You will begin at the oral cavity and then move down the esophagus and into the stomach and duodenum, which is the first portion of the small intestine. Then, you'll study diseases of the appendix and hernias before taking a quick break and then move on to the large intestine. You'll finish with codes related to the peritoneum and retroperitoneum; the liver and gallbladder; and the biliary tract and pancreas.

Gastrointestinal system overview
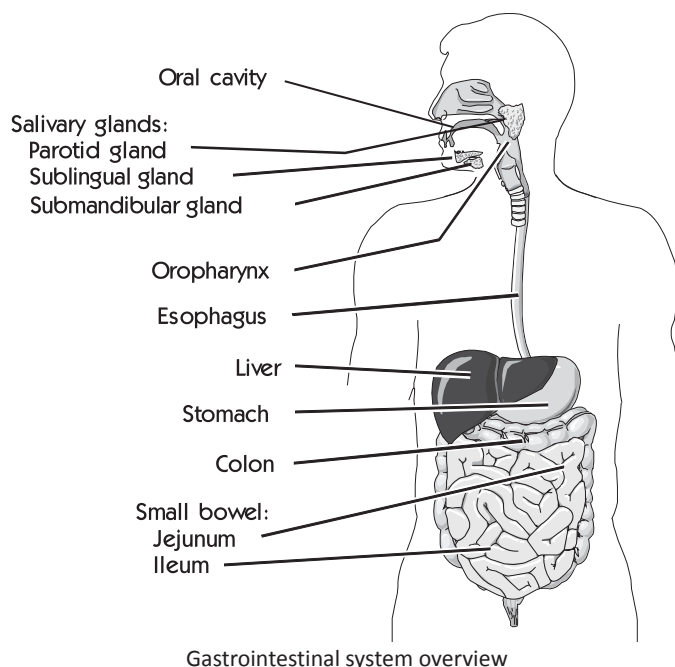
Take a moment to review the conditions that you may code in addition to the codes in this chapter:

● *certain conditions originating in the perinatal period (P04-P96)*

● *certain infectious and parasitic diseases (A00-B99)*

● *complications of pregnancy, childbirth and the puerperium (O00-O9A)*

● *congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)*

● *endocrine, nutritional and metabolic diseases (E00-E88)*

● *injury, poisoning and certain other consequences of external causes (S00-T88)*

● *neoplasms (C00-D49)*

● *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R94)*

As you'll recall, there is a link between tobacco and cardiovascular and respiratory conditions; in addition, exposure to tobacco has oral health consequences. "Smoking and other tobacco products can lead to gum disease by affecting the attachment of bone and soft tissue to your teeth."[1] In this chapter, you will find that the *Tabular List* directs you to assign additional codes to identify conditions related to alcohol abuse and dependence, as well as exposure to, dependence or use of tobacco.

Now, let's explore the sections of this chapter so you'll have a better understanding of the conditions and a chance to practice your coding skills!

Diseases of Oral Cavity and Salivary Glands (K00-K14)

The **oral cavity** encompasses the cavity of the mouth and its associated structures, including the cheek, palate, oral mucosa, glands with ducts opening into the cavity, teeth and tongue. The **teeth** are the hard, calcified structures set in the alveolar processes of the **mandible** (the lower jaw) and the **maxilla** (the upper jaw). During the body's development, disorders associated with the teeth may arise, such as absence of teeth, **mottling** (splotching with patches of color) of the enamel and premature eruption or appearance of teeth. Diseases of the teeth include *dental caries*, abscesses and *gingivitis*.

Dental caries represent one of the most common diseases. **Dental caries**, or **cavities**, are caused by genetic or environmental factors, or both, that involve oral bacteria that erode the surface enamel of the tooth. The defect spreads down into the dentin, which becomes decalcified and disintegrates so that the bacteria spreads deep into the tooth and invades the pulp chamber.

Pulpitis, or inflammation of the root canal, affects the nerves and blood vessels inside the tooth, causing pain. Superficial caries can be treated—but if the infection spreads to the root canal, abscesses and bone infection of the jaw can develop. This requires removal of the tooth.

Did you know that *periodontal disease* accounts for more tooth loss than dental caries and all other dental diseases combined? **Periodontal disease** occurs when bacteria around the tooth cause plaque to form and calcify into tartar. **Gingivitis** is a form of periodontal disease that involves inflammation of the gums. You'll find *K05* is the code block for gingivitis and periodontal diseases.

Diseases of the salivary glands include atrophy, hypertrophy, abscess or fistula of the salivary gland. Again, you'll use an additional code for alcohol abuse and dependence, or exposure, use or dependence to tobacco. Otherwise, coding from this code block is fairly straightforward.

Finally, **stomatitis** is an inflammation of the mucous lining of any structures in the mouth, including the cheeks, gums, tongue, lips and roof or floor of the mouth. Poorly fitting dentures may cause this inflammation.

You'll wrap up this section with a quick discussion of diseases of the tongue, which appear in code block *K14*. **Glossitis** is a condition in which the tongue is swollen and changes color, often making the surface of the tongue appear smooth.[2] Irregular patches on the surface of the tongue create a map-like appearance, known as **geographic tongue**. Meanwhile, **black hairy tongue**, or hypertrophy of tongue papillae, is a temporary, harmless, painless oral condition that gives the tongue a dark, furry appearance.

Now, let's try an example of coding from this section of the *ICD-10-CM Tabular List* with the following operative report.

PREOPERATIVE DIAGNOSIS
Dental caries.

POSTOPERATIVE DIAGNOSIS
Dental caries.

PROCEDURE
DENTAL RESTORATION.

BRIEF HISTORY
This 2-year-10-month-old male has not had any prior dental treatment because of his unmanageable behavior in a routine dental office setting. He was referred to me for that reason to be treated under general anesthesia for his dental work. Cavities have been noted by his parents and pediatrician that have been noted to be pretty severe. There are no contraindications to this procedure. He is healthy. His history and physical is in the chart.

PROCEDURE
The patient was brought to the operating room at 10:15 and placed in the supine position. Dr. X administered the general anesthetic after which two bite-wing and two periapical x-rays were exposed and developed, and his teeth were examined. A throat pack was then placed. Tooth D had caries on the distal surface which was excavated, and the tooth was restored with composite. Teeth E and F had caries in the mesial and distal surfaces; these carious lesions were excavated, and the teeth were restored with composite. Tooth G had caries in the mesial surface which was excavated, and the tooth was restored with composite. Teeth I and L both had caries on the occlusal surfaces which were excavated, and upon excavation of the caries in tooth I, the pulp was perforated, and a therapeutic pulpotomy was therefore necessary. This was done using ferric sulfate and zinc oxide eugenol. For final restorations, amalgam restorations were placed involving the occlusal surfaces of both teeth I and L. A prophylaxis was done and topical fluoride applied, and the excess was suctioned thoroughly. The throat pack was removed, and the patient was awakened and brought to the recovery room in good condition at 11:30. There was no blood loss.

The postoperative diagnosis is dental caries; however, the *ICD-10-CM* differentiates between caries on the chewing surface of the tooth or the smooth surface. Mesial and distal surfaces describe the smooth surface of the tooth, while occlusal refers to the chewing surface. In addition, you need to know if this is limited to the enamel, penetrates into the dentin or extends clear to the pulp of the tooth. So, let's walk through the coding process, step by step.

1. Teeth D, E, F and G have dental caries of the smooth surface, which is limited to the enamel. Therefore, you will use *Caries, dental, smooth surface, limited to enamel* to locate the tentative code *K02.61*. You'll verify this code with the *Tabular List*.

2. Teeth I and L have caries of the chewing surface, with the pulp involved on tooth I. Two codes are necessary here. First, you'll code Tooth L with caries of the chewing surface limited to the enamel. Your coding pathway is *Caries, dental, chewing surface, limited to enamel* for code *K02.51*. Then, you'll code Tooth I, which also involves the chewing surface, but has penetration into the pulp. For this code, the coding pathway is *Caries, dental, chewing surface, penetrating into pulp*, for code *K02.53*.

3. Finally, you'll list the codes as *K02.61 K02.51 K02.53* for this operative report.

Do you see why understanding the anatomy and terminology is important to be successful at locating the correct ICD-10-CM code? A quick look at the details of the anatomy may be necessary when coding some of these reports. Now, let's move to the next section of this chapter.

Diseases of Esophagus, Stomach and Duodenum (K20-K31)

The **esophagus** is the portion of the digestive system that extends from the pharynx to the stomach. The function of the esophagus is to efficiently transport food from the mouth to the stomach. Once the **stomach** receives food from the esophagus, it secretes acid and enzymes that digest the food. The **pyloric sphincter** is the valve that opens to allow food to pass from the stomach to the small intestine. The first part of the small intestine is the duodenum, where the digested food is mixed with bile from the gallbladder and digestive juices from the pancreas. You'll explore the duodenum more a bit later in this lesson.

Esophagus, stomach and duodenum
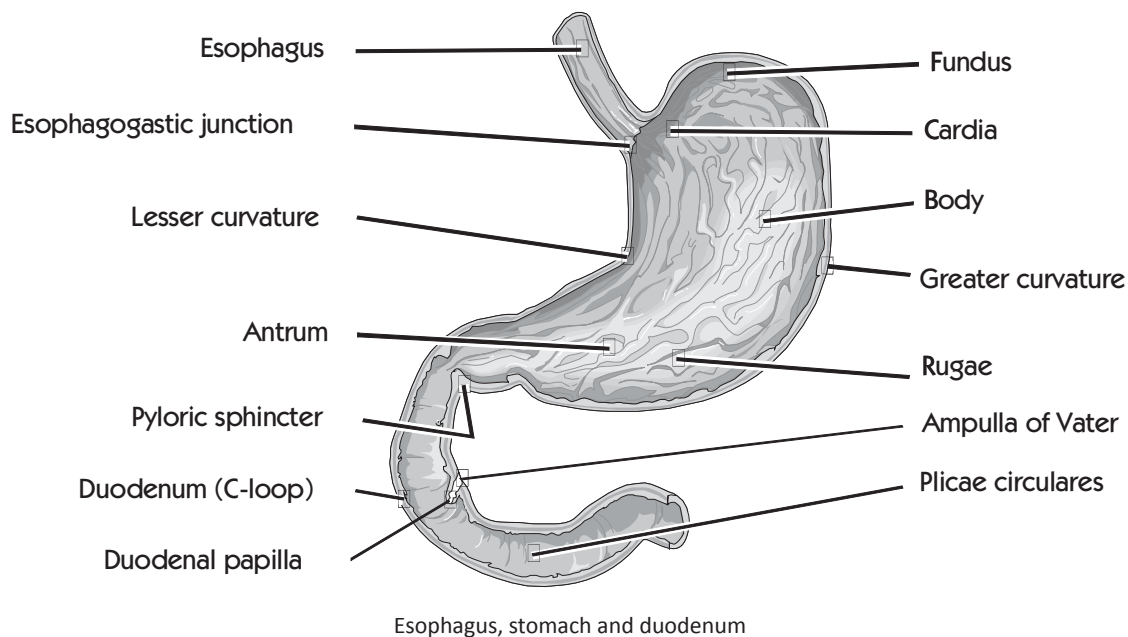
Now that you understand the basic anatomy, let's discuss what the *Tabular List* tells you about coding from this section.

Under the heading for this section you will see Excludes2. This means that you can code hiatus hernia (*K44.-*) in addition to the conditions listed in this section if there is supporting documentation.

Inflammation, irritation or swelling of the esophagus is called **esophagitis**. You need to use an additional code to identify alcohol abuse and dependence, if documented, when assigning a code from the *K20* code block. **Gastro-esophageal reflux** occurs when there is a backflow of gastric acid from the stomach to the esophagus and, possibly, the pharynx.

An **ulcer** is a lesion on the mucous membrane that leads to destruction of the normal tissue lining. Ulcers result from the action of gastric acid and pepsin on the gastric mucosa, which decrease its resistance to the ulcer. This section contains four categories for ulcers: gastric, duodenal, peptic and gastrojejunal.

- Gastric ulcer *(K25)* is a localized area of erosion in the stomach lining.

- Duodenal ulcers *(K26)* occur in the duodenum, which is the beginning of the small intestine.

- Peptic ulcers *(K27)* occur in the esophagus, stomach or duodenum; you'll code them when the site is not specified.

- Gastrojejunal ulcers *(K28)* occur in the areas between the stomach and jejunum, which is the part of the small intestine just after the duodenum.

Acute ulcers are associated with shallow erosion and minimal inflammation. They have a short duration and resolve quickly when the cause is identified and removed. **Chronic ulcers** are associated with a long duration and erode through the muscular wall with the formation of fibrous tissue. They are continuously present for many months or intermittently present throughout the person's lifetime.

Complications of ulcers include *hemorrhages* and *perforations*. To code **hemorrhages** (or bleeding ulcers) and/or **perforations** (holes in the tissue lining), these conditions must be noted in the documentation. The physician's direct observation with an endoscope can confirm the complications.

Diseases of Appendix (K35-K38)

The **appendix** is a worm-like appendage that branches off the large intestine at the **cecum**, which is the first part of the colon. Conditions within this section include *appendicitis*, hyperplasia, diverticulum and fistula of the appendix.
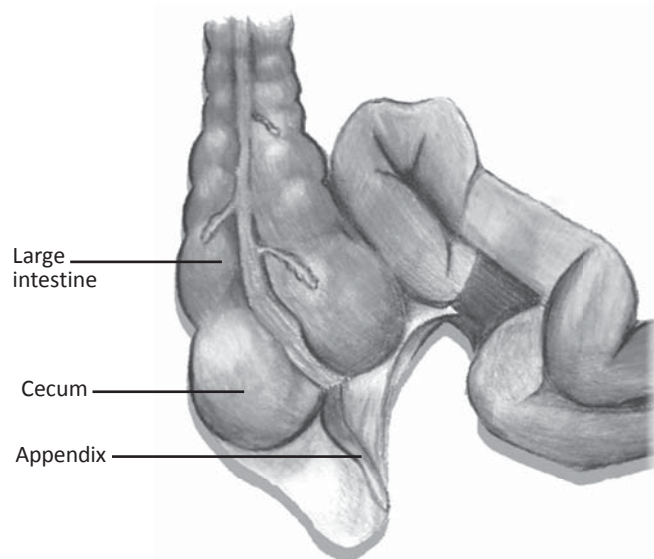
Location of the appendix

Appendicitis is an inflammation of the appendix. Appendicitis begins when the opening from the appendix to the cecum becomes blocked. Bacteria, usually within the appendix, begin to invade the appendix wall, causing inflammation. The infection and inflammation can cause the appendix to rupture. Infection can also spread throughout the **peritoneum,** or the lining of the abdominal cavity. Alternatively, this infection may be confined to the area that surrounds the appendix, forming a **peritoneal abscess**.

By now, you know much more about the anatomy and terminology for diseases of the appendix. Let's see if you can locate the correct code for the following dictation.

PREOPERATIVE DIAGNOSIS
Acute appendicitis.

POSTOPERATIVE DIAGNOSIS
Acute appendicitis, gangrenous.

PRIMARY PROCEDURE
APPENDECTOMY.

PROCEDURE
The patient was taken to the operating room under urgent conditions. After having obtained an informed consent, he was placed in the operating room and under anesthesia. Followed by a time-out process, his abdominal wall was prepped and draped in the usual fashion. Antibiotics had been given prior to incision. A McBurney incision was performed, and it carried out through the peritoneal cavity. Immediately there was purulent material seen in the area. Samples were taken for culture and sensitivity of aerobic and anaerobic sets. The appendix was markedly swollen, particularly in its distal three-fourth, where the distal appendix showed an abscess formation and devitalization of the wall. There was quite a bit of local peritonitis. The mesoappendix was clamped, divided and ligated, and then the appendix was ligated and divided, and the stump buried with a pursestring suture of Vicryl and then a Z stitch. The area was abundantly irrigated with normal saline and also the pelvis. Then the peritoneal and internal fascia were approximated with a suture of 0 Vicryl, and then the incision was closed in layers, and after each layer the wound was irrigated with normal saline. The skin was closed with a combination of a subcuticular suture of fine Monocryl followed by the application of Dermabond. The patient tolerated the procedure well. Estimated blood loss was minimal, and the patient was sent to the recovery room for recovery in satisfactory condition.

Once again, you'll open your ICD-10-CM manual to the *Index to Diseases and Injuries* to begin your search for the correct code. The documentation indicates "acute appendicitis, gangrenous." If you use *Appendicitis, gangrenous* as the coding pathway, you'll find instructions to *see Appendicitis, acute*. So, let's use that coding pathway. Now, the preoperative and postoperative diagnosis listed in the report does not mention peritonitis. However, read the description of the procedure carefully, and you'll see "there was quite a bit of local peritonitis." Therefore, you'll use *Appendicitis, acute, with, peritonitis, localized* to find code *K35.3*. You'll verify this code with the *Tabular List* and then assign it as the correct code for the dictation. As you can see, it is important to read through the entire report to gain a full understanding of the diagnosis to select the accurate code.

Hernia (K40-K46)

A **hernia** is the protrusion of a part or structure through the tissues that normally contain it. This section concentrates on hernias located in the abdominal cavity. You'll find a note in the *Tabular List* indicating that *hernia with both gangrene and obstruction is classified to hernia with gangrene*. In addition, this section includes acquired hernia, congenital hernia (except for diaphragmatic or hiatus) and recurrent hernia. The code blocks are based on where the hernia occurs, as follows:

- *K40* Inguinal hernia—In the groin area

- *K41* Femoral hernia—In the upper thigh

- *K42* Umbilical hernia—Around the belly button

- *K43* Ventral hernia—At the site of a surgical scar

- *K44* Diaphragmatic hernia—In the diaphragm

For accurate coding, you should know if the hernia is bilateral or unilateral; if it is recurrent; if an obstruction is present; and with or without gangrene. It is also important to know that *with obstruction* may be documented as *incarcerated*, *irreducible* or *strangulated*.

Now, read the following SOAP note from an office visit for a patient with a hernia, and then determine how to code the condition.

SUBJECTIVE
A 42-year-old male complains of a lump in the groin, which is tender to the touch. He states the pain increases when he is lifting.

OBJECTIVE
Abdominal exam confirms inguinal hernia on the right side. Attempt to push the protrusion back into the abdominal cavity was unsuccessful.

ASSESSMENT
Unilateral inguinal hernia.

PLAN
Outpatient surgery is required for repositioning.

First, make a mental list of the information you need before coding this office visit. Do you know the location? Yes, it's an inguinal hernia. Is bilateral or unilateral documented? Unilateral. Is it recurrent? No, it is not specified as recurrent. Is there an obstruction? No—there is no documentation for obstruction, incarcerated, irreducible or strangulated. Is with or without gangrene noted? Again, gangrene is not in the documentation, so it is without gangrene. Now, you're ready to go to the *Index* to locate the tentative code. The coding pathway *Hernia, inguinal, unilateral, not specified as recurrent* provides the code *K40.90*. After checking with the *Tabular List*, you can confidently assign this code.

Before moving to the large intestine, let's pause a moment to review what you've learned so far.

Step 4: Practice Exercise 26-1

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Ulcerative stomatitis**

   ICD-10-CM: _____

2. **Acute prepyloric ulcer with hemorrhage**

   ICD-10-CM: _____

3. **Chronic peptic duodenal ulcer, with perforation**

   ICD-10-CM: _____

4. **Appendicitis with peritonitis**

   ICD-10-CM: _____

5. **Strangulated hiatal hernia**

   ICD-10-CM: _____

6. **Coding Challenge**

PREOPERATIVE DIAGNOSIS
Gastroesophageal reflux. Rule out ulcers.

POSTOPERATIVE DIAGNOSIS
Gastroesophageal reflux.

PRIMARY PROCEDURE
ENDOSCOPY.

BRIEF HISTORY
A 52-year-old male presents with difficulty swallowing and a burning sensation in epigastric area.

PROCEDURE
After patient was adequately sedated by anesthesiologist, a flexible esophagoscope is passed from the mouth into the esophagus. Esophageal mucosa appears to be normal. Inflammation consistent with gastroesophageal reflux. No signs of ulcerations.

   ICD-10-CM: _____

Step 5: Review Practice Exercise 26-1

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 6: Diseases of the Digestive System (K00-K954), Part 2

In studying Chapter 11, you began at the oral cavity and then moved down the esophagus and into the first portion of the small intestine. Then, you studied diseases of the appendix and hernias. Now, you're ready to discover diseases and disorders of the large intestine. You'll wrap up this section with codes related to the peritoneum and retroperitoneum; the liver and gallbladder; and the biliary tract and pancreas. Let's continue.

Noninfective Enteritis and Colitis (K50-K52)

This short section includes codes for inflammation and insufficiency of the intestines and inflammation of the colon. Open your *ICD-10-CM* to this section. You'll see that it includes noninfective inflammatory bowel disease, but excludes irritable bowel syndrome *(K58.-)* and megacolon *(K51.-)*. For Crohn's disease *(K50)* and ulcerative colitis *(K51)* you need to use an additional code to identify manifestations, if documented.

Inflammatory bowel disease (**IBD**) is the term used to describe conditions that cause inflammation to the intestines. Abdominal cramps and pain, diarrhea, weight loss and bleeding from the intestine are symptoms of IBD. These symptoms prompt the physician to perform tests to determine the type of IBD—Crohn's disease or ulcerative colitis.

Crohn's disease, or **regional enteritis**, is an inflammation in the intestines, and is found in code block *K50*. This condition can occur anywhere in the GI tract, from the mouth to the end of the rectum. The chronic inflammation causes the intestinal wall to thicken. Medications can help to reduce inflammation. However, if medications are unsuccessful, a bowel resection may be necessary to remove the damaged or diseased intestines.

In some cases, the surgeon will perform a colectomy to remove the entire large intestine. When this is the case, the small intestine becomes connected directly to the rectum. There is no cure for Crohn's disease, even with removal of the diseased or damaged intestine.

Meanwhile, **ulcerative colitis**, code block *K51*, causes inflammation of the large intestine and the rectum, and is often associated with ulcers. To reduce inflammation, physicians will often prescribe corticosteroids. The cure for this condition is surgical removal of the colon. Let's take a look at the following example to better understand this type of condition.

> Holly sees her gastroenterologist for evaluation of diarrhea and severe abdominal pain. After an exam, he diagnoses her with ulcerative colitis and determines that she needs a resection of her rectosigmoid intestine due to an obstruction. Therefore, she has a low anterior rectosigmoid resection. She does well and goes home after a few days of recovery.

The signs and symptoms that brought Holly to the gastroenterologist are the diarrhea and abdominal pain. However, the physician determines Holly has ulcerative colitis, so you won't code the symptoms, but he does not specify the area. You'll use *Colitis, ulcerative, with, complication, obstruction* as the coding pathway to find *K51.912* as the tentative code. After verifying the code in the *Tabular List*, you'll assign *K51.912* to the example.

Other Diseases of Intestines (K55-K64)

This section of Chapter 11 contains a variety of conditions. In a moment, you'll explore *diverticulitis* and *irritable bowel syndrome* in more detail. First, let's review the anatomy of the intestines and the terminology that you'll encounter.

The **small intestine**, which is about 20 feet long, is the portion of the GI tract where all major digestive processes take place. It consists of the duodenum, *jejunum* and *ileum*. The duodenum is located between the pylori sphincter and the jejunum. You'll recall the duodenum is where the digested food mixes with bile from the gallbladder and digestive juices from the pancreas. The digestion process continues in the **jejunum**, where absorption begins—the body begins to receive nutrition from digested food. The **ileum**, the final section of the small intestine, absorbs any nutrients that the jejunum did not absorb.
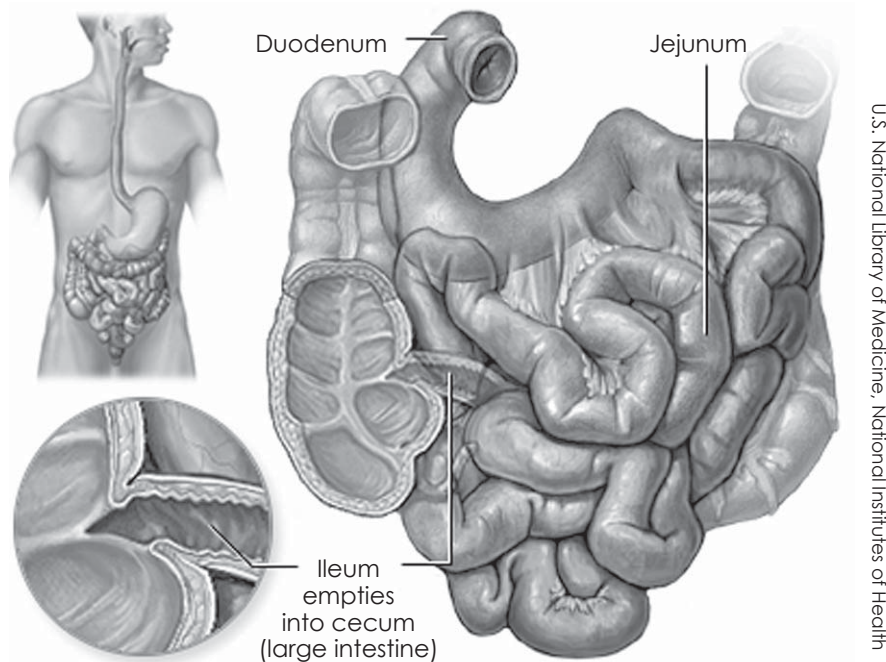
Diagram of the small intestine

The **large intestine** consists of the cecum and colon, ending with the rectum. The **cecum** is a large pouch at the beginning of the large intestine that receives waste material from the small intestine. The **colon**, which is about six feet long, moves waste materials from the cecum to the rectum, absorbing water from the waste as it moves towards the rectum.

A **diverticulum** is a sac-like dilatation or outpouching through a weakened area in the intestinal wall. Diverticula may occur at any point within the gastrointestinal tract but most commonly appear in the sigmoid colon. **Diverticulosis** is a condition in which multiple diverticula are present. **Diverticulitis** is an inflammation of the diverticula. This condition may occur with or without a perforation or abscess, and with or without bleeding.

Locate code block *K57 Diverticular disease of intestine* in the *Tabular List* and you'll see that you should not code congenital diverticulum of the intestine (*Q43.8*) or Meckel's diverticulum (*Q43.0*) with the conditions in this code block. However, you may code diverticulum of the appendix in addition to these conditions if there is supporting documentation.

Now it's time to practice coding again. Read the following procedure report, review what you learned so far in this section and identify the correct code(s).

PREOPERATIVE DIAGNOSIS
Rectal bleeding.

POSTOPERATIVE DIAGNOSIS
Diverticulosis.

PRIMARY PROCEDURE
FLEXIBLE SIGMOIDOSCOPY.

PROCEDURE
The Olympus gastroscope was introduced through the rectum and advanced carefully through the colon for a distance of 90 cm, reaching the proximal descending colon. At this point, stool occupied the lumen, preventing further passage. The colon distal to this was well cleaned out and easily visualized. The mucosa was normal throughout the regions examined. Numerous diverticula were seen. There was no blood or old blood or active bleeding. A retroflexed view of the anorectal junction showed no hemorrhoids. He tolerated the procedure well and was sent to the recovery room.

FINDINGS
1. Sigmoid and left colon diverticulosis.
2. Otherwise normal flexible sigmoidoscopy to the proximal descending colon.
3. The bleeding was most likely from a diverticulum, given the self limited but moderately severe quantity that he described.

You'll locate the main term *Diverticulosis* in the *Index*. Now, is this condition in the large or small intestine? With your background knowledge of anatomy, you know that the sigmoid and colon are part of the large intestine, so you'll continue your search using *large intestine* as the subterm. There is no documentation of active bleeding and the physician cannot confirm that the previous bleeding was due to the diverticulum. Therefore, your tentative code is *K57.30*. Turn to the *Tabular List* to confirm the code. Perforation or abscess is not noted, so you know you have selected the correct code for the procedure report.

Irritable bowel syndrome (**IBS**) is a disorder of the large intestine characterized by abdominal cramping and bloating along with alternating diarrhea and constipation. IBS *(K58)* is caused by an interruption in the bowel movement process that results in the contents of the colon lacking movement (**constipation**) or moving too fast (**diarrhea**). Although this process causes discomfort, it does not damage the intestines, and should not be confused with IBD. Proper diet, stress management and medication can help control the symptoms of IBS.

Diseases of Peritoneum and Retroperitoneum (K65-K68)

Recall that the peritoneum is the membrane that lines the abdominal cavity and covers most of the abdominal organs. By producing a lubricating fluid, the peritoneum helps the organs to move smoothly inside the abdomen. Peritonitis is an inflammation of the peritoneum, causing the abdomen to be very painful or tender. The space between the peritoneum and the abdominal wall is the **retroperitoneum**. Disorders of the retroperitoneum *(K68)* are usually caused by an abscess, or a collection of pus.

Diseases of Liver (K70-K77)

The **liver** is the large organ located on the right side of the abdomen, consisting of two large sections called lobes. The liver filters blood coming from the digestive tract before passing it to the rest of the body.

The *Tabular List* indicates that you should *not* code jaundice NOS with conditions in this section. On the other hand, you can code hemochromatosis, Reye's syndrome, viral hepatitis or Wilson's disease with these conditions, if there is supporting documentation.

Alcoholic liver disease is damage to the liver and its function due to alcohol abuse. When you assign a code from code block *K70 Alcoholic liver diseases*, you need to use an additional code to identify alcohol abuse and dependence *(F10.-)*, if there is documentation for it. When the alcohol causes swelling and inflammation of the liver, it is considered **alcoholic hepatitis**. This condition may occur with or without **ascites**, or excess fluid accumulation in the peritoneal cavity.

Cirrhosis involves scarring of the liver and poor liver function, and is the final phase of chronic liver disease. This condition may be the result of alcohol abuse or, alternatively, may not be alcohol-related. If the cirrhosis is a result of alcohol abuse, you'll assign code *K70.30* or *K70.31*. For cirrhosis not related to alcohol, you'll assign the code from the *K74* code block.

Diseases of Gallbladder, Biliary Tract and Pancreas (K80-K87)

The **gallbladder** is a small pouch just beneath the liver that stores bile for digestion. At that point, the **biliary tract** transports bile into the duodenum. The **pancreas** plays an essential role in converting the food eaten into fuel for the body's cells. It produces two types of secretions: *exocrine* and *endocrine* secretions. The **exocrine secretions** consist of pancreatic juice and enzymes that help to aid digestion. The **endocrine secretions** regulate blood sugar.

Let's move on to the disorders that you may encounter in this section. First, **cholelithiasis** (*K80*) involves calculus of the gallbladder or bile duct. In coding, you will default to gallbladder when the documentation indicates cholelithiasis without noting whether it is in the gallbladder or bile duct. **Gallstones** are composed almost entirely of excessive blood pigment, sometimes with calcium deposits. Gallstones may lodge in the neck of the gallbladder or the cystic duct, which may lead to an inflammation of the gallbladder known as **cholecystitis**. You will see cholelithiasis with or without cholecystitis, and you'll need to code appropriately either way.
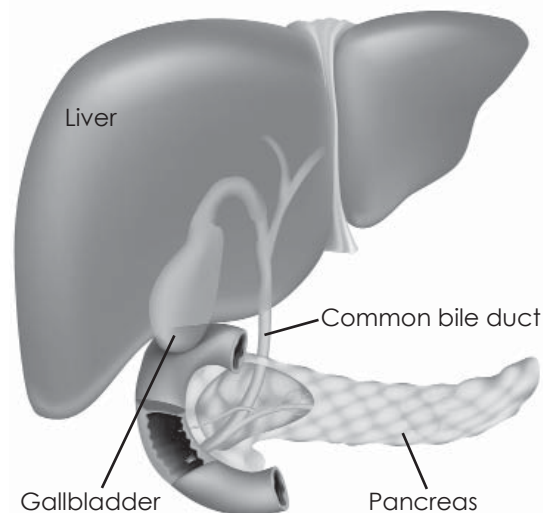
The gallbladder

Inflammation, obstruction, perforation and abnormal passages are disorders associated with the bile duct. **Cholangitis** is the term that indicates inflammation of the biliary ducts.

When the pancreas is inflamed or infected, it is known as **pancreatitis**, which can be categorized as either acute or chronic. Sudden inflammation that resolves quickly is **acute pancreatitis**, which you'll find in code block *K85*. This condition is usually caused by gallstones or overconsumption of alcohol. When gallstones are the cause, surgically removing the stones will stop the inflammation.

Chronic pancreatitis *(K86.1)* is an ongoing inflammation of the pancreas. In addition to inflammation, scarring of the tissues in the pancreas occurs, resulting in an inability to produce sufficient enzymes for the digestion process. This, in turn, interferes with insulin production. The slow process of inflammation eventually destroys the pancreas. In fact, one acute pancreatitis attack may trigger the chronic form of pancreatitis.

Now, let's code a diagnosis from this section of the digestive system chapter: A patient's diagnosis is cholelithiasis with cholecystitis. What code will you use to indicate this condition? Will you assign two codes for the two conditions? What main term will you use for your coding pathway? The answers to these questions will direct you to the accurate code.

You'll begin in the *Index* with the main term *Cholelithiasis*. The documentation does not state whether the calculus is in the bile duct or gallbladder, but you know to default to the *gallbladder*, which is a nonessential modifier of the main term. You see directions to *see Calculus, gallbladder*. Using this new pathway, you'll add the subterms *with, cholecystitis* to find the tentative code *K80.10*. You'll see in the *Tabular List* that *K80.10* codes to *Calculus of gallbladder with chronic cholecystitis without obstruction*. Chronic? Was there documentation for *chronic* cholecystitis? No. However, look at the inclusion listed under the code description: *Cholelithiasis with cholecystitis NOS*. This is exactly what you need, so you have selected the correct code. Nice work!

Other Diseases of the Digestive System (K90-K95)

Chapter 11 of the *Tabular List* concludes with other diseases of the digestive system. You will find intestinal malabsorbtion; intraoperative and postprocedural complications; and other diseases, such as hematemesis and melena in this section. The key to coding this section is to read the inclusions and exclusions carefully, and be sure to review the notes that suggest additional codes for accurate code assignment.

Once again, let's pause to review what you've learned in this section about diseases of the digestive system.

Step 7: Practice Exercise 26-2

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Impacted colon**

   ICD-10-CM: _____

2. **Cirrhosis of the liver**

   ICD-10-CM: _____

3. **Dumping syndrome postgastric surgery**

   ICD-10-CM: _____

4. **Coding Challenge**

PREOPERATIVE DIAGNOSIS
Epigastric abdominal pain.

POSTOPERATIVE DIAGNOSIS
Gastritis, gastric ulceration and duodenal ulceration.

PRIMARY PROCEDURE
ESOPHAGOGASTRODUODENOSCOPY WITH BIOPSY.

DESCRIPTION OF PROCEDURE
Following consent, the patient was brought to the endoscopy suite and placed in the sitting position, where he received Hurricaine spray to his oropharynx. The patient was placed in the left lateral decubitis position, where a bite-block was placed between his incisors. The Olympus video gastroscope was placed and advanced under visualization down through the oropharynx, the proximal, and the distal esophagus, through the gastroesophageal junction and into the gastric body and duodenum via the pylorus. The endoscope was withdrawn back into the gastric antrum, and the antral mucosa was biopsied. The endoscope was withdrawn back into the gastric body, retroflexed with visualization of the gastric fundus. The endoscope was then straightened and withdrawn completely under suction. The patient tolerated this procedure very well.

   ICD-10-CM: _____
   ICD-10-CM: _____
   ICD-10-CM: _____

Step 8: Review Practice Exercise 26-2

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 9: Diseases of the Skin and Subcutaneous Tissue (L00-L99)

Chapter 12 of the *ICD-10-CM* manual's *Tabular List* contains codes for the skin, which is the largest organ in the body. The skin is the covering that protects all other organs by acting as a barrier against infection and disease. The cells of the skin constantly change and adapt to outside influences. Because the skin is constantly exposed, it is a prime target for infection, inflammation and other diseases.

As with previous chapters of the *ICD-10-CM*, you will find a list of conditions to code in addition to diseases of the skin and subcutaneous tissue. These conditions are:

- *certain conditions originating in the perinatal period (P04-P96)*

- *certain infectious and parasitic diseases (A00-B99)*

- *complications of pregnancy, childbirth and the puerperium (O00-O9A)*

- *congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)*

- *endocrine, nutritional and metabolic diseases (E00-E88)*

- *lipomelanotic reticulosis (I89.8)*

- *neoplasms (C00-D49)*

- *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R94)*

- *systemic connective tissue disorders (M30-M36)*

- *viral warts (B07.-)*

Before you explore the details of the conditions found in this chapter, let's do a quick review of anatomy and terminology related to the skin and subcutaneous tissue. The skin consists of a thick, outer layer called the **epidermis** and a thicker, inner layer called the **dermis**. The skin also includes **appendages**, which are structures that grow within the skin. Skin appendages are the hair, nails and glands (sebaceous, apocrine and eccrine glands). The epidermis continually forms new cells in its deepest layer and sheds dead cells at its surface. The epidermis contains **melanin**, the pigment that gives the skin color. The epidermis, or cuticle, consists of stratified squamous epithelial tissue. The epidermis of the palms of the hands and soles of the feet has the following layers: **stratum corneum** (horny layer), **stratum lucidum** (clear layer), **stratum granulosum** (granular layer), **stratum spinosum** (prickle cell layer) and **stratum germinativum** (basal layer). The stratum lucidum is present only in the thick skin of the palms and soles.

The dermis, or corium, consists of fibrous connective tissue. It is primarily composed of fibrils of collagen. Collagen is responsible for the mechanical strength of the skin. The dermis is the layer of skin that lies beneath the epidermis, and consists of the **papillary** (or superficial) **layer** and the **reticular** (or deeper) **layer**. The dermis contains blood vessels, lymphatics, nerves, nerve endings, muscle, hair follicles and sebaceous and sweat glands.

Infections of the Skin and Subcutaneous Tissue (L00-L08)

This section of Chapter 12 contains codes for infections of the skin and *subcutaneous tissue*. The **subcutaneous tissue** is the layer of loose connective tissue located directly beneath the skin. Open your *ICD-10-CM* to the *Tabular List* to read the notes for this section. You'll see that you will use an additional code to identify the infectious agent. There is also a long list of other conditions that may be present with the conditions in this section. If documented, it is acceptable to code both conditions.

Code *L00* codes to *Staphylococcal scalded skin syndrome*, which can vary from a few blisters localized to the site of infection to a severe exfoliation affecting almost the entire body. This condition is also known as Ritter's disease, or Ritter von Ritterschein disease.

Moving on, a **furuncle** is a painful nodule formed in the skin; it is an inflammation of the dermis and the subcutaneous tissue that encloses a central core. The furuncle is commonly known as a **boil**, and is caused by *staphylococci* that enter through the hair follicles. A **carbuncle**, on the other hand, is an infection of the skin and subcutaneous tissue composed of a cluster of furuncles, usually due to *Staphylococcus aureus*, which results in cell death. When you code a carbuncle or furuncle, you will code to the site.

Cellulitis, found in code block *L03*, is an acute, widely distributed, spreading, fluid-filled, pus-producing, suppurative inflammation of the deep subcutaneous tissues and, sometimes, muscles. This condition may be associated with abscess or localized collection of pus formation. Again, codes are provided for you to specify the site of the infection.

The following terminology will help you code conditions in this section correctly:

- **Felon** is a painful abscess caused by infection in the closed space of the fingertip.

- **Onychia** is an inflammation of the nail matrix that causes nail loss.

- **Paronychia** is an inflammation of the tissue folds around the nail.

Now that you have some basic definitions and coding information for this section, put your *ICD-10-CM* manual to work by coding the following scenario:

CT OF NECK
Axial slices were obtained from the base of the skull to the thoracic inlet, following intravenous contrast infusion. Soft-tissue and bone window images were obtained for interpretation. There is an irregular fluid collection seen, with adjacent soft-tissue density, at the level of the vocal cord, just medial to the sternocleidomastoid muscle. Further collection appears to extend superiorly to the level of the hyoid bone and inferior to the level of the thyroid. Adjacent soft-tissue swelling is seen. There are several small lymph nodes seen at the left side of the neck. The findings are consistent with the clinical diagnosis of left deep neck abscess. Remainder of the findings appears unremarkable.

IMPRESSION
Neck abscess.

In the *Index*, you'll use *Abscess, neck* as the coding pathway. The tentative code *L02.11* is provided. You'll verify this code in the *Tabular List*, checking for the highest specificity. The organism is not documented, so you can't use an additional code to identify it; therefore, you will assign *L02.11* to the scenario. You're getting the hang of it!

Bullous Disorders (L10-L14)

Bullous skin disorders are autoimmune disorders characterized by the presence of blisters or erosions of the skin and mucous membranes.[3] You'll note that *benign familial pemphigus, staphylococcal scalded skin syndrome* and *toxic epidermal necrolysis* should never be used in the same case as the codes in this section.

Pemphigus vulgaris, the most common type of pemphigus, is characterized by blisters that occur within the lower layer of the epidermis. With **pemphigus foliaceus**, on the other hand, the blisters form in the top layer. Because pemphigus is found in the epidermis, the blisters are soft, limp and easily broken.

Pemphigold (*L12*) is also a blistering disorder caused by the autoimmune system. This condition is found in the layer below the epidermis, which is the dermis. These deeper blisters are tense, or rigid, and don't break easily.

Dermatitis and Eczema (L20-L30)

This section contains a variety of diseases with symptoms including inflamed, erupting, red, scaly and itching skin. These conditions include *seborrheic dermatitis*, *contact dermatitis* and *pruritus*. There is an important note at the beginning of this section:

Note: In this block, the terms dermatitis and eczema are used synonymously and interchangeably.

You will also note a list of conditions that can be coded with dermatitis and eczema, as long as they are documented. Now, let's look at some of these conditions.

Seborrheic dermatitis (*L21*) is a common chronic disease that affects about 15 percent of the U.S. population. The typical symptoms of seborrheic dermatitis are reddening, scaling and itching of the skin, especially under the nose, in the eyebrows and on the scalp. The skin becomes dry and begins to flake. On the scalp, this condition is known as **dandruff**. To code *Dandruff*, locate that as the main term in the *Index to Diseases and Injuries,* and you will find the code *L21.0*. In the *Tabular List,* you find *L21.0 Seborrhea capitis*. Although dandruff isn't specified as an inclusion, you can be comfortable that this is the correct code, based on the *Index to Diseases and Injuries* instructions.

Another condition, **contact dermatitis**, is an acute or chronic inflammatory rash causing itching and redness. It is the result of skin contact with a specific allergen or irritant. There are two types of contact dermatitis: *allergic contact dermatitis* (code block *L23*) and *irritant contact dermatitis* (code block *L24*). With **allergic contact dermatitis**, there is a skin reaction to something that has touched the skin at that site. The allergic reaction is often delayed, with the rash appearing 24 to 48 hours after exposure. Common allergens include natural rubber, metals (such as nickel), costume jewelry, perfume, cosmetics, hair dyes and plants, including poison ivy. **Irritant contact dermatitis** results from coming in contact with a substance that directly damages the skin.

Common offenders include harsh soaps, chemical solvents and cosmetics or skin products, including deodorant. With code blocks *L23* and *L24*, as well as for *L25, Unspecified contact dermatitis*, you will code first the appropriate code from *T36-T50*, which codes for adverse effect, to identify the drug when the condition is due to drugs contacting the skin.

Now, see how you do with coding dermatitis with the following report.

SUBJECTIVE
This 1+ year, black female is here for a consult of a lifelong history of atopic eczema. The patient's mom is from Tanzania. The patient has been treated with Elidel cream b.i.d. for six months but apparently this has stopped working now, and it seems to make her more dry and plus she has been using some Johnson's Baby Oil on her. The patient is a well-developed baby. Appears stated age. Overall health is good. The patient has eczema and a positive atopic family history. No psoriasis. No known drug allergies.

OBJECTIVE
The patient has eczematous changes today on her face, trunk and extremities.

ASSESSMENT
Atopic eczema.

PLAN
1. Discussed condition and treatment with Mom.
2. Continue bathing twice a week.
3. Discontinue hot soapy water.
4. Discontinue Elidel for now.
5. Add Aristocort cream 0.25%, Polysporin ointment, Aquaphor b.i.d. and p.r.n. itch. We will see her in one month if not better otherwise on a p.r.n. basis. Send a letter to ABC Practice program.

The patient is diagnosed with atopic eczema. Turn to *Eczema* in the *Index*. Can you find the subterm *atopic*? No. Recall the note at the beginning of this section. Eczema and dermatitis can be used interchangeably. So, try using *Dermatitis* as the main term to see if you can find the subterm *atopic*. Did you find it? You should have the tentative code of *L20.9*. A quick check with the *Tabular List* ensures that this code is correct!

Papulosquamous Disorders (L40-L45)

Papulosquamous disorders are conditions characterized by **papules**, which are solid, raised spots on the skin, and **scales**, or scaly, flakey, dry skin. **Psoriasis** is a common skin inflammation that involves the eruption of reddish, thick, dry, silvery-scaled skin, predominantly on the elbows, knees, scalp and trunk. This condition is incurable, and treatment focuses on control of the symptoms.

Another papulosquamous disorder, **Pityriasis rosea** (*L42*) is an eruption of macules or papules on the trunk and, less frequently, on the extremities, scalp and face. A single, larger, scaling lesion known as the **herald patch** frequently precedes pityriasis rosea by about a week. The patch lasts about six to eight weeks. Then, the lesions occur and follow the crease lines of the skin. Spontaneous remission occurs in approximately eight weeks. Treatment for this condition attempts to relieve the symptoms, rather than cure the rash.

Urticaria and Erythema (L49-L54)

Urticaria, commonly known as hives, is characterized by raised, often itchy, red welts on the surface of the skin. **Erythema** is a reddening of the skin due to inflammation. This section excludes Lyme disease (*A69.2-*) and rosacea (*L71.-*). Now, let's take a look at the details of this section.

Exfoliation is the process of removing the oldest dead skin on the skin's surface. When exfoliation is due to an erythematous condition, you will assign a code from code block *L49*. In addition, you'll code first the erythematous condition that is causing the exfoliation, such as Ritter's disease, Staphylococcal scalded skin syndrome, *Stevens-Johnson syndrome* or toxic epidermal necrolysis, followed by the appropriate code from code block *L49*.

Stevens-Johnson syndrome (*L51.1*) is a type of **erythema multiforme**, which is a hypersensitivity reaction that occurs in response to medication, infection or illness.

The following dictation contains diagnoses from the last two sections of the *ICD-10-CM*'s Chapter 12. Read through it carefully to see if you can come up with the accurate diagnosis codes.

CHIEF COMPLAINT
Itchy rash.

HISTORY OF PRESENT ILLNESS
This 34-year-old gentleman awoke this morning noting some itchiness to his back and then within a very short period of time realized that he had an itchy rash all over his torso and arms. No facial swelling. No tongue or lip swelling. No shortness of breath, wheezing, or other associated symptoms. He cannot think of anything that could have triggered this off. There have been no changes in his foods, medications, or other exposures as far as he knows. He states a couple of days ago he did work and was removing some insulation but does not remember feeling itchy that day.

PAST MEDICAL HISTORY
Medications: None.
Illnesses: Negative for chronic medical problems.
Operations: Has had previous back surgery and appendectomy, otherwise generally healthy.
ALLERGIES: TORADOL, MORPHINE, PENICILLIN, AND AMPICILLIN.
Social history: The patient is accompanied with his wife.
Family history: Negative

REVIEW OF SYSTEMS
As mentioned, denies any oropharyngeal swelling. No lip or tongue swelling. No wheezing or shortness of breath. No headache. No nausea. Notes itchy rash, especially on his torso and upper arms.

PHYSICAL EXAMINATION

GENERAL: The patient is in no distress. Sitting quietly on the gurney.

VITAL SIGNS: The patient was afebrile. He is slightly tachycardic, 105, but stable blood pressure and respiratory rate

HEENT: Unremarkable. His oral mucosa is moist and well hydrated. Lips and tongue look normal. Posterior pharynx is clear.

NECK: Supple. His trachea is midline. There is no stridor.

CHEST: Heart: Without murmur. Slight tachycardia. Lungs: Very clear with good breath sounds in all fields. There is no wheezing. Good air movement in all lung fields.

ABDOMEN: Soft, nontender.

SKIN: Notable for a confluence erythematous, blanching rash on the torso as well as more of a blotchy papular, macular rash on the upper arms. He noted some on his buttocks as well. Remaining of the exam is unremarkable.

IMPRESSION

Allergic urticaria and pruritus.

PLAN

The patient was treated with epinephrine 1:1000, 0.3 mL subcutaneously along with 50 mg of Benadryl intramuscularly. After about 15-20 minutes, he states that itching started to feel better. The rash has started to fade a little bit and feeling a lot more comfortable. The patient has what looks to be some type of allergic reaction, although the underlying cause is difficult to assess. He will make sure he goes home to look around to see if there is in fact anything that changed recently that could have triggered this off. In the meantime, I think he can be managed with some antihistamine over-the-counter. He is responding already to Benadryl and the epinephrine that we gave him here. He is told that if he develops any respiratory complaints, shortness of breath, wheezing, or tongue or lip swelling he will return immediately for evaluation. He is discharged in stable condition.

The provider determines the patient has allergic urticaria and pruritis, which requires two separate codes. First, locate the code for the *Urticaria*, by using that as the main term in the *Index to Diseases and Injuries*. The subterm *allergic* indicates the tentative code of *L50.0*. After verifying that code in the *Tabular List*, you'll go back to the *Index* to locate the main term *Pruritis*. The type of pruritis isn't documented, so you'll select the tentative code *L29.9*. Again, turn to the *Tabular List* to verify that code. Finally, you'll assign *L50.0 L29.9* to the dictation. Pretty straightforward, isn't it? You're ready to move on to the next section of Chapter 12.

Radiation-related Disorders of the Skin and Subcutaneous Tissue (L55-L59)

Sunburns, keratosis and *radiodermatitis* are a few of the conditions found within this section of Chapter 12. As most people know, **sunburn** is the result of too much sun exposure, as the ultraviolet rays damage the skin. The provider may document the degree of the burn, which is based on the depth affected.

- First degree sunburns—Injury to the epidermis, resulting in redness and, possibly, swelling and pain

- Second degree sunburns—Injury extends to the dermis and is characterized by blisters, redness, swelling and pain

- Third degree sunburns—Require immediate medical attention, as the subcutaneous tissue and fat layers are damaged, which can lead to infection

- Fourth degree sunburns—Very serious sunburns, as there is damage to the muscle under the subcutaneous skin layer

Epidermis		
Dermis		
Hypodermis - Subcutaneous fat		
First degree burn	Second degree burn	Third degree burn
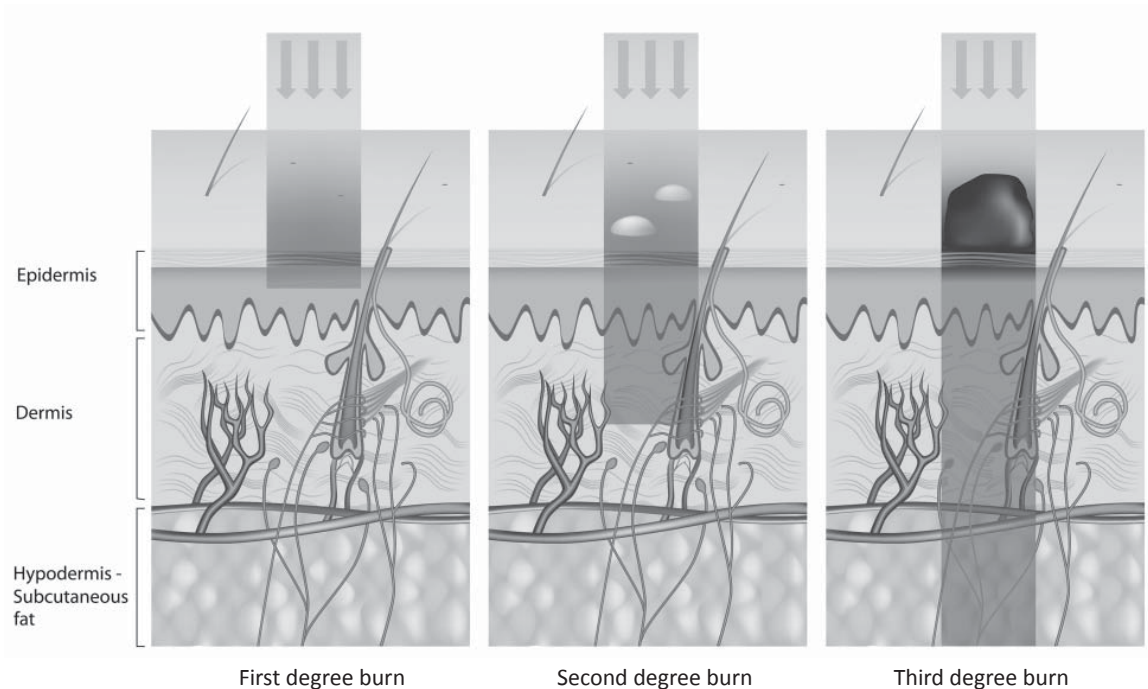
The provider must document the degree of the sunburn; the medical coder does not determine the degree. If it's not documented, you'll assign code *L55.9 Sunburn, unspecified*.

Before moving on to the next code section, let's briefly discuss radiodermatitis, which you'll find in code block *L58*. **Radiodermatitis** is an inflammation of the skin resulting from exposure to biologically effective levels of ionizing radiation. You will use an additional code to identify the source of the radiation (*W88*, *W90*) when coding radiodermatitis.

Disorders of Skin Appendages (L60-L75)

Recall that skin appendages are structures that grow within the skin, such as hair, nails and glands. Be sure to note the Excludes1 here: congenital malformations of integument (*Q84.-*) should not be coded with this section.

An **ingrowing nail** (also known as an **ingrown nail**) is a condition that usually affects the toenail, but it can affect the fingernail, as well. In this condition, the nail fold overgrows one edge of the nail, and a pus-forming lesion forms. Ingrown nails are the result of faulty trimming of the nails or pressure from a tight shoe on the toenails. To code an ingrown toenail, simply locate *Ingrowing* as the main term in the *Index to Diseases and Injuries,* and then *nail* as the subterm. When you look at the tentative code *L60.0* in the *Tabular List,* you will find that this is the accurate code.

One condition included in diseases of the hair and hair follicles is alopecia, which is hair loss or baldness. This condition can be found in code block *L63*. Age, genetics and testosterone, rather than disease, usually influence baldness. According to the American Academy of Dermatology, the average scalp loses between 50-100 hairs every day.[4] When a hair falls out, it is usually replaced within six months with a new one. When the body fails to replace the fallen hair, it is known as genetic hair loss. Hair loss is a gradual process of losing hair in patches or throughout the entire head.

Other Disorders of the Skin and Subcutaneous Tissue (L80-L99)

The final section of this chapter is a rather long one. You'll find a variety of codes here, but you'll focus on the details of *corns*, *callus* and *pressure ulcers* in this chapter.

Corns are localized thickening of the skin. Continuous pressure over the bony areas of the foot, especially the metatarsal head, causes corns, frequently resulting in localized pain. Shoes that do not fit properly can cause corns. A **callus**, or callosity, is an area of thickened skin. Regular or prolonged pressure or friction is the usual cause. Gardeners can develop calluses on the palms of their hands, joggers on the soles of their feet and guitarists on the tips of their fingers. Code *L84* is used for corns and callosities.

A **pressure ulcer** is an area of skin that breaks down as the result of constant pressure, which reduces the blood supply, causing tissue in the area to die. This condition may also be known as bed sores, decubitis ulcers, plaster ulcers, pressure areas and pressure sores. You will *code first any associated gangrene* (*I96*). In addition, be sure to review the various conditions that can be coded with this code block, if the condition is also documented.

Pressure ulcers have combination codes found in category *L89* that identify the site of the pressure ulcer, as well as the stage. The site identifies the location and laterality. The *ICD-10-CM* classifies pressure ulcer stages based on severity, and provides codes for unspecified stage or *unstageable*.

There are four stages of pressure ulcers:

- Stage 1—Pre-pressure ulcer skin changes are limited to persistent focal erythma. In this stage, the sores are not opened wounds; the skin is still closed, but the wounds can be very painful. The skin may be warm, firm or stretched.

- Stage 2—Pressure ulcers may have abrasions, blisters or partial thickness skin loss involving the epidermis and/or dermis. The skin is tender and painful. Bacteria can enter the site due to the opened wound.

- Stage 3—Pressure ulcer with full-thickness skin loss involving damage or necrosis of the subcutaneous tissue. The skin breaks down and looks like a crater, in which there is damage to the tissue below the skin. The fat layer is exposed.

- Stage 4—Pressure ulcer with necrosis of soft tissues through the underlying muscle, tendon or bone. The pressure ulcer is very deep, causing extensive damage.

When the documentation does not identify or describe the stage, you will code to unspecified stage. **Unstageable** refers to pressure ulcers whose stage cannot be clinically determined, possibly because the ulcer is covered by **eschar**, or dead tissue.

As the pressure ulcer heals, the stage will change. You should assign the appropriate code based on the current documentation. However, if the documentation indicates the pressure sore has completely healed, no code is necessary.

Now, see how you do with coding the following operative report.

PREOPERATIVE DIAGNOSIS
Chronic stage IV pressure ulcer of the right heel.

POSTOPERATIVE DIAGNOSIS
Same.

PRIMARY PROCEDURE
EXCISIONAL DEBRIDEMENT OF SKIN AND SUBCUTANEOUS TISSUE OF HEEL.

PROCEDURE
The patient's foot was prepped with dilute betadine solution. Following this, the necrotic tissue surrounding the ulcer was sharply excised through the skin and the subcutaneous tissue. The tissue was debrided until it started to bleed around the edge of the ulcer. Adequate hemostasis was noted. This process was accomplished with minimal local anesthesia, and the patient tolerated it with little or no pain. The wound was packed with saline-dampened gauze and wrapped with sterile dressings.

How did you do? Did you get code *L89.614*? If so, great job! If not, review the following steps for a better understanding of the process. You'll use *Ulcer, pressure, stage 4, heel* as the coding pathway to find the tentative code *L89.6-*. This is an invalid code because it is not complete. You must go to the *Tabular List* to determine the final digits. The *right* heel is noted, so you'll find *L89.61*, and then look through the codes until you find *stage 4. L89.614* is the correct code for this operative report.

As you wrap up Chapter 12 in the *ICD-10-CM*, keep in mind that some skin conditions may be the result of another disease or a drug reaction. You are directed to code first to identify the drug or underlying disease. Now that you are aware of the notes found within this chapter, you're ready to move on to *Diseases of the Musculoskeletal System and Connective Tissue*. First, however, complete a Practice Exercise to build up those coding skills!

Step 10: Practice Exercise 26-3

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Boil located on the right side of the chin**
    ICD-10-CM: _____

2. **Eczema due to petting her cat**
    ICD-10-CM: _____

3. **Perianal itch**
    ICD-10-CM: _____

4. **Severe sunburn of face and neck**
    ICD-10-CM: _____

5. **Baldness**
    ICD-10-CM: _____

6. **Lupus erythematosus**
    ICD-10-CM: _____

7. **Patient has left dominant side hemiplegia due to cerebrovascular disease presenting with a stage 2 pressure ulcer located on the left buttocks, resulting from contact with wheelchair.**
    ICD-10-CM: _____
    ICD-10-CM: _____

Medical Coding and Billing Specialist

8. Coding/Billing Challenge

Use the following encounter form and dictation to create a CMS-1500 version 02/12 claim form using MedLook.

Roger Floyd, MD
NPI: 0102033210

Joyce Hart, MD
NPI: 0188123456

Scott Olson, MD
NPI: 0199654321

The Womens Clinic
1200 Carol Lane
Brown, CO 80001-4790
(970) 555-1010
EIN: 99-9889009
NPI: 0220332233

☑ 11 Physician Office
☐ 12 Private Residence
☐ 22 Outpatient Hospital
☐ 23 Hospital Emergency Room
Participating Provider ☑Y ☐N

Physician signature: _Scott Olson, MD_

Patient Information

Name	Sally R. Tucker	**Date of Birth**	11-26-70
Address	1801 Peterson Court	**Sex**	female
City	Springtown	**State**	CO
ZIP	80002		
Home Phone	970-555-3255		

Insurance Information

Primary Insurance

Name	Blue Cross of Iowa
ID#	321-1010
Group#	BA1503
Address	PO Box 1677
City	Sioux City
State	IA **ZIP** 51102-1677
Primary Insured Name	Sally
DOB	
Relation to Patient	self

Secondary Insurance

Name	Mutual Life
ID#	402-4679
Group#	LA4832
Address	PO Box 911
City	Denver
State	CO **ZIP** 80111-0911
Secondary Insured Name	Gregory S. Tucker
DOB/Sex	9-2-71 male
Relation to Patient	spouse
Address/Phone	same as patient

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Sally R. Tucker
Signature of patient (or parent of minor child)

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Gregory S. Tucker
Signature of patient (or parent of minor child)

Date of Service	3/3/20XX	
Diagnosis	**Procedure**	**Charge**
	99212 office, est. patient	$42.00

Today's Charge	$42.00
Copayment	$ 0.00
Balance	$42.00

Name: Sally R. Tucker
DOB: November 26, 1970
Date of Service: March 3, 20XX

SUBJECTIVE
Patient developed "infection in my cuticle." The patient gets regular acrylic manicures. Washes hands 1 or 2 x a day. Otherwise, no excessive exposure to water or detergents.

OBJECTIVE
Vital signs are normal. There is redness and swelling of the perionychium at the base of the right index finger. The nail is raised, and there is suppuration present.

ASSESSMENT
Paronychia.

PLAN
Incision and drainage. Culture and sensitivity. Cephradine 500 mg p.o. t.i.d. for 10 days. Return in 3 days for observation and results of culture.

Step 11: Review Practice Exercise 26-3

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 12: Diseases of the Musculoskeletal System and Connective Tissue (M00-M99), Part 1

Chapter 13 of the *ICD-10-CM Tabular List* contains codes for diseases, disorders and pains of the joints, bones and cartilage located in the musculoskeletal system, as well as acquired musculoskeletal deformities. The musculoskeletal system is composed of the skeletal system and muscular system because they work so closely together. The skeletal system is the "backbone" of the body, while the muscular system consists of tissues that produce movement throughout the body by contracting and relaxing. Connective tissues bind together and support various structures of the body.

The musculoskeletal system and connective tissue chapter is quite a long one, so you'll learn about *arthropathies*, *dentofacial* anomalies and other disorders of the jaw, systemic connective tissue disorders and *dorsopathies* first. Then, you'll pause to reinforce what you've studies before moving on to soft tissue disorders, *osteopathies* and *chondropathies*, as well as other disorders of the musculoskeletal system and connective tissues.

When you look at the beginning of this chapter, you will find a note to assist you with accurate, complete coding. The *ICD-10-CM* notes: *Use an external cause code following the code for the musculoskeletal condition, if applicable, to identify the cause of the musculoskeletal condition.*

Next, you are provided with a list of conditions to code in addition to diseases of the musculoskeletal system and connective tissues. These conditions are:

- *arthropathic psoriasis (L40.5-)*

- *certain conditions originating in the perinatal period (P04-P96)*

- *certain infectious and parasitic diseases (A00-B99)*

- *compartment syndrome (traumatic) (T79.A-)*

- *complications of pregnancy, childbirth and the puerperium (O00-O9A)*

- *congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)*

- *endocrine, nutritional and metabolic diseases (E00-E88)*

- *injury, poisoning and certain other consequences of external causes (S00-T88)*

- *neoplasms (C00-D49)*

- *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R94)*

The *Chapter-Specific Guidelines* for *Diseases of the Musculoskeletal System and Connective Tissue* provide additional information regarding site and laterality; traumatic versus chronic or recurrent conditions; coding of pathological fractures; and osteoporosis. Let's review the basics of the first three, and you'll explore osteoporosis in more detail when you study that condition.

Site and Laterality

When coding diseases of the musculoskeletal system and connective tissue, it's important to understand some common terminology. Site refers to the bone, joint or muscle involved. Often, multiple sites may be affected by the condition; therefore, you will apply a code that specifies multiple sites, or code each site separately. In some situations, the documentation may indicate that the condition affects the upper or lower end of the bone. You may be tempted to code to the joint because the upper or lower end is indicated; however, the site is actually the bone, not the joint.

You'll recall that laterality simply means identifying the side affected. Chapter 13 contains many codes that designate the side affected. If it is documented, you will assign the character to indicate if the right or left side was affected. In some cases, the documentation will not specify a side, so you will code to unspecified.

Acute Traumatic vs. Chronic or Recurrent Conditions

According to the *Official Guidelines*, "many musculoskeletal conditions are a result of previous injury or trauma to a site, or are recurrent conditions." Chapter 13 contains codes for bone, joint or muscle conditions that are a result of a healed injury or recurrent condition. These chronic and recurrent conditions should be coded from Chapter 13, while current and acute injuries are coded from Chapter 19, *Injury, Poisoning and Certain Other Consequences of External Causes*.

Pathological Fractures

A **fracture** is a break or rupture in a bone. **Traumatic fractures** occur because of mechanical injury. **Pathological** or **spontaneous fractures** occur without major external trauma and are the result of the bone structure weakening by a pathological process, such as with osteoporosis and neoplasms. A **fatigue** or **stress fracture** results from excessive physical activity, rather than from any specific injury or trauma. You'll find codes for fatigue fracture of vertebra under code *M48.4-*. Be sure to add the place-holder before your 7th character to identify the encounter.

> A – initial encounter for fracture
>
> D – subsequent encounter for fracture with routine healing
>
> G – subsequent encounter for fracture with delayed healing
>
> K – subsequent encounter for fracture with nonunion
>
> P – subsequent encounter for fracture with malunion
>
> S – sequela

When a patient is receiving active treatment for a fracture, you will apply the 7th character "A" to the code. According to the guidelines, examples of active treatment include surgical treatment, emergency department encounters and evaluation and treatment by a new physician. Once active treatment is complete, "D" is the accurate 7th character to apply.

Now, let's walk through the sections of this chapter and learn how to apply these guidelines. Chapter 13 is a very long chapter. Are you ready? Grab your *ICD-10-CM* and let's get to it!

Arthropathies (M00-M25)

Arthropathy means joint disease. A form of arthropathy that involves inflammation of one or more joints is known as **arthritis**. This section, *M00-M25*, is broken down into subsections:

● *M00-M02 Infectious arthropathies*

● *M05-M14 Inflammatory polyarthropathies*

● *M15-M19 Osteoarthritis*

● *M20-M25 Other joint disorders*

Let's look at the conditions found within each subsection to discover what information the *Tabular List* provides for accurate coding.

Infectious Arthropathies (M00-M02)

The note found in the *Tabular List* explains this block of codes in more detail:

This block comprises arthropathies due to microbiological agents. Distinction is made between the following types of etiological relationship:

a) direct infection of joint, where organisms invade synovial tissue and microbial antigen is present in the joint;

b) indirect infection, which may be of two types: a reactive arthropathy, where microbial infection of the body is established but neither organisms nor antigens can be identified in the joint, and a postinfective arthropathy, where microbial antigen is present but recovery of an organism is inconstant and evidence of local multiplication is lacking.

Infectious arthropathies are divided into three basic code blocks:

- *M00 Pyogenic arthritis*

- *M01 Direct infection of joint in infectious and parasitic diseases classified elsewhere*

- *M02 Postinfective and reactive arthropathies*

Let's look at code block *M00 Pyogenic arthritis.* **Pyogenic** means pus producing. You'll note that several of the codes in this subcategory of pus producing arthritis include a note to use an additional code to identify the bacterial agent.

Code block *M01 Direct infection of joint in infectious and parasitic diseases classified elsewhere* consists of manifestation codes, which are never the primary diagnosis codes. You will code first the underlying disease. You also need to be aware of the extensive exclusion list when coding from this subsection. Remember, Excludes1 indicates mutually excludes codes; the two conditions cannot be reported together.

Finally, let's look at code block *M02 Postinfective and reactive arthropathies.* **Reactive arthritis** is defined as joint pain and swelling triggered by an infection in another part of the body—most often the intestines, genitals or urinary tract.[5] Reiter's disease is a specific type of reactive arthritis that typically affects the eyes and urethra, as well as the joints.

Inflammatory Polyarthropathies (M05-M14)

This subsection contains conditions associated with inflammation, such as *rheumatoid arthritis* and *gout*. **Rheumatoid arthritis** (**RA**) is an autoimmune disorder characterized by chronic inflammation that affects the lining of the joints, causing painful swelling. Look at code block *M05 Rheumatoid arthritis with rheumatoid factor.* You'll note that you will not code rheumatic fever (*I00*), juvenile rheumatoid arthritis (*M08.-*) or rheumatoid arthritis of the spine (*M45.-*) with conditions in this code block.

Rheumatoid factor (**RF**) is a blood test that measures the amount of the RF antibody in the blood. This test is used to diagnose RA. The physician may document seropositive to indicate RA with RF, or seronegative for RA without RF. Rheumatoid factor is positive in up to 80 percent of people with RA.[6]

Now, turn to code *M06.2 Rheumatoid bursistis.* **Bursitis** is inflammation of the bursa, which is a fluid-filled sac that reduces friction between two surfaces that move in different directions. Systemic inflammatory conditions, such as rheumatoid arthritis, can also lead to inflammation of the burse, which is known as **rheumatoid bursitis.**

Another complication associated with RA is the presence of **rheumatoid nodules**, which are firm, flesh-colored lumps that grow under the skin.[7] You'll find this condition under code *M06.3*.

Before moving on to gout, let's take a look at code block *M08 Juvenile arthritis*. **Juvenile rheumatoid arthritis** (**JRA**) is the most common form of arthritis in children, and is characterized by pain, swelling and stiffness. JRA typically appears in children between the ages of 6 months and 16 years. You will code any associated underlying condition with codes from this code block. However, you won't code arthopathy in Whipple's disease, juvenile dermatomyositis or psoriatic juvenile arthropathy with conditions in this code block.

Take a moment to see if you can accurately code the diagnosis for the following dictation.

DESCRIPTION
Sandy is a 14-year-old Hispanic female with history of juvenile pauciarticular arthritis, in particular arthritis of her left knee, although she has complaints of arthralgias in multiple joints. Under general anesthesia, 20 mg of Aristospan were injected on the left knee.

INDICATIONS FOR PROCEDURE
The patient was here for joint injection. Sandy is a 14-year-old Hispanic female with history of juvenile pauciarticular arthritis, in particular arthritis of her left knee, although she has complaints of arthralgias in multiple joints. What bothers her the most is the joint swelling of her left knee that has been for several months. She has been taking Naprosyn on her last visit. She was feeling better but still has significant symptoms especially when she was active. After evaluation in the clinic, she decided to have a joint injection as it was discussed before. I discussed the side effects and the complications with the parents and the patient and the possibility of doing it in the clinic, but she decided that she did not want to do it in the clinic and she wanted to be sedated for this.

DESCRIPTION OF PROCEDURE
Under aseptic technique and under general anesthesia, 20 mg of Aristospan were injected on the left knee. No fluid was obtained. Her swelling was about 1+. No complications. No bleeding was observed, and the patient tolerated the procedure without any complications or side effects. After that, she went to the recovery room where she is going to be discharged with her parents and see her back in the clinic for re-evaluation in a few weeks after the procedure. If the patient has any problems overnight, she is going to call us. If she has any fevers or strange swelling, she is to call us for advice. We will see her in the clinic as scheduled.

For this procedure, you'll code juvenile pauciarticular arthritis of the left knee. In the *Index*, use *Arthritis, juvenile, pauciarticular, knee* as the coding pathway. The tentative code listed is *M08.46-*. Locate this code in the *Tabular List*. The *left* knee is documented, so you'll assign *M08.462* as the final diagnosis. Well done! Now, you're ready to learn about gout.

Gout is a type of arthritis that occurs when uric acid builds up in blood, and sudden burning, pain, stiffness and swelling occur in a joint. **Chronic gout** (*M1A*) is defined as repeated episodes of pain and inflammation, which may involve more than one joint. For chronic gout, the *Tabular List* directs you to apply the appropriate 7th character to identify with or without tophus (tophi), which is a deposit of crystallized uric acid.

Chronic gout does not include *acute gout* and gout NOS. **Acute gout** (*M10*) is an intensely painful inflammatory arthritis that typically affects a single joint. With both *M1A Chronic gout* and *M10 Gout*, you will also need to use an additional code to identify the following:

- *autonomic neuropathy in diseases classified elsewhere* (*G99.0*)

- *calculus of urinary tract in diseases classified elsewhere* (*N22*)

- *cardiomyopathy in diseases classified elsewhere* (*I43*)

- *disorders of external ear in diseases classified elsewhere* (*H61.1-, H62.8-*)

- *disorders of iris and ciliary body in diseases classified elsewhere* (*H22*)

- *glomerual disorders in diseases classified elsewhere* (*N08*)

Now that you have a better understanding of some conditions caused by inflammation, let's look at osteoarthritis, which is a noninflammatory condition.

Osteoarthritis (M15-M19)

Osteoarthritis, also known as **degenerative arthritis**, is a noninflammatory degenerative joint disease in which the repair of joint cartilage does not keep up with cartilage degeneration. This condition tends to occur in the weight-bearing joints, such as the knees and hips. If osteoarthritis of the spine (*M47.-*) is documented in addition to a condition found within this subsection, you can code it, as well.

Pull out your *ICD-10-CM* manual and try coding the condition in the following physical therapy report.

CHIEF COMPLAINT
Left knee pain and inability to ambulate.

HISTORY OF PRESENT ILLNESS
The patient is a 58-year-old female, referred to therapy due to left knee osteoarthritis. The patient states that approximately 2 years ago, she fell to the ground and thereafter had blood clots in the knee area. The patient was transferred from the hospital to a nursing home and lived there for 1 year. Prior to this incident, the patient was ambulating independently with a pickup walker throughout her home. Since that time, the patient has been unable to ambulate. The patient states that her primary concern is her left knee pain and the desire to walk short distances again in her home.

PAST HISTORY
Medications: Naproxen, Plavix and stool softener.
Illnesses: High blood pressure, obesity, right patellar fracture with pin in 1990 and history of blood clots.

REVIEW OF SYSTEMS
Musculoskeletal: The patient states that she had an x-ray of the knee in 20XX and was diagnosed with osteoarthritis. The patient reports that when seated and at rest, her knee pain is 0/10. The patient states that with active motion of the left knee, the pain in the anterior portion increases to 5/10. She states she would like to be able to transfer better and walk 5 feet from her bed to the couch. The patient reports that she transfers with standby to contact-guard assist in the home from her bed to her wheelchair and return.

PHYSICAL EXAMINATION
MUSCULOSKELETAL: The right knee has a large 8-inch long and very wide tight scar with adhesions to the underlying connective tissue due to her patellar fracture and surgery following an MVA in 19XX, bilateral knees are very large due to obesity. There are no scars, bruising or increased temperature noted in the left knee. Active and passive range of motion of the right knee is 0 to 90 degrees and the left knee, 0 to 85 degrees. Pain is elicited during active range of motion of the left knee. Palpation to the left knee elicits pain around the patellar tendon and to each side of this area. The patient is able to stand modified independent from wheelchair level and tolerates at least 15 seconds of standing prior to needing to sit down due to the left knee pain.

IMPRESSION
Left knee osteoarthritis, post-traumatic. Examination indicates pain in the left knee and deficits in muscle endurance, and functional mobility. The patient would benefit from skilled physical therapy to address these impairments.

PLAN
1. The patient will be seen 2 x per week for an initial 4 weeks with re-assessment at that time for an additional 4 weeks if needed.
2. Modalities including electrical stimulation, ultrasound, heat and ice.
3. Therapeutic exercise.
4. Functional mobility training.
5. Gait training.

You know that a dislocation is a displacement of the joint. A **pathological dislocation** occurs when the displacement is due to paralysis, synovitis, infection or another disease. This condition (*M24.3*) excludes congenital dislocation or displacement of the joint, current injury or recurrent dislocation of the joint. Repeated dislocation or subluxation of a joint is called **recurrent**, and is found under *M24.4*.

Finally, let's look at two other conditions of the joint before moving on. Look at *M24.5- Contracture of joint*. **Contractures** occur when muscles or tendons have become too tight for a long period of time, thus becoming shorter, which prevents full extension of the joint. You'll see that contracture of muscle or joint without contracture of joint and Dupuytren's contracture are excluded. However, you can code acquired deformities of the limbs if documented with this condition. The other condition of the joint is **ankylosis**, which is characterized by stiffness of a joint due to abnormal adhesion and rigidity of the bones of the joint. This condition is found in *M24.6-*.

This concludes the arthropathies section of the chapter. The next section provides codes for dentofacial anomalies and other disorders of the jaw.

Dentofacial Anomalies [Including Malocclusion] and Other Disorders of Jaw (M26-M27)

Before you examine the *Tabular List* for coding this section, let's review some terminology to enhance your understanding. **Dentofacial** means pertaining to the teeth, alveolar process and the face; and a deviation from the normal is an **anomaly**. Dentofacial anomalies include *hyperplasia, hypoplasia*, macrogenia, microgenia and asymmetry. While **hyperplasia** is the overdevelopment of the maxillary or mandible bone, **hypoplasia** is the underdevelopment of those same bones.

Malocclusion, which occurs when the teeth are not aligned properly, can be classified according to the relationship between the mandible and the maxillae—known as Angle's class. Edward Angle was an American dentist and is considered the father of modern orthodontics. For coding purposes, the provider will document the classification; you will not determine the class based on the documentation. However, the basics of classification are as follows:

Angle's Classification of Malocclusion[8]

Class I—The normal anteroposterior relationship of the mandible to the maxillae. The mesiobuccal cusp of the permanent maxillary first molar occludes in the buccal groove of the permanent mandibular first molar.

Class II—The posterior relationship of the mandible to the maxillae. The mesiobuccal cusp of the permanent maxillary first molar occludes mesial to the buccal groove of the permanent mandibular first molar.

Class III—The anterior relationship of the mandible to the maxillae may have a subdivision. The mesiobuccal cusp of the permanent maxillary first molar occludes distal to the buccal groove of the permanent mandibular first molar.
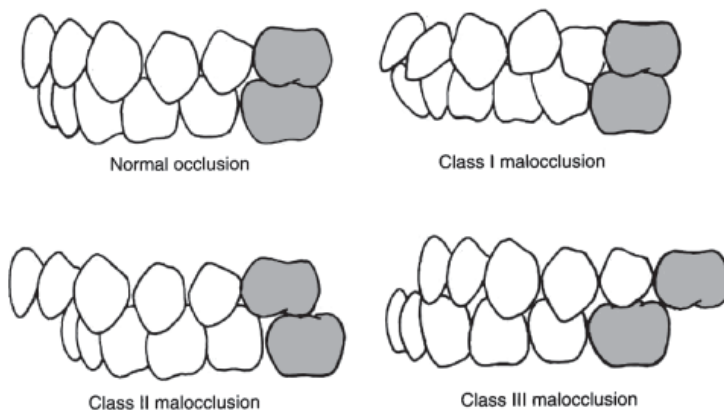
Angle's Classification of Malocclusion

Reference: http://orthocorner.blogspot.com/2010/05/angle-classification-today-and-post.html.

Now, let's finish this section by exploring a commonly known condition. The **temporomandibular joint** (**TMJ**) connects the lower jaw to the skull; this joint is located just in front of the ears. The term TMJ literally refers to the joint itself, but is also often used to describe disorders of the joint. **TMJ disorder** can result from clenching or grinding one's teeth, poor posture or the lack of relaxation or sleep. There are many symptoms related to this condition, including popping sounds, inability to fully open the jaw, jaw pain, headache, earache and toothache. To code TMJ disorder, use the coding pathway *Disorder, temporomandibular joint* and you will be redirected to *see Anomaly, dentofacial, temporomandibular joint.* Based on what you've learned, this makes sense, as the disorder is a deviation from the normal pertaining to teeth and alveolar process and the face. Using the new pathway, you'll find *Anomaly, dentofacial, temporomandibular joint* provides the tentative code *M26.60.* You'll check the code with the *Tabular List* and verify it as correct.

Good job! You're ready to move on from the face and teeth to learn more about disorders relating to systemic connective tissue.

Systemic Connective Tissue Disorders (M30-M36)

Connective tissue diseases are actually a group of diseases that primarily target the connective tissues of the body. You'll recall that connective tissues bind together and support various structures of the body. As noted in the *Tabular List*, this section includes autoimmune disease NOS, collagen (vascular) disease NOS, systemic autoimmune disease and systemic collagen (vascular) disease. An **autoimmune disease** is characterized by an overactive, misdirected immune system response that attacks one's own body. Let's take a look at some of the code blocks in this section.

M30 **Polyarteritis nodosa** is a rare autoimmune disease featuring spontaneous inflammation of the arteries.

M31 Other necrotizing vasculopathies consists of a variety of diseases of the blood vessels that cause death of that specific area of tissue.

These diseases include:

● **Goodpasture syndrome** is an autoimmune disease that causes bleeding in the air sacs of the lungs and inflammation in the kidney's filtering units.

● **Thrombotic thrombocytopenic purpura** is a rare disorder that causes blood clots (thrombi) to form in small blood vessels throughout the body.

● **Wegener's granulomatosis** is a rare disease characterized by an inflammation of the blood vessels that limits the flow of blood to important organs.

Systemic lupus erythematosus (**SLE**) is a chronic inflammatory disease of the connective tissue that can affect many organ systems. Characteristics of this disease include fever, weakness, muscle and joint pain, anemia and a "butterfly" rash around the cheeks and forehead. There is no cure for SLE; treatment focuses on the symptoms. To code systemic lupus erythematosus, locate the main term *Lupus* in the *Index.* If you review the list of subterms, you will find *erythematosus, systemic* provides code *M32.9.* Organ or system involvement is not noted, so you'll turn to the *Tabular List* to determine the highest level of specificity. Based on the information here, you'll see that *M32.9 Systemic lupus erythematosus, unspecified* is the correct code.

Dorsopathies (M40-M54)

Dorsopathy is a general term for diseases and disorders of the spine. You'll see that this section is broken down into subsections:

- *M40-M43 Deforming Dorsopathies*

- *M45-M49 Spondylopathies*

- *M50-M54 Other Dorsopathies*

Although this is a fairly straightforward section to code, a brief review of the anatomy of the spine and some terminology will assist you with accuracy.

The spine is called the **vertebral column** because it is composed of a stack of 33 vertebrae, which are divided into five distinct regions. There are seven **cervical vertebrae**, numbered C1 through C7; 12 **thoracic vertebrae**, numbered T1 through T12; five **lumbar vertebrae**, numbered L1 through L5; five fused **sacral vertebrae**, numbered S1 through S5; and four fused **coccygeal vertebrae**, forming the coccyx.

cervical (C1-C7)

thoracic (T1-T12) or
dorsal (D1-D12)

lumbar (L1-L5)

sacral (S1-S5)

coccyx

Vertebral column
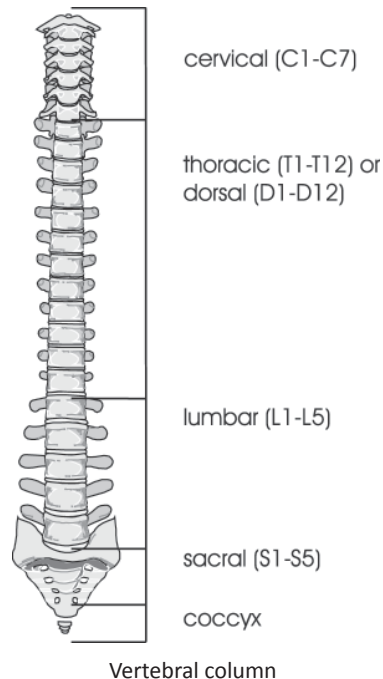
Intervertebral discs form the major joint at each level of the spine. These discs cushion the vertebrae from the shock of weight-bearing movements by the rest of the body. These discs also allow the spine to bend. A disorder of the discs without a disorder of the spine is specified as "without myelopathy."

As the spine flexes and extends, the discs protect the vertebral bodies from injury. Injuries to the discs include *displacement* and degeneration. **Displacement**, or the lack of normal positioning, may also be called **herniation**. When you locate *Herniation* in the *Index of Diseases and Injuries,* you are directed to *see also Hernia*. The coding pathway *Hernia, intervertebral cartilage or disc* redirects you to *see Displacement, intervertebral disc*.

Let's code hernia of the L4-L5 intervertebral disc. With your anatomy knowledge, you know that L4-L5 refers to the lumbar region. So, let's look up *Hernia, lumbar* in the *Index*. This coding pathway directs you to *see Hernia, abdomen, specified site NEC*. If you follow this pathway, you'll find code *K46.9*. That code is in the *Diseases of the Digestive System*—that's not right! Let's take the pathway previously discussed: *Displacement, intervertebral disc, lumbar region*. This provides the tentative code of *M51.26*. Next, you turn to the *Tabular List* to determine the highest level of specificity. You can comfortably conclude that *M51.26* is the accurate code. Nice work!

Before reinforcing what you've learned with a Practice Exercise, let's consider spine curvature and work through an example. There are three main types of spine curvature disorders, including:[9]

- **Lordosis**: Also known as swayback, the spine of a person with lordosis curves significantly inward at the lower back.

- **Kyphosis**: Kyphosis is characterized by an abnormally rounded upper back (more than 50 degrees of curvature).

- **Scoliosis**: Scoliosis is characterized by a sideways curve to the spine. The curve is often S-shaped or C-shaped.

Read through the following scenario and see if you can determine the correct codes.

HISTORY OF PRESENT ILLNESS
The patient is a 13-year-old new patient and is here for evaluation of thoracic kyphosis. She was noted by her parents to have round back posture. They have previously seen another orthopedist who recommended observation at this time. She is here for a second opinion in regards to kyphosis. The patient denies any pain in her back or any numbness, tingling or weakness in her upper or lower extremities. No problems with her bowels or bladder.

PAST HISTORY
Medications: She is currently on Zyrtec, Flonase and Ceftin for an ear infection.
Operations: Bilateral pinning of her ears.
ALLERGIES: NO KNOWN ALLERGIES.
Social history: She is currently an 8th grader in middle school and is interested in basketball. She lives with both of her parents and has a 9-year-old brother. She had menarche beginning in September.

REVIEW OF SYSTEMS
She is in her usual state of health except as mentioned in the history of present illness.

PHYSICAL EXAMINATION
GENERAL: On physical exam, she is alert, oriented, and in no acute distress standing 63 inches tall.
BACK: In regards to her back, her skin is intact with no rashes, lesions and/or no dimpling or hair spots. No cafe au lait spots. She is not tender to palpation from her occiput to her sacrum. There is no evidence of paraspinal muscle spasm. On forward bending, there is a mild kyphosis. She is not able to touch her toes, indicating hamstring tightness. She has a full 5/5 in all muscle groups. Her sensation is intact to light touch in L1 through L2 dermatomal distributions. She has symmetric limb lengths as well bilaterally from both the coronal and sagittal planes.

DATABASE
X-rays today included PA and lateral sclerosis series. She has approximately 46 degree thoracic kyphosis.

IMPRESSION
Kyphosis.

PLAN
The patient's kyphosis is quite mild. While this is likely in the upper limits of normal, it is normal for an adolescent and still within normal range as would be expected. At this time, three options were discussed with the parents including observation, physical therapy, and bracing. At this juncture, given that she has continued to grow, she is Risser 0. She may benefit from continued observation with physical therapy; bracing would be a more aggressive option at this time. As such, she was given a prescription for physical therapy for extension based strengthening exercises, flexibility range of motion exercises, postural training with no forward bending. We will see her back in 3 months' time for repeat radiographs including PA and lateral standing of scoliosis series. Should she show evidence of continued progression of her kyphotic deformity, discussions of bracing would be held at that time.

The provider determined that the patient has kyphosis; however, if you stop there, you haven't coded the situation correctly. Look at the database and history—thoracic is indicated. Using the *Index*, you'll locate *Kyphosis, thoracic region* to find code *M40.204*. After checking the code in the *Tabular List*, you can confidently assign *M40.204* to the scenario.

You are doing great! Up next, you'll learn about connective tissue, but before continuing, let's pause to complete the following Practice Exercise.

Step 13: Practice Exercise 26-4

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Arthralgia of the left shoulder**
   ICD-10-CM: _____

2. **Herniation of cervical region**
   ICD-10-CM: _____

3. **Calcification of the cervical disc**
   ICD-10-CM: _____

4. **Lower back pain**
   ICD-10-CM: _____

5. **Coding Challenge**

PREOPERATIVE DIAGNOSIS
Old medial and lateral meniscus tears, left knee.

POSTOPERATIVE DIAGNOSIS
Same.

PRIMARY PROCEDURE
ARTHROSCOPY WITH MEDIAL AND LATERAL MENISCECTOMIES, LEFT KNEE.

PROCEDURE
The patient was placed on the operating table in the supine position under general anesthesia. The left knee was prepped and draped in the usual manner. Ports were established in the knee and the joint was inflated. Arthroscopy was carried out beginning in the inferolateral portal.

After initial exploration, the medial compartment was explored. The arthroscopy exposed the meniscus that revealed a tear. The torn portion was removed with forceps.
Attention was then turned to the lateral compartment that also revealed a tear in the lateral meniscus. The torn portion was removed with forceps.

After completion of the meniscectomies, there were no other significant findings. The knee joint was thoroughly irrigated and the instruments were removed. Dressing was applied. The patient tolerated the procedure well and left the operating room in good condition.

ICD-10-CM: _____

ICD-10-CM: _____

Step 14: Review Practice Exercise 26-4

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 15: Diseases of the Musculoskeletal System and Connective Tissue (M00-M99), Part 2

While Chapter 13 is quite long, the organization is straightforward, which makes using the ICD-10-CM much easier. Stay focuses and you'll continue to do well. Let's get back to the musculoskeletal system and connective tissues by looking at soft tissue disorders.

Soft Tissue Disorders (M60-M79)

The next section of Chapter 13 contains codes for disorders of the soft tissues, which include the muscles, tendons and ligaments. You'll also see reference to the **synovium**—the thin layer of tissue only a few cells thick—that lines the joints and tendon sheaths. This section is broken down into subsections:

- *M60-M63 Disorders of Muscles*

- *M65-M67 Disorders of Synovium and Tendon*

- *M70-M79 Other Soft Tissue Disorders*

Although there are many codes in this section, most are easily identified, and the final code is based on laterality.

Osteopathies and Chondropathies (M80-M94)

Osteopathy is any disease of the bone, while **chondropathy** is any disease of the cartilage. This section of the chapter also contains subsections:

- *M80-M85 Disorders of Bone Density and Structure*

- *M86-M90 Other Osteopathies*

- *M91-M94 Chondropathies*

Let's briefly review some of these conditions.

Disorders of Bone Density and Structure (M80-M85)

Osteoporosis is a condition characterized by a decrease in the density of bone, reducing its strength and resulting in fragile bones.[10] This condition affects the entire musculoskeletal system, rather than a specific site. Pathological fractures are commonly found in those presenting with osteoporosis; code category *M80* applies to osteoporosis with current pathological fracture. The 6th character will identify the site of the pathological fracture, and the 7th character identifies the encounter. When osteoporosis is documented without current pathological fractures, you'll use code category *M81* for the encounter.

Age-related or **senile osteoporosis** accounts for most cases of this disease, and can be found in codes *M80.0-*. It affects persons older than age 70 and is due to the natural aging process. When there is no apparent cause for the disease, it is **idiopathic osteoporosis**. You'll find the codes for idiopathic osteoporosis in *M80.8-*.

While osteoporosis develops due to a decrease in the density of bone, a defect in the bone-building process results in **osteomalacia**. This softening of the bones may be due to a lack of vitamin D or a problem with the body's ability to break down and use this vitamin.

Review the following operative report and use your *ICD-10-CM* manual to apply the accurate code(s).

PREOPERATIVE DIAGNOSIS
Suspect osteomalacia.

POSTOPERATIVE DIAGNOSIS
Biopsy sample confirms osteomalacia.

PRIMARY PROCEDURE
BONE BIOPSY.

INDICATIONS FOR PROCEDURE
A 52-year-old female presents with pain and tenderness in hip area as well as overall weakness. Review of x-ray suggests signs of osteomalacia.

PROCEDURE
Local anesthesia applied to procedure site. A small incision is made in the skin, and a biopsy needle is pushed and twisted into the bone. Once the bone sample is obtained, the needle is removed. Pressure is applied to biopsy site for several minutes. No excess bleeding is noted. Site is covered with gauze patch and secured.

The patient is 52, so you know this isn't a juvenile condition. The cause of the osteomalacia isn't documented; therefore, your coding pathway is *Osteomalacia, adult.* You'll verify the tentative code and apply *M83.9* to this operative report.

The next code block, *M84 Disorder of continuity of bone*, includes stress and pathological fractures. Recall that neither stress nor pathological fractures are related to injury or trauma. A stress fracture results from excessive physical activity, while pathological fractures are the result of the bone structure weakening by a pathological process. With both conditions, you'll apply the appropriate 7th character to identify the type of encounter. You'll use an additional code to identify the cause of the stress fracture, and code the underlying condition for pathological fractures in neoplastic and other diseases.

Other Osteopathies (M86-M90)

Osteomyelitis is an inflammation of the bone tissue and marrow that a pus-forming organism causes. If the organism is noted, you'll use an additional code to identify the infectious agent. You'll also use an additional code to identify major osseous defect, a consequence of extensive amounts of bone loss. Osteomyelitis may be documented as acute hematogenous, other acute, subacute or chronic.

Another osteopathy, **osteonecrosis**, is a disease caused by reduced blood flow to bones in the joints. With too little blood, the bone starts to die and may break down. This condition, also called avacular necrosis of the bone, may be idiopathic or caused by drugs or a previous trauma.

The last code block you'll study in this section is *M90 Osteopathies in diseases classified elsewhere*. These are manifestation codes; you will code first the underlying disease. As you are aware, manifestation codes are never listed as the principal diagnosis.

Chondropathies (M91-M94)

Chondropathies are diseases of the cartilage, including *osteochondrosis*. You will not code postprocedural chondropathies with codes from this section. **Osteochondrosis** is a disease that affects the progress of bone growth by killing bone tissue. It occurs only in children and adolescents whose bones are still growing. **Osteochondritis dissecans** is a joint condition in which a piece of cartilage, along with a thin layer of the bone beneath it, comes loose from the end of a bone.[11] This condition occurs most often in young men, particularly after a joint has been injured.

You've covered quite a bit of information since your last Practice Exercise. Let's stop and give you a chance to review the material. Complete the following Practice Exercise to see how well you grasp the concepts from the material in this section.

Step 16: Practice Exercise 26-5

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Infective myositis of the right foot**
    ICD-10-CM: _____

2. **Acquired trigger finger**
    ICD-10-CM: _____

3. **Infective bursitis of the right hip**
    ICD-10-CM: _____

4. **Idiopathic osteoporosis of the left metatarsus**
    ICD-10-CM: _____

5. **Coding Challenge**

SUBJECTIVE
This 16-year-old male has experienced mild pain in the back of his lower heel that increases when he is playing basketball. The season just started, and he admits to being out of shape.

OBJECTIVE
Physical exam reveals swelling of the back of the left leg. Palpation notes a hard knot of tissue.

ASSESSMENT
The patient suffers from Achilles tendinitis.

PLAN
An MRI is scheduled to determine the extent of the injury. He is to follow up in this office in 2 weeks to review the MRI results.

    ICD-10-CM: _____

Step 17: Review Practice Exercise 26-5

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 18: Lesson Summary

You have now completed all of the new information in this lesson! You should feel proud of your progress in coding. You made it through an introduction to Chapters 11, 12 and 13 of the *ICD-10-CM* manual's *Tabular List,* and you learned a lot of valuable coding information in the process.

Do you know how it feels to train for a challenging physical event? Maybe even for a marathon? If you do, you might recognize some things in common as you work through this course. There are periods of intensity when you wonder whether you're going to reach the smaller goals you set for yourself along the way to the finish line. But each time you accomplish a goal, you are inspired, and you feel even more energy for the next step. By now, you are in the final step of this lesson, and well on your way toward your goal of consistently using ICD-10-CM codes correctly!

Now, take the time you need to go back and review any topics in this lesson that are still challenging for you, or try another shot at the coding exercises that troubled you. When you are ready, go ahead and complete your next Quiz. Then, take a few more deep breaths, clear your head and you'll be ready to start fresh with the next lesson.

Step 19: Quiz 26

Once you've mastered the course content, locate this Quiz in your *Online Course* or your *Assignment Pack.* Read and follow the Quiz instructions carefully.

Endnotes

[1] *Smoking and Oral Health.* WebMD, 2013. Web. 4 October 2013.

[2] *Glossitis.* MedlinePlus, 5 March 2011. Web. 5 October 2013.

[3] *Autoimmune Bullous Skin Diseases.* Suite101.com, 23 October 2006. Web. 4 October 2013.

[4] *Hair Loss.* American Academy of Dermatology, 2013. Web. 4 October 2013.

[5] *Reactive Arthritis.* Mayo Clinic, 5 March 2011. Web. 4 October 2013.

[6] *Rheumatoid Arthritis.* Mayo Clinic, 27 July 2013. Web. 4 October 2013.

[7] *Rheumatoid Nodules.* WebMD, 28 February 2012. Web. 4 October 2013.

[8] *Classification of Occlusion. Dentalcare.com,* 2013. Web. 4 October 2013.

[9] *Types of Spine Curvature Disorders.* WebMD, 2013. Web. 4 October 2013.

[10] *Osteoporosis.* Mayo Clinic, 21 June 2013. Web. 4 October 2013.

[11] *Osteochondritis Dissecans.* Mayo Clinic, 1 September 2013. Web. 4 October 2013.

Lesson 27
ICD-10-CM Chapters 14, 15 and 16

Step 1: Learning Objectives for Lesson 27

When you complete the instruction in this lesson, you will be trained to:

- Describe the anatomy and assess the diseases of the genitourinary system.

- Identify the anatomy, terminology and conditions found in pregnancy, childbirth and the puerperium.

- Describe the terminology related to certain conditions originating in the perinatal period.

- Explain the general notes that relate to Chapters 14, 15 and 16 of the *Tabular List* in the *ICD-10-CM* manual.

- Apply the *Chapter-Specific Guidelines* as they relate to Chapters 14, 15 and 16 of the *Tabular List*.

- Identify the diagnoses and assign the final codes for the documented disorders and diseases.

Step 2: Lesson Preview

Now that you've started practicing with coding medical conditions, you have taken a big step toward your goal. You will move even further toward that goal in this lesson, which introduces you to the codes in Chapters 14, 15 and 16 of the *ICD-10-CM* manual's *Tabular List*. You will begin by looking at diseases of the genitourinary system. You will then discover the various complications and conditions found in pregnancy, childbirth and the puerperium. You will also learn about conditions in the perinatal period.

Just as in the previous lesson, you'll find a lot of detailed information here. But again, you'll have as much time as you need to study the material and make sense of it. And as always, you can contact your instructor whenever you have questions you need answered.

The *ICD-10-CM* chapters are subdivided into discussions about each section, and refer you often to the *Index to Diseases and Injuries* and the *Tabular List* so you can see exactly how the process works. And there are plenty of Practice Exercises that allow you to apply your coding skills as you learn.

Step 3: Diseases of the Genitourinary System (N00-N99)

You'll find *Diseases of the Genitourinary System* in Chapter 14 of the *ICD-10-CM Tabular List*. The term **genitourinary** pertains to the genital and urinary organs. The genital and urinary systems are usually considered together because anomalies of the genital and urinary tracts are often interrelated. The urinary system includes the kidneys, ureters, bladder and urethra; the genital system includes the male and female genital organs and the breasts.

The Excludes2 at the beginning of this chapter indicates that it may be acceptable to use both the code and the excluded code together if the documentation supports doing so. These conditions are as follows:

- *certain conditions originating in the perinatal period (P04-P96)*

- *certain infectious and parasitic diseases (A00-B99)*

- *complications of pregnancy, childbirth and the puerperium (O00-O9A)*

- *congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)*

- *endocrine, nutritional and metabolic diseases (E00-E88)*

- *injury, poisoning and certain other consequences of external causes (S00-T88)*

- *neoplasms (C00-D49)*

- *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R94)*

Although this chapter is a fairly short chapter, it's broken down into quite a few sections. Let's review the information in some of these sections so that you'll be familiar with the conditions you're coding.

Glomerular Diseases (N00-N08)

This section deals with diseases of the *kidneys*. The **kidneys** are the two bean-shaped organs in the back part of the abdominal cavity. They filter the blood, remove ion wastes and toxins and eliminate liquid waste from the body in the form of urine. Your terminology review will be helpful here; the word *kidney* is *renal* in Latin and *nephros* in Greek. You'll see references to kidney, renal and nephros in this section.

Glomerular diseases reduce the ability of the kidneys to maintain a balance of certain important substances in the bloodstream. The *Tabular List* instructs you to *code also any associated kidney failure* (*N17-N19*) if documented with glomerular diseases. However, you will not code hypertensive chronic kidney disease with codes from this section, as these conditions are mutually exclusive. Let's examine the specifics of the glomerular diseases.

Clusters of capillaries in the kidney, known as **glomeruli**, remove excess fluid, electrolytes and waste from the bloodstream and pass them into the urine. **Nephritis** means inflammation of the kidneys. **Glomerulonephritis** is characterized by inflammation of these tiny filters in the kidneys.

Nephrotic syndrome is caused by various disorders that damage the kidneys. This damage leads to the release of too much protein into the urine. Symptoms of this disease include large amounts of protein in the urine (**proteinuria**), low levels of albumin in the blood, high fat and cholesterol levels and swelling.

While nephrotic syndrome is characterized by massive proteinuria, *nephritic syndrome* is characterized by inflammation. **Nephritic syndrome** involves a group of symptoms that occur with some disorders that cause swelling and inflammation of the glomeruli in the kidney. This inflammation restricts filtration, allowing red blood cells to escape to the urine, causing hematuria.

The next section, *Renal Tubulo-interstitial Diseases* (*N10-N16*), includes **pyelonephritis**, which is an infection of the kidneys. When coding this section, be sure to read the instructional notes found within the *Tabular List* for complete and accurate coding. Now, you're ready to move to the next section.

Acute Kidney Failure and Chronic Kidney Disease (N17-N19)

As previously discussed, the *ICD-10-CM* classification system presumes a cause-and-effect relationship between hypertension and renal failure, so you will code these combined diagnoses to code block *I12 Hypertensive chronic kidney disease* or code block *I13 Hypertensive heart and chronic kidney disease*. Open your *ICD-10-CM* manual to *Acute Kidney Failure and Chronic Kidney Disease* (*N17-N19*) and review the extensive list of codes that you may apply in addition to the codes in this section, if there is supporting documentation.

This section has three distinct code blocks:

- *N17—Acute kidney failure*

- *N18—Chronic kidney disease (CKD)*

- *N19—Unspecified kidney failure*

Kidney failure occurs when the kidneys don't work properly, causing harmful wastes to build up, fluid retention and reduced production of red blood cells. When this condition happens very suddenly, over a few hours or a few days, it is called **acute kidney failure**. Although acute kidney failure can be fatal, it may be reversible with intensive treatment.

Long-term diseases, such as high blood pressure, diabetes or heart disease, can slowly damage the kidneys and reduce their function over time. When damaged kidneys are unable to perform as they should, the condition is known as **chronic kidney disease** (**CKD**). Renal failure that requires *dialysis* or a kidney transplant to keep the patient alive is known as **end-stage renal disease** (**ESRD**). Meanwhile, **dialysis** is the treatment that removes wastes from the blood by machine. In 2002, the *National Kidney Foundation* published treatment guidelines that identified five stages of CKD based on declining **glomerular filtration rate** (**GFR**) measurements, which indicate how well the kidneys are working.[1] The five stages are as follows.

- Stage 1: Kidney damage with normal GFR (90 or above). Kidney damage may be detected before the GFR begins to decline. In this first stage of kidney disease, the goals of treatment are to slow the progression of CKD and reduce the risk of heart and blood vessel disease.

- Stage 2: Kidney damage with mild decrease in GFR (60 to 89). When kidney function starts to decline, a healthcare provider will estimate the progression of CKD and continue treatment to reduce the risk of other health problems.

- Stage 3: Moderate decrease in GFR (30 to 59). When CKD has advanced to this stage, anemia and bone problems become more common. A stage 3 patient must work with a healthcare provider to prevent or treat these complications.

- Stage 4: Severe reduction in GFR (15 to 29). The patient should continue following treatment for complications of CKD and learn as much as possible about the treatments for kidney failure. Each treatment requires preparation. Hemodialysis, for instance, first requires a procedure to make a vein in the arm larger and stronger for repeated needle insertions. For peritoneal dialysis, a catheter will be placed in the abdomen. Alternatively, patients may ask family or friends to consider donating a kidney for transplantation.

- Stage 5: Kidney failure (GFR less than 15). At this stage, the kidneys do not work well enough to maintain life, and the patient will need dialysis or a kidney transplant.

According to the *ICD-10-CM*, ESRD is assigned when the provider has documented end-stage renal disease. However, if CKD of any stage is documented with ESRD, you will assign *N18.6 End stage renal diseases* only. In addition, you will also identify the dialysis status using code *Z99.2*.

Finally, keep in mind that you should review additional guidelines in detail when coding CKD and kidney transplant status, as well as CKD with other serious conditions. Now, you're ready to move on to the next section.

Urolithiasis (N20-N23)

Urolithiasis is a condition characterized by the formation or presence of *calculus* in the urinary tract. **Calculus**, or stones, can be found in the kidneys, ureter, bladder, urethra or lower urinary tract. Kidney stones are the most common type of calculus. Although kidney stones are painful, they usually pass on their own without permanent damage. Medication can be used to decrease the chances of stone formation and to aid in the breakdown of already-formed stones. If the stones are too large to pass naturally, ultrasonic waves can be used to break up the stones. Surgery might also be an option for removal of stones.

Other Diseases of the Urinary System (N30-N39)

Diseases that you'll find in section *N30-N39* of the *Tabular List* include *cystitis*, *neuropathic bladder*, urethritis, urethral stricture and urinary tract infections. You will not code urinary infections complicating pregnancy, as indicated at the beginning of this section.

Code block *N30* contains various conditions related to **cystitis**, which is an inflammation of the urinary bladder. However, you should not code prostatocystits (*N41.3*) with any of the conditions found in this code block.

Neurogenic bladder is a condition in which a person lacks bladder control due to damage to part of the nervous system. You'll find this and other related conditions under code block *N31*. Be sure to note that you'll also code any associated urinary incontinence (*N39.3* or *N39.4-*), if it is documented. You'll learn more about urinary incontinence shortly.

The **urethra** is the tube that carries the urine from the bladder to the exterior of the body. Inflammation of this urinary organ is known as **urethritis**. If the cause of the inflammation is an infectious agent, you'll use an additional code to identify it. Meanwhile, when an **abscess**, or pocket of pus, forms in the tube, you'll apply code *N34.0*.

A narrowing of the urethra is known as a **stricture**. Code block *N35 Urethral stricture* does not include congenital urethral stricture or postprocedural urethral stricture. However, it does include post-traumatic and postinfective urethral stricture.

Before moving to the next section, let's explore two common diseases of the urinary system: *urinary tract infections* and *stress incontinence*. The *Tabular List* indicates that various types of hematuria and proteinuria can be coded with code block *N39*, if it is documented.

As you know, the urinary system includes the kidneys, ureters, bladder and urethra. When you have an infection in any part of the urinary system, it is a **urinary tract infection**, or **UTI**. Code *N39.0* is for urinary tract infections when the site is not specified; therefore, if you know it is cystitis or urethritis, you will not apply *N39.0* to the condition. In addition, if you know the infectious agent causing the infection, you will apply an additional code to identify that agent.

Urinary incontinence is the loss of bladder control. Leakage may occur upon sneezing, laughing, coughing, sudden movement or lifting. When the urinary incontinence is not related to a urinary disorder, you will code *R32 Unspecified urinary incontinence*, which is a symptom or sign involving the genitourinary system. However, if the urinary incontinence is due to a disorder of the urinary system, you'll code stress or other specified urinary incontinence. You will code also any associated overactive bladder (*N32.81*) with these conditions when it is documented.

Now, let's take a look at some terminology related to these disorders.

Stress incontinence—Leakage of urine when pressure is exerted on the bladder

Urge incontinence—A sudden, intense urge to urinate, followed by leakage of urine

Mixed incontinence—Both stress and urge incontinence

Overflow incontinence—Frequent or constant dribble of urine

Now that you have a better grasp of other diseases of the urinary system, review the following SOAP note and see if you can accurately assess the diagnoses.

SUBJECTIVE
This patient complains of dysuria and prostate nodule. Suspect UTI, rule out pyelonephritis and prostatic carcinoma.

OBJECTIVE
Expanded problem focused exam performed on established patient. Urinalysis: Specific gravity 1.030, pH 7.4. Negative for protein, glucose and ketones. Microscopic: No RBCs, WBCs or casts seen. Urine culture results from outside lab positive for Enterobacter, resistant to ampicillin and cephalothin.

ASSESSMENT
Urinary tract infection secondary to E coli. No evidence of pyelonephritis or prostatic carcinoma from serologic or urine testing.

PLAN
Oral antibiotics. Patient to return in 1 week.

How did you do with coding this scenario? You should have two codes—one for the UTI and the other to identify the infectious agent. Let's walk through the steps to locate the codes. First, you'll code for the UTI. In the *Index to Diseases and Injuries,* locate *Infection* as the main term and *urinary (tract)* as the subterms. Code *N39.0* is provided as the tentative code, which you'll verify in the *Tabular List.* The notes in the *Tabular List* indicate you'll use an additional code to identify the infectious agent, so you'll code the E. coli next. Use the coding pathway *Infection, Escherichia (E.) coli NEC, as the cause of disease classified elsewhere* for the tentative code *B96.20.* You'll list *N39.0 B96.20* for this SOAP note.

Although there are many diseases within this section, most are not difficult to code. As long as you check the *Coding Guidelines* and follow the instructional notes, you'll do well with coding diseases of the urinary system. Let's keep moving through this chapter of the *Tabular List* and learn more about diseases of the male genital organs.

Diseases of Male Genital Organs (N40-N53)

Before exploring the details of the *Tabular List*, let's briefly review the anatomy and terminology related to the male genital organs. The primary reproductive organ in males is the **testis** (**testicle**). The job of the two testes is to produce sperm for reproduction and the male hormone testosterone.

The external organs of the male reproductive system include the **penis** and the **scrotum**. The testes are enclosed by the scrotum. The only portions of the male reproductive system that are internal are the accessory glands and the reproductive ducts. The **accessory glands** include the **seminal vesicle**, **prostate gland** and **bulbourethral gland**. These glands make semen, which contains sperm. The reproductive duct system includes the epididymis, the **ductus deferens** and the urethra. These ducts carry the sperm and semen on their way out of the body.

Male reproductive system
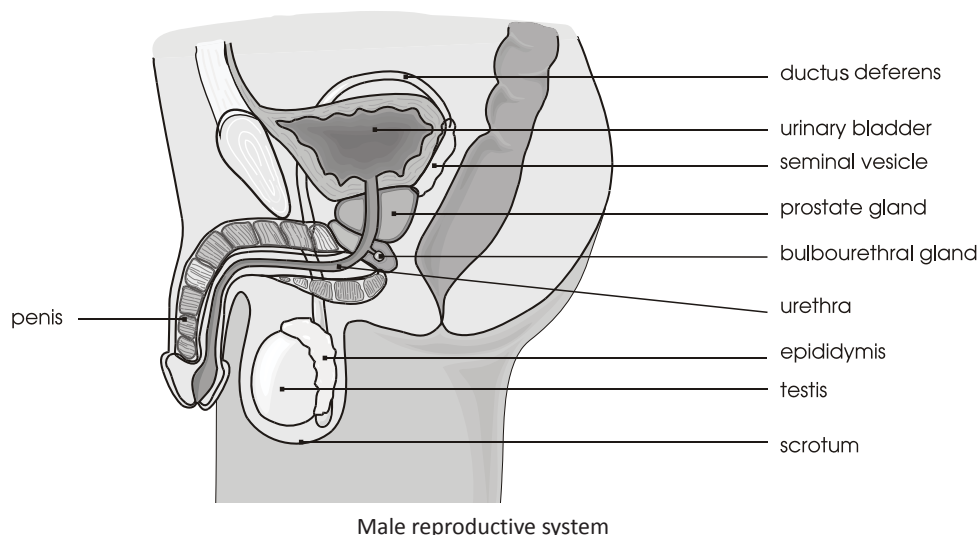
The prostate gland, one of the accessory glands that contribute to the production of semen, surrounds the neck of the bladder and the urethra. Diseases of the prostate include enlargement (*N40*), inflammation (*N41*) and calculus (*N42.0*).

When the prostate gland grows bigger, it's known as an **enlarged prostate**. Turn to *N40 Enlarged prostate* to review the conditions included under this code block. An enlarged prostate is often called benign prostatic hyperplasia (BPH) or benign prostatic hypertrophy. Hyperplasia is an increase in the size of the tissues and organs when the number of cells increases. **Hypertrophy** is an increase in the size of tissues or organs as individual cells enlarge. Simply put, hypertrophy is the result of an increase in *individual cell size*, while hyperplasia is the result of an increase in the *number of cells*.

An enlarged prostate is not cancerous, nor does it increase the risk of cancer. You'll note that benign neoplasms of the prostate are listed as a mutually exclusive condition; however, malignant neoplasm of the prostate (*C61*) can be coded in addition to code block *N40*, if there is supporting documentation.

Finally, if the enlarged prostate is documented with lower urinary tract symptoms, you'll use an additional code to identify the associated symptoms.

When coding inflammatory diseases of the prostate, code block *N41*, you'll use an additional code to identify the infectious agent. **Prostatitis** is an inflammation of the prostate. When the inflammation develops suddenly, it is known as **acute prostatitis**. Meanwhile, **chronic prostatitis** develops gradually and continues for a long period of time. **Prostatocystitis** occurs when the inflammation affects the prostate and bladder.

Terminology of Male Genital Organs

You'll need to know the following terms and related definitions to increase your understanding of the provider's dictation for conditions related to the male genital organs. And remember: If an infection for any of the following is indicated, you will use an additional code to identify the organism.

Hydrocele—A collection of fluid found in the spermatic cord or in the space of the tunica vaginalis testis

Orchis—A Greek term that means "testis."

Orchitis—An inflammation of the testis.

Epididymis—An elongated structure connected to the posterior surface of the testis. The epididymis stores and matures spermatozoa and transports them from testis to ductus deferens (vas deferens). Inflammation of this structure is known as **epididymitis**.

Before wrapping up this section and moving to disorders of the breast, try coding the following scenario.

ADMITTING DIAGNOSIS
Dysuria.

HISTORY OF PRESENT ILLNESS
This 67-year-old Hispanic male patient was admitted because of enlarged prostate and symptoms of bladder neck obstruction.

PERTINENT PAST HISTORY
Physical examination revealed normal heart and lungs. Abdomen was negative for abnormal findings.

LABORATORY DATA
BUN 19 and creatinine 1.1. Blood group was A, Rh positive. Hemoglobin 13, hematocrit 32.1, prothrombin time 12.6 seconds, PTT 37.1. Discharge hemoglobin 11.4, and hematocrit 33.3. Chest x-ray showed calcified old granulomatous disease, otherwise normal. EKG was normal.

HOSPITAL COURSE
The patient had a cystourethroscopy and TUR of the prostate. Postoperative course was uncomplicated. The pathology report is pending at the time of dictation.

DISPOSITION
He is being discharged to home in satisfactory condition with a good urinary stream and minimal hematuria. Patient was provided with a standard postprostatic surgery instruction sheet.

FOLLOW-UP
To be followed in my office in one week.

DISCHARGE DIAGNOSIS
Enlarged prostate with bladder neck obstruction.

DISCHARGE MEDICATIONS
Bactrim DS 1 a day for 10 days.

To begin coding this scenario, you'll find the tentative code for the enlarged prostate. In the *Index to Diseases and Injuries*, locate *Enlargement, prostate*. You see that code *N40.0* is provided. In addition, *with* or *without lower urinary tract symptoms* are also options. The admitting diagnosis indicates dysuria and the discharge diagnosis includes a bladder obstruction; therefore, you'll code *with lower urinary tract symptoms*. You'll verify code *N40.1* with the *Tabular List*. Next, you'll apply an additional code for the associated symptoms as the instructional notes direct. You'll find the tentative code *N32.0* using *Obstruction, bladder-neck* as the coding pathway. After verifying that code, you'll assign *N40.1 N32.0* to the scenario.

You're getting the hang of it now! For accurate coding, continue to start at the *Index to Diseases and Injuries* with each code, and read through the notes in the *Tabular List*. Keep up the good work as you move on to the next section.

Disorders of Breast (N60-N65)

This brief section contains codes for disorders of the breast, which include conditions classifiable to both males and females. Please note that disorders of the breast associated with childbirth should not be coded with conditions in this section.

Abnormal tissue growths that are not neoplastic in nature are known as **benign mammary dysplasias**, found in code block *N60*. These conditions include cysts and fibroids of the breasts and dilation of the mammary ducts.

N61 Inflammatory disorders of breast include abscesses of the areola and breast, carbuncle of the breast and *mastitis*. **Mastitis** is an infection of the breast tissue that results in breast pain, swelling, warmth and redness of the breast. This breast infection most commonly occurs one to three months after the delivery of a baby, but can also occur in women who have not recently delivered, as well as in post-menopausal women. When the inflammatory disorder of the breast is associated with childbirth, you will code *O91.-* instead.

Code block *N62 Hypertrophy of breast* includes *gynecomastia* and *massive pubertal hypertrophy* of the breast. These conditions do not include breast engorgement of a newborn (P83.4) or disproportion of reconstructed breasts (*N65.1*). **Gynecomastia** is swelling of the breast tissue (not excess fat tissue) in males that is caused by an imbalance of the hormones estrogen and testosterone. Gynecomastia can affect one or both breasts, sometimes unevenly, and occurs in more than half of developing boys during puberty.

Excessive growth of the breasts during puberty in girls is known as **massive pubertal hypertrophy** of the breast. This condition, caused by over-sensitivity to the hormones estrogen and progesterone, occurs in girls between eight and 16 years of age and is characterized by rapid enlargement of the breast(s). With this condition, one breast can grow to weigh as much as 30 to 50 pounds.[2]

It's time to try coding a condition from this section. See if you can quickly determine the correct diagnosis code for the following operative report.

PREOPERATIVE DIAGNOSIS
Bilateral gynecomastia.

POSTOPERATIVE DIAGNOSIS
Same.

PROCEDURE PERFORMED
BILATERAL SUBCUTANEOUS MASTECTOMY.

PRIMARY PROCEDURE
The patient was brought to the operating room and given 1 mg midazolam hydrochloride in intravenous incremental doses. The area of concern was then infiltrated with 1% Xylocaine mixed with 0.5% Marcaine. The area was infiltrated extensively. An incision was made beneath the nipple of the right breast, extending down into the skin and subcutaneous tissue. A wide excision was then taken, grasping all of the breast tissue and completely dissecting it free. Hemostasis was achieved with electrocautery and suture ligatures. Dissection was carried up to include the tail of the breast and laterally and inferiorly. Hemostasis was determined to be intact. The breast tissue was removed and sent off as a separate specimen. The wound was then approximated and closed with interrupted 4-0 Vicryl sutures.I then proceeded to perform the same procedure on the left breast. This wound was then approximated and closed with interrupted 4-0 Vicryl sutures. The patient was awakened and taken to the recovery room in excellent condition.

How did you do? Did you determine *N62* as the correct code? If so, you're ready to move on to the next section! If not, review the coding pathway for a better understanding. You'll use *Gynecomastia* as the main term to locate *N62*, which you'll then verify in the *Tabular List*. You'll note that although the condition is documented as bilateral, there isn't a code to specify the location, so you'll just apply *N62*.

Inflammatory Diseases of Female Pelvic Organs (N70-N77)

The codes you'll find in this section for inflammatory conditions of the female pelvic organs include those for inflammation of the ovaries, fallopian tubes, pelvic cellular tissue, peritoneum, uterus, cervix, vagina and vulva. Inflammation of the ovary, fallopian tube, pelvic cellular tissue, peritoneum and uterus are further classified as acute, chronic or unspecified.

Female reproductive tract, anterior view

Female reproductive system
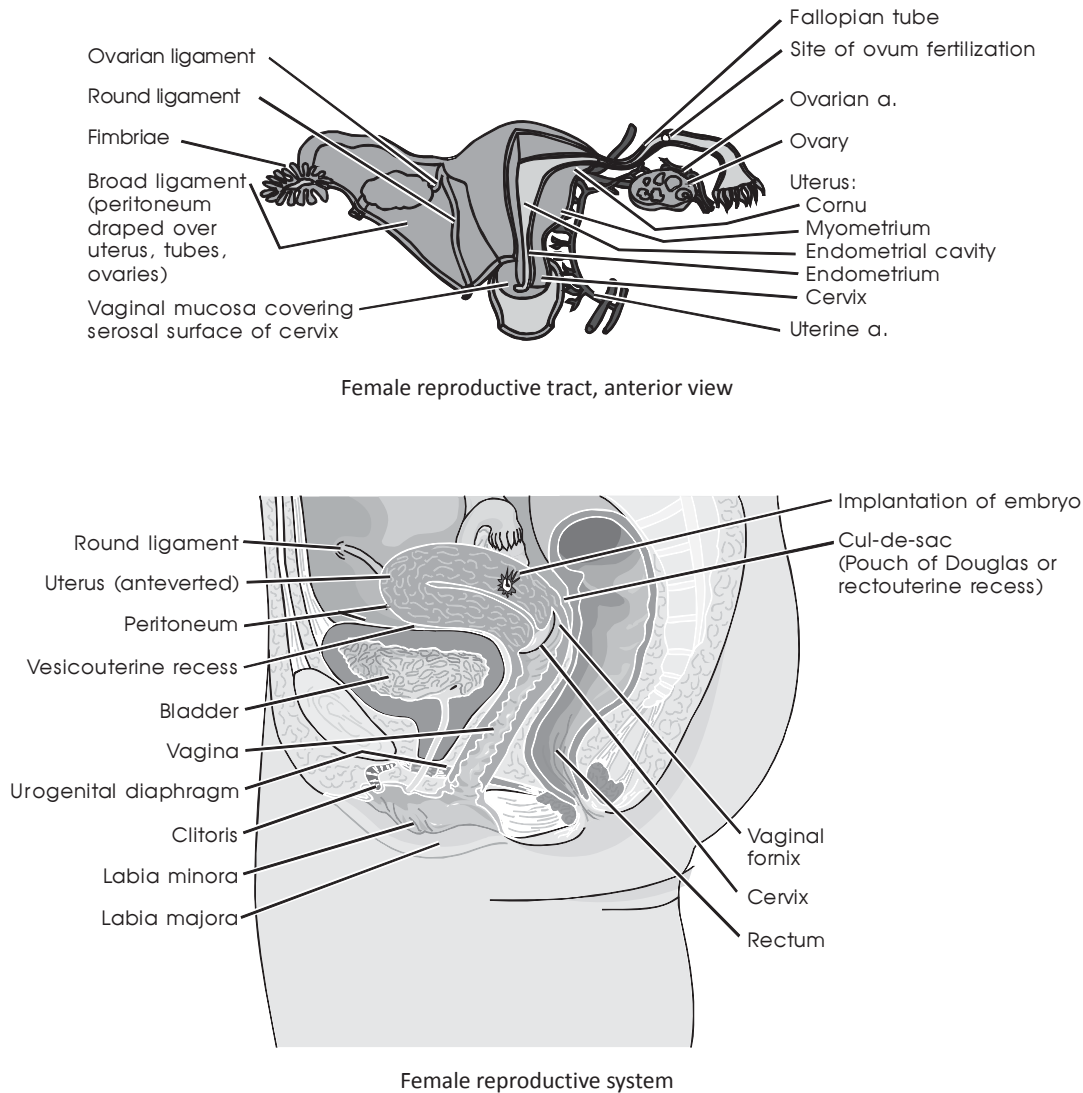
Also, note in the *Tabular List* that you will use an additional code to identify the infectious organism responsible for the inflammation, if it is known. Be aware that these codes exclude conditions associated with pregnancy, abortion, childbirth or the puerperium. Finally, you will find that reviewing your terminology will be particularly helpful with this section. For example, *salpingo* is a combining form for *tube*, meaning the uterine or fallopian tube; *oophoron* is Latin for *ovary*.

Pelvic inflammatory disease (**PID**) is an infectious inflammation of the female reproductive organs. It can affect some or all of the organs, and ranges from mild to severe. Usually, a bacterium, either one that normally occurs in the vagina or one that sexual contact transmits, spreads into the abdominal cavity through the vagina. Antibiotics can kill the infection. Providers also prescribe pain relievers and rest. Early treatment minimizes scarring, adhesions and other permanent damage to the reproductive system. According to the CDC, it is estimated that each year in the United States, more than 750,000 women experience an episode of acute PID.[3]

The following scenario is another for you to code. Take a moment to see if you can accurately determine the correct code, and then compare your results with the summary that follows.

SUBJECTIVE
An 18-year-old sexually active female complains of vaginal discharge with odor x 1 month. She has had multiple sex partners in the past 6 months. There has been pain with intercourse and an increase in menstrual cramping.

OBJECTIVE
Physical exam indicates abdominal tenderness. Pelvic exam reveals cervical discharge and motion tenderness. Labs requested: WBC, serum HCG, endocervical culture.

ASSESSMENT
Examination and labs confirm pelvic inflammatory disease due to Enterobacter sakazakii.

PLAN
Recommend antibiotic treatment and follow-up appointment in 2 weeks.

So, how did you code the SOAP note? Using *Disease, pelvis, inflammatory (female)* you'll find code *N73.9*. Acute and chronic are not noted, so you'll continue by checking the code in the *Tabular List*. The code is correct, but you'll also need to apply an additional code to identify the infectious agent, Enterobacter sakazakii. Return to the *Index* to locate *B96.89* with *Infection, bacterial, as cause of disease classified elsewhere, Enterobacter sakazakii* as the coding pathway. After checking that code, you'll assign *N73.9 B96.89* to this SOAP note.

Nice job! You have one more section to review, and then you'll be ready to complete another Practice Exercise. Remember, the more you code, the easier it will become. Each example you work on will help you with the process later, when you're on your own!

Noninflammatory Disorders of Female Genital Tract (N80-N98)

This final section of Chapter 14 of the *Tabular List* contains disorders of the female genital tract, such as *endometriosis, genital prolapse,* fistula, disorders of menstruation and menopause and infertility. You might find this section challenging because of the number of conditions included here! Take your time exploring the categories so that you become comfortable with the information.

Endometriosis is an often-painful disorder in which the **endometrium**, or the tissue that normally lines the inside of the uterus, grows outside the uterus. In addition to pain, this condition can cause irregular bleeding and infertility. Meanwhile, **genital prolapse** occurs when pelvic organs bulge into the vagina or cause pelvic pressure with movement. Code block *N81 Female genital prolapse* excludes conditions that complicate pregnancy, labor or delivery. Also note that prolapse or hernia of the ovary and fallopian tube, as well as prolapse of the vaginal vault after a hysterectomy, should not be coded with conditions in this code block.

While the details of each section won't be discussed, briefly review what the following terms mean:

Cystocele—A protrusion of the urinary bladder into the vaginal wall

Perineocele—A hernia in the perineal region, between the rectum and vagina or the rectum and bladder, or alongside the rectum

Rectocele—A protrusion into the back of the vaginal wall caused by the rectum pushing against weakened tissues of the vaginal wall (usually associated with a cystocele)

Urethrocele—Weakness of the tissues in the front wall of the vagina, causing the overlying urethra to bulge backward and downward into the vagina

Before moving on, let's look at *N94 Pain and other conditions associated with female genital organs and menstrual cycle.* Pain and other symptoms associated with female genital organs may occur during sexual intercourse, menstruation or at unexpected times.

Dyspareunia, code *N94.1*, is pain experienced during sexual intercourse. This pain can occur in the pelvic area during or soon after sexual intercourse. This condition may be due to vaginal dryness resulting from inadequate lubrication or current medications.

Pain relating to menstruation can be classified as "pain between periods," "pain during periods" or "pain before periods." **Mittelschmerz** is one-sided, lower-abdominal pain that occurs at or around the time of ovulation. This is not a harmful condition, but often requires treatment to relieve the cramping pain. Some pain during menstruation is normal. However, pain that is severe enough to limit usual activities or that requires medication is called **dysmenorrhea**. Premenstrual tension syndrome (*N94.3*), includes premenstrual dysphoric disorder, but you are to include a code to identify an associated menstrual migraine (*G43.82-*, *G43.83-*), if it is documented.

By now, you're probably feeling like a pro in terms of your ability to move around the *ICD-10-CM* manual! You're quickly assessing each scenario, determining the best starting place for the tentative code, verifying the code and making any final adjustments for additional codes as directed in the *Tabular List*. Now, go ahead and complete the following Practice Exercise to review what you've learned.

Step 4: Practice Exercise 27-1

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Nephritic edema**

    ICD-10-CM: _____

2. **Carbuncle of the kidney**

    ICD-10-CM: _____

3. **Acute cystitis due to E. coli**

    ICD-10-CM: _____

    ICD-10-CM: _____

4. **Testicular abscess**

    ICD-10-CM: _____

5. **Periodic fibroadenosis of the right breast**

    ICD-10-CM: _____

6. **Paravaginal prolapse**

    ICD-10-CM: _____

7. **Primary amenorrhea**

    ICD-10-CM: _____

8. Coding/Billing Challenge

Use the following encounter form and dictation to create a CMS-1500 version 02/12 claim form using MedLook.

Greg North, MD
800 Medical Court
Brown, CO 80001-9898
(970) 555-2222

☐ 11 Physician Office
☐ 12 Private Residence
☑ 22 Outpatient Hospital
☐ 23 Hospital Emergency Room

Participating Provider ☑Y ☐N

Physician signature: *Greg North, MD*

EIN: 47-9823559
NPI: 04-05674390

Patient Information

Name	Benjamin Kent Fox	**Date of Birth**	12/2/80
Address	1227 Comet Drive	**Sex**	male
City	Springtown **State** CO		
ZIP	80002		Seen at Weston Hospital
Home Phone	970-555-1001		

Insurance Information

Primary Insurance
Name Mountain States
ID# 7752
Group# 120
Address 1801 SW Vine Street
City Denver
State CO **ZIP** 80217-6789
Primary Insured Name Benjamin K. Fox
Relation to Patient Self

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Benjamin K. Fox
Signature of patient (or parent of minor child)

Secondary Insurance
Name none
ID#
Group#
Address
City
State **ZIP**
Secondary Insured Name
Relation to Patient

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Signature of patient (or parent of minor child)

Date of Service	2-18-20XX	
Diagnosis	**Procedure**	**Charge**
	52352 Cystourethroscopy	$1,661.00

Name: Benjamin K. Fox
DOB: December 2, 1980
Date of Service: February 18, 20XX

PREOPERATIVE DIAGNOSIS
Left ureteral stone.

POSTOPERATIVE DIAGNOSIS
Same.

PRIMARY PROCEDURE
CYSTOURETHROSCOPY, URETERAL DILATION AND URETHROSCOPY WITH STONE
EXTRACTION.

PROCEDURE
After general anesthesia was done, the patient was placed in the dorsal lithotomy position. The genital area
was prepped and draped. A cystourethroscopy was done, which was unremarkable. Under direct vision, a
0.035-inch guidewire was inserted into the right ureter, all the way to the renal pelvis. A 4 cm 12 French
ureteral balloon dilator was inserted over the guidewire, and the lower ureter was dilated at 16 mL. After the
dilation was accomplished, the dilator was removed from the guidewire, and the ureteroscope was inserted
into the ureter. The stone could be seen above the ureterovesical junction. It was engaged into a Segre
basket, and gradually it was removed. Ureteroscopy was done. There was some redness of the ureteral vault,
but it was otherwise unremarkable. The bladder was drained, and the patient was sent to the recovery room.

Step 5: Review Practice Exercise 27-1

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 6: Pregnancy, Childbirth and the Puerperium (O00-O9A), Part 1

The first note in the *Tabular List* for this chapter is important:

CODES FROM THIS CHAPTER ARE FOR USE ONLY ON MATERNAL RECORDS, NEVER ON
NEWBORN RECORDS.

The *ICD-10-CM* capitalizes this note because it is easy to forget and can lead to inaccurate coding. Conditions
within this chapter range from pregnancy with abortive outcomes to complications of labor and delivery. As
noted in the *ICD-10-CM*, codes from this chapter are for use for *conditions related to or aggravated* (to make
worse or more troublesome) *by the pregnancy, childbirth or by the puerperium (maternal causes or obstetric
causes).* The **puerperium** is the period between childbirth and the return of the uterus to its normal size.

A pregnancy may be charted either by the number of weeks or by the trimester. The 40 weeks of pregnancy are divided into trimesters, each three months long. You'll find a note in the beginning of this chapter to assist you in converting weeks to trimesters and trimesters to weeks. You are also directed to use an additional code from code block *Z3A* to identify the specific week of pregnancy. The *ICD-10-CM Coding Guidelines* indicate that *codes in category Z3A, Weeks of gestation, **may** be assigned to provide additional information about the pregnancy.* At this point, submitting the *Z3A* code is optional for data gathering purposes only. You will include the *Z3A* code when the information is provided in this program.

As you know, Excludes1 means not coded here. In other words, the conditions are mutually exclusive codes and cannot be reported together. *Supervision of normal pregnancy (Z34.-)* should not be coded with any code from this chapter.

Excludes2 indicates that it may be acceptable to use both the code and the excluded code together, if doing so is supported by the documentation. You may code the following conditions in addition to a code from Chapter 15 as long as there is documentation:

- *mental and behavioral disorders associated with the puerperium (F53)*

- *obstetrical tetanus (A34)*

- *postpartum necrosis of pituitary gland (E23.0)*

- *puerperal osteomalacia (M83.0)*

Before you study the specifics of this chapter, be sure you understand the following key terms to help you code accurately:

Gravida means a pregnant woman. *Gravida*, or *G,* followed by an Arabic numeral or preceded by a Latin prefix (primi-, secundi-), designates the number of pregnancies.

Gravida 1 or **primigravida** refers to a woman in her first pregnancy.

Gravida 2 or **secundigravida** refers to a woman in her second pregnancy.

Para means the number of times a woman has given birth to one or more viable infants. *Para*, or *P,* followed by an Arabic numeral or preceded by a Latin prefix (primi-, secundi-, terti-, quadri-), designates the number of times a pregnancy has culminated in a single or multiple birth.

Para 0 refers to a woman who has never given birth to a viable infant.

Para 1 or **primipara** refers to a woman who has given birth for the first time.

Para 2 or **secundipara** refers to a woman who has given birth for the second time to one or more infants.

Now, let's look at some of the *Chapter-Specific Guidelines* for more information on coding from Chapter 15. This chapter contains quite a few guidelines for accurate coding. Be sure to read the *Chapter-Specific Guidelines* carefully when coding from this section of the *ICD-10-CM*.

General Rules for Obstetric Cases

The first rule to keep in mind regarding obstetric coding is sequencing. Codes from the range *O00-O9A* have sequencing priority over codes from any other chapter. Again, these codes are for the mother's records only—do not assign codes from this chapter to the newborn record.

In this chapter of the *ICD-10-CM*, you will find that many of the codes require a final character to indicate the trimester of pregnancy. This character assignment will be based on the provider's dictation. However, if the documentation isn't sufficient and you cannot determine the trimester, you will code to *unspecified trimester.* If the condition you are coding doesn't occur in all trimesters, the option will not be available with that code.

For certain codes in this chapter, the 7th character identifies the fetus for which the complication code applies.

0	not applicable or unspecified
1	fetus 1
2	fetus 2
3	fetus 3
4	fetus 4
5	fetus 5
9	other fetus

According to the *ICD-10-CM Coding Guidelines*, you will assign "0" as the 7th character:

● For single gestations

● When the documentation in the record is insufficient to determine the fetus affected and it is not possible to obtain clarification

● When it is not possible to clinically determine which fetus is affected

During pregnancy, there are many routine outpatient prenatal visits. For such visits, when no complications are noted, you'll apply the appropriate code from block *Z34* as the principal diagnosis. Codes from Chapter 15 should not be used.

The *Coding Guidelines* caution: *When coding from Chapter 15, it is important to assess if a condition was pre-existing prior to pregnancy or developed during or due to the pregnancy in order to assign the correct code.*

When a patient is admitted during the pregnancy due to an HIV-related illness, you will assign the accurate code for HIV disease complicating pregnancy, followed by the code for the HIV-related illness. However, if the patient is not symptomatic, the obstetric code is assigned first, followed by *Z21* to identify the HIV status.

Finally, a code from category *Z37 Outcome of delivery*, should be included on every maternal record when a delivery has occurred. However, these codes should not be used on subsequent records or on the newborn record.

Pregnancy with Abortive Outcome (O00-O08)

When a fertilized egg develops outside the uterus, it is called an **ectopic pregnancy**, which is found in code block *O00*. Although the most common site of an ectopic pregnancy is in the fallopian tubes, it can also occur in the abdominal or pelvic cavity, ovary, uterine tube or cervix. When a fetus begins to develop outside the uterus, the pregnancy is not viable, and the fetus must be surgically removed. You will assign an additional code from code block *O08* to identify any associated complication, if it is documented.

A **hydatidiform mole**, or **molar pregnancy**, is the result of over-production of the tissue that normally develops in the placenta. This condition is characterized by a mass of cysts that resemble a bunch of grapes. A pelvic exam may reveal signs of a normal pregnancy, although some bleeding may be present. However, because there is no fetus, the size of the uterus may be abnormally large, and there will be no fetal heart tones. Once the diagnosis is confirmed, if the mass of tissue is not miscarried, it must be removed by **suction curettage**. This procedure may also be called a **D and C** which stands for **dilation** (widening of the cervix to allow instruments into the uterus) and **curettage** (scraping of the walls of the uterus). You'll use code block *O01* for this condition, in addition to code block *O08* to identify any associated complication.

The next code block, *O03 Spontaneous abortion*, includes miscarriages. There is a note that indicates *incomplete abortion includes retained products of conception following spontaneous abortion*. **Abortion** is the expulsion of an embryo or fetus from the uterus before the stage of viability. A **spontaneous abortion**, or **miscarriage**, is when the loss of the fetus is the result of natural causes. Keep in mind that you can use *abortion* as the main term if a complication of the miscarriage is noted.

Therapeutic, elective or legally induced abortions are intentional or deliberate terminations of the pregnancy. **Therapeutic abortions** are those recommended by physicians to protect the mother's health. **Elective abortions** are initiated by individual choice, not medical necessity. When the pregnancy continues despite an attempt to end it by legal means, it is known as a **failed attempted abortion**.

Complete indicates that all of the products of conception have been expelled from the uterus before 20 weeks gestation. *Incomplete* indicates that not all of the products of conception have been expelled during this time period. *Unspecified* indicates that the stage of abortion is not specified in the documentation.

Supervision of High Risk Pregnancy (O09)

Code block *O09* is used for prenatal outpatient visits for those with a *high-risk pregnancy*. When the patient or her baby has an increased health problem, it is considered a **high-risk pregnancy**. For these records, you will list the *O09* code first, followed by appropriate codes from Chapter 15, if they apply.

Edema, Proteinuria and Hypertensive Disorders in Pregnancy, Childbirth and the Puerperium (O10-O16)

Conditions of the mother that existed prior to pregnancy are called pre-existing conditions. According to the *Coding Guidelines*: *it is important to assess if a condition was pre-existing prior to the pregnancy or developed during or due to the pregnancy in order to assign the correct code*. Let's look at two conditions that fall into these categories.

Hypertension is the most common medical problem encountered during pregnancy, complicating two to three percent of pregnancies.[4] Pre-existing hypertension is always considered a complicating factor of pregnancy, and you will code this condition as category *O10 Pre-existing hypertension complicating pregnancy*. Patients who do not have pre-existing hypertension frequently develop *transient* or *gestational* hypertension during pregnancy. The terms **transient** or **gestational** indicate the patient didn't have the condition before the pregnancy, and will likely not have it after delivery.

Pre-eclampsia is defined as high blood pressure and excess protein in the urine (proteinuria) after 20 weeks of pregnancy in a woman who previously had normal blood pressure. Symptoms of pre-eclampsia include swelling of the hands (edema). If not controlled, pre-eclampsia may develop into **eclampsia**, which is a serious condition characterized by seizures, and it can put the mother and baby at risk.

Other Maternal Disorders Predominantly Related to Pregnancy (O20-O29)

The following conditions are not included in this section and may be coded in addition to the codes in this section, if there is documentation:

- *maternal care related to the fetus and amniotic cavity and possible delivery problems (O30-O48)*

- *maternal diseases classifiable elsewhere but complicating pregnancy, labor and delivery, and the puerperium (O98-O99)*

Conditions you will find in this section include hemorrhage in early pregnancy, *hyperemesis gravidarum*, varicose veins, genitourinary tract infections, diabetes, malnutrition and complications of anesthesia. You've already encountered many of these disorders, but this section pertains to these conditions *in pregnancy*.

Hyperemesis gravidarum is extreme, persistent nausea and vomiting during pregnancy. You'll see that this condition may be classified as mild, with metabolic disturbance, or late vomiting of pregnancy. Nearly all women suffer some nausea and vomiting during pregnancy, usually during the first three months. Extreme, persistent nausea and vomiting during pregnancy can lead to dehydration and poor weight gain. Severe cases of hyperemesis gravidarum require hospitalization for IV fluid and nutrition.

Diabetes is a condition that the patient may have prior to pregnancy, or may develop as a result of the pregnancy. Gestational diabetes is found in subcategory *O24.4*, while pre-existing diabetes complicating pregnancy is coded *O24.31-*. In addition, you'll assign *Z79.4* to identify long-term insulin use, if applicable.

Take a look at the following emergency department report and see if you can assess the accurate code.

HISTORY OF PRESENT ILLNESS
The patient is a 28-year-old G1 at approximately 8 weeks who presented after intractable nausea and vomiting with blood-tinged vomit starting approximately 5 days ago. This has gotten worse over the past couple of days. This is patient's 4th trip to the emergency department and 2nd trip for admission.

LABORATORY FINDINGS
While in the emergency department, the patient was found to have slightly low sodium, potassium slightly elevated and her ALT of 93, AST of 35, total bilirubin is 1.2. Her urine was 3+ ketones, 2+ protein, and 1+ esterase, and RBC too numerous to count with a moderate amount of bacteria. H and H stable at 14.1 and 48.7.

HOSPITAL COURSE
The patient was admitted after receiving some Phenergan and Zofran IV. She was also given a dose of Rocephin to treat bladder infection. She was admitted overnight. Nausea and vomiting resolved to only one episode of vomiting after receiving Maalox. She tolerated fluids as well as p.o. food. Follow-up chemistry was obtained for AST, ALT.

DISPOSITION
We will plan for discharge as lab variables have resolved.

FOLLOW-UP
Return in 1 week for follow-up and recheck of labs.

DISCHARGE DIAGNOSIS
1. This is a 28-year-old G1 at approximately 8 weeks gestation with hyperemesis gravidarum.
2. Slightly elevated ALT, questionable, likely due to the nausea and vomiting. We will recheck at follow-up.

At first glance, you might think you'd code *O21.0 Mild hyperemesis gravidarum*; however, the notes indicate low sodium and high potassium, among other factors. This leads you to *O21.1 Hyperemesis gravidarum with metabolic disturbance*, which is the correct code for this report. Don't forget that you will use an additional code from category *Z3A Weeks of gestation* to identify the specific week of the pregnancy. In the *Index*, locate *Pregnancy, weeks of gestation, 8 weeks* for code *Z3A.08*. After a quick check in the *Tabular List*, you'll list *O21.1 Z3A.08* to this discharge summary.

You've covered quite a lot of information in this lesson so far. Let's pause to review what you've learned.

Step 7: Practice Exercise 27-2

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Ovarian pregnancy**
   ICD-10-CM: _____

2. **Complete miscarriage at 12 weeks**
   ICD-10-CM: _____
   ICD-10-CM: _____

3. **Hyperemesis gravidarum at 19 weeks' gestation**
   ICD-10-CM: _____
   ICD-10-CM: _____

4. **Twin pregnancy of monochorionic/diamniotic at 24 weeks**
   ICD-10-CM: _____
   ICD-10-CM: _____

Step 8: Review Practice Exercise 27-2

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 9: Pregnancy, Childbirth and the Puerperium (O00-O9A), Part 2

Now you're ready to continue with Chapter 15 of the *ICD-10-CM Tabular List*.

Maternal Care Related to the Fetus and Amniotic Cavity and Possible Delivery Problems (O30-O48)

This section of Chapter 15 is quite long. However, you can divide it into smaller, more manageable portions. First, you'll learn how to properly code for multiple gestations. Next, you'll look at conditions that impact maternal care. Then, you'll discover fetal and placental problems that affect management of the mother. Finally, you'll find codes related to antepartum hemorrhage, false labor and late pregnancy.

Although many of these conditions are related to the fetus, you must remember that the *codes from this chapter are for use only on material records, never on newborn records*. In addition, you'll only code these conditions when they affect management of the mother's care. For accurate coding, it's important to read the notes, be aware of inclusions and exclusions and apply the final digits appropriately.

Multiple Gestations

Twins, triplets, quadruples and other multiple gestations are found in the first code block, *O30 Multiple gestations*. According to the CDC, in 2010 the number of multiple births in the United States declined slightly from 2008:[5]

Number of twin births: 132,562

Number of triplet births: 5,503

Number of quadruplet births: 313

Number of quintuplets and other higher-order births: 37

When using this code block, you will code also any complications specific to multiple gestation, which is in code block *O31*. When coding these complications, you'll find the first box for the 7th character identifying the fetus affected. Remember, you'll use a dummy place-holder to stretch the code out to seven digits.

To assist with accurate coding, it's important to understand some of the terminology you'll see with multiple gestations. Before you continue with this code block, review the following definitions.

The **placenta** is the structure that develops in the uterus during pregnancy to provide nourishment to the baby and remove wastes from the body's blood. Also within the uterus is the **amniotic sac**, which is the bag of fluid where the fetus develops and grows. With multiple gestations, the fetuses may share a common placenta (**monochorionic**) or two separate placentas (**dichorionic**). In addition, the fetuses may be sharing one amniotic sac (**monoamniotic**), or each has an individual amniotic sac (**diamniotic**).

Fraternal twins—the most common kind—occur when two separate eggs are fertilized by two different sperm. Each twin has an individual placenta and amniotic sac. **Identical twins** occur when a single fertilized egg splits and develops into two fetuses. Identical twins might share a placenta, but each baby usually has a separate amniotic sac. The presence of one or two placentas for identical twins depends on when the egg splits. If the egg splits early enough, the two embryos will implant separately in the uterus and develop individual placentas. However, if the split occurs later, the twins may share a placenta. Keep in mind, the number of placentas does not identify whether the twins are fraternal or identical. Triplets and other higher-order multiples can also be identical, fraternal or a combination of both.

Monochorionic/monoamniotic, indicating one placenta and one amniotic sac, occurs in less than one percent of all twin pregnancies in the U.S. There are some serious risks associated with the condition, including cord entanglement.[6]

Conditions Impacting Maternal Care

As with all codes in Chapter 15, the codes you'll find here specifically affect management of the mother's care. The code blocks in this section include maternal care for malpresentation of the fetus, *disproportion* and abnormality of pelvic organs. For codes in all of these code blocks, you are directed to *include the listed conditions as a reason for observation, hospitalization or other obstetric care of the mother, or for cesarean delivery before the onset of labor*.

In the last weeks of pregnancy, most babies will move to a head-down position with the back of the head slightly forward, termed an **anterior position**. For pregnancies in which this fails to happen, you may encounter conditions classifiable to code block *O32 Maternal care for malpresentation of fetus*, which includes unstable lie, *breech presentation*, transverse and oblique lie, face, brow and chin presentation, high head at term or compound presentation. When the baby's buttocks and/or feet are positioned to be delivered first, the baby is in **breech presentation**, which is the most commonly encountered malpresentation.

Moving on, you'll find conditions for maternal care related to disproportion in code block *O33*. **Disproportion** is the lack of a proper relationship between two elements or factors. In this case, the elements are the head of the fetus and the mother's pelvis.

For both *O32* and *O33,* you'll note that when these conditions are associated with obstructed labor, you will not code the condition here. Let's look at the details of a breech presentation to understand this concept. If the baby is in a breech position, the provider will attempt to correct the position by pressing gently on the pregnant belly while viewing fetal movements by ultrasound. If the baby is still in breech position when labor begins, it is possible to deliver vaginally. If the breech delivery is successful, you'll assign a code from block *O32*. However, trying to deliver the baby's feet or buttocks first may lead to the head becoming stuck in the birth canal. In this case, the infant's body does not stretch the birth canal wide enough for the head to pass, and the base of the baby's skull cannot compress or mold to the birth canal as it does during a headfirst passage.[7] If this happens, you'll have malpresentation of the fetus with obstructed labor, and will code *O64.-* as directed.

While *O32* and *O33* provide a different code to assign when the condition is associated with obstructed labor, *O34 Maternal Care for Abnormality of Pelvic Organs* instructs you to *code first any associated obstructed labor* (*O65.5*). In other words, you'll have at least two codes for this condition. You'll also use an additional code for the specific condition causing the abnormality.

Fetal and Placental Problems

When using code blocks *O35* and *O36*, you'll need to refer to the *Coding Guidelines* for accurate coding. First, note that you'll only code from these blocks when the condition is *responsible for modifying the management of the mother*. You won't just code the condition simply because it exists. In addition, for code blocks *O35* and *O36*, you are again directed to *include the listed conditions as a reason for observation, hospitalization or other obstetric care of the mother, or for cesarean delivery before the onset of labor.*

Conditions found in code block *O35 Maternal Care for Known or Suspected Fetal Abnormality and Damage* range from central nervous system and chromosomal abnormalities to decreased fetal movement. You will code also any associated maternal conditions with codes from this code block. However, you will not code here if it is an encounter to rule out suspected maternal and fetal conditions.

O36 Maternal Care for Other Fetal Problems includes Rh incompatibility, hydrops fetalis and intrauterine death. Keep in mind that you will assign these codes only when the fetal condition is actually responsible for modifying management of the mother. Just the fact that the fetal condition exists does not justify assigning a code from this block to the mother's record.

The final code block you'll study here is *O40 Polyhydramnios*. **Polyhydramnios**, or **hydramnios**, is the presence of excess amounts of amniotic fluid. Let's look at an example so that you can better grasp this concept.

> Lisa, gravida 1, para 0, and 20 weeks into her pregnancy, sees her provider complaining of belly pain with bloating. She is having a hard time breathing, as well. The provider determines Lisa has hydramnios and prescribes medication to prevent preterm labor, and schedules an appointment to remove some of the amniotic fluid to help relieve the symptoms.

For this example, you will locate the main term *Hydramnios* in the *Index to Diseases and Injuries*, which provides code *O40.-*. Turn to the *Tabular List* to complete the code. The second trimester is documented, so you'll work with code *O40.2*; however, a 7th character is needed, as well. You know that this is a single gestation, so the accurate code is *O40.2XX0*. In the *Index*, locate Preg*nancy, weeks of gestation, 20 weeks* for code *Z3A.20*. After a quick check in the *Tabular List*, you'll list *O40.2XX0 Z3A.20* to this example.

Antepartum Hemorrhage, False Labor and Late Pregnancy

Antepartum means before the onset of labor. Turn to *O46 Antepartum hemorrhage, not elsewhere classified* to see the conditions that are mutually exclusive and should not be coded with this block.

False or threatened labor is more commonly known as **Braxton Hicks contractions**. Braxton Hicks contractions are most commonly experienced in the third trimester, but can begin as early as the second trimester. When this happens, the muscles of the uterus tighten for approximately a minute at a time. Unlike true labor, these contractions are usually not painful and do not happen at regular intervals. Braxton Hicks are also called "practice contractions" because they are a preparation for the actual labor event and allow the opportunity to practice breathing exercises that are often taught in childbirth classes.

According to the *ICD-10-CM*, **post-term pregnancy** is any pregnancy over 40 to 42 completed weeks gestation. Pregnancy that has advanced beyond 42 completed weeks gestation is known as **prolonged pregnancy**. Both conditions are found in code block *O48 Late pregnancy*.

Complications of labor and delivery (O60-O77)

So, you have covered abortions and ectopic pregnancies, pre-existing conditions, maternal disorders and care. Most of these conditions are related to the gestation period. Now, you'll learn about a few of the conditions that may occur during labor and delivery. The conditions in this section are quite extensive, but you will build on what you know of obstructed labor and expand your knowledge of perineal lacerations.

Recall that code blocks *O32* and *O33* exclude conditions with obstructed labor, suggesting codes *O64.-* and *O65-O66* instead. In addition, code block *O34* instructs you to *code first any associated obstructed labor (O65.5)*. You'll find codes in this section for the conditions that complicate labor and delivery. Let's look at an operative report to understand how a breech presentation may cause an obstruction.

PREOPERATIVE DIAGNOSIS
Intrauterine pregnancy at term, 40 weeks gestation. Premature rupture of membranes. Frank breech, causing obstruction.

POSTOPERATIVE DIAGNOSIS
Cesarean delivery due to breech presentation with obstructed labor.

PRIMARY PROCEDURE
PRIMARY LOW TRANSVERSE CESAREAN SECTION.

DESCRIPTION AND FINDINGS
The patient underwent an epidural block administered by anesthesiology, and immediately after that, she was prepped and draped in the usual manner. A Pfannenstiel incision was used, and the abdominal wall was then dissected using sharp and blunt dissection. With careful extraction, a female fetus was then delivered in the frank breech position. Apgars of the fetus were 8 and 9. Cord was clamped and cut. Blood was drawn from the infant for type and cross match and Rh factor. The placenta was expressed manually and visually inspected. The pelvic cavity was then inspected, and intensive irrigation was carried out. The uterus was closed. Ovaries and tubes were inspected and noted to be normal. Closure of the abdomen was accomplished. The skin was then closed with staples. The patient then was transferred to a recovery room in stable condition.

In this scenario, the breech presentation caused an obstruction, making it impossible to continue with a vaginal delivery, and affecting the management of maternal care. To code this operative report, locate *Delivery, complicated, by, obstructed labor, due to breech (frank) presentation* to find code *O64.1*. When you verify this code with the *Tabular List*, you'll see that it's not valid, as it requires seven characters. Since there was a single gestation, you determine *O64.1XX0* to be the complete code. But you aren't done yet! This section doesn't indicate an additional code is necessary. However, you'll recall that the *Coding Guidelines* direct you to include an outcome of delivery code on every maternal record when a delivery has occurred. Return to the *Index* to locate *Outcome of delivery, single, liveborn* for code *Z37.0*. In addition, you'll need to code the weeks of pregnancy. In the *Index*, locate Preg*nancy, weeks of gestation, 40 weeks* for code *Z3A.40*. After a quick check in the *Tabular List*, you'll apply *O64.1XX0 Z37.0 Z3A.40* to the report.

You're now ready to move on to code block *O70 Perineal laceration*, which includes *episiotomy* extended by laceration. An **episiotomy** is a surgical incision into the perineum and vagina to prevent laceration at the time of delivery, or to facilitate vaginal surgery. A perineal laceration may occur without an episiotomy, or if an episiotomy is not sufficient in length. When the extent of the perineal laceration is not noted, you will code to *unspecified*. Otherwise, you will assign one of the following types:

First degree—indicates the perineal skin is torn.

Second degree—perineal laceration, rupture or tear involves the perineal muscles.

Third degree—perineal laceration, rupture or tear consists of the anal sphincter.

Fourth degree—perineal laceration, rupture or tear is classifiable to a third-degree laceration, but includes the anal or rectal mucosa.

Perineal lacerations
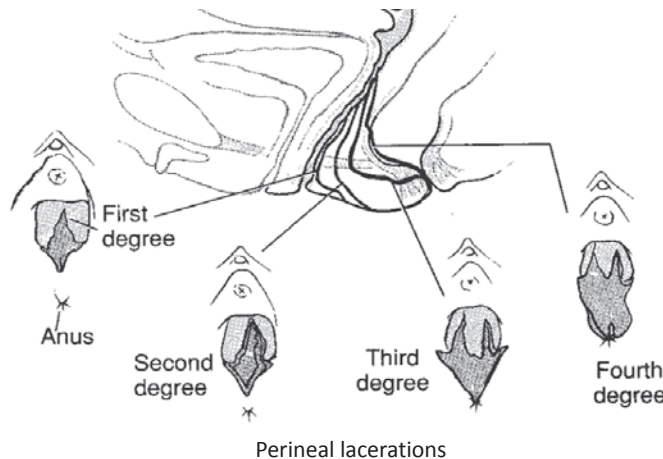
Reference: *2013 ICD-9-CM Professional for Physicians – Volumes 1 & 2,*
Salt Lake City, Utah: Optium, Inc., page 207, Volume 1.

So, let's say a patient arrives at the hospital in active labor at 39 weeks. The physician performs an episiotomy to assist the vaginal delivery of a healthy newborn. Upon delivery, the episiotomy tears, creating a third-degree perineal laceration. How do you code for this condition? You will code the perineal laceration and the outcome of the delivery. Let's do that now.

In the *Index to Diseases and Injuries,* use the coding pathway *Laceration*, *perineum, female, during delivery, third degree* and you'll find code *O70.2.* After checking with the *Tabular List,* you'll see that this is the correct code. Again, you'll apply the outcome of delivery and weeks of gestation codes *Z37.0 Z3A.39,* as well. Nice job!

Encounter for Delivery (O80, O82)

This section has two codes: *O80 Encounter for full-term uncomplicated delivery* and *O82 Encounter for cesarean delivery without indication.* For both situations, you'll use an additional code to indicate the outcome of delivery (*Z37.0*). To avoid any confusion, let's look at a full-term uncomplicated delivery in more detail.

Open your *ICD-10-CM Tabular List* to code *O80* and read the note. Simply, a **normal delivery** is the spontaneous birth of one live baby, delivered vaginally, head first at 40 weeks gestation, with no fetal manipulation or instrumental assistance *with or without* an episiotomy. Be aware that you cannot use code *O80* with any other code from Chapter 15, because then you no longer have a normal delivery.

In the next example, the patient is gravida 2, para 1, which means this is her second pregnancy and she has given birth once. Carefully read through the delivery note, and then see how far you can go in determining the correct codes.

DELIVERY NOTE

The patient is a 32-year-old, gravida 2, para 1, at term who presented to labor and delivery in active labor. The patient's labor progressed rapidly, and she was completely dilated at approximately a +2 station. The patient went on to have a normal spontaneous vaginal delivery over an intact perineum. She was delivered of a viable female in cephalic presentation, Apgars were 8 at five minutes and 9 at ten minutes. The birth weight was 3628 gm.

The delivery time was 1628. The placenta delivery time was 1637 and was spontaneous. The perineum was examined and noted to have no lacerations of any type. The estimated blood loss at delivery was 300 mL. There were no complications during delivery.

The patient had a normal spontaneous vaginal delivery without manipulation or assistance, resulting in a single liveborn infant.

Based on the documentation, you can code this to a normal delivery (*O80*) with the outcome of delivery being a single liveborn (*Z37.0*) at 40 weeks gestation (*Z3A.40*). Did you come up with the same codes? Excellent!

Complications Predominately Related to the Puerperium (O85-O92)

Recall that the puerperium is the period between childbirth and the return of the uterus to its normal size. Conditions found in this section include *puerperal sepsis*, infections, embolisms and mastitis associated with pregnancy.

Puerperal sepsis is a serious form of septicemia that women can contract following a vaginal delivery. This was once a common cause of maternal death, but is now rare due to improved hygiene standards and effective antibiotics. The CDC indicates there were just 55 deaths due to puerperal sepsis in the United States from 1999 to 2007, but the WHO states that it's the second leading cause of maternal mortality in developing countries.[8] Now, review the *Coding Guidelines* for more information on accurate coding of this condition. You'll see that code *O85* should be assigned with a secondary code to identify the causal organism. In addition, codes from code block *A40* or *A41* should not be used for puerperal sepsis. Finally, you can use *R65.2- Severe Sepsis*, if it is documented, as well as any other associated organ dysfunction.

Turn to code block *O87 Venous complications and hemorrhoids in the puerperium*. Three common conditions found in the puerperium are *deep vein thrombosis, hemorrhoids* and *varicose veins*. Recall that the puerperium is the period between childbirth and return of the uterus to its normal size. **Deep phlebothrombosis**, or **deep-vein thrombosis**, is the presence of blood clots deep in the veins, usually in the leg. Varicose veins are swollen, twisted veins that you can see just under the skin. They also usually occur in the legs, but can form in other parts of the body, as well. Hemorrhoids, a type of a varicose condition, are swollen, inflamed veins around the anus or lower rectum. Although each of these conditions can be found elsewhere in the *ICD-10-CM*, if the condition exists in the puerperium, you'll locate the code in block *O87*.

Previously, when learning about disorders of the breasts, you studied abscesses and mastitis, which is an inflammation of the breast tissue. When these conditions present during the puerperium, you will use code block *O91 Infections of breast associated with pregnancy, the puerperium and lactation*.

Let's code the following scenario to give you some practice working with codes from this section.

SUBJECTIVE
A 26-year-old female is seen by her OB/GYN 2 weeks after giving birth to her 1st child. She complains of pain and swelling of the right breast. She has had no problem breastfeeding.

OBJECTIVE
Physical exam of breast reveals a lump in the right breast. There is tenderness when palpating the nodes in the right armpit. She is afebrile.

ASSESSMENT
Mastitis.

PLAN
Recommend moist heat on affected breast for 20 minutes, 4 x a day until symptoms subside.

The assessment indicates that this patient has mastitis. Turn to your main term *Mastitis* in the *Index*. The first code you'll find is *N61*. However, you know this code is for the genitourinary system, not from Chapter 15, which relates to pregnancy, childbirth and the puerperium. The subjective information provides the time frame of two weeks after giving birth, so the patient is still in the puerperium period. In addition, the documentation does not indicate purulent, or discharging pus. Therefore, you'll use *Mastitis, obstetric, associated with, puerperium* as the coding pathway to locate code *O91.22*. A quick check with the *Tabular List* verifies this as the correct code for the SOAP note.

Whew! You've covered quite a lot of information so far. Although not every section or code block was discussed, you should have a basic understanding of the codes found in this chapter of the *ICD-10-CM*. If you code for an OB/GYN in the future, you'll want to take some time to read through the notes and exclusions in more detail for a firm grasp of the rules to coding here. By now, you have a good understanding of accurate coding for the mother's record. Next, you'll look at how to code the newborn's record. But first, complete the following Practice Exercise to show what you know about coding the mother's records. Remember, the outcome of the delivery is never listed as the primary diagnosis, and when the weeks gestation is provided, it's listed after the outcome of delivery. Good luck!

Step 10: Practice Exercise 27-3

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Secundigravida, with previous cesarean delivery, delivered a single liveborn by vaginal delivery at 38 weeks gestation.**

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

2. **Partial placenta previa with hemorrhage, at 30 weeks**

   ICD-10-CM: _____

   ICD-10-CM: _____

3. **Third-degree perineal laceration extending to anal sphincter during delivery of healthy baby girl at 40 weeks gestation.**

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

4. **Pulmonary embolism 5 days after delivering her first child**

   ICD-10-CM: _____

5. **Maternal cracked nipple 2 weeks after delivery, due to breastfeeding**

   ICD-10-CM: _____

6. **Coding Challenge**

ADMITTING DIAGNOSIS
Intrauterine gestation, at term, in active labor.

HISTORY OF PRESENT ILLNESS
This is a 30-year-old, gravida 1, para 0, with no prenatal care who came in complaining of contractions and active labor.

DELIVERY NOTE
The patient had ultrasound done on admission that showed gestational age of 38 weeks. The patient progressed to a normal spontaneous vaginal delivery over an intact perineum. Rupture of membranes occurred at 2008 hours via artificial rupture of membranes. No meconium was noted. Infant was delivered at 2154 hours. Prior to rupture of membranes, 2 doses of ampicillin were given. GBS status unknown. Intrapartum events, no prenatal care. The patient had epidural for anesthesia. No observed abnormalities were noted on initial newborn exam. Apgar scores were 9 and 9 at 1 and 5 minutes respectively. There was a nuchal cord x 1, nonreducible, which was cut with 2 clamps and scissors prior to delivery of body of child. Placenta was delivered spontaneously and was normal and intact. There was a 3-vessel cord. Baby was bulb suctioned and then sent to newborn nursery. Mother and baby were in stable condition. EBL was approximately 500 mL. NSVD with no active bleeding noted upon deliverance of the placenta. Upon delivery of the placenta, the uterus was massaged, and there was good tone. Pitocin was started following delivery of the placenta. Baby delivered vertex from OA position. Mother following delivery had a temperature of 100.7, denied any specific complaints and was stable following delivery.

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

Step 11: Review Practice Exercise 27-3

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 12: Certain Conditions Originating in the Perinatal Period (P00-P96)

Now that you have a good understanding of coding the mother's record, let's turn to the newborn. Similar to what you found in Chapter 15, you'll first find an important note in this chapter: *Codes from this chapter are for use on newborn records only, never on maternal records*. This reminder is critical for accurate coding.

The *ICD-10-CM* notes that Chapter 16 includes *conditions that have their origin in the fetal or perinatal period*, which consists of any time before birth through the first 28 days after birth, even if morbidity occurs later. For instance, a toddler recently diagnosed with fetal alcohol syndrome would be coded from this chapter, as the condition originated during the fetal period—regardless of when the condition was discovered. In addition, the *Coding Guidelines* indicate that these *codes may be used throughout the life of a patient if the condition is still present*.

The Excludes2 at the beginning of this chapter indicates that it may be acceptable to use both the code and the excluded code together if the documentation supports doing so. These conditions are as follows:

- *congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)*

- *endocrine, nutritional and metabolic diseases (E00-E88)*

- *injury, poisoning and certain other consequences of external causes (S00-T88)*

- *neoplasms (C00-D49)*

- *tetanus neonatorum (A33)*

Refer to the *Coding Guidelines* again, and you'll see that when coding the birth in a newborn record, you will assign the principal diagnosis from code block *Z38 Liveborn infants according to the place of birth and type of delivery*. You'll assign this only once, on the initial record, at the time of birth.

Many of the codes in this chapter are straightforward. You will learn the details of some, but will need to read the notes and guidelines carefully when coding those that are not specifically covered here. You'll do great! For now, pull out your *ICD-10-CM* and follow along.

Newborn Affected by Maternal Factors and by Complications of Pregnancy, Labor and Delivery (P00-P04)

This section consists of maternal conditions or complications that affect the newborn to cause **morbidity** (disease) or **mortality** (death) of the newborn. These conditions can be coded only if they are in fact affecting the newborn—not just because the conditions exist. You will use the codes in this section to code for the newborn record. These codes are used as secondary diagnoses for codes that indicate liveborn infants according to the type of birth. Remember when you coded the outcome of delivery in addition to the delivery code for the mother's records? When coding the baby's records, you will always assign a code from code block *Z38*, according to the type of birth. This code represents the principal diagnosis, and you can assign it only once, at the time of birth.

For code blocks *P00, P01, P02* and *P03*, you are directed to code first any current condition in the newborn. Let's look at a few of the conditions you'll find here.

Complications of the placenta, cord and membranes can affect the newborn. When the documentation specifies a maternal condition as the cause of morbidity or mortality in the fetus or newborn, you will assign the appropriate code from code block *P02*. **Placenta previa** is the term used when the placenta develops in the lower part of the uterus, covering the cervix opening. Hemorrhaging in the last trimester is a common symptom of this condition. When placenta previa affects the health and life of the fetus, you will use code *P02.0* for the condition.

The **umbilical cord** provides oxygen and nutrients to the fetus and removes waste, as well. A **prolapsed cord** occurs when the cord slips into the vagina after the membranes have ruptured and before the baby enters the birth canal. As the baby passes through the cervix and vagina during labor and delivery, he can put pressure on the cord, which reduces or cuts off the baby's oxygen supply. Unless the baby is delivered quickly, the situation could result in a stillborn delivery. If the newborn is affected by the prolapsed cord, you'll assign *P02.4*.

Let's practice applying some of this instruction now. You'll code for a term newborn, born in the hospital and delivered by cesarean section because of an abnormal fetal heart rate during labor; the abnormal heart rate was caused by a prolapsed cord during labor.

Once again, for the situation presented, we will go through several steps to determine the required codes and the correct order of those codes. Let's walk through the steps now:

1. Based on what you have learned, you know that you must include a code indicating liveborn infant according to the type of birth, so let's do that first. You choose the coding pathway of *Newborn, born in hospital, by cesarean* and the tentative code of *Z38.01* is provided. Confirm that code with the *Tabular List*, and you'll find it is the accurate code.

2. Next, you will code for the abnormal fetal heart rate. The coding pathway of *Newborn, affected by, heart rate abnormalities, intrauterine, during labor* provides the tentative code of *P03.811*. Then, you turn to the *Tabular List* to review the information there, and determine this code to be accurate and complete.

3. Then, you will code for the prolapsed cord documented in the notes. In the *Index to Diseases and Injuries,* locate the coding pathway of *Newborn, affected by, prolapsed cord.* Again, check code *P02.4* in the *Tabular List*.

4. Finally, assign the codes to the newborn's records as *Z38.01 P03.811 P02.4*.

How did you do? If you have questions on this scenario, be sure to contact your instructor for guidance.

Before moving on to the next section, let's look at code block *P04 Newborn (suspected to be) affected by noxious substances transmitted via placenta or breast milk*. Drugs and alcohol ingested during pregnancy can pass through the placenta to the fetus and through breast milk to the newborn, so these substances affect the health and life of the fetus or newborn. Noxious substances include anesthesia and analgesia, tobacco, alcohol, cocaine and other addictive drugs. Remember, these codes apply to the newborn's records.

Disorders of Newborn Related to Length of Gestation and Fetal Growth (P05-P08)

According to the CDC, one out of every nine babies born each year in the United States is premature.[9] Typically, a **premature** infant is a baby born before 37 completed weeks of gestation; however, providers may use different criteria for determining prematurity. Therefore, you will only assign a prematurity code when the record specifically documents the birth as such.

Now, refer to the *Coding Guidelines* for assistance with code blocks *P05* and *P07*. You are to consider the recorded birth weight and estimated gestation age when assigning codes from blocks *P05* and *P07*. When both the birth weight and gestational age are available, you'll assign two codes from code block *P07*. Additionally, the patient must not only meet the definition of *P07*, but the condition must also be affecting the patient's current heath status for you to code from block *P07*.

To accurately code from *P08 Disorders of newborn related to long gestation and high birth weight*, it's important to know some terminology. **Long gestation** is defined as more than 40 completed weeks to 42 completed weeks. **High birth weight** is usually defined as 4,500 grams or more.

Now, let's code a scenario that includes maternal causes of perinatal morbidity and mortality. Earlier, you learned about gestational hypertension as it pertains to the mother's records. If a preterm newborn is delivered at the hospital at 34 weeks gestation as the result of maternal hypertensive disorder, what ICD-10-CM code(s) will you assign to the newborn's record? To help simplify the information you have, break it down into specific steps.

1. First, you will code the liveborn infant according to the type of birth. Using the coding pathway of *Newborn, born in hospital*, you'll find the tentative code *Z38.00*. A quick check with the *Tabular List* confirms that it's the right code.

2. Next, you know that the baby was premature at 34 weeks gestation. So, using the coding pathway *Preterm, newborn, gestational age, 34 completed weeks* you'll find code *P07.37*. Again, you'll verify this code with the *Tabular List*.

3. Then, you'll code to the maternal hypertension, as it affected the newborn. Return to the *Index* using *Newborn, affected by, maternal, hypertensive disorder* to find *P00.0* as the tentative code.

4. The final step is to assign the codes in the correct order. Based on the *Coding Guidelines*, you will assign codes in order of *Z38.00 P07.37 P00.0*. Good work!

Birth Trauma (P10-P15)

Injuries to the newborn during delivery are **birth traumas**. Injuries might be due to vacuum extraction or breech presentation, or because the birth canal is too small or the fetus is too large. Because the head is the first part of the body to pass through the birth canal, it experiences much of the pressure during delivery, which may result in swelling and bruising. Most of the time, this resolves in a few days. However, the rupture of blood vessels within the skull may cause an intracranial hemorrhage. Other birth injuries may occur to the central or peripheral nervous system, the scalp or the skeleton. To code these conditions, use *Birth, injury* as the starting point in the *Index*.

Respiratory and Cardiovascular Disorders Specific to the Perinatal Period (P19-P29)

The **perinatal period** includes the days immediately before and 28 days after the birth of a newborn. Respiratory disorders specific to this period include metabolic academia, *respiratory distress, failure* and *arrest*, congenital pneumonia and neonatal *aspiration*. Cardiac failure, neonatal hypertension and persistent fetal circulation are cardiovascular disorders specific to the perinatal period.

Let's look at respiratory distress, failure and arrest in more detail. **Respiratory distress** is a condition in which the newborn cannot get enough oxygen. Turn to *P22 Respiratory distress of newborn* in the *Tabular List* and you'll see that this condition excludes *respiratory arrest of newborn* (*P28.81*) and *respiratory failure of newborn NOS* (*P28.5*). When the airway and lungs are unable to meet the metabolic demands of the body, it's known as **respiratory failure**. Meanwhile, **respiratory arrest** occurs when there is no effective breathing.

In this context, **aspiration** is the process of breathing in a foreign object. Neonatal aspiration can include breathing in *meconium*, amniotic fluid, mucus, blood, milk and regurgitated food.

Meconium refers to the earliest feces or stool passed by a newborn soon after birth, before the baby has started to digest breast milk or formula. Aspiration of meconium may occur in utero or during the delivery. This condition is coded *P24.0-*, with the final character to identify with or without respiratory symptoms.

Infections Specific to the Perinatal Period (P35-P39)

Infections in this section are those acquired in utero, during birth via the umbilicus or during the first 28 days after birth. There are quite a few conditions here that may exist, and that can be coded in addition, if they are documented. Be sure to review the *Tabular List* carefully.

Hemorrhagic and Hematological Disorders of Newborn (P50-P61)

Hemorrhagic conditions include intrauterine blood loss, umbilical hemorrhage and intracranial nontraumatic hemorrhage. There are many sources that can cause intrauterine blood loss; however, congenital anemia from intrauterine blood loss should not be coded with conditions found here. An umbilical hemorrhage can be caused by the umbilicus failing to heal properly, getting caught on clothing or being pulled off before it's healed. While a little bleeding is normal, prolonged or massive bleeding is not; you will find this condition in code block *P51 Umbilical hemorrhage of newborn*.

Hemolytic diseases of the newborn, found in code block *P55*, include Rh isoimmunization and ABO isoimmunization. Blood types are composed of groups (A, B, AB, O) and types (Rh positive and Rh negative). In most cases, the blood of the mother and fetus are compatible. However, when there is incompatibility, the health and life of the fetus are at risk. For **ABO isoimmunization**, the mother's blood group is O, and the fetus' blood group is either A or B. The mother develops antibodies against this "foreign" blood, and these antibodies cross the placenta and destroy the infant's red blood cells. The same destruction process occurs when the mom is Rh negative and the fetus is Rh positive; this is known as **Rh isoimmunization**. The risks for the fetus include premature delivery (before 37 weeks gestation), severe anemia at birth and excessive bilirubin levels. Testing can determine whether the Rh factor might be a problem in the pregnancy. If there is a problem, Rh-immune globulin will be given to the mother at 28 weeks into the pregnancy to help prevent the destruction of red blood cells in the fetus.

Now, it's your turn to practice coding from this section. Read through the following physician's note, and then determine what code or codes you think are correct. As usual, you'll review the process afterward to see how well you did.

SUBJECTIVE
A 3-day-old baby is brought in by her mother, presenting with fever, jaundice, and is inconsolable. Poor weight gain is also noted. Mother has been typed as Rh negative, while baby is Rh positive.

OBJECTIVE
Febrile, yellowish eyes and skin noted.

ASSESSMENT
Baby is jaundiced due to Rh antibodies still in her system.

PLAN
Baby will be hospitalized for a transfusion to completely exchange the infant's blood.

The SOAP note indicates the baby has **jaundice**, which is a yellowing of the skin and the whites of the eyes caused by an accumulation of the yellow-brown bile pigment bilirubin in the blood. Let's use *jaundice* as the main term in the *Index.* Your coding pathway is *Jaundice, febrile, due to or associated with, Rh, antibodies.* The tentative code *P55.0* is confirmed as correct in the *Tabular List.*

Transitory Endocrine and Metabolic Disorders Specific to Newborn (P70-P74)

This section of Chapter 16 includes *transitory endocrine and metabolic disturbances caused by the infant's response to maternal endocrine and metabolic factors, or its adjustment to extrauterine existence.* The syndrome of an infant of a mother with gestational diabetes is an example of the conditions in this category. This condition occurs when maternal diabetes mellitus affects the fetus or newborn, usually in the form of hypoglycemia. **Neonatal diabetes mellitus** occurs when the infant's sugar level is abnormally high and requires insulin for control.

You're doing great with this lesson! Remember, while you didn't study every single code found within this chapter in detail, you've laid the basic foundation for coding conditions of the perinatal period. You're ready to review what you've learned about coding the newborn's record with the following Practice Exercise. Reviewing the *Coding Guidelines*, as well as the notes found in the *Tabular List*, will ensure accurate and complete coding.

Step 13: Practice Exercise 27-4

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Term vaginal delivery of newborn in a hospital, small for gestational date due to mother's use of alcohol during pregnancy.**
    ICD-10-CM: _____
    ICD-10-CM: _____
    ICD-10-CM: _____

2. **Newborn twins delivered in a hospital, preterm at 32 weeks gestation, via c-section. Twin B is stillborn. Code for Twin A.**
    ICD-10-CM: _____
    ICD-10-CM: _____

3. **Premature infant was delivered by cesarean at 35 weeks' gestation due to fetal distress during the labor.**
    ICD-10-CM: _____
    ICD-10-CM: _____
    ICD-10-CM: _____

4. **Vaginal delivery in a hospital of a term newborn noted to be large for gestational age at 4000 grams.**
    ICD-10-CM: _____
    ICD-10-CM: _____

5. **Coding Challenge**

ADMITTING DIAGNOSIS
Respiratory distress syndrome, intrauterine growth restriction, thrombocytopenia, hypoglycemia.

HISTORY OF PRESENT ILLNESS
The baby was delivered at 32 weeks, small for gestational age infant with birth weight 1102. Baby was born at ABCD Hospital at 1333 on 07/14/20XX. Mother is a 20-year-old gravida 1, para 0 female who received prenatal care. Prenatal course was complicated by low amniotic fluid index and hypertension. She was evaluated for evolving pre-eclampsia and had a c-section secondary to the nonreassuring fetal status. Baby delivered operatively. Apgar scores were 8 and 9 initially. Taken to level 2 satellite nursery and arrangements were to transfer to Children's Hospital. Infant was transferred to Children's Hospital for higher level of care, stayed at Children's Hospital for approximately 2 weeks, and was transferred back to ABCD where he stayed until he was discharged on 08/16/20XX.

HOSPITAL COURSE
At the time of transfer to ABCD, these were the following issues. Feeding and nutrition: Baby was on TPN, and p.o. feeds had been started and were advanced 1 mL q.6 h. Baby was tolerating p.o. feeds of expressed breast milk, and baby began to experience some abdominal distention. The p.o. feeds were held, and IV D10 water was given. Baby was started on Mylicon drops and glycerin suppositories. Abdominal ultrasound showed gaseous distention without signs of obstruction. OG tube was passed. Baby improved after a couple of days when p.o. feedings were restarted. Baby was also given Reglan. At the time of discharge, baby was tolerating p.o. feeds well of breast milk fortified with 22-cal NeoSure. Feeding amounts at the time of discharge were between 35-50 mL per feed, and weight was 1797 g. Respirations: At the time of admission, baby was not having any apnea spells, no bradycardia or desaturations, was saturating well on room air and continued to do well on room air until the time of discharge. Hypoglycemia: Baby began to experience hypoglycemic episodes on 07/24/20XX. Blood glucose level was as low as 46. D10 was given initially as bolus. Baby continued to experience hypoglycemic episodes. Diazoxide was started 5 mg/kg per os every 8 hours, and heelsticks were done to monitor blood glucose level. The baby improved with diazoxide; hypoglycemic issues resolved and then began again. Diazoxide was discontinued, but the hypoglycemic issues restarted. The diazoxide was restarted again. Blood glucose level stabilized, and then diazoxide was weaned off until daily dose of 6 mg/kg and then the diazoxide was discontinued. At the time of discharge, blood glucose levels were not being stable for 24 hours. Cardiovascular: Infant was hemodynamically stable on admission from Madera. Infant has a closed PDA. Infant had two cardiac echograms done. The lab showing normal antegrade flow across the right coronary artery as well as the left main and left anterior descending coronary artery, then the circumflex coronary artery. CNS: Infant had a head ultrasound done to rule out intracranial abnormalities and intracranial hemorrhage. The ultrasound was negative for intracranial hemorrhage. Infectious disease: The patient had been on antibiotics during the stay at Madera. At the time of admission to the ABCD, the patient was not on any antibiotics and his clinical condition has remained stable. Hematology: The patient is status post phototherapy at Madera and was started on iron. Ophthalmology: Exam on 07/17/20XX showed immature retina. The patient is to get follow-up exam after discharge.

DISCHARGE DIAGNOSIS
Stable 32-weeks premature infant. Respiratory distress syndrome. Intrauterine growth restriction. Thrombocytopenia. Hypoglycemic.

DISCHARGE INSTRUCTIONS
The patient's parents have been educated on CPR measures. Follow-up appointment has been made at Kid's Care. Calcium challenge has been done. The patient's parents are comfortable with feeding. The patient has been discharged on NeoSure and expressed breast milk.

     ICD-10-CM: _____

     ICD-10-CM: _____

     ICD-10-CM: _____

     ICD-10-CM: _____

Step 14: Review Practice Exercise 27-4

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 15: Lesson Summary

Do you remember the comparison of running a marathon to completing the previous lesson in this course? Now, you've essentially completed another major "marathon" with this complex lesson about coding conditions. You learned new terms, additional instructions and details about how to code correctly for a wide range of diagnoses. You studied anatomy, terminology and disorders related to the genitourinary system. In addition, you studied conditions and diseases related to pregnancy, childbirth and the puerperium. Finally, discovered how to code certain conditions originating in the perinatal period. Soon, you will be a star "athlete" when it comes to ICD-10-CM coding skills!

Always remember to balance your time between hard work on these lessons and enough rest to keep your mind sharp. In addition, continue to review the basics of everything you've studied before you begin a new chapter, so that you can dive into the new material with the previous information fresh in your mind.

Once again, you've covered a lot of coding territory in this lesson. Now that you've made it this far in your study of ICD-10-CM codes, your confidence should be building. You are very close to completing the information in this course about ICD-10-CM coding! Take as much time as you need to review the content and Practice Exercises in this lesson, and then complete the Quiz.

Step 16: Quiz 27

Once you've mastered the course content, locate this Quiz in your *Online Course* or your *Assignment Pack*. Read and follow the Quiz instructions carefully.

Endnotes

1   *Chronic Kidney Disease.* Medline Plus, 21 September 2011. Web. 4 October 2013.

2   Gunes, Mutafoglu-Uysal, Canda, Saydam, Cemeroglu, and Oglun. "Unilateral Juvenile (Virginal) Hypertrophy of the Breast. *The Turkish Journal of Pediatrics, 50.*3 (2008): 278-81. Web. 4 October 2013.

3   *Pelvic Inflammatory Disease.* Centers for Disease Control and Prevention. 28 January 2011. Web. 4 October 2013.

4   *Hypertension and Pregnancy.* Medscape, 24 February 2012. Web. 4 October 2013.

5   *Multiple Births.* Centers for Disease Control and Prevention, 5 August 2013. Web. 4 October 2013.

6   Johnson, Winter. *Twins Who Shared Amniotic Sac, A Potentially Deadly Condition, Now Home with Mom and Dad.* Stanford School of Medicine, 14 Jan 2013. Web. 4 October 2013.

7   *Breech Series.* University of Maryland Medical Center, 22 Oct 2008. Web. 4 October 2013.

8   *Maternal and Perinatal Health.* World Health Organization, 2013. Web. 4 October 2013.

9   *National Prematurity Awareness Month.* Centers for Disease Control and Prevention, 11 Feb 2013. Web. 4 October 2013.

Lesson 28
ICD-10-CM Chapters 17 and 18

Step 1: Learning Objectives for Lesson 28

When you complete the instruction in this lesson, you will be trained to:

- Identify the anatomy and assess congenital malformations, deformations and chromosomal abnormalities.

- Describe the terminology related to symptoms, signs and abnormal clinical and laboratory findings.

- Explain the general notes that relate to Chapters 17 and 18 of the *Tabular List* in the *ICD-10-CM* manual.

- Apply the *Chapter-Specific Guidelines* as they relate to Chapters 17 and 18 of the *Tabular List*.

- Identify the diagnoses and assign the final codes for the documented disorders and diseases.

Step 2: Lesson Preview

Are you well rested and ready to expand your understanding of the *ICD-10-CM*? Great! In this lesson, you will want to stay focused and divide your study time into reasonable periods, because we'll cover quite a bit of material. You will lean about the codes for congenial malformations, deformations and chromosomal abnormalities. In addition, you'll discover the guidelines for coding signs and symptoms.

We'll follow the same routine that we used in other lessons—definitions and descriptions of diseases and conditions; explanations to help you find the correct codes in the *Index*; and, as always, plenty of examples for your hands-on practice. So let's get started!

Step 3: Congenital Malformations, Deformations and Chromosomal Abnormalities (Q00-Q99), Part 1

Chapter 15 applies to the mother's records and Chapter 16 applies to the newborn's records. You won't use codes from Chapter 15 to code for a newborn, and you won't use codes from Chapter 16 to code the mother's records. This chapter will take on an additional challenge—you cannot use codes in Chapter 17 for maternal *or* fetal records. Let's look at the details of Chapter 17 now.

Chapter 17 of the *Tabular List* includes a variety of congenital malformations, deformations and chromosomal abnormalities. As you read through the documentation, you should be able to determine whether the condition is congenital or acquired. Congenital anomalies are conditions that exist at birth, such as abnormal mental or physical traits and other anomalies, malformations or diseases. Such anomalies may be either hereditary or the result of an influence that occurs during gestation, up to the moment of birth. Also note that a congenital form of a disease may not be reported with the acquired form of the same condition.

The Excludes1 note indicates that inborn errors of metabolism (*E70-E88*) should not be coded with conditions in this chapter. Surprisingly, this chapter does not have an Excludes2 list, but there is information in the *Chapter-Specific Guidelines* to review before you're ready to code from this chapter. Let's review some key points:

- Codes from this chapter may be the principal or secondary diagnosis.

- If the abnormality doesn't have a specific code, you'll code the manifestations documented.

- Manifestations that are an inherent component of the abnormality should not be coded separately.

- Codes from this chapter can be used throughout the life of the patient.

- Assign a personal history code if the condition has been corrected.

Keeping these points in mind, let's walk through some of the sections within this chapter of the *ICD-10-CM Tabular List*.

Congenital Malformations of the Nervous System (Q00-Q07)

This section has many terms that are included under certain codes. Be sure to read carefully for accurate coding. Conditions found here include *anencephaly*, *encephalocele*, *congenital hydrocephalus* and *spina bifida*.

Anencephaly, a serious birth defect, means that a baby is born without parts of the brain and skull. Almost all babies born with anencephaly will die shortly after birth. The CDC estimates that each year, about one in every 4,859 babies in the United States will be born with anencephaly.[1]

Encephalocele occurs when the developing baby's skull does not close completely. A sac-like protrusion of the brain and the membranes that cover it bulge through the opening in the skull.

Hydrocephalus comes from the Greek terms *hydro* and *cephalus,* meaning water on the brain. However, **hydrocephalus** is a general term used to describe several different types of problems that cause cerebrospinal fluid either to build up abnormally in the brain and intracranial space, or to drain improperly. When the documentation notes only congenital hydrocephalus, you'll code from block *Q03*; when the condition is present in conjunction with spina bifida, you'll code from *Q05*.

Spina bifida is an abnormal bulging of the membranes that surround the spinal cord. As previously noted, spina bifida may occur with or without hydrocephalus. This condition usually causes some paralysis; as such, you are directed to use an additional code to identify any associated paraplegia (*G82.2-*).

To reinforce what you've learned, try coding a patient diagnosed with lumbosacral spina bifida with hydrocephalus, resulting in complete paraplegia.

First, you'll code for the spina bifida. In the *Index to Diseases and Injuries,* use *Spina bifida, lumbosacral, with hydrocephalus* as the coding pathway for code *Q05.2.* You'll verify this code in the *Tabular List.* The note in this code block directs you to code the paraplegia, as well. Return to the *Index* and locate *Paraplegia, complete*, which supplies code *G82.21*. You'll verify this code as well, and assign *Q05.2 G82.21* to the example.

Congenital Malformations of Eye, Ear, Face and Neck (Q10-Q18)

You've already studied many of the conditions found in this section. However, keep in mind that when a condition is present at birth, it is a congenital malformation—and you will code it from this section. You'll see an Excludes2 in the *Tabular List*, indicating that cleft lip and cleft palate, as well as several types of congenital malformations listed, can be coded in addition to the codes from this section, if both conditions are documented.

Let's practice by coding a cataract in a newborn. First, locate the problem in the *Index*. The problem, *Cataract*, is the main term. The condition is present in a newborn, meaning it is a congenital malformation. The subterm *congenital* is next in the coding pathway, and you find that the tentative code is *Q12.0*. Then, turn to the *Tabular List* to determine the highest level of specificity, and you'll confirm that the code is correct.

Conditions included in the codes for congenital malformations of the ear that cause impairment of hearing vary from absence of the auditory canal to absence of the entire ear. In code block *Q17*, you will find codes for other specified malformations of the ear that do not cause impairment of hearing. These conditions include **macrotia** (abnormal enlargement of the pinna of the ear), **microtia** (underdeveloped external ear) and *bat ear*.

Some ears protrude more than normal; this condition is known as **bat ear**. Although correcting the condition is not medically necessary, some people choose to do so for appearance and self-esteem issues. To code this condition, simply locate *Bat ear* in the *Index to Diseases and Injuries* and you'll find code *Q17.5*. Determine the highest level of specificity in the *Tabular List*, and you can confirm this code is the accurate code.

Congenital Malformations of the Circulatory System (Q20-Q28)

According to the CDC, congenital heart defects are the most common type of birth defect in the United States, affecting about 40,000 births per year.[2] The March of Dimes indicates congenital heart defects as the number-one type of birth defect in the United States. Some defects are found during pregnancy or soon after birth, but many have few or no signs and symptoms. Often, congenital malformations go undetected until children are older.

Congenital Heart Defect-Related Death

During the period 1999–2006, there were 41,494 deaths related to congenital heart defects in the United States. This means that, for those deaths, while congenital heart defects might not have been the main cause of death, they did contribute to death in some way. During this time period, congenital heart defects were listed as the main cause of death for 27,960 people. Nearly half (48%) of the deaths due to congenital heart defects occurred during infancy (younger than 1 year of age).

Reference: *Congenital Heart Defects.* Centers for Disease Control and Prevention. 12 Sept 2011. Web. 31 October 2013.

In code block *Q21*, you will find conditions including ventricular, atrial and atrioventrical septal defects. In this block, you'll find **tetralogy of Fallot**, which is a rare, congenital condition caused by a combination of four heart defects that are present at birth. The defects are as follows: a ventricular septal defect, pulmonary stenosis or atresia, dextroposition of the aorta and hypertrophy of the right ventricle.

To code tetralogy of Fallot, use *Fallot's* as the main term to locate in the *Index to Diseases and Injuries*. Locating the subterm *tetrad or tetralogy* provides you with the tentative code of *Q21.3*. An alternative pathway of *Tetralogy of Fallot* can be used; it also provides the tentative code of *Q21.3*. Now, turn to the *Tabular List* to verify the code. Great job!

Congenital Malformations of the Respiratory System (Q30-Q34)

The section for *Congenital Malformations of the Respiratory System* contains many inclusion terms, but it is fairly straightforward to code. Conditions found here include malformations of the nose, larynx, trachea and bronchus, as well as the lung.

Subglottic stenosis is a life-threatening narrowing below the vocal cords (subglottis) and above the trachea. In some cases, this condition can be caused by trauma, prolonged intubation with a breathing tube, infection or the irritating reflux of stomach acid. However, code *Q31.1 Congenital subglottic stenosis* is applied when the patient is born with the condition. In congenital subglottic stenosis, the airway remains narrow because the airway cartilage did not form properly before birth.

You're ready for your first Practice Exercise in this lesson. Before completing it, take a moment to log onto a computer and visit the Web site link below. At this site, you'll find an interesting article about subglottic stenosis and its treatment. Read the article to learn more before you continue with the next section: http://sharing. mayoclinic.org/2012/12/17/rare-congenital-subglottic-stenosis-treated-with-airway-reconstruction-surgery/.[3]

Step 4: Practice Exercise 28-1

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Spina bifida of L3-L4**

   ICD-10-CM: _____

2. **Simple hypoplasia of the right eye**

   ICD-10-CM: _____

3. **Infant born with absence of external ear**

   ICD-10-CM: _____

4. **Roger's disease**

   ICD-10-CM: _____

5. **Fallot's triad**

   ICD-10-CM: _____

6. **Single umbilical artery of a newborn**

   ICD-10-CM: _____

Step 5: Review Practice Exercise 28-1

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 6: Congenital Malformations, Deformations and Chromosomal Abnormalities (Q00-Q99), Part 2

Are you ready to continue with Chapter 17 of the *ICD-10-CM*? Let's continue by learning more about *cleft lip* and *cleft palate*.

Cleft Lip and Cleft Palate (Q35-Q37)

A **cleft palate** (*Q35*) is a congenital fissure of the soft palate, the hard palate or of both the soft and hard palate. The cleft typically opens through the roof of the mouth into the nasal cavity, and extends anteriorly to the premaxilla, where it deviates to the right or left, following the line of fusion.

A **cleft lip** (*Q36*) is the separation of two sides of the lip. A cleft lip may be bilateral, median or unilateral. Bilateral indicates that the cleft occurs on both sides, while unilateral means that the condition is on only one side. Median cleft lip is defined as any congenital vertical cleft through the center of the upper lip. It is a rare deformity that affects only one in 100,000 live births.[4]

If a cleft palate is documented with a cleft lip, you'll assign the combination code from *Q37*, rather than listing the codes separately. In addition, if any of these conditions are associated with a malformation of the nose, you'll use an additional code (*Q30.2*) to identify that.

Before moving on, take a look at the following operative report and try your hand at coding from this section of the *ICD-10-CM Tabular List*.

PREOPERATIVE DIAGNOSIS
Cleft soft palate.

POSTOPERATIVE DIAGNOSIS
Cleft soft palate.

PRIMARY PROCEDURE
REPAIR OF CLEFT SOFT PALATE.

ANESTHESIA
General.

DESCRIPTION OF PROCEDURE
The patient was placed supine on the operating room table. The face was prepped and draped in a sterile fashion. The Dingman mouthgag was inserted, and the palate was injected with 0.25% bupivacaine with epinephrine. After giving this 5 minutes to take effect, the palate was incised along its margins. The anterior oral mucosa was lifted off and held demonstrating the underlying levator muscle. Muscle was freed up from its attachments at the junction of the hard palate and swept down so that it will be approximated across the midline. The Z-plasties were then designed so there would be opposing Z-plasties from the nasal mucosa compared to the oral mucosa. The nasal mucosa was sutured first using interrupted 4-0 Vicryl. Next, the muscle was reapproximated using interrupted 4-0 Vicryl with an attempt to overlap the muscle in the midline. In addition, the remnant of the uvula tissue was found and was sutured in such a place that it would add some extra bulk to the nasal surface of the palate. Following this, the oral layer of mucosa was repaired using an opposing Z-plasty compared to the nasal layer. This was also sutured in place using interrupted 4-0 Vicryl suture. The anterior and posterior open edges of the palate were sewn together. Suction of blood and mucus was performed at the end of the case. The patient tolerated the procedure well and was sent to the postanesthesia recovery room in stable condition.

How did you do? It's a pretty straightforward diagnosis. You should have determined *Q35.3* to be correct. If that's what you determined, great job! If not, review the coding pathway to find where you went astray. You'll use *Cleft, palate, soft* to locate code *Q35.3* in the *Index*. Once you have a firm grasp on this code, you're ready to move on to the next section.

Other Congenital Malformations of the Digestive System (Q38-Q45)

A common congenital malformation in the digestive system is the absence of a body part. The newborn may be missing a salivary gland, uvula and small or large intestines. Another condition you'll find in relation to many organs is **atresia**, which is the congenital absence or closure of a normal body opening or tubular structure. You'll find this condition in the esophagus, both large and small intestines and the bile ducts. Esophageal atresia occurs in about one out of every 4,000 births.[5] Take a look at the following scenario.

> Shortly after birth, Susan was feeding Parker when he began to cough and choke, and then turned blue. The physician suspects esophageal atresia and attempts to pass a small feeding tube through the mouth or nose into the stomach. The feeding tube is not able to pass all the way to the stomach in a baby with esophageal atresia. An x-ray of the esophagus shows an air-filled pouch and air in the stomach and intestine. Parker is admitted for emergency surgery to repair the esophagus so that the lungs are not damaged and the baby can be fed.

To code for this situation, you'll locate *Atresia, esophagus* in the *Index.* You'll then verify code *Q39.0* with the *Tabular List.* The scenario does not note that the physician surgically created a passage; therefore, the code description *without fistula* is correct.

Congenital Malformations of the Genital Organs (Q50-Q56)

You will not code congenital malformations of the genital organs with androgen insensitivity syndrome (*E34.5-*) or syndromes associated with anomalies in the number and form of chromosomes (*Q90-Q99*). Female organs affected by congenital malformations include the ovaries, fallopian tubes, uterus, cervix, vagina and external female genitalia. Undescended and ectopic testicle, hypospadia, absence and hypoplasia of the testis are a few congenital malformations related to the male genital organs.

Undescended testes, or **cryptorchidism**, occurs when one or both testicles fail to move into the scrotum before birth. Usually just one testicle is affected, but rarely, both testicles can be undescended. Undescended testicles are fairly common in infants who are born prematurely. The vast majority of the time, the undescended testicle moves into the proper position on its own, within the first few months of life. However, in some cases, surgery is required to correct the congenital malformation. You may see this condition described as ectopic, undescended or abdominal testis. Review the following definitions for more information on ectopic and abdominal testes.[6]

Ectopic testis—The testicle may be found in regions not in the usual pathway of descent into the scrotum. Five major sites of ectopia are perineum, femoral canal, superficial inguinal pouch, suprapubic area and contralateral scrotal pouch.

Abdominal testis—The testicle is located inside the abdominal cavity, residing in a position along its pathway of natural descent. In such a position, it is not amenable to future examination by a physician, and it is at risk of becoming cancerous.

Medical Coding and Billing Specialist

Now, review the following operative report and try to determine the correct code(s).

PREOPERATIVE DIAGNOSIS
Left undescended testis.

POSTOPERATIVE DIAGNOSIS
Left undescended testis plus left inguinal hernia.

PROCEDURES
LEFT INGUINAL HERNIA REPAIR. LEFT ORCHIPEXY.

ABNORMAL FINDINGS
A high left undescended testis with a type 3 epididymal attachment along with vas.

ESTIMATED BLOOD LOSS
Less than 5 mL.

FLUIDS RECEIVED
1100 mL of crystalloid.

ANESTHESIA
General inhalational anesthetic.

INDICATIONS FOR OPERATION
The patient is an 11-1/2-year-old boy with an undescended testis on the left. The plan is for repair.

DESCRIPTION OF OPERATION
The patient was taken to the operating room, where surgical consent, operative site, and patient identification were verified. Once he was anesthetized, he was then placed in a supine position, and sterilely prepped and draped. A superior curvilinear scrotal incision was then made in the left hemiscrotum with a 15-blade knife and further extended with electrocautery into the subcutaneous tissue. We then used the curved cryoclamp to dissect into the scrotal space and found the tunica vaginalis and dissected this up to the external ring. We were able to dissect all the way up to the ring, but were unable to get the testis delivered. We then made a left inguinal incision with a 15-blade knife, further extending with electrocautery through Scarpa fascia down to the external oblique fascia. The testis again was not visualized in the external ring, so we brought the sac up from the scrotum into the inguinal incision and then incised the external oblique fascia with a 15-blade knife further extending with Metzenbaum scissors. The testis itself was quite high up in the upper femoral canal. We then dissected the gubernacular structures off of the testis, and also, then opened the sac, and dissected the sac off and found that he had a communicating hernia hydrocele and dissected the sac off with curved and straight mosquitos and a straight Joseph scissors. Once this was dissected off and up towards the internal ring, it was twisted upon itself and suture ligated with an 0 Vicryl suture. We then dissected the lateral spermatic fascia, and then, using blunt dissection, dissected in the retroperitoneal space to get more cord length. We also dissected the sac from the peritoneal reflection up into the abdomen once it had been tied off. We then found that we had an adequate amount of cord length

to get the testis in the mid-to-low scrotum. The patient was found to have a type 3 epididymal attachment with a long looping vas, and we brought the testis into the scrotum in the proper orientation and tacked it to mid-to-low scrotum with a 4-0 chromic stay stitch. The upper aspect of the subdartos pouch was closed with a 4-0 chromic purse-string suture. The testis was then placed into the scrotum in the proper orientation. We then placed the local anesthetic and the ilioinguinal nerve block and placed a small amount in both incisional areas as well. We then closed the external oblique fascia with a running suture of 0-Vicryl. The Scarpa fascia was closed with a 4-0 chromic suture, and the skin was closed with a 4-0 Vicryl subcuticular closure. Dermabond tissue adhesive was placed on both incisions, and IV Toradol was given at the end of the procedure. The patient tolerated the procedure well, was in a stable condition upon transfer to the recovery room. Sponge and needle counts were correct x 2.

Although the preoperative diagnosis only indicates the undescended testicle, the postoperative diagnosis also notes the inguinal hernia. The procedure notes both, so you'll code to both conditions. Let's walk through the process.

1. Look at the diagnosis of left undescended testis. You'd think this is a straightforward condition, but read through the documentation. The provider had a hard time locating the testis. When it was found, it was noted to be "quite high up in the upper femoral canal." According to the definition, this is an ectopic testis; therefore, use *Ectopic, testis, unilateral* as the coding pathway to locate code *Q53.01*. You'll verify this as the correct code in the *Tabular List*.

2. Code the left inguinal hernia. Return to the *Index* and use *Hernia, inguinal* as the coding pathway. You will select *unilateral*, because left is documented. Verify code *K40.90* with the *Tabular List*.

3. Finally, list codes *Q53.01 K40.90* for the operative report.

Nice work! Let's cover one more condition before moving on to the next section.

Pseudohermaphroditism is the presence of gonads of one sex and external genitalia of the other sex. Code block *Q56 Indeterminate sex and pseudohermaphroditism* provides many conditions that should not be coded with this category, as they are mutually exclusive.

Congenital Malformations of the Urinary System (Q60-Q64)

Agenesis is the absence or incomplete development of an organ. In this section, you'll find *renal agenesis* and *agenesis of ureter*. **Renal agenesis** is characterized by a congenital absence of one (unilateral) or both (bilateral) kidneys. If only one kidney is missing, chances of survival are excellent, since the remaining kidney is capable of handling the workload. Around four in 10 babies with both kidneys absent are stillborn, and liveborn babies with this condition typically don't survive more than a few hours.

Polycystic kidney disease is a congenital malformation in which cysts form in dilated nephrons. It can occur in infants or adults. In infants, the cysts are small, but the disease enlarges the kidneys and makes them useless. In adults, the cysts are larger and develop during adolescence, but they usually don't cause symptoms until middle age.

Congenital Malformations and Deformations of the Musculoskeletal System (Q65-Q79)

You've discovered quite a lot about congenital malformations—and you aren't done yet! ?As you may recall, *Chapter 13, Diseases of the Musculoskeletal System and Connective Tissue* was quite long; there are many codes for congenital malformations and deformations of the musculoskeletal system, as well. You'll see that laterality is used to describe the location of conditions here. Congenital dislocations, deformities, absences and reductions are a few of the malformations you'll encounter. Remember, congenital conditions are those that exist at birth. The malformations and deformations may be either hereditary or the result of an influence that occurs during gestation, up to the moment of birth. An acquired deformity involves a major difference in the shape of a body part or organ compared to the average shape of that part. It can be caused by any environmental factors, diseases, conditions or characteristics that are not congenital but develop after birth. Acquired conditions are often listed as exclusions to codes found in this section.

Now, let's code a deformed finger of a newborn. Again, the term *newborn* indicates this is a congenital deformity. In the *Index to Diseases and Injuries,* use the coding pathway of *Deformity, finger, congenital.* Determine the highest level of specificity for the tentative code of *Q68.1* in the *Tabular List.* You'll find you have the correct code.

Other Congenital Malformations (Q80-Q89)

Other congenital malformations include conditions of the integumentary system and the breast. Open your *ICD-10-CM* to code block *Q82.5 Congenital non-neoplastic nevus.* A **nevus** is a highly pigmented area on the skin that is either flat or raised, and may be called a birthmark, strawberry nevus, portwine nevus, sanguineous nevus or vascular nevus.

Marfan's syndrome (*Q87.4-*) is a connective-tissue, multisystemic disorder characterized by skeletal changes and cardiovascular defects. Skeletal changes include a tall, lanky body with long limbs and spider-like fingers. Curvature of the spine, or scoliosis, is common with Marfan's syndrome, as well. Marfan's syndrome with cardiovascular manifestations includes defects, such as enlargement of the base of the aorta, aortic regurgitation, mitral valve prolapse and dissecting aortic aneurysms. Since there is not just one treatment for this condition, the characteristics of Marfan's syndrome should be addressed as needed. The following is a cardiology consultation report for you to review. Take your time and consider the details so you have a good sense of the patient's condition and diagnoses. Then, when you're ready, determine the correct diagnosis code or codes based on this report. Figure out the coding pathway(s), determine the tentative code(s) from the *Index to Diseases and Injuries* and then confirm the accuracy of your conclusions in the *Tabular List.* When you're done, compare your coding process and final code results with the summary that follows the report.

CARDIOLOGY CONSULTATION REPORT

REASON FOR REFERRAL
Severe chest pain.

HISTORY OF PRESENT ILLNESS
This is a 24-year-old white male with Marfan's syndrome diagnosed 11 years ago and since then complains of intermittent severe chest pain. He was admitted yesterday after 10 hours of sharp, substernal chest pain, radiating to the neck, back, left arm, and left leg. No history of nausea, vomiting, shortness of breath, or diaphoresis. Over the past several years, the pain has been increasing in intensity. Exertion will almost always bring it on, although it also occurs at rest and with anxiety. He was started on Isordil, then diltiazem 1 year ago with initial improvement, now not effective. Inderal was started with uncertain efficacy. Over the past 5-6 years, he has 10-block dyspnea on exertion and chest pain. He was previously followed at another institution. His last hospitalization was 5 months ago. At that time, echocardiography showed no mitral regurgitation, positive mitral valve prolapse, and tricuspid valve prolapse with 4+ tricuspid regurgitation. The patient states he has had MVP and stated he had a global decrease in left ventricular function. The prior hospitalization had a negative aortogram to look for aortic dissection. A chest x-ray at that time was also negative. The patient has a history of staphylococcal endocarditis. Cardiac catheterization done at that time showed pulmonary artery stenosis.

PAST MEDICAL HISTORY
Medications: Diltiazem 30 mg t.i.d., Inderal 20 mg b.i.d., nitroglycerin, Motrin.
Illnesses: Marfan's syndrome, chronic diarrhea, possible malabsorption syndrome for 1 year.
Operations: Exploratory laparotomy 2 years prior to the admission for appendectomy and removal of Meckel diverticulum.
ALLERGIES: THE PATIENT IS ALLERGIC TO PENICILLIN WITH HISTORY OF RASH.
Social history: No history of alcohol or tobacco use.
Family history: Incidences of sudden death in grandparents and mother. He has a brother with Marfan's and a maternal grandmother with Crohn's disease.

REVIEW OF SYSTEMS
Otherwise noncontributory.

PHYSICAL EXAMINATION
GENERAL: The patient is alert and comfortable and in no distress.
VITAL SIGNS: Pulse: 60/min. Respiratory rate: 18/min. Blood pressure: 88/60. Temperature: 98.4 °F.
SKIN: Nondiaphoretic.
HEENT: PERRLA. Normocephalic, atraumatic. Funduscopic examination normal. EOMs intact. Tympanic membranes clear.
NECK: Supple without JVD or carotid bruits.
CHEST: Heart: Regular rate and rhythm with distant heart tones. Normal S1, S2 without gallops or murmurs. There is a 1+ midsystolic click when patient is turned to 30 degrees.
ABDOMEN: There is a well-healed scar in the midline of the lower abdomen. Normal bowel sounds, nontender, no hepatosplenomegaly.
EXTREMITIES: No cyanosis, clubbing, or edema. Slender body habitus.

DATABASE
Chest x-ray: Slender cardiac silhouette. EKG has a sinus rhythm of 71/min with an incomplete right bundle branch block. This study is unchanged from a prior electrocardiogram of 1 month ago. Chest CT: Aneurysm present without evidence of dissection.

ASSESSMENT AND RECOMMENDATIONS

1. Recurrent severe chest pain attributed to mitral valve prolapse, increasing in frequency and intensity. History of global poor left ventricular function. Cannot rule out cardiomyopathy. Suggest that Inderal and Isordil be discontinued. Increase diltiazem to 60 mg t.i.d. and continue to increase diltiazem as symptoms necessitate.

2. The EKG suggests the presence of septal defect. Will schedule 2D Doppler echocardiogram with flow study.

3. Marfan syndrome with aortic aneurysm without evidence of dissection.

This coding example has several parts, so let's review them one at a time.

1. You'll note in the assessment and plan for this patient that mitral valve prolapse is causing the chest pain, which is the reason for this encounter. So, the first coding pathway is *Prolapse, mitral (valve)*. Following this pathway in the *Index to Diseases and Injuries,* you identify a tentative code of *I34.1*. When you look up this code in the *Tabular List*, you find it to be accurate; however, the Excludes1 indicates this code cannot be coded with Marfan's syndrome (*Q87.4-*).

2. Now you must find the correct code for the diagnosis of Marfan's syndrome. Follow the coding pathway of *Syndrome, Marfan's, with cardiovascular manifesations* in the *Index to Diseases and Injuries*, and you will come up with a tentative code of *Q87.418*. Once again, check the *Tabular List* to determine the highest level of specificity. You can comfortably conclude that the code is correct.

3. The next problem to address is the aortic aneurysm, for which you identify a coding pathway of *Aneurysm, aorta*. Following that pathway in the *Index*, you find a tentative code of *I71.9*, which you check to determine the highest level of specificity in the *Tabular List*. Based on the information you find there, you know you have chosen the correct code for this portion of the diagnosis.

4. Finally, you are ready to assign diagnosis codes *Q87.418 I71.9* to this consultation report.

You have one more section to cover, and then you'll be finished with another chapter of the *ICD-10-CM Tabular List.* Keep up the good work!

Chromosomal Abnormalities, Not Elsewhere Classified (Q90-Q99)

In this section, you'll find syndromes associated with abnormalities related to the number and form of chromosomes. **Down syndrome**, or **Trisomy 21**, is usually caused by an extra copy of the 21st chromosome. Characteristics of Down syndrome include a smaller than normal and abnormally shaped head, flattened nose, protruding tongue and upwardly slanted eyes. The hands of individuals with Down syndrome are short and broad, and their fingers are short, as well. Their mental and social skills are also delayed. Although the severity of intellectual disabilities varies, it is usually moderate to severe in persons with Down syndrome. The average life span is also shorter for people with this condition because of increased episodes of congenital heart disease. When coding *Q90 Down syndrome*, you'll use additional code(s) to identify any associated physical conditions and degree of intellectual disabilities (*F70-R79*).

That concludes the basic information you'll need to know to code from this chapter of the *ICD-10-CM* manual. Take a few minutes to review what you've learned about coding congenital malformations, deformations and chromosomal abnormalities. Then, when you're ready, complete the Practice Exercise that follows before moving to the next chapter of the *Tabular List*.

Step 7: Practice Exercise 28-2

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Congenital honeycomb lung**

    ICD-10-CM: _____

2. **Unilateral cleft palate with cleft lip**

    ICD-10-CM: _____

3. **Doubling of the uterus**

    ICD-10-CM: _____

4. **Coding Challenge**

CONSULTATION REPORT

REASON FOR REFERRAL
Noted to have left low-set ear, left string-like thumb attached to metacarpal and left clubfoot following breech cesarean section.

HISTORY OF PRESENT ILLNESS
The patient is a 1-day-old male infant born to a gravida 1 mother by a crash cesarean section for double footling breech with multiple congenital anomalies.

PHYSICAL EXAMINATION
GENERAL: Weight: 2500 gm. Length: 45 cm. Head circumference: 34.5 cm.
HEENT: Head: Normocephalic. Anterior fontanelle small but open. Eyes: Mild mongoloid slant and hypertelorism (IC 2.5 cm). Ears: Left auricle small and crumpled appearance. External auditory canal appears patent. Mouth: Palate high and arched.
NECK: Very short and posterior, hairline appears low.
CHEST: No deformity. Nipples well formed. Heart: PMI on the left. Lungs: Clear.
ABDOMEN: No organomegaly. Liver on the right. Umbilical cord stump dry.
GENITALIA: Normal male with descended testes.
RECTAL: Patent.
EXTREMITIES: Left hand with hypoplastic thumb which is attached by a piece of skin. Left forearm has mesomelia but not camptomelia. Right hand with proximally placed thumb.
NEUROLOGIC: Good cry and muscle tone.

DATABASE

X-rays reveal multiple cervical spine anomalies characterized by hypoplasia including hemiatrophy of T1, butterfly pattern of T3, and left rib anomalies. Chest film also shows evidence of congenital heart disease and possible ventricular septal defect. Chest x-ray and abdominal films show no evidence of situs inversus. Stomach bubble on the left and heart on the left, liver on the right.

ASSESSMENT

Multiple congenital anomalies. Congenital anomalies found in this infant so far are:

1. Dysplasia of the left auricle.
2. Multiple vertebral anomalies in the cervical and upper thoracic spine.
3. Left thumb hypoplasia.
4. Mesomelia (abnormally short) left forearm without camptomelia.
5. Congenital heart disease.

RECOMMENDATIONS

WCC. Intracranial sonography to rule out CNS malformation. Renal sonography, UGI and barium enema for evaluation of the urogenital and gastrointestinal tracts.

> ICD-10-CM: _____
>
> ICD-10-CM: _____
>
> ICD-10-CM: _____
>
> ICD-10-CM: _____
>
> ICD-10-CM: _____

Step 8: Review Practice Exercise 28-2

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 9: Symptoms, Signs, and Abnormal Clinical and Laboratory Findings, Not Elsewhere Classified (R00-R99), Part 1

A **symptom** is defined as any evidence of a disease or disorder (such as pain) that is discovered. When no other diagnosis code quite fits the condition identified in the documentation, you'll code from this chapter of the *Tabular List*. This chapter includes conditions and symptoms that are not well-defined and that require further tests to establish a final diagnosis. The notes at the beginning of the chapter are quite extensive, and will require careful review to thoroughly understand the concepts.

The *ICD-10-CM* indicates that the conditions and signs or symptoms included in categories *R00-R94* consist of the following:

- *(a) cases for which no more specific diagnosis can be made even after all the facts bearing on the case have been investigated;*

- *(b) signs or symptoms existing at the time of initial encounter that proved to be transient and whose causes could not be determined;*

- *(c) provisional diagnosis in a patient who failed to return for further investigation or care;*

- *(d) cases referred elsewhere for investigation or treatment before the diagnosis was made;*

- *(e) cases in which a more precise diagnosis was not available for any other reason;*

- *(f) certain symptoms, for which supplementary information is provided, that represent important problems in medical care in their own right*

Before taking a look at the guidelines for this chapter, review the information in the *Tabular List* to determine the conditions that may be coded in addition to codes within this chapter, if there is documentation for doing so:

- *abnormal findings on antenatal screening of mother (O28.-)*

- *certain conditions originating in the perinatal period (P04-P96)*

- *signs and symptoms classified in the body system chapters*

- *signs and symptoms of breast (N63, N64.5)*

Now, let's look at the *Chapter-Specific Guidelines* for *Symptoms, Signs, and Abnormal Clinical and Laboratory Findings, Not Elsewhere Classified*.

As you're learning, outpatient coding requires coding only to the highest level of certainty. As you know, coding an unconfirmed diagnosis is not allowed. If the physician documents terms, such as *possible*, *suspect*, *probable*, *rule out* or *consistent with*, you will not assign the diagnosis associated with the term. Instead, you will code for the sign or symptom of the condition.

Meanwhile, symptoms integral to a disease are those that are routinely associated with the disease. In this case, you will just code the disease, not the symptom(s). For example, abdominal pain is routinely associated with appendicitis, but you will only code for the appendicitis. However, you *will* code symptoms when they are not routinely associated with a disease. For instance, numbness in the foot is not routinely associated with an ankle sprain. In this case, you will code both conditions. Take a look at the following example and determine whether you'll code the signs and symptoms:

> Phil presents with difficulty swallowing and a burning sensation in the epigastric area. The physician performs flexible endoscopy. Phil is diagnosed with gastroesophageal reflux with no signs of ulcerations.

So, what do you think? Will you assign the signs and symptoms, or not? In this example, difficulty swallowing and the burning sensation are routinely associated signs and symptoms of gastroesophageal reflux, so you will only code the reflux.

In some cases, you may have a definitive diagnosis code, but you will also code a symptom if it is not routinely associated with the definitive diagnosis. In this case, you'll code the definitive diagnosis as the principal code, followed by the symptom code.

According to the guidelines, the *ICD-10-CM contains a number of combination codes that identify both the definitive diagnosis and common symptoms of that diagnosis. When using one of these combination codes, an additional code should not be assigned for the symptom.*

Now that you know the basics, let's get into the chapter details. Remember to refer back to the guidelines when learning about specific sections in this chapter.

Symptoms and Signs Involving the Circulatory and Respiratory Systems (R00-R09)

There is a direct relationship between the circulatory and respiratory systems. Let's briefly review that concept. The oxygen that you breathe in and the carbon dioxide that you breathe out travel the body through the bloodstream. The heart and lungs work together to deliver oxygen to and remove carbon dioxide from the body's tissues. When you inhale, oxygen enters the blood through the alveoli. The oxygenated blood travels through the pulmonary veins to the left side of the heart, which then pumps it throughout the body. The deoxygenated blood then returns to the right side of the heart and is pumped through the pulmonary arteries to the lungs. When you exhale, carbon dioxide exits the body and the cycle starts again.

Understanding some basic medical terminology will assist you with accurate coding from this section. Let's take a moment to review.

Abnormalities of the heart beat, code block *R00*, include *tachycardia*, *bradycardia* and *palpitations*. The heart usually beats between 60 and 100 times a minute in an adult at rest. **Tachycardia** is a faster than normal heart rate, while **bradycardia** is slower than normal. Awareness of the beats of one's own heart, whether appearing unusually rapid or irregular, is known as **palpitations**.

Previously, you discovered that essential or primary hypertension is the state of having elevated blood pressure with no apparent cause. When elevated blood pressure is documented, but hypertension is not specifically noted, you will use code block *R03 Abnormal blood-pressure reading, without diagnosis*. Review the note in the *Tabular List* for code *R03.0*: *This category is to be used to record an episode of elevated blood pressure in a patient in whom no formal diagnosis of hypertension has been made, or as an isolated incidental finding.*

Hemorrhage from respiratory passages (*R04*) includes hemorrhages from the nose and throat, as well as coughing up blood. An **epistaxis** is commonly known as a nosebleed. **Hemoptysis** is the medical term for coughing up blood from the respiratory tract.

There are quite a few conditions found under *R06 Abnormalities of breathing*. You'll see that the following conditions should not be coded with this code block:

- *acute respiratory distress syndrome* (*J80*)

- *respiratory arrest* (*R09.2*)

- *respiratory arrest of newborn* (*P28.81*)

- *respiratory distress syndrome of newborn* (*P22.-*)

- *respiratory failure* (*J96.-*)

- *respiratory failure of newborn* (*P28.5*)

You will recognize many of these terms, as you've seen them in the medical records you've been coding so far. They are symptoms of other diseases and descriptive terms used during examinations. Be sure to note the exclusions within this code block when reviewing the conditions.

Let's review a few more definitions. **Dyspnea** means difficulty breathing. When this condition occurs while the patient is lying flat, it is known as **orthopnea**. Dyspnea and shortness of breath are often thought to be the same; however, if the provider specifically documents shortness of breath (SOB) you will assign code *R06.02*. **Stridor** is an abnormal, high-pitched, musical breathing sound usually heard during inspiration, while **wheezing** is a high-pitched whistling sound that occurs during both inhalation and exhalation.

R07 Pain in throat and chest excludes epidemic myalgia (*B33.0*), but indicates that jaw pain and pain in the breast can be coded in addition if the conditions are documented. Let's take some time to examine the different types of chest pain. Chest pain upon breathing can also be known as painful respiration, while **precordial** pain refers to chest pain over the heart and lower thorax. Pain in the pleural cavity (**pleurodynia**) and **intercostal** (rib) pains are found under *R07.8- Other chest pain*. Most often, you'll assign *R07.9 Chest pain, unspecified* because further classification is not noted. Always keep in mind that proper use of the *Index to Diseases and Injuries* will assist you in determining the correct code for the documented circumstances.

Symptoms and Signs Involving the Digestive System and Abdomen (R10-R19)

This section consists of symptoms that involve the digestive system and abdomen. You'll see many conditions excluded, as they are conditions that are mutually exclusive and should not be coded together.
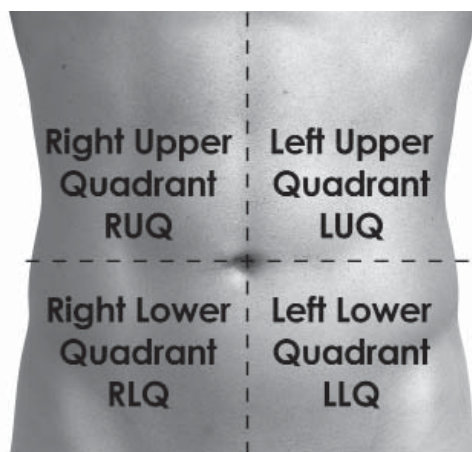
Abdominal pain may be localized to the upper or lower abdomen. The abdomen can be divided into four quadrants; it's important to know the acronyms used to identify each quadrant:

RUQ—Right Upper Quadrant

RLQ—Right Lower Quadrant

LUQ—Left Upper Quadrant

LLQ—Left Lower Quadrant

Abdomen divided into four quadrants

Epigastric refers to pain in the center just below the rib cage, while **periumbilical** is pain around the belly button region. If there is pain when pressure is applied, this is abdominal tenderness. Rebound tenderness is pain that occurs when the applied pressure is released. Now, see how well you understand abdominal pain by coding the following radiological report.

CT ABDOMINAL SCAN WITH CONTRAST
CLINICAL HISTORY
RLQ abdominal pain.

TECHNIQUE
Spiral abdominopelvic CT with oral and intravenous contrast material.

FINDINGS
There is mild thickening of the wall of the terminal ileum. There is an increased number of normal sized mesenteric lymph nodes in the right lower quadrant of the abdomen. The appendix is visualized and is unremarkable. There is a trace amount of free fluid in the pelvis. No renal, hepatic, splenic, or pancreatic abnormalities are seen. Renal uptake of contrast material is prompt and symmetric. There is no evidence of hydronephrosis. The bladder is unremarkable.

IMPRESSION
Constellation of findings consistent with ileitis, which may be due to an infectious process or inflammatory bowel disease. No CT evidence of appendicitis.

Let's go over the details of this example together. The impression notes the findings are consistent with ileitis. However, recall that *consistent with* indicates an unconfirmed diagnosis. You'll code the symptom documented, which is the abdominal pain. As you review the documentation, note that the abdominal pain is located in the right lower quadrant, and the findings verify that location, as well. First, turn in the *Index to Diseases and Injuries* to *Pain, abdominal, lower, right quadrant*, and you find the tentative code of *R10.31*. Now, use the *Tabular List* to verify the code and determine that it is accurate.

Other symptoms and signs involving the digestive system include nausea and vomiting, *dysphagia*, gas and diarrhea. **Dysphagia** is the medical term to describe difficulty in swallowing. You are directed to *code first, if applicable, dysphagia following cerebrovascular disease.* Codes in the nausea and vomiting (also known as emesis) code block have several Excludes1 notes that you should recognize when you code. Keep in mind, you might code nausea with vomiting, nausea alone or vomiting alone.

Understanding the terminology is the first step to accurate *ICD-10-CM* coding. Once you are comfortable with that, use the *Index* and *Tabular List* to help make finding the final code a breeze!

Symptoms and Signs Involving the Skin and Subcutaneous Tissue (R20-R23)

Symptoms involving skin and subcutaneous tissue do not include symptoms that relate to the breast. However, the Excludes2 indicates that if these conditions are documented, you can code them in addition to the codes found in this section.

This category consists of a variety of skin conditions, from rash to excessive blushing. **Rash** is a general term for a skin eruption. If the type of rash is specified, you'll code to that condition, rather than using code *R21*. Other skin changes include *cyanosis*, *pallor* and *flushing*. **Cyanosis** is characterized by a blush color to the skin that is caused by a lack of oxygen in the blood. **Pallor** is paleness of the skin, but also includes clammy skin. For code *R23.2*, **flushing**, also known as excessive blushing, you'll code first menopausal and female climacteric states, if applicable.

Before moving to the next section, try coding a symptom that involves the skin.

SUBJECTIVE
A 5-year-old female presenting with a rash on her arm and legs and complaining of itching skin.

OBJECTIVE
Examination of skin is inconsistent with chickenpox.

ASSESSMENT
Rash.

PLAN
Patient is to treat the rash with hydrocortisone as needed for the itching.

The physician does not provide a definitive diagnosis for the condition, so you will code for the rash. To do so, first locate *Rash* in the *Index*, where you will see code *R21* as the tentative code. Then, turn to the *Tabular List* to determine the highest level of specificity. Based on what you find there, you will assign *R21* as the accurate code for this scenario.

Symptoms and Signs Involving the Nervous and Musculoskeletal Systems (R25-R29)

Abnormal, involuntary movements, abnormalities of gait and mobility and lack of coordination are some of the code blocks found in this section. You'll note that each lists conditions excluded from the code blocks. Basically, if the condition is specific to another disease or disorder, you won't code it from this section.

The *Coding Guidelines* offer additional information when assigning *R29.6 Repeated falls*. You will use this code when a patient has recently fallen and the reason for the fall is still being investigated. However, if the patient has fallen in the past and is at risk for future falls, you'll assign *Z91.81 History of falling*. If there is documentation, *R29.6* and *Z91.81* may be assigned together.

Symptoms and Signs Involving the Genitourinary System (R30-R39)

Symptoms that involve the genitourinary system include *hematuria*, *dysuria,* urinary incontinence and urgency of urination. You studied many of these conditions with the urinary system; however, when they are symptoms without a final diagnosis, you'll code them from this section.

Let's review some of the terminology you'll see frequently here. **Dysuria** is difficult or painful urination, which is often the result of a UTI (urinary tract infection). **Hematuria** is blood in the urine. Again, if it's a symptom of an underlying condition, you'll just code that condition. Urinary incontinence is the loss of bladder control. Leakage may occur upon sneezing, laughing, coughing, sudden movement or lifting. When the urinary incontinence is not related to a urinary disorder, you will code *R32 Unspecified urinary incontinence*, which is a symptom or sign involving the genitourinary system. However, if the urinary incontinence is due to a disorder of the urinary system, you'll code stress or other specified urinary incontinence.

Before moving on to the next section, complete the following Practice Exercise

Step 10: Practice Exercise 28-3

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Elevated blood pressure reading**

   ICD-10-CM: _____

2. **Chest discomfort**

   ICD-10-CM: _____

3. **Numbness in hands**

   ICD-10-CM: _____

4. **Transient monoplegia**

   ICD-10-CM: _____

Step 11: Review Practice Exercise 28-3

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 12: Symptoms, Signs, and Abnormal Clinical and Laboratory Findings, Not Elsewhere Classified (R00-R99), Part 2

You're doing great with this lesson. You know that when no other diagnosis code quite fits the condition identified in the documentation, you'll code from Chapter 18 of the *Tabular List*. Let's wrap up this lesson by looking at the rest of the chapter.

Symptoms and Signs Involving Cognition, Perception, Emotional State and Behavior (R40-R46)

Consciousnesses is a state of awareness of self and surroundings, and knowledge of what you are doing and intend to do. Alteration of this state can range from drowsiness to unconsciousness, known as a **coma**, the state from which a patient cannot be awakened. You'll see that *symptoms and signs constituting part of a pattern of mental disorder (F10-R99)* are not included in this section.

Coma Scale

You'll want to refer to the *Coding Guidelines* to assist with accurate coding for *R40.2- Coma*. You can identify a traumatic brain injury, cerebrovascular disease or sequelae of CVD with codes from this section. These codes are intended primarily for trauma registry and research use, but may be applied and used for other information collection purposes, as well. You are directed to apply a code from each subcategory (eyes, verbal response and motor response) to accurately identify the coma scale, with the 7th character indicating when the scale was recorded.

R40.21 Coma scale, eyes open

    R40.211 Coma scale, eyes open, never

    R40.212 Coma scale, eyes open, to pain

    R40.213 Coma scale, eyes open, to sound

    R40.214 Coma scale, eyes open, spontaneous

R40.22 Coma scale, best verbal response

    R40.221 Coma scale, best verbal response, none

    R40.222 Coma scale, best verbal response, incomprehensible words

    R40.223 Coma scale, best verbal response, inappropriate words

    R40.224 Coma scale, best verbal response, confused conversation

    R40.225 Coma scale, best verbal response, oriented

R40.23 Coma scale, best motor response

    R40.231 Coma scale, best motor response, none

    R40.232 Coma scale, best motor response, extension

    R40.233 Coma scale, best motor response, abnormal

    R40.234 Coma scale, best motor response, flexion withdrawal

    R40.235 Coma scale, best motor response, localizes pain

    R40.236 Coma scale, best motor response, obeys commands

The **Glasgow Coma Scale** (**GCS**) is the most common scoring system used to describe the level of consciousness in a patient. You will use code *R40.24- Glasgow coma scale* when only the total score is documented, not the individual scores. Let's study the following scenario to see an example of documentation for the Glasgow coma scale.[7]

HISTORY OF PRESENT ILLNESS

A 64-year-old woman with hypertension was admitted by her physician after complaining of right-sided weakness. Over the next couple of days, her condition worsened, and 4 days later, she appeared to suffer a serious stroke, following which she was completely unresponsive. Tests confirmed brain stem death, and permission was sought to switch off her life support.

PERTINENT PAST HISTORY

The woman had a 10-year history of hypertension. When she noticed loss of sensation and loss of power on her right side, she went to her physician, who had her admitted.

LABORATORY FINDINGS
No abnormal findings on CT scan or EEG.

HOSPITAL COURSE
She showed no improvement of her right-sided weakness after admission to hospital. A small stroke was suspected, but no lesion could be seen on the CT scan. Four days after admission, she deteriorated. Her Glasgow coma scale rating was 3. She was totally unresponsive. An MRI showed a suspected brain stem hemorrhage and a small established infarct in the left parietal lobe.

When tests showed brain stem death, permission was sought from her family to switch off her life support, and she died 6 days after admission.

In the report, the individual scores are not documented, so you will code the Glasgow coma scale. Turn to the *Index* and locate *Glasgow coma scale, total score, 3-8* for code *R40.243*. You'll verify this code with the *Tabular List* and see that it's accurate. Next, you'll locate *Death, brain* for code *G93.82*. You'll verify this code and assign *R40.243 G93.82* to the scenario.

Symptoms and Signs Involving Speech and Voice (R47-R49)

R47 Speech disturbances, not elsewhere classified excludes autism, cluttering, stuttering and specific developmental disorders of speech and language. Aphasia and dysphasia are language disorders characterized by the inability to speak and understand others. Again, understanding the key terminology will assist you with code block *R48*:

- **Dyslexia**—A learning disorder characterized by difficulty reading

- **Alexia**—Loss of the ability to read

- **Agnosia**—The inability to recognize and identify objects or persons

- **Apraxia**—Loss of the ability to execute or carry out skilled movements and gestures

The codes in this section are fairly straightforward to apply, so let's move on to the next section in this chapter.

General Symptoms and Signs (R50-R69)

General symptoms and signs common to many conditions include fever, headache, pain and malaise. You have encountered many of these as you've studied the details of diseases in other chapters of the *ICD-10-CM Tabular List*. Let's do a quick review and discuss some of these symptoms and signs in more detail. When coding from this section, be sure to note the many exclusions, inclusions and notes provided for accurate coding.

When the body temperature is elevated above normal, this condition is called a **fever** or **pyrexia**. When the cause of the fever is unknown or not otherwise specified, you will use code *R50.9*.

Recall that a headache itself may be the problem, rather than just the symptom of another condition. In this case, you will use code block *G44 Other headache syndromes*. These conditions include cluster, tension, post-traumatic and drug-induced headaches. However, when a headache is just a symptom, you'll assign code *R51 Headache*.

Code *R52* is assigned for unspecified, acute or generalized pain. You'll assign a code from code block *G89* when the pain is specified as acute or chronic, post-thoracotomy, postsurgical or neoplasm-related. In addition, if the pain is localized, or the site of pain is identified, you'll code to the specific site. Finally, if the condition is a pain disorder exclusively related to psychological factors, you will not code *R52 Pain, unspecified*.

Now, let's take a look at code block *R53 Malaise and fatigue*. **Malaise** is a vague feeling of physical discomfort or lack of good health, while **fatigue** results from overwork or lack of sleep, resulting in weariness, irritability and boredom.

According to the *ICD-10-CM Coding Guidelines*: *functional quadriplegia (R53.2) is the lack of ability to use one's limbs or to ambulate due to extreme debility. It is not associated with neurologic deficit or injury.* This code should only be used when "functional quadriplegia" is specifically documented in the medical record.

A persistent fatigue, with symptoms of weak muscles, sore throat, tender lymph nodes, headaches, depression and mild fever is known as **chronic fatigue syndrome**. There is no known cause for this condition, and treatment is focused on the symptoms. To code chronic fatigue syndrome, locate the main term *Syndrome* in the *Index to Diseases and Injuries*. Using *fatigue*, *chronic* as the subterms, you will find the tentative code of *R53.82*. Then, turn to the *Tabular List* to determine the highest level of specificity. Based on the information there, you will confirm the code is correct.

Syncope is a sudden, temporary suspension of consciousness due to reduced blood flow to the brain. This condition is often known as a **blackout**, or **fainting**. Refer to the extensive list of exclusions in the *Tabular List* under code *R55* to ensure proper coding.

Sudden, involuntary contractions of the muscles are **convulsions**. Code block *R56* excludes dissociative, epileptic and newborn convulsions and seizures. **Febrile convulsions**, or **seizures**, code *R56.0-*, are those associated with high fever and that occur in children. Febrile seizures can be classified as *simple* or *complex*:[8]

Simple febrile seizures—These are the most common type of febrile seizure, and can last from a few seconds to 15 minutes. Simple febrile seizures do not recur within a 24-hour period.

Complex febrile seizures—Complex febrile seizures last longer than 15 minutes, occur more than once within 24 hours or are confined to one side of the child's body.

You'll see that a febrile seizure NOS is coded to simple febrile convulsions. Try coding the following SOAP note.

SUBJECTIVE
The patient has recently had an admission for pneumonia with positive blood count. She was treated with IV antibiotics and p.o. antibiotics; she improved on that. She was at home and doing quite well for approximately 10-12 days when she came to the emergency department with a temperature of 102. She was found to have strep. She was treated with penicillin and sent home. She returned about 8 o'clock after a probable seizure. Temperature was 104.5; she was lethargic after that. She had an LP, which was unremarkable. She had blood cultures, which have not grown anything. The CSF has not grown anything at this point.

OBJECTIVE
She is alert, recovering from anesthesia. Head, eyes, ears, nose and throat are unremarkable. Chest is clear to auscultation and percussion. Abdomen is soft. Extremities are unremarkable.Laboratory studies show a white count in the emergency room of 9.8 with a slight shift. CSF glucose was 68, protein was 16, and there were no cells. The Gram stain was unremarkable.

ASSESSMENT
Febrile seizure.

PLAN
Readmit the patient for observation and to control her temperature and assess her white count.
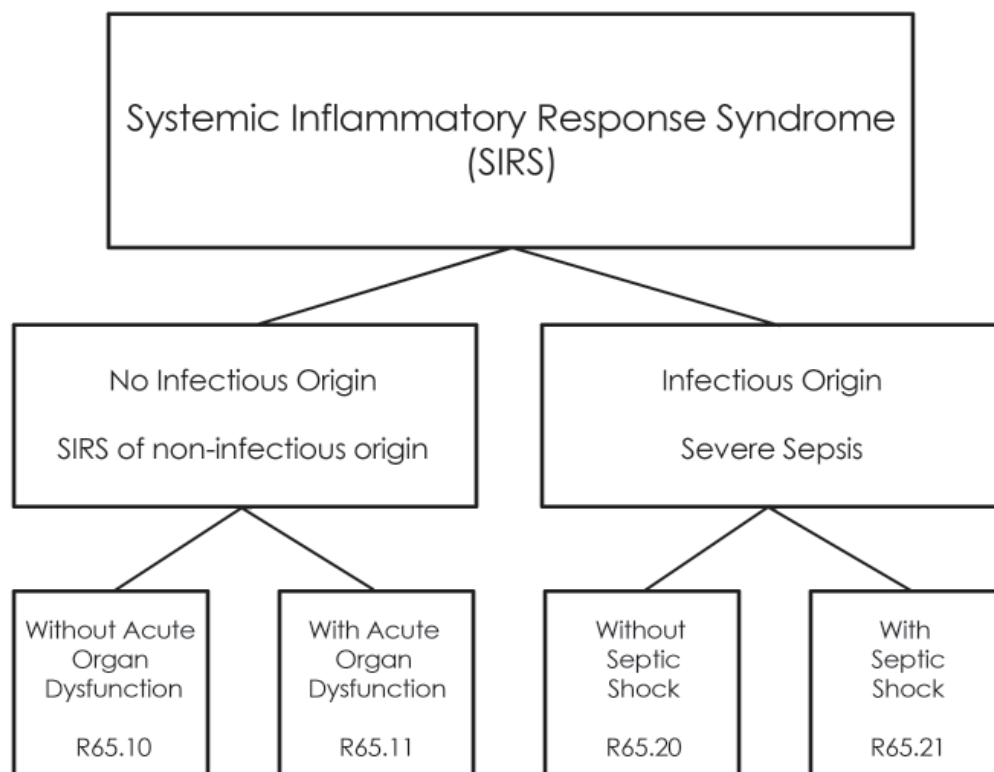
To code this condition, locate *Seizure*, *febrile* and you'll find *R56.00* as the tentative code. When you turn to the *Tabular List* to determine the highest level of specificity, you will confirm that it is the accurate code.

SIRS and Severe Sepsis

You'll take a bit more time for this next code block. *R65 Symptoms and signs specifically associated with systemic inflammation and infection* consists of *SIRS* of non-infectious origin and severe sepsis. Although SIRS and septic shock are both conditions found within Chapter 18 of the *Tabular List,* it's important to review the *Chapter-Specific Guidelines* of Chapter 1, *Certain Infectious and Parasitic Diseases*—because that's where you'll find many of the rules for coding sepsis, severe sepsis and *septic shock*.

You'll recall that if the physician documents *generalized sepsis*, *septicemia*, or *Streptococcal sepsis* you'll assign codes from Chapter 1. If *severe sepsis* or *sepsis with acute or multiple organ dysfunction* are documented, then you'll code from the signs and symptoms section of the *Tabular List,* which is Chapter 18.

Systemic inflammatory response syndrome (**SIRS**) is the term used to describe the body's response to inflammation. When the patient has SIRS of a non-infectious origin, you'll assign code *R65.1-*. You will list the underlying condition first. The final character identifies with or without acute organ dysfunction. If acute organ dysfunction is noted, be sure to use an additional code to identify the specific acute organ dysfunction as directed in the *Tabular List*.

Severe sepsis is an infectious process with associated acute or multiple organ dysfunction(s). When coding severe sepsis, you will code first the underlying infection, and use an additional code to identify the specific acute organ dysfunction. In addition, the final character identifies with or without septic shock.

Septic shock is a serious, abnormal condition that usually affects the very old or the very young. **Septic shock** occurs when an overwhelming infection of bacteria causes a release of toxins, which results in low blood pressure and low blood flow. Septic shock occurs only when severe sepsis is present. For accurate coding of septic shock, you will code the underlying systemic infection first, and then *R65.21 Severe sepsis with septic shock*. The codes identifying the organ dysfunction will follow. According to the *Chapter-Specific Guidelines*, "*a code from subcategory R65.2- can never be assigned as a principal diagnosis.*"

Are you ready to try coding? Read the following SOAP note to assign the accurate ICD-10-CM code.

SUBJECTIVE
An 82-year-old male arrives in the emergency department by ambulance, complaining of chills and a fever for the last week. His wife notes he has had shortness of breath, dizziness and confusion during this time as well. He has had decreased urine output for the past 2 days.

OBJECTIVE
A comprehensive physical exam is performed. Extremities are cool to the touch. Palpitations noted. Blood gas reveals low oxygen saturation and respiratory alkalosis. Blood tests confirm kidney failure. Blood cultures, EKG and chest x-ray are pending.

ASSESSMENT
Patient has septic shock due to a massive infection, with evidence of acute kidney failure.

PLAN
Patient is admitted to ICU by his primary care provider.

This is a complicated case to code, so let's go through it step by step.

1. Code for the septic shock. Locate the coding pathway *Shock*, *septic* in the *Index to Diseases and Injuries* and you'll find code *R65.21*. Turn to the *Tabular List* to determine the highest level of specificity for code *R65.21*. The notes tell you to code first the underlying infection. In addition, you'll need to identify the specific acute organ dysfunction, which is the acute kidney failure.

2. Code the underlying infection. The source of infection is not documented. According to the *Coding Guidelines*: *if the causal organism is not documented, assign code A41.9 Sepsis, unspecified organism, for the infection*.

3. Code the acute organ dysfunction. To code the kidney failure, use the coding pathway *Failure, kidney, acute* and you are directed to *see also Failure, renal, acute*; however, the tentative code *N17.9* is also provided. The new pathway *Failure*, *renal*, *acute* provides the same tentative code, *N17.9*. You'll verify this in the *Tabular List*.

4. Assign the codes. By following the notes and guidelines, you know to list the underlying infection first, followed by the shock and then the organ dysfunction. You will assign *A41.9 R65.21 N17.9* to the SOAP note.

SIRS, sepsis, severe sepsis and septic shock can be a challenge to code. Keep your guidelines handy when coding from this section, and you'll do fine! Now, let's move on in this chapter of the *Tabular List.*

Abnormal Findings on Examination, without Diagnosis (R70-R94)

The next few sections of Chapter 18 of the *ICD-10-CM* manual include codes for abnormal findings based upon the examination of blood, urine and other body fluids, without diagnosis. These sections also include abnormal findings on diagnostic imaging and in functional studies, without diagnosis. You will use these codes when the notes indicate that lab, x-ray, pathology and other diagnostic studies have revealed abnormal findings, and the physician documents the clinical significance of these findings. These codes also apply when no definitive diagnosis can be made, and the documentation indicates that additional work-up is needed.

For example, consider a woman who has a routine mammogram. The radiologist reviews the results, notes abnormal mammogram and requests that the patient be contacted to have a second mammogram. To code for the radiologist's note, you will use the coding pathway *Abnormal, mammogram NEC* to locate the tentative code of *R92.8*. You will confirm this code in the *Tabular List.*

You're moving right along with the material in this chapter! Let's examine one more code before completing a Practice Exercise.

Ill-defined and Unknown Cause of Mortality (R99)

The final code you'll review in this chapter of the *Tabular List* is *R99 Ill-defined and unknown causes of mortality.* According to the *Coding Guidelines,* this code is for limited use only. You should only apply the code when a patient who has already died has been brought into a facility and is pronounced dead upon arrival.

Now, it's time to test your skills in coding symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified. Complete the following Practice Exercise.

Step 13: Practice Exercise 28-4

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Persistent vegetative state**
   ICD-10-CM: _____

2. **Pyrexia of unknown origin**
   ICD-10-CM: _____

3. **Lethargy**
   ICD-10-CM: _____

4. **Abnormal pap smear of the cervix**
   ICD-10-CM: _____

Medical Coding and Billing Specialist

5. Coding/Billing Challenge

Use the following encounter form and dictation to create a CMS-1500 version 02/12 claim form using MedLook.

Greg North, MD
800 Medical Court
Brown, CO 80001-9898
(970) 555-2222

☐ 11 Physician Office
☐ 12 Private Residence
☐ 22 Outpatient Hospital
☑ 23 Hospital Emergency Room

Physician signature: *Greg North, MD*

Participating Provider ☑Y ☐N

EIN: 47-9823559
NPI: 04-05674390

Patient seen at Weston Hospital

Patient Information

Name	Richard M. Bloom	**Date of Birth**	March 10, 1977
Address	409 Yorkshire Court	**Sex** M	
City	Brown	**State** CO	
ZIP	80001		
Home Phone	970-555-5875		

Insurance Information

Primary Insurance		**Secondary Insurance** none	
Name	MedLink	**Name**	
ID#	52960	**ID#**	
Group#	WB02	**Group#**	
Address	PO Box 560	**Address**	
City	Brown	**City**	
State CO	**ZIP** 80001-0560	**State**	**ZIP**
Primary Insured Name	Richard Michael Bloom	**Secondary Insured Name**	
Relation to Patient	self	**Relation to Patient**	
DOB/Sex	March 10, 1977 Male	**DOB/Sex**	
Address/Phone	Same as patient	**Address/Phone**	

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Richard M. Bloom
Signature of patient (or parent of minor child)

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Signature of patient (or parent of minor child)

Date of Service	1/27/XX	
Diagnosis	**Procedure**	**Charge**
	99283 Emergency Depratment	$125.00

Name: Richard M. Bloom
DOB: March 10, 1977
Date of Service: January 27, 20XX

SUBJECTIVE
Patient complains of pleuritic left chest pain and a low-grade fever.

OBJECTIVE
Temperature: 101 °F. There are rales and decreased breath sounds in both bases with auscultation predominately in the left base. Percussion of the left lateral aspect of the thorax demonstrates an area of consolidation at the midaxillary line that extends from the precordium. There is a pleural rub in the same area.

ASSESSMENT
Suspected postoperative basilar atelectasis. Associated aspiration pneumonia cannot be excluded at the present time. Due to this being the second postoperative day, pulmonary emboli cannot be ruled out.

PLAN
Chest film to look for consolidative collapse of the lingula and lower lobes. Encourage deep breathing and frequent use of incentive spirometer. Arterial blood gasses. Consultation with pulmonary medicine.

Step 14: Review Practice Exercise 28-4

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 15: Lesson Summary

Nice job with this lesson! Not only have you studied congenial malformations, deformations and abnormalities, but you have a good understanding of signs and symptoms as well. This lesson contained quite a lot of new information. If you're feeling overwhelmed, that's perfectly natural. Take your time; go back to review materials and try your hand at the Practice Exercises again; and remember to contact your instructor if you have questions along the way.

Just a couple of lessons left and you'll complete your journey through the *ICD-10-CM Tabular List*. Stay focused and you'll continue to do well. Now, let's pause to reinforce what you've learned in the last lesson with a Quiz.

Step 16: Quiz 28

Once you've mastered the course content, locate this Quiz in your *Online Course* or your *Assignment Pack*. Read and follow the Quiz instructions carefully.

Endnotes

[1]   *Facts about Anencephaly.* Centers for Disease Control and Prevention. 15 July 2013. Web. 4 October 2013.

[2]   *Congenital Heart Defects.* Centers for Disease Control and Prevention. 28 August 2013. Web. 4 October 2013.

[3]   Shepard, Margie. "Rare Congenital Subglottic Stenosis Treated with Airway Reconstruction Surgery" *Sharing Mayo Clinic,* Mayo Clinic, 17 December 2012. Web. 4 October 2013.

[4]   *Cleft Lip and Cleft Palate.* Mayo Clinic, 14 June 2012. Web. 4 October 2013.

[5]   *Esophageal atresia.* MedlinePlus, 11 Aug 2011. Web. 4 October 2013.

[6]   *(Undescended Testicle) Cryptorchidism.* Mayo Clinic, 11 April 2013. Web. 4 October 2013.

[7]   *Case History – Case 1.* The Virtual Autopsy, n.d. Web. 4 October 2013.

[8]   *Febrile Seizure.* Mayo Clinic, 24 Jan 2012. Web. 4 October 2013.

Lesson 29
ICD-10-CM Chapters 19 and 20

Step 1: Learning Objectives for Lesson 29

When you complete the instruction in this lesson, you will be trained to:

- Identify the anatomy and assess injuries, poisonings and certain other consequences of external causes.

- Explain the terminology related to external causes of morbidity.

- Explain the general notes that relate to Chapters 19 and 20 of the *Tabular List* in the *ICD-10-CM* manual.

- Apply the *Chapter-Specific Guidelines* as they relate to Chapters 19 and 20 of the *Tabular List*.

- Identify the diagnoses and assign the final codes for documented disorders and diseases.

Step 2: Lesson Preview

In this lesson, you will learn the details of coding conditions included in Chapters 19 and 20 of the *Tabular List*. Chapter 19 of the *Tabular List* focuses on injuries, poisonings and certain other consequences of external causes. In addition, you'll learn about Chapter 20, which was once considered a supplementary classification and is now integrated into the *ICD-10-CM Tabular List*. Keep in mind that codes that appear in Chapter 20 are never the principal diagnosis codes.

Just as in other lessons, this lesson consists of many important details you'll need to understand to become a proficient and accurate medical coding specialist. Focus carefully as you work through the material, take breaks to refresh your mind and remember that your instructor is available to assist you if you are uncertain about how to find the correct codes. So, let's get started on these last several chapters of the *ICD-10-CM* manual.

Step 3: Injury, Poisoning and Certain Other Consequences of External Causes (S00-T88)

Besides being one of the longest chapters, Chapter 19 of the *ICD-10-CM* manual also contains a wide variety of conditions. The *S-section* codes for different types of injuries related to single body regions, while the *T-section* covers injuries to unspecified body regions, as well as poisoning and certain other consequences of external causes. You will learn about the *S-section* and *T-section* separately so that you don't become overwhelmed with the amount of information. Before beginning with the *S-section,* let's review some of the rules that apply to the entire chapter.

The note at the beginning of this chapter instructs: *use secondary code(s) from Chapter 20, External causes of morbidity, to indicate cause of injury. Codes within the T-section that include the external cause do not require an additional external cause code.* At this point, you have not been exposed to Chapter 20 of the *Tabular List* and are not expected to include these codes in the *S-section*. You will revisit injury codes in conjunction with external causes when you explore the details of Chapter 20 later in this lesson.

Meanwhile, you are instructed to use an additional code to identify any retained foreign body, if applicable *(Z18.-)*. The Excludes1 at the beginning of this chapter reminds you that you cannot code birth trauma *(P10-P15)* or obstetric trauma *(O70-O71)* in addition to conditions from this chapter.

The *Chapter-Specific Guidelines* for Chapter 19 are quite extensive. While you'll explore some of them in detail here, it is essential for you to always use the guidelines when coding from this chapter of the *ICD-10-CM*.

Extensions

Certain categories have a 7th-character extension, which you are required to add to each code when using it. The extension identifies the service as an initial or subsequent encounter, or a sequela. You will find notes similar to the following in this category:

The appropriate 7th character is to be added to each code from category *S00*:

> A initial encounter
> D subsequent encounter
> S sequela

As you'll recall, an initial encounter is the first visit for the current condition; a subsequent encounter is any visit after the first visit for the current condition. Sequela indicates complications or conditions that arise as a direct result of a condition. Let's expand on what you know about identifying services.

- An initial encounter is the period when the patient receives active treatment for a condition. Besides the first visit, this may consist of surgical treatment, an emergency department visit or evaluation and treatment by a new physician.

- A subsequent visit occurs after the patient has received active treatment for the condition and is receiving routine care during the healing and recovery phase.

- Sequela indicates complications or conditions that arise as a direct result of an acute phase of an injury or illness that no longer exists.

Remember, the letter "X" is used as a place-holder in the *ICD-10-CM* manual. You'll recall that, according to the *ICD-10-CM Conventions*, a place-holder "X" is used as a 5th- or 6th-character place-holder in certain six- and seven-character codes to allow for future expansion without disturbing the 6th- or 7th-digit structure.

Again, you should refer to the *Coding Guidelines* to assist you with accurate coding for this chapter. Next, you will focus on the *S-section* of the *ICD-10-CM Tabular List*. As you walk through the *Tabular List*, refer back to the guidelines to enhance your understanding of the coding rules and steps. Let's go!

Step 4: Injuries to Single Body Regions (S00-S99), Part 1

While the *S-section* contains a large number of codes, there is a pattern to those codes. The body regions are separated into code blocks, and within each code block you'll find the injury type. In this chapter, you'll approach the *Tabular List* a little differently, building a strong foundation that will result in a firm understanding of the codes here. First, you will examine the various body regions within the code blocks. Next, you'll discover the meanings of basic injury types. Then, you'll look at the details the *Tabular List* provides while walking through examples in each code block. Finally, you'll complete a Practice Exercise to polish your coding skills related to injuries.

Body Regions and Injury Type

As you've learned, the body regions are separated into code blocks in the *ICD-10-CM Tabular List*. The *S-section* consists of codes for injuries to the following body regions:

Head

Neck

Thorax

Abdomen, lower back, lumbar spine, pelvis and external genitals

Shoulder and upper arm

Elbow and forearm

Wrist, hand and fingers

Hip and thigh

Knee and lower leg

Ankle and foot

Within each code block, you'll find the following as basic injury types:

Superficial Injury

Open wound

Fracture

Dislocation and Sprain

Injury of Nerves and/or Spinal Cord

Injury of Blood Vessels

Injury to muscle, fascia and/or tendon

Crushing Injury

Traumatic Amputation

Other and unspecified injury

Now that you understand the code blocks for the body regions, you're ready to discover the meanings of the injury types.

Superficial Injury

Damage inflicted on the body that pertains to or is situated near the body's surface is considered a **superficial injury**. The *ICD-10-CM* lists abrasion, blister, *contusion*, external constriction, superficial foreign body and insect bite as types of superficial injuries. A **contusion** may be identified as a bruise or hematoma.

It's important to note that the *Coding Guidelines* indicate that *superficial injuries, such as abrasions or contusions are not coded when associated with more severe injuries of the same site.* You'll find superficial injuries in each body region: *S00, S10, S20, S30, S40, S50, S60, S70, S80* and *S90*.

Open Wound

An **open wound** may be classified as an unspecified open wound, laceration with or without foreign body, puncture wound with or without foreign body and open bite. For this code block in each body region, you are directed to code also any associated wound infection. Be sure to read the notes in the *Tabular List* carefully, as instructional notes to code also, as well as Excludes1 and Excludes2, will assist you with accurate coding for each specific body region. You'll find open wounds in each body region: *S01, S11, S21, S31, S41, S51, S61, S71, S81* and *S91*.

Fracture

A **fracture** is a break or rupture in a bone. Fractures are classified as *closed* or *open*. If the skin is not injured, the fracture is a **closed fracture**. If the broken bone protrudes through the skin, the fracture is an **open fracture**. You will code a closed fracture when the documentation does not indicate either an open or closed fracture. To ensure proper coding, you also should be aware of other terms that might be used to describe an open or closed fracture. Review the boxed information that follows to keep these other terms in mind as you code.

Closed Fracture		Open Fracture
comminuted	oblique	compound
depressed	segmental	infected
epiphysis	simple	missile
fissured	slipped	puncture
greenstickom	spiral	with foreign body
impacted	torus	
linear	transverse	

Once again, when a fracture is not identified as either open or closed, or by any of the above terms, you will code to a closed fracture. Likewise, you will code the fracture to *displaced* if the documentation does not specifically indicate whether the fracture is displaced or not. You will code fractures individually, indicating each specified site and sequencing the fracture codes according to severity.

Let's examine a displaced fracture in more detail. A **displaced fracture** occurs when the bone breaks into two or more parts and moves so that the two ends are no longer aligned. Meanwhile, in a **nondisplaced fracture**, the bone cracks either part or all of the way through, but doesn't move and maintains its proper alignment. A displaced fracture is more complex than a nondisplaced fracture. With other situations in the *ICD-10-CM*, you will usually default to the less-complex code when the documentation is not specific. However, the *ICD-10-CM* doesn't follow the usual route here: *A fracture not indicated as displaced or nondisplaced should be coded to displaced.*

You'll see references to specific types of closed fractures in the *ICD-10-CM* manual, so let's briefly review each:

- **Torus** (or **Buckle**)—One side of the bone may buckle upon itself without disrupting the other side

- **Greenstick**—One side of the fracture has broken and one side is bent

- **Transverse**—Broken straight across the bone where the line of break forms a right angle with the axis of the bone

- **Oblique**—A slanted fracture of the shaft along the bone's long axis

- **Spiral** (or **Torsion**)—The bone has been twisted apart

- **Comminuted**—The bone is shattered into many small pieces or fragments

- **Segmental**—A fracture in two parts of the same bone

You'll also see reference to a *physeal* fracture. A **physeal** or Salter-Harris fracture involves the growth plate of the bone and commonly occurs in children. The provider will indicate the type of Salter-Harris fracture, or you'll code to unspecified.

For traumatic fractures, you will apply the 7th character extension for initial encounter during active treatment. Subsequent care occurs after the active treatment is complete and the patient is receiving service during the healing or recovery phase. Complications or conditions that arise from the injury have the sequela character extension. Be sure to refer to the *Coding Guidelines* for more information on *coding of traumatic fractures*. You'll find fractures in each body region: *S02, S12, S22, S32, S42, S52, S62, S72, S82* and *S92*. Let's move on!

Dislocation and Sprain

A **dislocation** is a separation of two bones in a joint so they no longer touch each other, usually caused by an injury. Displacement that leaves the bones in partial contact is called **subluxation**. A **sprain** is a stretching or tearing of ligaments, which are the tough bands of fibrous tissue that connect one bone to another in the joints. You'll find dislocations and sprains in each body region: *S03, S13, S23, S33, S43, S53, S63, S73, S83* and *S93*.

Injury of Nerves with or without Spinal Cord

Nerves are fragile; **nerve injuries** can occur from pressure, stretching or cutting the fibers within the nerve. Injury to a nerve can stop signals to and from the brain, resulting in muscles that cannot work properly and a loss of feeling in the injured area. **Spinal cord** injuries occur when the spinal cord is damaged by being pulled, pressed sideways or compressed. Spinal cord injuries can be devastating, resulting in paralysis, loss of sensation, disruption of body functions and permanent disability. For both nerve and spinal cord injuries, you are to code transient paralysis (*R29.5*) in addition to the injury, if it is documented. In addition, you will code open wounds or fractures with codes from these code blocks when they apply.

Injuries to the spinal cord can be at the neck (cervical), thorax, lumbar or sacral areas. In each code block, you'll see directions to code to the highest-level cervical, thoracic or lumbar cord injury.

According to the *Coding Guidelines*: *when a primary injury results in minor damage to peripheral nerves, the primary injury is sequenced first with additional code(s) for injuries to the nerves and spinal cord. When the primary injury is to the nerves, that injury should be sequenced first.* You'll find nerve with or without spinal cord injuries in each body region: *S04, S14, S24, S34, S44, S54, S64, S74, S84* and *S94*.

Injury of Blood Vessels

Injury of blood vessels includes *minor* or *major* lacerations, as well as other and unspecified injuries. A **minor laceration** of the blood vessel may be described as an incomplete transection, laceration or superficial laceration, while a **major laceration** includes complete transaction and traumatic rupture. You are to code any associated open wound in addition to the blood vessel injury, when it is documented.

Again, the *Coding Guidelines* indicate that *when a primary injury results in minor damage to blood vessels, the primary injury is sequenced first with additional code(s) for injuries to the blood vessels. When the primary injury is to the blood vessels, that injury should be sequenced first.* You'll find blood vessel injuries in the following body regions: *S15, S25, S35, S45, S55, S65, S75, S85* and *S95*. Injuries to the head do not include this injury type.

Injury to Muscle, Fascia, Tendon

Before studying the specifics of this type of injury, let's review the key terminology. The human body has hundreds of **muscles**, which allow movement and carry out bodily functions. The **fascia** is composed of the bands of fibrous tissue that surround the muscles. **Tendons** are tough bands of dense, regular connective tissue whose strong collagen fibers firmly attach muscles to bones. The tendons are under extreme stress when muscles pull on them, so they are very strong and are woven into the coverings of both muscles and bones.

Injuries to the muscle, fascia and tendon include strain, lacerations and other or unspecified injuries. You know that a sprain is a stretching or tearing of ligaments. A **strain**, on the other hand, is stretching or tearing of a muscle or tendon, which can be caused by a direct blow to the body, overstretching or excessive muscle contraction. If an injury to the muscle, fascia or tendon includes an open wound, you will assign a code for the open wound, as well.

You'll find muscle, fascia and tendon injuries in the following body regions: *S16, S46, S56, S66, S76* and *S86*. In addition, you'll find just muscle and tendon injuries in *S96 Injuries to the ankle and foot*. Injuries that don't include this type are those to the head, thorax and abdomen, lower back, lumbar spine, pelvis and external genitals.

Crushing Injury

A **crushing injury** occurs when a body part is caught between two objects that are being pushed together by high pressure. Crushing injuries are common in car accidents, falls and any situation that can lead to collapse of a structure. In addition, varying degrees of crushing injuries can result from incidents like slamming a finger in a door to limbs being trapped and crushed for an extended period of time. When coding a crushing injury, you'll also code for any associated injuries, such as open wounds, fractures or spinal cord injuries.

You'll find crushing injuries in the following body regions: *S07, S17, S28, S38, S47, S57, S67, S77, S87* and *S97*. Note that code blocks *S28* and *S38* also include traumatic amputations, which you'll learn about next.

Traumatic Amputation

Traumatic amputation is the loss of a body part that occurs as the result of an accident or injury. A complete amputation totally detaches a body part from the rest of the body. In a partial amputation, some soft tissue remains attached to the site. The *ICD-10-CM* notes that an amputation not identified as partial or complete should be coded to complete.

You'll find avulsion and traumatic amputation of part of head in code block *S08*. **Avulsion** is the forcible tearing away of a body part by trauma or surgery. *Scalp avulsion* (*S08.0-*) is a rare but severe injury, and usually happens in industrial accidents when the hair gets wrapped around equipment.

You'll find traumatic amputation in the following body regions: *S07, S17, S28, S38, S47, S57, S67, S77, S87* and *S97*. As you just learned, code blocks *S28* and *S38* also include crushing injuries.

> Before you move on, log on to the Internet and go to the Web site link below. Read the article entitled, "Replantation of Total Avulsion of Scalp," to learn about a real-world example of what you are studying here: http://www.gangahospital.com/caseofweek/old2/.

Other and Unspecified Injury

This is somewhat of a catch-all category for injuries not covered in the other basic injury types for the body regions. You'll learn more about this section as you walk through the *S-section* in the *Tabular List.* But before moving on, let's pause to reinforce what you have learned about the basic injury types.

Step 5: Practice Exercise 29-1

Determine the injury type for the following scenarios, and write your answers on scratch paper.

1. **Alyssa was at school playing on the monkey bars and came home with blisters on both hands.**

2. **While landscaping his yard, Jim strained his hamstring.**

3. **Patty was brought into the emergency department after being pinched between her fence and car.**

4. **While playing soccer, Michaela tripped over the ball and broke her wrist when she landed on her hand.**

5. **Tom was running in a field and caught his foot on a root, causing him to fall. He tore the ligaments in his ankle and partially displaced his shoulder.**

6. **Kyle was running into the house without shoes and caught his foot on a metal strip, puncturing the top of the foot. He was taken to urgent care and received five stitches to close the wound.**

Step 6: Review Practice Exercise 29-1

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 7: Injuries to Single Body Regions (S00-S99), Part 2

Are you ready to learn about these code blocks? Recall, the body regions are separated into code blocks, and within each code block you'll find the injury type. You've learned a little about the injury types, and gained an overview of the code blocks. Now, you're ready to move through the code blocks and learn about each block in more detail. Let's begin.

Injuries to the Head (S00-S09)

Injuries to the head include those of the ear, eye, face, gum, jaw, oral cavity, palate, periocular area, scalp, temporomandibular joint area, tongue and tooth. When coding from this section, you'll code also for any associated infection, when it is documented. In addition, review the Excludes2 in the *Tabular List*. If any of these conditions exist, you can code them in addition to codes from this section.

Most of the code blocks were already covered when you studied the injury types; however, *S05 Injury of eye and orbit* and *S06 Intracranial Injury* are two code blocks that vary from the basic injury types. Let's examine each one now, in addition to *S04 Injury of cranial nerve*.

First, understanding the anatomy of the cranial nerves is important to accurately determine the correct code from block *S04 Injury of cranial nerve*. The *ICD-10-CM* manual indicates the selection of side should be based on the side of the body being affected.

Cranial nerves
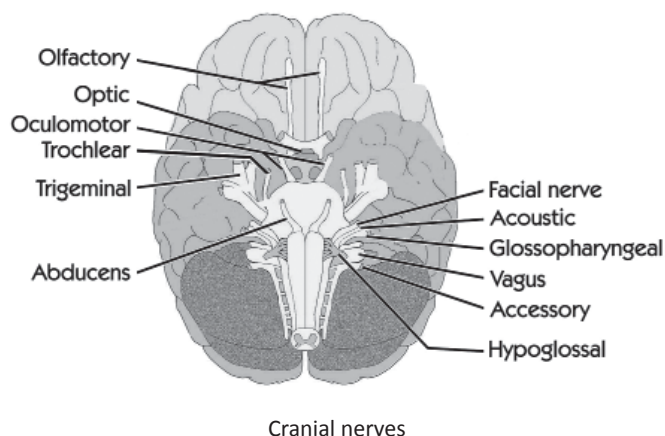
S05 Injury of eye and orbit includes any open wound of the eye and orbit. Injuries to the conjunctiva and *corneal abrasions* in this section do not include injuries from foreign bodies. Instead, you'll code those to the *T-section*. You know that the cornea is the transparent portion of the sclera. A superficial scratch to this area, known as a **corneal abrasion**, can be painful and cause tears, blurred vision, increased sensitivity and redness.

A contusion of the eyeball and orbital tissue (*S05.1-*) should not be confused with a black eye. A black eye is actually a contusion to the eyelid and periocular area. You'll note that this code category includes **hyphema**, which is characterized by blood collecting behind the cornea and in front of the iris.

Traumatic enucleation occurs when an injury causes the eyeball to be removed from the orbit. The following case study describes an unusual case of traumatic enucleation.[1]

> A 37-year-old man was seen in the emergency department with a traumatic injury to his right orbit. The patient, not wearing protective eyewear, was tightening a high-pressure industrial pipe that began to leak. Owing to a sudden malfunction, a high-pressure water jet was directed into his right orbit. The right globe was found approximately 45 m (50 yd) from the scene of the injury by emergency personnel. Ophthalmic examination of the right orbit showed relatively clean, soft tissue with conjunctival chemosis and an anophthalmic socket. Gross and histopathologic examination findings of the eye revealed an intact globe with no readily identifiable sites of scleral rupture and 15 mm of optic nerve present. The extraocular muscles were avulsed through their insertions on the globe. A computed tomographic scan of the orbits confirmed the anophthalmic socket. The extraocular muscles were in their normal anatomical positions and intact. Ophthalmic examination of the left eye, including confrontation visual fields, showed no abnormalities.
>
> The patient underwent right socket and orbital debridement and a moderate amount of ecchymotic nonviable tissue was removed. The orbit was explored extensively and the recti muscles were isolated. The muscle ends were pulled anteriorly and sutured to a 20-mm, scleral-wrapped, hydroxyapatite implant through scleral fenestrations.
>
> Six months after the initial injury and surgery, the patient showed excellent cosmetic results, with a well-healed right orbit and excellent socket motility. Nuclear medicine imaging revealed a well-vascularized, hydroxyapatite implant.

S06 Intracranial Injury may also be known as traumatic brain injury, but should not be confused with *head injury NOS (S09.90)*. You are directed to code also any associated open wounds of the head or skull fracture, if either is documented with this condition. In this code block, you'll also find concussion, traumatic cerebral edema, diffuse traumatic brain injury, focal traumatic brain injury, epidural hemorrhage, traumatic subdural and subarachnoid hemorrhage, as well as other and unspecified intracranial injuries. You've encountered many of these terms previously, when you studied cerebrovascular diseases. However, those were nontraumatic hemorrhages, while the conditions in this code block are the result of trauma.

Many of the conditions in this code block are injuries that might result in loss of consciousness (LOS). If the LOS is not documented, you'll find a code specific to *without loss of consciousness*; however, if LOS is documented, the time should also be noted there to help you determine the code. If the duration is not documented, you'll code to *unspecified duration.*

Now, let's bring together what you've just studied. Let's walk through an example of the initial encounter for a depressed fracture of the parietal bone with a subdural hemorrhage in a patient who was unconscious for 20 minutes.

First, you'll code to the fracture by using *Fracture, traumatic, parietal bone (skull)* in the *Index*. The tentative code is *S02.0*. Now, turn to the *Tabular List* to verify the code. You'll see that a 7th character is required. You know that *depressed* indicates a *closed fracture* and that this is an *initial encounter*; therefore, you determine *S02.0XXA* is the correct code for the fracture.

The *Tabular List* for *S02.0* directs you to *code also any associated intracranial injury*—which is the subdural hemorrhage. Return to the *Index* and locate *Injury, intracranial, subdural hemorrhage, traumatic* for code *S06.5X-*. Turn to the *Tabular List* to complete your code. The LOC is 20 minutes, so you'll select *loss of consciousness of 30 minutes or less S06.5X1*; and then determine *A* for *initial encounter* for a final code of *S06.5X1A*.

Finally, you'll assign *S02.0XXA S06.5X1A* for the example. Well done! You're ready to move on to the next code section.

Injuries to the Neck (S10-S19)

Injuries to the neck include those of the nape, supraclavicular region and throat. Be sure to review the Excludes2 list in the *Tabular List*. If any of these conditions exist, you can code them in addition to codes from this section.

The specific body areas found in this section include the throat, larynx, trachea, vocal cord, thyroid gland, pharynx, cervical esophagus, carotid and vertebral artery, external and internal jugular vein and the cervical region.

Let's review the anatomy of the neck for a better understanding of code assignment here. With a fracture of the cervical vertebra, the bone that's broken is the vertebra itself. If the first cervical vertebra is fractured, the provider will indicate the first cervical vertebra, or C1. If multiple vertebrae are fractured, the provider may list C1 through C3, but you will assign each level a specific code. A dislocation or subluxation can actually occur *between* vertebrae. For instance, C1/C2 indicates the injury is between the first and second cervical vertebrae. The nerve injury lists the nerve level. Remember that, although there are seven cervical vertebrae, there are eight cervical nerves.

The cervical spine

Blood vessels at the neck level include the carotid and vertebral arteries, and the external and internal jugular vein. The arteries distribute oxygenated blood from the heart to the body, while the veins carry blood toward the heart. There are four arteries that supply blood to the brain: two carotid arteries located on each side of the neck, and two vertebral arteries that supply blood to the brainstem. The carotid artery is the brain's main supplier of blood. The external jugular veins collect blood from the neck, cranium and deep facial tissue, while the internal jugular vein collects blood from the face, brain and neck. Now that you have a handle on the anatomy of the neck, let's move on to the next section of codes—injuries to the *thorax*.

Injuries to the Thorax (S20-S29)

According to the *ICD-10-CM Tabular List*, injuries to the thorax include those of the breast, chest, chest wall and interscapular area. The *Tabular List* also contains an extensive Excludes2 list that you should review before coding from this section. As you are aware, if any of these conditions exist, you can code them in addition to the codes from this section.

The **thorax** is the area between the neck and the abdomen. It consists of the breast, ribs, *sternum*, thoracic spine (with 12 vertebrae), thoracic aorta, subclavian artery and vein, superior vena cava, pulmonary blood vessels, intercostal blood vessels, heart and *intrathoracic organs*. The **sternum**, commonly known as the breastbone, is a long, flat bone that forms the center part of the chest. The sternum consists of the manubrium, body and xiphoid process. Attached to the sides of the manubrium and the body are the seven pairs of **costal** (rib) **cartilages** that join the sternum to the ribs.
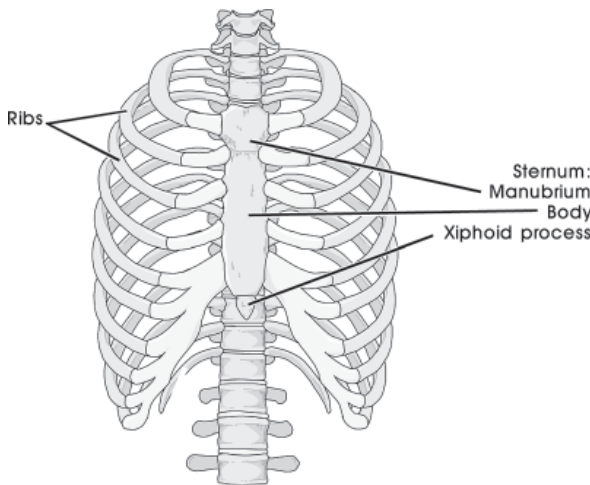
Anterior view of the rib cage

Again, most of the injury conditions have already been discussed, but two code blocks were not part of those basic injuries. Let's examine the details of *S26 Injury of heart* and *S27 Injury of other and unspecified intrathoracic organs* in more detail.

S26 Injury of heart may be caused by a contusion or laceration, which may be mild, moderate or major. This injury can be classified with or without *hemopericardium*, or unspecified with or without hemopericardium. **Hemopericardium** refers to blood in the pericardial sac of the heart.

Now, look at *S27 Injury of other and unspecified intrathoracic organs.* Intrathoracic organs are the lungs, bronchus, trachea and pleura. Traumatic **pneumothorax** (air or gas in the pleural cavity), **hemothorax** (blood in the pleural cavity) and **hemopneumothorax** (air or gas and blood in the pleural cavity) are some of the injuries found in this code block. Other injuries include contusion, laceration and primary or secondary *blast*.

A **blast injury** results from direct or indirect exposure to an explosion. Historically, blast injuries were seldom seen outside combat. However, according to the CDC, as the "risk of terrorist attacks increase in the U.S., disaster response personnel must understand the unique pathophysiology of injuries associated with explosions and must be prepared to assess and treat the people injured by them." **Primary blast** injuries are caused by blast overpressure waves or shock waves, often injuring the intrathoracic organs. **Secondary blast** injuries result from flying debris and bomb fragments. Blast injuries often affect the intra-abdominal organs as well, which you'll study next. Now, let's take a look at the details related to intrathoracic blast injuries.[2]

> "Blast lung" is a direct consequence of the high-order explosive over-pressurization wave. It is the most common fatal primary blast injury among initial survivors. Signs of blast lung are usually present at the time of initial evaluation, but have been reported as late as 48 hours after an explosion. Blast lung is characterized by apnea, bradycardia and hypotension. Pulmonary injuries vary from scattered petechae to confluent hemorrhages. Blast lung should be suspected for anyone with dyspnea, cough, hemoptysis or chest pain following blast exposure. In addition, blast lung produces a characteristic "butterfly" pattern on a chest x-ray. A chest x-ray is recommended for all exposed persons; a prophylactic chest tube is recommended before general anesthesia or air transport is indicated if blast lung is suspected.

Try your hand at coding an initial encounter for bilateral blast lung injury. To code this condition, turn in the *Index* to *Blast, injury, abdomen or thorax* and you're directed to *see Injury, by site*. Follow the directions and turn to *Injury, lung.* Again, you're redirected, but this time you are to *see also Injury, intrathoracic, lung*. With your knowledge of the condition, this sounds like the right pathway, so you'll continue. *Injury, intrathoracic, lung, blast injury (primary), bilateral* provides the tentative code *S27.312*. Turn to the *Tabular List* to verify the code and apply the final digit to indicate the *initial encounter*. Your final code is *S27.312A*.

Injuries to the Abdomen, Lower Back, Lumbar Spine, Pelvis and External Genitals (S30-S39)

As usual, let's see what information the *Tabular List* provides on this topic before exploring the details. Injuries in this section include those of the abdominal wall, anus, buttock, external genitalia, flank and groin. Remember, the external genitalia include the penis, scrotum and testes for males; and the vagina and vulva for females. If any of the conditions in the Excludes2 list exist, you can code them in addition to the codes from this section.

To successfully code fractures and dislocations, it's important to understand the bone structures involved. Recall that the lower-back spine consists of five lumbar vertebrae, with the sacrum located at the base of the lumbar vertebrae. The coccyx, or tail bone, is located at the very end of the sacrum.

The parts of the pelvis that may be fractured include the acetabulum, pubis and other specified parts, such as the ilium and ischium. The **acetabulum** is the hip socket. The rounded, upper end of the *femur* fits into the acetabulum or hip socket.
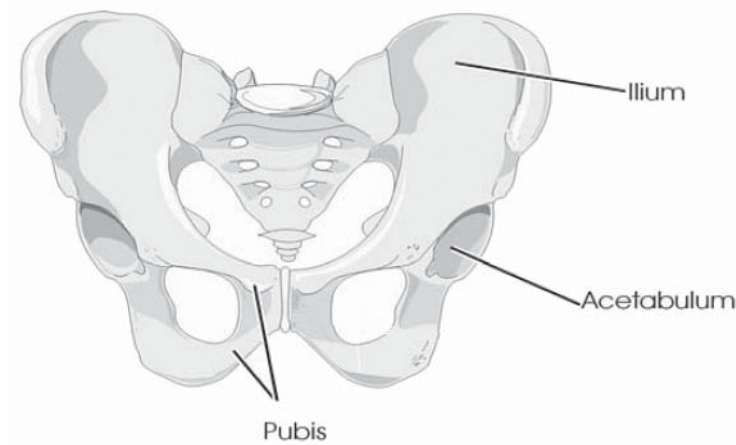
The acetabulum is the hip socket

Other significant injuries to this section include injuries to the blood vessels. The abdominal aorta is the largest artery in the abdominal cavity.[3] Surviving a laceration to the abdominal aorta is very rare. For instance, in one real-world case, a blunt force trauma resulted in a displaced fracture in the lumbar area. The sharp bones from the fractured vertebral body lacerated the abdominal aorta.

Another major vein that may be injured in this region is the vena cava. The superior vena cava is the large vein that returns blood to the heart from the head, neck and both upper limbs. The inferior vena cava returns blood to the heart from the lower part of the body.

Now, let's briefly discuss the injuries not covered in the basic injury section*: S36 Injury of intra-abdominal organs* and *S37 Injury of urinary and pelvic organs.*

Intra-abdominal organs are the spleen, liver and gallbladder, bile duct, pancreas, stomach, small intestine, colon and rectum. Injuries you'll see to these organs include contusions, lacerations and blast injuries.

You will encounter minor and major contusions; minor, moderate and major lacerations; and other and unspecified injuries of the urinary and pelvic organs. As you know, the urinary system includes the kidneys, ureters, bladder and urethra.

The remaining sections for this chapter are fairly straightforward to code. You have a good understanding of the types of injuries, so you'll just need a quick review of the anatomy of each. According to the *Tabular List*, conditions not included in the remaining sections are burns and corrosions, frostbite and insect bites or stings that are venomous. However, if these conditions are documented, you can code them in addition to the other conditions here. Are you ready to finish this section? Let's get to it!

Injuries to the Shoulder and Upper Arm (S40-S49)

The shoulder is the junction between the *humerus*, *clavicle* and *scapula*. In the *Tabular List*, you discover that this section includes injuries of the *axilla* and scapular regions. Let's review the anatomy for this section.

The **axilla**, also known as the **armpit** or **underarm**, is the area directly under the joint where the arm connects to the shoulder. The **clavicle** is commonly known as the collar bone. The clavicle is divided into three sections: the sternal end, where the collar bone meets the breastbone; the **shaft**, or long, slender part of the clavicle; and the **lateral** or **acromial process**, which is the highest point of the shoulder.

The **scapula**, or shoulder blade, consists of the body and acromial process. The **acromioclavicular joint** is located between the acromial process and the clavicle. The **coracoid process** projects from the front surface of the upper border of the scapula. It can be felt between the **deltoid** and **pectoralis** major muscles, about an inch below the clavicle. The **glenoid cavity**, or arm socket, forms a depression where the head of the humerus bone fits. Between the glenoid cavity and the body of the scapula, you'll find the neck of the scapula. In the majority of scapula fractures, the scapular body is affected. Only about a fourth of scapular fractures affect the scapular neck.[4]
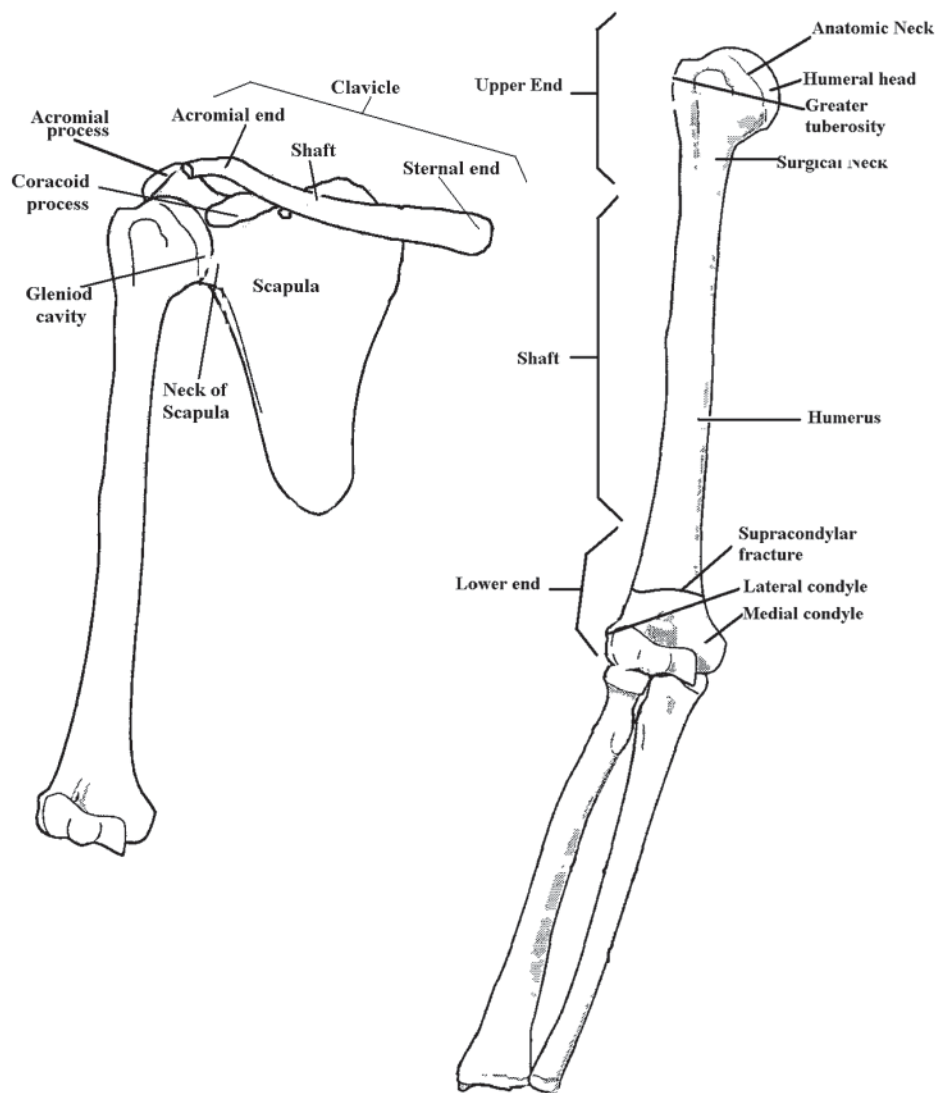
Clavicle and humerus

The **humerus,** the bone that extends from the shoulder to the elbow, consists of the upper end, shaft and lower end. The upper end is further categorized by the surgical neck and the greater and lesser tuberosity. The lower end of the humerus includes the supracondylar fracture and lateral and medial condyle.

The nerves in this section are the *ulnar*, *median*, *radial*, axilla, musculocutaneous and cutaneous sensory nerves. Although the *radius* and *ulna* are part of the forearm, the radial and ulnar nerves originate in the upper arm. The **ulnar nerve** passes down the inside of the arm, behind the elbow and to the outer hand, including the ring and little finger. The pain you feel when you hit your "funny bone" is actually in the ulnar nerve. The **median nerve** also passes down the inside of the arm, but crosses in front of the elbow and through the carpal tunnel into the thumb and all of the fingers, except the little one. The **radial nerve** passes down the back and outside of the upper arm. You'll code to these injuries when the injury is located at the upper arm.

Now, you're ready to move on to learn more about the elbow and forearm.

Injuries to the Elbow and Forearm (S50-S59)

Let's briefly review the anatomy of the elbow and forearm, and then you'll get a chance at coding from this section!

The elbow is the joint at the junction of the humerus, ulna and radius. Together, the radius and ulna are the bones that form the **forearm**. The **radius** is located on the outer or thumb side of the forearm, while the **ulna** is the inner, larger bone of the forearm. At the upper or proximal end of the ulna, you'll find the olecranon and coronoid processes. The upper or proximal end of the radius consists of the head and neck of the radius. The middle region of both bones is the shaft. The radial styloid process is at the lower or distal end of the radius, while the ulna styloid process is at the lower end of the ulna.

Elbow and forearm
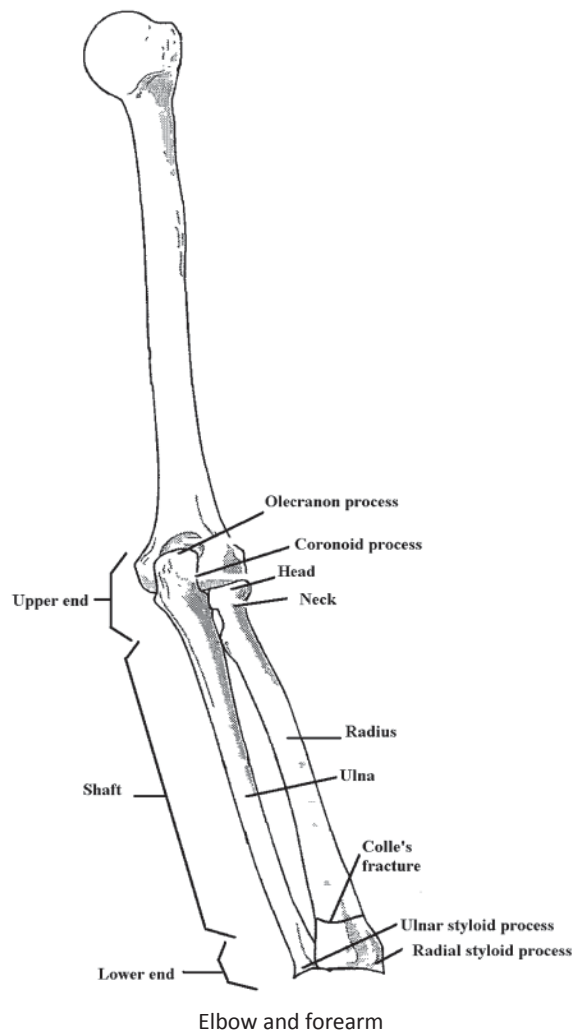
Medical Coding and Billing Specialist

You must closely examine dictations related to this section, because a fracture might be of the radius alone, the ulna alone or the radius with the ulna. For instance, a **Colles' fracture** is a break of the lower end of the radius, in which the lower fragment is displaced posteriorly, or behind the radius. This type of fracture most commonly occurs in people older than age 40, and usually results from a fall with the hand outstretched to break the fall. Although this is often called a broken wrist, it is technically the lower bones of the forearm that are broken.

Here again, you'll find the ulnar, median and radial nerves. You'll code to these nerves when the injury is at the forearm level. The radial and ulnar arteries are found in the forearm and wrist, as well.

By now, you have a grasp of the basic terminology and coding details for these groups of codes. So, it's time again to try your hand at coding a related diagnosis. Carefully read the following operative report and try to determine the code or codes for the indicated diagnosis.

PREOPERATIVE DIAGNOSIS
Colles fracture, left wrist.

POSTOPERATIVE DIAGNOSIS
Same.

PRIMARY PROCEDURE
OPEN REDUCTION, INTERNAL FIXATION COLLES FRACTURE.

INDICATIONS FOR PROCEDURE
This patient presents with a Colles fracture of the left wrist following an automobile accident. The patient was a passenger in the vehicle that was struck by another vehicle. The patient attempted to brace herself against the dashboard with her left hand resulting in the fracture.

PROCEDURE
After the attainment of adequate general anesthesia, the left upper extremity was prepped and draped. A skin marker was used to mark the appropriate location using the positioner on the forearm for the radius pins. The fracture was addressed. I was able to reduce the fracture to the appropriate anatomical position. Fixation was obtained using a modular hand 2-0 titanium plate with 6 cortices on either side of the fracture. Excellent stable fixation was obtained. Rotational alignment appeared to be satisfactory. The wound was irrigated with normal saline and closed using 3-0 Vicryl and 4-0 nylon monofilament sutures. Sterile Xeroform 4 x 4 cast padding and Ace bandage were used. The patient tolerated the procedure well and went to the recovery room in good condition.

After you've determined what you think is the correct code, compare the process you used and your results to the following summary. To code the postoperative diagnosis for this dictation, you must determine the problem. According to the notes, the patient has a Colles' fracture. Open your *ICD-10-CM* manual to the *Index to Diseases and Injuries* and follow the coding pathway *Colles' fracture.* You will find code *S52.53-*. Now, determine the highest level of specificity for the tentative code in the *Tabular List*. The left side is fractured, so you'll select *S52.532-*. The procedure was open, but the fracture was closed; therefore, you'll select *A initial encounter for closed fracture* for the final character. The code for this operative report *is S52.532A*. Does that match your results? Great!

Coding from the *S-section* can become tedious. Be sure to take breaks as needed and review any information that you find challenging. Once you get a handle on the basics, you'll do fine with injuries to single body regions. When you're ready, to ahead and move on to the next section.

Injuries to the Wrist, Hand and Fingers (S60-S69)

Next, you will examine the anatomy of the wrist, hand and fingers. For superficial injuries and open wounds, you will identify whether the condition is with or without damage to the nail.
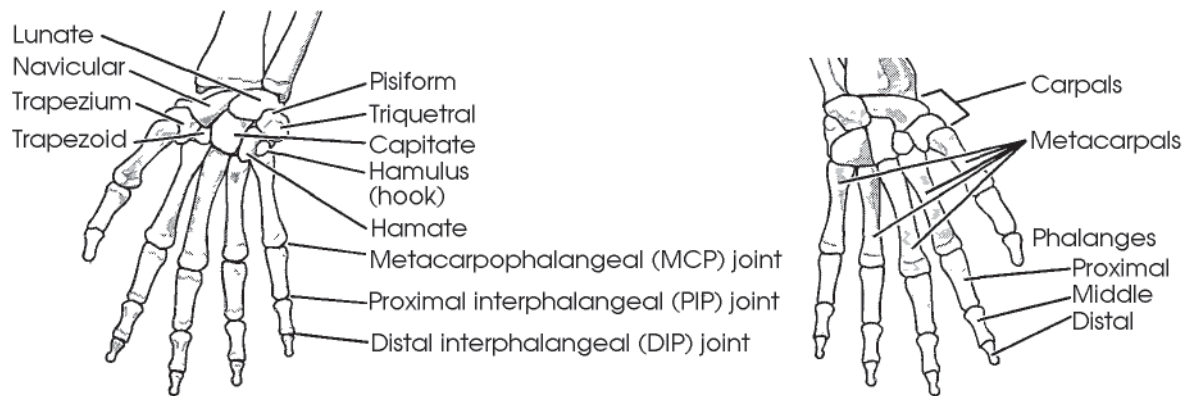
Bones of the hands and wrist

A brief review of the anatomy of this section, as in others, will assist you with accurate coding. Each hand and wrist has 27 tiny bones. The carpal bones are arranged in two rows of four bones each. The first row includes the lunate, scaphoid or navicular bone, triquetrum and pisiform. The next row has the trapezium, trapezoid, capitates and hamate. You'll find that the **metacarpals**, or the five bones of the hand, lie between the wrist and the *phalanges*. Finally, the **phalanges** are the fingers and thumb of the hand. Metacarpophalangeal and interphalangeal joints are found in the fingers. The nerves in this area are the ulnar, median and radial nerves you studied previously, as well as digital nerves of the thumb and fingers. The ulnar and radial arteries are also in the wrist and hand, leading into the palmar arch.

For a coding example from this section, consider a four-year-old boy who was playing on the driveway when his sister ran over his right hand as she rode her bike. The injury was extensive enough to break the distal phalanx of the ring and little finger and crush his hand. Let's walk through the coding process.

Begin your code search in the *Index to Diseases and Injuries* at the main term *Broken*. You will not find the subterm *fingers*. The problem is that the term *broken* is not considered a medical term. Instead, a broken bone is considered a fracture. So, now you'll turn to *Fracture, traumatic* and under that you will find the subterms *finger (except thumb), little, distal phalanx (displaced) S62.63-*. Recall that if displaced or nondisplaced is not documented, you'll default to a displaced fracture. Next, code the other finger using the subterms *finger (except thumb), ring, distal phalanx (displaced)* for code *S62.63-*. Interesting—you find that it's the same code. Turn to the *Tabular List*, and you'll determine the 6th character based on the location. *S62.634-* is for the right ring finger, and *S62.636-* is for the right little finger. This is an initial encounter for a closed fracture, so you apply your final character and have *S62.634A S62.636A* for the fractures. Did that make sense? Good!

Now, let's turn to the crushing injury of the hand. The coding pathway of *Crush, hand (except fingers alone)* suggests the tentative code of *S67.2-*. Again, the right hand was injured, and this is an initial encounter, so your code will be *S67.21XA*.

Finally, you'll apply *S62.634A S62.636A S67.21XA* for this coding example. You're ready to move down the body to injuries to the hip and thigh.

Injuries to the Hip and Thigh (S70-S79)

While studying the pelvis, you learned that the acetabulum is the hip socket. The rounded, upper end of the femur, known as the head of the femur, fits into the acetabulum. The **femur**, commonly known as the thigh, is actually the long bone of the thigh that extends from the pelvis to the knee. The femur is the longest and largest bone in the body. Besides the head and neck section, the upper femur also consists of the greater and lesser trochanter. The middle section is the shaft of the femur. Finally, the lower or distal end consists of the lateral and medial condyle.

The femur
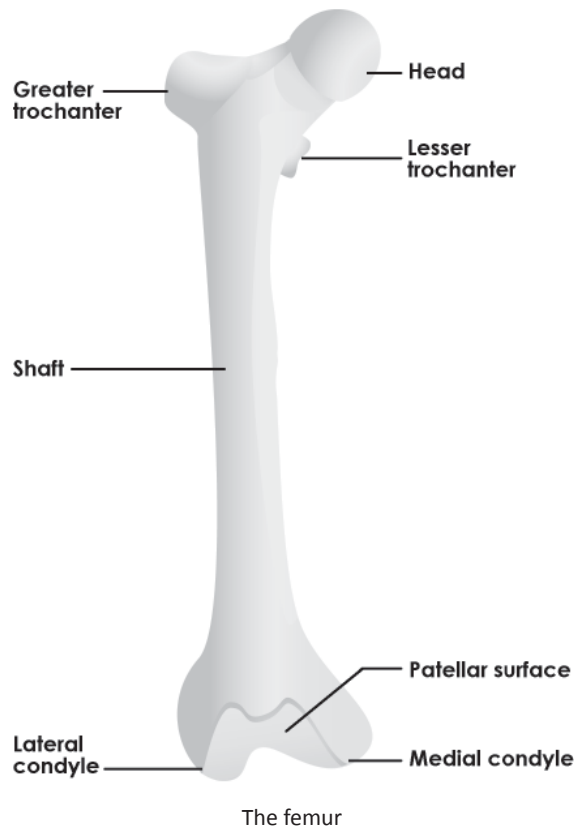
The sciatic nerve is the largest single nerve in the human body; it runs from the lower back, through the hips and buttocks and down each leg. Sciatica refers to pain that radiates along the path of the sciatic nerve, usually affecting only one side of the body. This condition most often occurs when a herniated disk or bone spur on the spine compresses part of the nerve. Sciatica might also be caused by an injury, including a fracture of the pelvis or trauma to the buttocks or thigh.

The blood vessels in this section include the femoral artery and vein and the greater saphenous vein. The femoral artery, which passes fairly close to the outer surface of the upper thighs, divides into smaller branches to provide blood to the muscles and superficial tissues in the thigh. The corresponding femoral vein travels parallel to the artery, carrying the blood from these locations back to the heart. The greater saphenous vein is the longest vein in the body; it is located superficially, just below the skin layers, and extends from the groin all the way to the ankles. When the injury of the greater saphenous vein is at the hip or thigh region, you'll apply the codes from this section.

Before moving to the knees and lower leg, let's look at an emergency department report.[5]

HISTORY OF PRESENT ILLNESS
The patient is an 88-year-old white female, household ambulator with a walker, who presents to the emergency department this morning after incidental fall at home. The patient states that she was on a ladder on Saturday, and she stepped down off the ladder and felt some pain in her left hip. Subsequently she fell, injuring her left shoulder. It is unclear how long she was on the floor. She presently is complaining of pain to the left shoulder. She states she also has pain to the hip with motion of the leg. She denies any numbness or back pain.

PERTINENT PAST HISTORY
Medications: Lipitor 20 mg daily, metoprolol 25 mg b.i.d., Plavix 75 mg once a day, aspirin325 mg, Combivent aerosol 2 puffs 2 x/day, Protonix 40 mg daily, Fosamax 70 mg weekly, multivitamins including calcium and vitamin D, hydrocortisone, nitroglycerin, citalopram 20 mg daily.
Illnesses: Extensive including coronary artery disease, peripheral vascular disease, status post MI, history of COPD, diverticular disease, irritable bowel syndrome, GERD, PMR, depressive disorder and hypertension.
Operations: Includes a repair of a right intertrochanteric femur fracture.
ALLERGIES: PENICILLIN, SULFA, ACE INHIBITOR.
Social history: She denies alcohol or tobacco use. She is the caretaker for her daughter, who is widowed and lives at home.

REVIEW OF SYSTEMS
Patient is hard of hearing. She also has vision problems. Denies headache syndrome. Presently, denies chest pain or shortness of breath. She denies abdominal pain. Presently, she has left hip pain and left shoulder pain. No urinary frequency or dysuria. No skin lesions. She does have swelling to both lower extremities for the last several weeks. She denies endocrinopathies. Psychiatric issues include chronic depression.

PHYSICAL EXAMINATION
GENERAL: The patient is alert and responsive.
EXTREMITIES: The left upper extremity, there is moderate swelling and ecchymosis to the brachial compartment. She is diffusely tender over the proximal humerus. She is unable to actively elevate her arm due to pain. The neurovascular exam to the left upper extremity is otherwise intact with a 1+ radial pulse. She does have chronic degenerative change to the MP and IP joints of both hands. The left lower extremity, the thigh compartment is supple. She has pain with log rolling tenderness over the greater trochanter. The patient has pain with any attempt at hip flexion, passively or actively. The knee range of motion between 5 and 60 degrees with no point specific tenderness, no joint effusion, and an intact extensive mechanism. She has 2 -3+ bilateral pitting edema, pretibially and pedally. The patient has a weak motor response to the left lower extremity. She has a 1+ dorsalis pedis pulse. Her sensory examination is intact plantarly and dorsally on the foot.

LABORATORY DATA

Left shoulder series was performed which identifies a three-part valgus-impacted left proximal humerus fracture with displacement of the greater tuberosity fragment, approximately 1 cm. There is no evidence of dislocation. There was an AP pelvis as well as left hip series, which identify a nondisplaced valgus-impacted femoral neck fracture. There is also evidence of severe degenerative disk disease with degenerative scoliosis of the LS spine. There is evidence of previous surgical repair of the right proximal femur with an intact intramedullary nail. Patient's H&H is 13 and 38.7, white blood cell count is 6.9, and there are 198,000 platelets. Electrolytes: sodium 137, potassium 4.1, chloride 102, CO_2 is 27, BUN is 20, and creatinine 0.62. Urinalysis: The urine is clear yellow, 0-2 white cells, and no bacteria.

IMPRESSION

Status post fall with injuries to left shoulder and left hip. The left shoulder fracture is a valgus-impacted proximal humerus fracture and the left hip is a nondisplaced femoral neck fracture.

PLAN

Patient will be admitted to medical service for medical clearance for surgery of her left hip, which will include a percutaneous screw fixation. I have explained the nature of the injuries to the patient, the recommended surgical procedures, and the postoperative course and rehabilitation required thereafter. She presently understands and agrees with the plan.

Not only will you apply your knowledge about injuries to the hip and thigh, you will also code the injuries to the shoulder and upper arm here. So, you'll begin with the shoulder fracture, which is specific to the proximal humerus.

1. In the *Index*, locate *Fracture, traumatic, humerus, proximal end*, which directs you to *see Fracture, humerus, upper end*. Now, the x-ray report noted a displacement of the greater tuberosity; therefore, you'll use *Fracture, traumatic, humerus, upper end, greater tuberosity (displaced)* for code *S42.25-*. Turn to the *Tabular List* to complete the code. This was the *left humerus* and the *initial encounter for a closed fracture*, so your final code is *S42.252A*.

2. Return to the *Index*, and locate *Fracture, traumatic, femur, neck* and you are again redirected. Using the new pathway, *Fracture, traumatic, upper end, neck* you find code *S72.00-*. Turn to the *Tabular List to* verify and complete the code. This was the *left femur* and the *initial encounter for a closed fracture*, so your final code is *S72.002A*.

3. Finally, you'll assign *S42.252A S72.002A* to this ED report. Nice work!

What do you think of injury codes so far? Once you understand the patterns of the *ICD-10-CM Tabular List*, coding becomes much more manageable. Now, you have two more sections to review, and then you'll pause to test what you've learned.

Injuries to the Knee and Lower Leg (S80-S89)

Injuries of the ankle and foot, except fractures of the ankle and malleolus (*S90-S99*), are not included in this section; however, they can be coded with codes from this section if there is documentation. Let's go through the anatomy of this section, and then learn about the exception.

The **patella**, or knee cap, is the largest sesamoid bone in the body. This triangular bone is located at the front of the joint of the knee. In medical terminology terms, the lower leg extends from the knee to the ankle. The lower leg contains two bones, the *tibia* and the *fibula*. The **fibula** is the small bone on the outside of the leg. The **tibia**, also known as the shin, is the larger, weight-bearing bone in the lower leg. The upper end of the tibia consists of the lateral and medial condyle. Again, the middle section is the shaft, followed by the lower end of the tibia. The medial malleolus is the inside part of the tibia, while the lateral malleolus is the end of the tibia. Fractures of the medial and lateral malleolus are often known as ankle fractures, although they are really parts of the lower leg. If both the lateral and medial malleolus are fractured, it is a **bimalleolar** fracture. Meanwhile, a **trimalleolar** fracture involves the lateral malleolus, medial malleolus and the distal posterior aspect of the tibia.
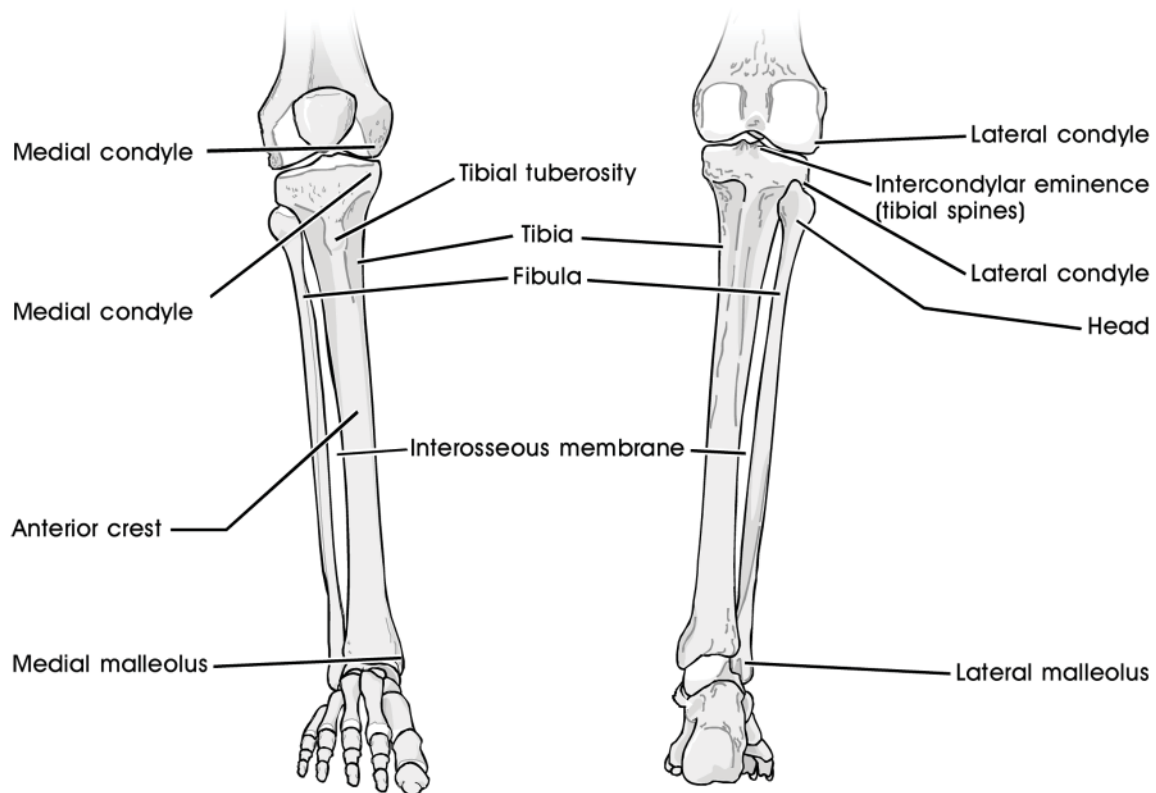
The lower leg contains two bones, the tibia and the fibula.

The most common knee injury is a torn meniscus.[6] The **meniscus** is the rubbery, c-shaped piece of cartilage that cushions the knee. Each knee has two menisci (plural of meniscus)—one at the outer edge of the knee and one at the inner edge. A meniscus tear is usually caused by twisting or turning quickly, which often occurs while lifting something heavy or playing sports. When the tear is around the rim of the meniscus, it is a bucket-handle tear.

Let's explore the four main ligaments that connect the femur and tibia:[7]

- The medial collateral ligament (MCL) runs along the inside of the knee and prevents the knee from bending outward.

- The lateral collateral ligament (LCL) runs along the outside of the knee and prevents the knee from bending inward.

- The anterior cruciate ligament (ACL) is in the middle of the knee. It prevents the shin bone from sliding out in front of the thigh bone.

- The posterior cruciate ligament (PCL) works with the ACL. It prevents the shin bone from sliding backwards under the femur.

You'll also need to know the related nerves here. The sciatic nerve branches off to the *tibial* and *peroneal* nerves. The **tibial nerve** supplies movement and sensation to the calf and foot muscles, while the **peroneal nerve** supplies movement and sensation to the lower leg, foot and toes. Meanwhile, the blood vessels of the lower leg include the popliteal artery and vein, tibial and peroneal arteries and greater or lesser saphenous vein.

Now that you have a good grasp of the terminology related to this section, try coding the following scenario.

SUBJECTIVE
Patient was playing football and was stepped on by another player. The exposed screw from the player's cleats punctured the patient's knee.

OBJECTIVE
Exam reveals no foreign body remained in the left knee. No blood vessels or other structures of the knee were injured, and this is Deion's first visit.

ASSESSMENT
Puncture wound without foreign body, left knee, initial visit.

PLAN
The wound was cleaned and dressed prior to discharge. The patient was instructed on keeping the area clean and dry and signs of infection to watch for. Follow-up as needed.

What code will you assign for this scenario? Is it *S81.032A*? If this is your code, you're on the right track! If not, review the coding pathway for a better understanding of the process. In the *Index*, you'll locate *Puncture, knee, left* for code *S81.032*. Now, turn to the *Tabular List* to verify the code, and you'll see that the 7th character is required. This is an *initial encounter*, so your code is *S81.032A*. You're ready to review the last *S-section*!

Injuries to the Ankle and Foot (S90-S99)

As you previously learned, a fracture of the ankle and malleolus (*S82.-*) is excluded from this section. You can code it in addition to the codes here, if the condition is documented. In a moment, you will examine the anatomy of the wrist, hand and fingers. But first, note that for superficial injuries and open wounds, you will identify whether the condition is with or without damage to the nail.

There are seven **tarsal** bones; two of the largest are the **talus** and the **calcaneus**, or heel bone. The other tarsal bones are aligned in a row between the large tarsal bones and the metatarsals. These bones are the navicular, first, second and third cuneiforms and the cuboid. The **metatarsal** bones are the five bones that form the arch of the foot. The **phalanges** of the toes are named just like their counterparts, the phalanges of the fingers. The joints within the foot and ankle are the interphalangeal and metatarsophalangeal joints.

The foot
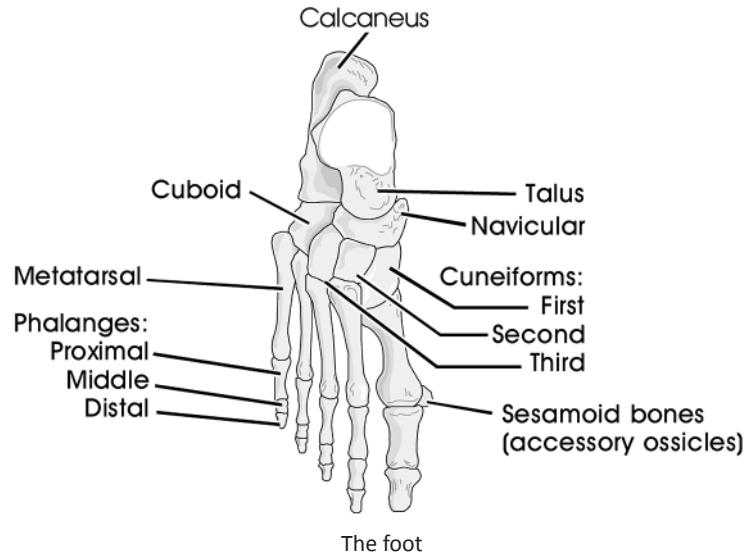
A sprained ankle may involve the calcaneofibular, deltoid or tibiofibular ligaments, while a sprained foot involves the tarsal or tarsometatarsal ligament. Let's look at an example of a sprain.

CHIEF COMPLAINT
Right ankle sprain.

HISTORY OF PRESENT ILLNESS
This is a 56-year-old female who fell on November 26, 20XX at 11:30 a.m. while at work. She did not recall the specifics of her injury, but she thinks that her right foot inverted and subsequently noticed pain in the right ankle. She describes no other injury at this time.

PERTINENT PAST HISTORY
Medications: She takes Lexapro and a blood pressure pill but does not know anything more about the names and the doses.
Illnesses: Hypertension and anxiety.
Operations: None.
ALLERGIES: NO KNOWN DRUG ALLERGIES.
Social history: The patient lives here locally. She does not report any significant alcohol or illicit drug use. She works full time.
Family history: Noncontributory.

REVIEW OF SYSTEMS
Respiratory: No cough, wheezing, or shortness of breath.Cardiovascular: No chest pain or palpitations.
Gastrointestinal: No abdominal pain. No nausea, vomiting or diarrhea.

PHYSICAL EXAMINATION
GENERAL: No acute distress.
VITAL SIGNS: Temperature 97.8, blood pressure 122/74, heart rate 76, respirations 24, weight 250 pounds, O2 sat 95% on room air.
NECK: Supple. No lymphadenopathy. No thyromegaly.
CHEST: Clear to auscultation bilaterally. Heart: Regular rate and rhythm. No murmurs.
ABDOMEN: Nondistended, nontender, normoactive bowel sounds.
EXTREMITIES: No Clubbing, cyanosis or edema.
MUSCULOSKELETAL: The spine is straight, and there is no significant muscle spasm or tenderness there. Both knees appear to be nontraumatic with no deformity or significant tenderness. The right ankle has some swelling just below the right lateral malleolus, and the dorsum of the foot is tender. There is decreased range of motion and some mild ecchymosis noted around the ankle.

LABORATORY FINDINGS
X-ray of the right ankle reveals no acute fracture by my observation. Radiologic interpretation is pending.

IMPRESSION
Right ankle sprain.

PLAN
1. Motrin 800 mg t.i.d.
2. Tylenol 1 p.o. q.i.d. as needed.
3. Walking cast is prescribed.

For this example, calcaneofibular, deltoid or tibiofibular ligaments are not documented, so your coding pathway is *Sprain, ankle* for code *S93.40-*. Turn to the *Tabular List* to complete the code. The *right ankle* is noted, and it's an *initial encounter*. You'll assign *S93.401A* to this example.

Whew! That is quite a bit of information, and you have discovered so much about the single body regions. Complete the following Practice Exercise to reinforce what you've learned about the *S-section*, and then you'll be ready to move on to the *T-section* of the *ICD-10-CM Tabular List*.

Step 8: Practice Exercise 29-2

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Initial encounter for left black eye, fractured nose and multiple facial contusions**

    ICD-10-CM: _____

    ICD-10-CM: _____

    ICD-10-CM: _____

2. **Initial encounter for a blow-out fracture of the orbital floor**

    ICD-10-CM: _____

3. Patient presents to the ED by ambulance. While riding a bike, he crashed into the windshield of a parked car, resulting in traumatic enucleation of right eyeball and multiple lacerations of the forehead.

   ICD-10-CM: _____

   ICD-10-CM: _____

4. Subarachnoid hemorrhage with open skull fracture following a fall from a two-story building. Patient does not regain consciousness before death due to brain injury.

   ICD-10-CM: _____

   ICD-10-CM: _____

5. Initial encounter for a fracture of the C1-C4 vertebrae with complete lesion at C3 level, resulting in transient paralysis

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

6. Initial encounter for dislocation of thoracic vertebra T9/T10 due to trauma

   ICD-10-CM: _____

7. Initial encounter for an acromioclavicular dislocation with fracture of the acromial end of the right clavicle

   ICD-10-CM: _____

   ICD-10-CM: _____

8. Laceration of the left forearm, with flexor tendon involvement

   ICD-10-CM: _____

   ICD-10-CM: _____

9. Open comminuted left femoral shaft fracture with femoral vein avulsion, initial encounter

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

10. Compound fracture of the right medial malleolus with crushing injury to the same ankle

    ICD-10-CM: _____

    ICD-10-CM: _____

11. Follow-up visit to check blister on heel of right foot due to uncomfortable shoes

    ICD-10-CM: _____

12. Traumatic rupture of the interphalangeal joint of the second right toe, initial encounter

ICD-10-CM: _____

13. Coding/Billing Challenge

Use the following encounter form and dictation to create a CMS-1500 version 02/12 claim form using MedLook.

Eric Sulliman, MD
1000 Main Street
Brown, CO 80001-9898
(970) 555-1717
EIN: 21-5432987
NPI: 03-77484809
Physician signature: *Eric Sulliman, MD*

☐	11 Physician Office
☐	12 Private Residence
☐	22 Outpatient Hospital
☑	23 Hospital Emergency Room

Participating Provider ☑Y ☐N

Patient seen at Weston Hospital

Patient Information

Name	Steven Kyle Gibbs	**Date of Birth**	08-10-2010
Address	1343 Oval Street	**Sex**	M
City	Windsor	**State**	CO
ZIP	80520		
Home Phone	970-555-7643		

Insurance Information

Primary Insurance		**Secondary Insurance**	
Name	Mountain States	**Name**	NONE
ID#	34-5678	**ID#**	
Group#	420	**Group#**	
Address	1801 SW Vine Street	**Address**	
City	Denver	**City**	
State CO	**ZIP** 80217-6789	**State**	**Zip**
Primary Insured Name	Michael A. Gibbs	**Secondary Insured Name**	
Relation to Patient	father	**Relation to Patient**	
DOB/Sex	2-11-79 Male	**DOB/Sex**	
Address	1343 Oval Street	**Address**	
City Windsor	**State** CO	**City**	**State**
ZIP	80520	**ZIP**	
Phone	970-555-7643	**Phone**	

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Michael A. Gibbs
Signature of patient (or parent of minor child)

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

_____
Signature of patient (or parent of minor child)

Date of Service	*9-18-XX*	
Diagnosis	**Procedure**	**Charge**
	12011 laceration repair	*$113.00*

Today's Charge	$113.00
Cash/Check	$ 20.00
Balance	$ 93.00

Name: Steven K. Gibbs
DOB: August 10, 2010
Date of Service: September 18, 20XX

SUBJECTIVE
Patient sustained a 1.2 cm forehead laceration resulting from a fall down the stairs at home.

OBJECTIVE
Patient seen in the emergency department presenting with a wound to the forehead and requested an evaluation. After examination of the forehead, no foreign body was noted. The laceration was approximately 1.2 cm in length. It was felt sutures would provide the best healing for this injury. Laceration was lavaged, anesthetized, and repaired with 6-0 nylon monofilament sutures. An antiseptic dressing was then applied.

ASSESSMENT
Simple repair of 1.2 cm forehead laceration.

PLAN
The patient is to see his family physician within 3 days.

Step 9: Review Practice Exercise 29-2

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 10: Injuries, Poisonings and Certain Other Consequences of External Causes (T07-T88)

You've done a thorough job of learning the *S-section*, which contains codes for different types of injuries related to single body regions. Now, you're ready to discover injuries to unspecified body regions, as well as poisonings and certain other consequences of external causes. These injuries are all included in the *T-section*. Before beginning the *T-section,* let's review some of the rules you have previously encountered that apply to the entire chapter.

The note at the beginning of this chapter directs you to: *use secondary code(s) from Chapter 20, External causes of morbidity, to indicate cause of injury. Codes within the T-section that include the external cause do not require an additional external cause code.* At this point, you have not been exposed to Chapter 20 and are not expected to include these codes in the *T-section*. You will revisit injury codes in conjunction with external causes when you explore the details of Chapter 20.

The notes also instruct you to use an additional code to identify any retained foreign body, if applicable *(Z18.-).* The Excludes1 at the beginning of this chapter reminds you that you cannot code birth trauma (*P10-P15*) or obstetric trauma (*O70-O71*) in addition to conditions from this chapter.

Injuries Involving Multiple or Unspecified Body Regions (T07, T14)

In the first section, you'll find only one code: *T07 Unspecified multiple injuries*. The use of this code should be limited. The *Coding Guidelines* specify: *When coding injuries, assign separate codes for each injury unless a combination code is provided, in which case the combination code is assigned.*

The next section covers injuries of unspecified body parts (*T14*). Code *T14.8* applies when the injury type (abrasion, contusion, crushing injury, fracture) is identified but the body region is not. On the other hand, code *T14.98* applies when there is limited information on the type or region of the injury. Finally, code *T14.91* applies for a suicide attempt.

Effects of Foreign Body Entering Through Natural Orifice (T15-T19)

A foreign body is anything in the body that has been introduced through its openings, such as swallowed objects that are not ordinarily eaten or swallowed. Open your *ICD-10-CM* manual to review the *Tabular List* notes for this section. The Excludes2 indicates that a foreign body accidently left in an operating wound or in a penetrating wound can be coded with the codes from this section, if the condition is documented. In addition, you can code a residual foreign body in soft tissue or a splinter, which is a superficial injury, in conjunction with these codes when they are identified in the documentation. You will apply the 7th character to indicate an initial or subsequent encounter, or sequela.

Site categories included within this section are the external eye, ear and respiratory tract. Within the respiratory tract, a foreign body might be located in the nose, pharynx, larynx, trachea, bronchus or lung. One of the most common locations for a foreign body is the **alimentary tract**, which is the tubular passage extending from the mouth to the anus, through which food is passed and digested. An additional area for foreign bodies is the GI tract—urethra, bladder, vulva, vagina, uterus and penis. Be sure to note the exclusions listed under *T19 Foreign body in genitourinary tract*.

Once you identify the problem as a foreign body and specify the site, the coding of this section is straightforward. Let's move on to the next section in this chapter.

Burns and Corrosions (T20-T32)

The burn codes in the *ICD-10-CM* manual apply to thermal burns, which come from heat sources, and burns resulting from electricity and radiation. In contrast, **corrosions** are burns resulting from chemicals. Turn to the *Tabular List* to view all inclusions for this section. The *ICD-10-CM* manual makes a distinction between the two types of burns, but the *Chapter-Specific Guidelines* apply to both.

Let's go over some terminology for the severity of burns. A first-degree burn is a superficial burn involving only the epidermal layer of the skin. This type of burn is inflamed and painful, but does not blister. A second-degree burn involves the dermal layer of the skin. Second-degree burns do include blisters, and they are also quite painful since the nerve endings are still intact. A third-degree burn is frequently called a full-thickness burn. It goes completely through the skin, which may appear charred and black or dry and white, depending on the burning agent. Since the nerve endings are severely damaged or destroyed, third-degree burns are not usually painful.

Please note, the *ICD-10-CM* manual indicates: *an external cause code should be used with burns and corrosions to identify the source and intent of the burn, as well as the place where it occurred.* At this point, you have not yet been exposed to Chapter 20 of the manual, so you are not expected to include these codes. You will revisit burn and corrosion codes in conjunction with external causes when you explore the details of Chapter 20 of the *Tabular List*.

When burns are documented at more than one site, you'll first sequence the code for the site of the highest-degree burn. Then, sequence additional codes for the other sites in descending order of degree. Although there are codes to classify multiple burns, you should assign these codes only when the location of the burns is not clear in the documentation.

As you code burns, you will classify them according to the highest degree indicated in the diagnostic statement. In other words, for coding purposes, a third-degree burn takes precedence over a second-degree burn, and a second-degree burn takes precedence over a first-degree burn.

For example, let's practice coding an initial visit for the diagnosis of first- and second-degree burns of the left forearm. Turn to the main term *Burn* in the *Index to Diseases and Injuries*. Next, find the site of the burn, which is *forearm, left*. You know the burns are first- and second-degree burns, but you will code to the higher degree, so locate *second degree* for the tentative code of *T22.212*. Now, turn to the *Tabular List* to complete the code. It is an *initial encounter*, so the final code is *T22.212A*.

As you code burns, you will assign separate codes for each burn site. Let's say that the patient in the example with first- and second-degree burns of the left forearm also has a first-degree burn of the left wrist. For the first- and second-degree burn of the forearm in the example above, you determined that *T22.212A* is the accurate code. Now, to code for the wrist burn, return to *Burn* in the *Index to Diseases and Injuries*, and locate the subterms *wrist*, *left*, *first degree*. Code *T23.172* is the tentative code provided. Turn to the *Tabular List* to complete this code. Again, it was an initial encounter, so the code is *T23.172A*. You will sequence the highest-degree burn first, so you will assign *T22.212A T23.172A*.

You'll use an additional code from *T31* or *T32 when the site of the burn is not specified or when there is a need for additional data.* The *Coding Guidelines* indicate:

It is advisable to use category T31 as additional coding when needed to provide data for evaluating burn mortality, such as that needed by burn units. It is also advisable to use category T31 as an additional code for reporting purposes when there is mention of a third-degree burn involving 20 percent or more of the body surface.

Although the *ICD-10-CM Guidelines* note it is *advisable* to use this code block, for this program you will always include the extent of the body surface involved when coding a burn. Turn to this section in the *Tabular List* and you'll see a note directing you to *use additional code from category T31 or T32 to identify the extent of the body surface.*

You need to know that the method for estimating burned body surface area in burn patients is the **Rule of Nines**. Different areas of the body make up the following percentages: head and neck, nine percent; each arm, nine percent; anterior leg, nine percent; posterior leg, nine percent; anterior trunk, 18 percent; posterior trunk, 18 percent; and genitalia, one percent. This rule applies to adults only, and does not apply for children. You must consult the physician before you assign burn percentages for children.
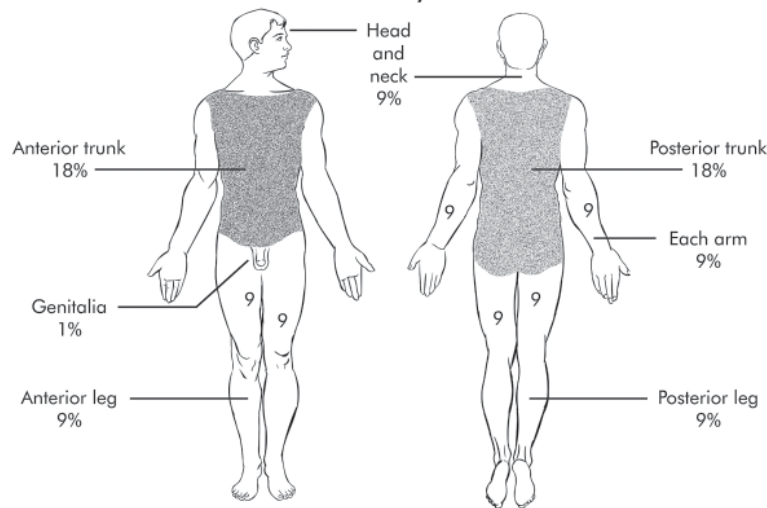
The method for estimating burned body surface area is the Rule of Nines.

So, let's build on the previous example of an initial visit for a patient diagnosed with first- and second-degree burns of the left forearm and a first-degree burn of the left wrist. Four percent of the total body surface area is documented as burned. You've already determined the first two codes to be *T22.212A* and *T23.172A*. For the third code, you'll code to the extent of the body surface area involved. Return to the main term *Burn* in the *Index to Diseases and Injuries*, and then locate the subterm *extent (percentage of body surface)*. The tentative code indicated for less than 10 percent is *T31.0*. You then turn to the *Tabular List* to determine the highest level of specificity and see that this is a valid code. You will record the final codes as *T22.212A T23.172A T31.0*.

Frostbite (T33-T34)

Frostbite is damage to the skin and underlying tissues, caused by extreme cold. You'll see that *T33* codes to superficial frostbite, while *T34* is for frostbite with tissue necrosis, or death. Codes in both blocks exclude hypothermia and other effects of reduced temperature, but these conditions can be coded in conjunction with frostbite, if there is documentation for them.

Poisoning by, Adverse Effects of and Underdosing of Drugs, Medicaments and Biological Substances (T36-T50)

Before diving into this section, let's learn some terminology to enhance your understanding of the topics included here. **Poisoning** is defined as overdosing of a substance, providing the wrong substance or taking the wrong substance in error. An **adverse effect** occurs when the physician correctly prescribes and properly administers a drug, but the patient suffers a bad reaction as a result. On the other hand, **underdosing** occurs when a patient either inadvertently or deliberately takes less of a medication than the physician prescribes or the manufacturer instructs. Let's take a look at the inclusions for this section:

● *adverse effect of correct substance properly administered*

● *poisoning by overdose of substance*

● *poisoning by wrong substance given or taken in error*

● *underdosing by (inadvertently) (deliberately) taking less substance than prescribed or instructed*

Codes in this section are combination codes that include the substance taken, as well as the intent. However, when coding an adverse effect, you'll code first the nature of the adverse effect. You will use an additional code to specify manifestations of the poisoning; underdosing or failure in dosage during medical and surgical care; or underdosing of the medication regimen. You'll also use an additional code to identify abuse or dependence of the substance, if it is diagnosed. Finally, you will use an additional code to identify the intent of underdosing. Keep in mind that the codes for underdosing should never be the principal diagnosis.

To code a poisoning by, adverse effect of or underdosing, you'll use the *ICD-10-CM Table of Drugs and Chemicals*, which appears just after the *Neoplasm Table*. You'll see reference to this as *Table of Drugs* for short. The first column contains the substance; then, you'll see several columns to identify the intent. Poisoning is classified as accidental or unintentional; intentional with self-harm in mind; an assault; or undetermined. After the poisoning columns, you'll find columns for adverse effect and underdosing. So, once you locate the drug, you'll move to the accurate intent column and note the tentative code. As with all codes, you'll always verify the code with the *Tabular List*. As an example, look up *Ibuprofen* in the *Table of Drugs* and you will find the following information:

Poisoning, Accidental (unintentional)	Poisoning, Intentional Self-harm	Poisoning, Assault	Poisoning, Undetermined	Adverse Effect	Underdosing
T39.311	T39.312	T39.313	T39.314	T39.315	T39.316

Again, once you locate the tentative code in the *Table of Drugs and Chemicals*, you'll always verify the code with the *Tabular List*. Let's go through a couple of examples so that you have a firm understanding of coding poisonings.

SUBJECTIVE
A 15-year-old female is brought into the emergency department after accidentally taking an antihistamine drug. She is complaining of shortness of breath.

OBJECTIVE
The physician performs a detailed physical examination.

ASSESSMENT
Poisoning from the medicine, resulting in respiratory distress.

PLAN
Use pulse oximetry to maintain SaO2 at 96% via nasal cannula. Continuous blood pressure and pulse monitoring. Give patient 30 mL ipecac syrup followed by 200-300 mL of water. Repeat dose 1 time if vomiting does not occur in 20 minutes. Will reassess following treatment.

The documentation indicates the patient accidentally took an antihistamine drug. You'll find *Antihistamine* in the *Table of Drugs and Chemicals*. You'll stop at the first column, because this was an accidental poisoning, and find code *T45.0X1* there. Then, turn to the *Tabular List* to confirm the code. You'll see that the code needs a 7th character to indicate an initial encounter, so *T45.0X1A* is the accurate code.

You also need to use an additional code to specify the manifestation of the poisoning, which is respiratory distress. So, you'll turn to the *Index to Diseases and Injuries* and find the coding pathway *Distress, respiratory*. You find that the tentative code of *R06.00* is provided. Then, determine the highest level of specificity and confirm that this is the accurate code based on the information provided in the *Tabular List*.

To accurately sequence the codes, list the poisoning code first, followed by the manifestation. You'll assign *T45.0X1A R06.00* to this scenario. Did you follow this process to determine all three codes? If so, you're ready to continue. If not, review the steps, *Coding Guidelines* and *Tabular List* notes for a better understanding of the process, and then move on when you're ready.

Let's look at adverse effects of a drug, which occur when the drug is correctly prescribed and properly administered, but the patient suffers a bad reaction. Adverse effects include tachycardia, delirium, gastrointestinal hemorrhaging, vomiting, hypokalemia, hepatitis, renal failure and respiratory failure. When you code an adverse effect, you will sequence the nature of the adverse effect followed by the adverse effect code from the *Table of Drugs and Chemicals.* Take a look at the following SOAP note:

SUBJECTIVE
A 42-year-old male complaining of severe dizziness is seen by his family physician. He has been taking fluoxetine for the past 2 weeks as prescribed for his depression.

OBJECTIVE
A detailed physician examination is performed.

ASSESSMENT
The patient is having dizziness secondary to the fluoxetine.

PLAN
Patient is advised to discontinue use of the drug. Begin Xanax XR 0.5 mg once daily and call in 3 days for dosage increase if necessary.

To code this scenario, you will code dizziness as the principal diagnosis, and then code the appropriate drug. Turn to the *Index to Diseases and Injuries* and locate *Dizziness.* You find the tentative code of *R42.* Using the *Tabular List*, determine the highest level of specificity for that code. Now, turn to the *Table of Drugs and Chemicals* and locate the drug *Fluoxetine.* Find the code provided in the *Adverse Effect* column, which is *T43.225.* Next, turn to the *Tabular List* to verify the code. You'll add the 7th character identifying the initial encounter. Finally, you will assign codes *R42 T43.225A*, in that order, for this example.

Toxic Effects of Substances Chiefly Nonmedicinal as to Source (T51-T65)

Finally, a **toxic effect** occurs when a person ingests or comes in contact with a harmful substance. **Nonmedicinal** means the substance was not medically prescribed. You will assign the accurate code from categories *T51-T65* for toxic effects that pertain to, are due to or are of the nature of a poison or toxin from a substance that does not have a healing quality.

The toxic effect codes have an associated intent of accidental, intentional self-harm, assault and undetermined. However, the *Tabular List* notes: *When no intent is indicated code to accidental. Undetermined intent is only for use when there is specific documentation in the record that the intent of the toxic effect cannot be determined*.

Review the following SOAP note and coding process for this section.

SUBJECTIVE
Katy was in good health until today when she consumed poisonous mushrooms. While attending a going away party after her last day at work, Katy ate a mushroom casserole prepared by her coworker. The same coworker offered Katy a mojito to drink. Not wanting water, tea or wholesome milk, Katy took the mojito and enjoyed the casserole. About an hour after the party, Katy began having hot flushes of the face and neck, a metallic taste in the mouth, tingling sensations in the limbs, numbness in the hands, palpitations, a throbbing headache, nausea and vomiting. Upon questioning, Katy's coworker admitted to putting wild mushrooms containing coprine in the casserole, which were reacting with the alcohol.

OBJECTIVE
Pulse 110, blood pressure 125/90, respirations 20, temperature 98.7 degrees Fahrenheit. Chest: Clear to A&P. The chest is warm and flushed. Abdomen: Diffuse epigastric tenderness to palpation. Hyperactive bowel sounds. Neurologic: Decreased sensation in the hands bilaterally.

ASSESSMENT
Toxic effect of ingested mushroom.

PLAN
Will treat patient symptomatically, as the symptoms will continue as long as there is any alcohol in the patient's body. Expect recovery to be normally spontaneous once the body is rid of the alcohol. Advised patient to enjoy her new job and to avoid any ingestion of alcohol for at least 1 week as this may cause symptoms to return.

Coprine is a mushroom that generally causes no harm to humans, unless it's ingested in combination with alcohol. How would you code this unfortunate encounter? If you locate *Toxic, effect* in the *Index*, you're directed to *see Table of Drugs and Chemicals, by substance, poisoning*. So, turn to the *Table of Drugs and Chemicals* and locate *Mushroom, noxious*. Then, you'll find the column for *Poisoning, Accidental (unintentional)*, which provides code *T62.0X1*. Now, turn to the *Tabular List* to complete the code. This is an *initial encounter*, so the code is *T62.0X1A*.

Other and Unspecified Effects of External Causes (T66-T78)

Conditions you'll find in this section include radiation sickness, heat stroke, hypothermia, asphyxiation, motion sickness and anaphylactic shock. Most conditions here are fairly straightforward to code, as long as you read the *Tabular List* notes and apply the appropriate 7th character.

In this section, you'll find codes for adult and child abuse, neglect and other maltreatment. The *Coding Guidelines* offer additional information pertaining to these code blocks. Please note that code block *T74* is for use with confirmed abuse or neglect, while *T75* is for suspected cases. You'll use *T74.-* or *T75.-* as the principal diagnosis, followed by any accompanying mental health or injury code(s). Let's review the guidelines for the specifics of these codes:

- For cases of confirmed abuse or neglect, an external cause code from the assault section (*X92-Y08*) should be added to identify the cause of any physical abuse. A perpetrator code (*Y07*) should be added when the perpetrator of the abuse is known. For suspected cases of abuse or neglect, do not report external cause or perpetrator codes.

- If a suspected case of abuse, neglect or mistreatment is ruled out during an encounter, you will use code *Z04.71 Encounter for examination and observation following alleged physical adult abuse, ruled out* or code *Z04.72 Encounter for examination and observation following alleged child physical abuse, ruled out*, rather than a code from *T76*.

- If a suspected case of alleged rape or sexual abuse is ruled out during an encounter, you will use code *Z04.41 Encounter for examination and observation following alleged physical adult abuse, ruled out* or code *Z04.42 Encounter for examination and observation following alleged rape or sexual abuse, ruled out*, rather than a code from *T76*.

Certain Early Complications of Trauma (T79)

Code block *T79* consists of codes for certain early complications of trauma. This section excludes adult respiratory distress syndrome, complications occurring during or following medical procedures, complications of surgical and medical care NEC and newborn respiratory distress syndrome. However, if these conditions exist in conjunction with the conditions in this section, you can code them both. Early complications of trauma include traumatic air and fat embolism, traumatic secondary and recurrent hemorrhage and traumatic shock.

Complications of Surgical and Medical Care, Not Elsewhere Classified (T80-T88)

You will see when you turn to this section of codes that a number of conditions are not included here. Turn to the *Tabular List* to review the extensive list of exclusions for this section. If the complication can be classified elsewhere, you will not use the codes in this section.

No time limit is defined for the development of these complications. When a complication occurs during the episode in which the operation or other care was given, the complication code is assigned as a coexisting condition to the principal diagnosis. When a complication develops later and is the reason for the visit, the complication is designated as the principal diagnosis.

For transplanted organs, you will identify the nature of the complication with an additional code. Be sure to read the *Coding Guidelines* and *Tabular List* notes for additional information regarding transplant complications.

Now, let's try coding a complication of breast prosthesis due to a *Staphylococcal aureus* infection. In the *Index to Diseases and Injuries*, locate the coding pathway of *Complications, breast implant (prosthetic), infection and inflammation*, and you will find the tentative code of *T85.79*. Turn to the *Tabular List* to verify this code. You'll see that a 7th character is required. This is an *initial encounter*, so the complete code is *T85.79XA*. The *Tabular List* directs you to use an additional code to identify the specified infection, which is the *Staphylococcus aureus*. So, turn to *Infection, staphylococcal, aureus* in the *Index to Diseases and Injuries*. The tentative code *A49.01* is confirmed in the *Tabular List*, as well. Now, you can assign *T85.79XA A49.01* for this condition.

You have now finished the first 19 chapters of the *Tabular List*! Let's pause to review what you've learned.

Step 11: Practice Exercise 29-3

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Patient presents with 1st and 2nd degree burns of the left thigh, 2nd degree burns of the lower back, 13% of the body surface involved.**

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

2. **Accidental barbiturate overdose**

   ICD-10-CM: _____

3. **Swallowed nail polish remover as a suicide attempt**

   ICD-10-CM: _____

4. **A patient is seen in the emergency department for the removal of an impacted tampon from the vagina. The vagina needs to be dilated to retrieve the foreign body. The patient, unable to tolerate the procedure while awake, has general anesthesia administered. The vagina is enlarged by using progressively longer and wider vaginal obturator dilators. The foreign body is successfully removed. The patient tolerates the procedure well and is taken to recovery where she is discharged to her husband after 45 minutes.**

   ICD-10-CM: _____

5. **A 35-year-old male is seen in the emergency department complaining of pain to the right eye. While sharpening tools with his bench grinder, he felt something hit his eye. Examination of the eye reveals a small piece of metal embedded in the cornea. With use of a slit lamp, an incision is made, and the metal is removed using the beveled edge of a needle. Antibiotic is applied, and the eye is covered with a patch. Patient is instructed to keep the eye covered for 48 hours. Patient is discharged in good condition.**

   ICD-10-CM: _____

6. **Coding Challenge**

CHIEF COMPLAINT
Burn, right arm.

HISTORY OF PRESENT ILLNESS
This patient had hot oil splashed onto his arm, burning from the elbow to the wrist on the medial aspect. He has had it cooled and presents with his father to the office as a new patient for care.

PAST HISTORY
Noncontributory.
Medications: None.
ALLERGIES: NONE.

PHYSICAL EXAMINATION
GENERAL: Well-developed, well-nourished male child who is appropriate and cooperative. His only injury is to the right upper extremity. There are 1st- and 2nd- degree burns on the right forearm, ranging from the elbow to the wrist. The 2nd-degree areas with blistering are scattered through the medial aspect of the forearm. There is no circumferential burn, and I see no areas of deeper burn. The patient moves his hands well. Pulses are good. Circulation to the hand is fine.

DISPOSITION
Home.

ASSESSMENT
There are 1st-degree and 2nd-degree burns, right forearm, secondary to hot oil spill, with 4 percent of total body surface area affected.

PLAN
The wound is cooled and cleansed with soaking in antiseptic solution. The patient was given Demerol 50 mg IM for pain. A burn dressing is applied with Neosporin ointment. The patient is given Tylenol No. 3, tabs #4, to take home with him and take 1 or 2 every 4 hours p.r.n. for pain. He is to return tomorrow for a dressing change. Tetanus immunization is up to date. Preprinted instructions are given.

    ICD-10-CM: _____

    ICD-10-CM: _____

Step 12: Review Practice Exercise 29-3

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 13: External Causes of Morbidity (V00-Y99)

External causes of morbidity, often known just as **external causes**, is *used to completely describe the cause, the intent, the place of occurrence and, if applicable, the activity of the patient at the time of the event, and the patient's status for all injuries and other health conditions due to an external cause.* These codes are supplemental to the diagnostic code, and are never to be used as principal diagnosis codes. The external cause codes are intended to provide data for research and analysis for injury prevention.

> There is no national requirement for mandatory ICD-10-CM external cause code reporting. Unless a provider is subject to a state-based external cause code reporting mandate or these codes are required by a particular payer, reporting of ICD-10-CM codes in Chapter 20 *External Causes of Morbidity* is not required. If a provider has not previsously been reporting external cause codes, the provider will not be required to report ICD-10-CM codes in Chapter 20, unless a new state or payer-based requirement regarding the reporting of these codes is instituted. Such a requirement would be independent of ICD-10-CM implementation. In the absence of a mandatory reporting requirement, providers are encouraged to voluntarily report external cause codes, as they provide valuable data for injury research and evaluation of injury prevention strategies.
>
> Reference: AHIMA Web site, at: http://library.ahima.org/xpedio/groups/public/documents/government/bok1_050189.hcsp?dDocName=bok1_050189

Although the codes within this chapter are most often assigned in conjunction with codes from Chapter 19, you may code the external cause in addition to any diagnosis code found in the *ICD-10-CM* manual. You should assign as many external cause codes as necessary to fully describe each cause of injury. As long as the injury or condition is being treated, you can add the external cause code. Finally, you'll apply a 7th-character extension to identify the encounter as initial, subsequent or sequela, when it is required.

To locate the external cause code, you will begin your search in the *Index of External Causes*, which appears between the *Table of Drugs and Chemicals* and the *Tabular List*. Once you've located the tentative code, you'll read the inclusion and exclusion notes in the *Tabular List* before assigning the code.

Transport Accidents (V00-V99)

In this chapter, you'll also find codes for a transport accident (*V00-V99*), or one in which the vehicle involved is moving, running or in use for transport purposes at the time of the accident. When using codes from this section, you'll use an additional code to identify an airbag injury (*W22.1*), type of street or road (*Y92.4-*) and/or the use of a cellular telephone or other electronic equipment at the time of the transportation accident (*Y93.C-*). The *Tabular List* includes extensive definitions for transport vehicles.

Pedestrian injured in transport accident (*V00-V09*) includes a person changing a tire on a transport vehicle, and a person examining the engine of a vehicle broken down in (on the side of) the road. It does not include falls due to non-transport collisions with another person, pedestrians on foot falling or slipping on ice and snow or pedestrians struck or bumped by another person. You may see the term *conveyance* in relation to these codes. **Conveyance** is simply the act of conveying, carrying or transporting.

Other External Causes of Accidental Injury (W00-X58)

Other external causes of accidental injury includes quite an extensive list of codes. While not all of them will be covered, you'll learn the details of some examples found here.

Slipping, tripping, stumbling and falls may be due to ice and snow, or the result of falling over an animal. In the following dictation, try to locate the external cause of this injury, in addition to the diagnosis code.

HISTORY
CHIEF COMPLAINT
Pain and deformity of the distal right forearm.

HISTORY OF PRESENT ILLNESS
The patient was in good health until today when he fell over a Doberman while walking down a sidewalk. He fell on his outstretched arm, resulting in severe pain and deformity of the distal right forearm.

PAST HISTORY
Social history: Does not smoke, drink or use recreational drugs.

REVIEW OF SYSTEMS
Noncontributory.
PHYSICAL EXAMINATION
GENERAL: The patient appears in some distress with acute pain in the distal right forearm.
VITAL SIGNS: Pulse: 78. Blood pressure: 150/88. Temperature: Normal.
HEENT: PERRLA.
NECK: Supple.
CHEST: Clear. No cardiac murmurs. Regular rate and rhythm.
EXTREMITIES: There is palpable deformity over the distal radius with 1/5 apposition and strength in the right hand and 4+ swelling in the right wrist.
NEUROLOGIC: Focal neurologic deficit to pinprick at the site of maximal tenderness in the distal right forearm. Decreased DTRs in the RUE.

DATABASE
X-ray confirms Colles fracture.

ASSESSMENT
Colles fracture.

RECOMMENDATIONS
Refer to orthopedic surgery clinic for reduction and immobilization. Right forearm sling and wrist immobilizer.

You know that the external cause code cannot be the primary diagnosis, so you'll code the Colles fracture first. In the *Index*, locate *Fracture, traumatic, Colles'* and you are directed to *see Colles' fracture*. The new pathway provides code *S52.53-*. Turn to the *Tabular List* to complete the code. The *right* arm is noted, and it's an *initial encounter for a closed fracture*, so you'll determine *S52.531A* is the correct code. Now, you'll turn to the external cause, which was falling over a Doberman.

This time, you'll use the *Index to External Causes*. Locate the coding pathway *Fall, falling (accidental), over, animal* for code *W01.0*. Again, verify the code with the *Tabular List*. You'll see that a 7th character is required to identify the *initial encounter*; therefore, the code is *W01.0XXA*. Finally, you'll apply *S52.531A W01.0XXA* to the service.

That doesn't seem too difficult, does it? You're simply adding a code to describe the circumstances of the injury. Now, let's briefly look at some of the other external causes that you'll find in this section.

Inanimate means not having the qualities associated with active, living organisms. Codes in this next section (*W20-W49*) describe scenarios that result from exposure to inanimate mechanical forces, including being struck by a thrown, projected or falling object. With these codes, you'll code also any associated *cataclysm* or lighting strike. A **cataclysm** is a violent upheaval that causes great destruction or brings about a fundamental change, such as an earthquake, volcanic eruption or hurricane. You'll also find codes here for striking against or being struck by sports equipment or other objects, such as a lamppost. Codes for being caught, crushed, jammed or pinched in or between objects appear here, as well.

Take a moment to review the other codes in this section so that you have a firm understanding of the various ways an inanimate mechanical force can result in external causes of morbidity.

While inanimate indicates qualities associated with active, living organisms, animate mechanical forces are caused by an active, living organism, such as a person or animal. This includes accidental hits, strikes, kicks, twists, bites or scratches by another person. Animate forces also encompass being crushed, pushed or stepped on by a crowd or human stampede. You'll find codes here related to being struck or bitten by a dog, cat, cow, pig, dolphin and shark, among many others.

Exposure to electric currents, radiation and extreme ambient air temperature and pressure comprises the next group of codes for this section. This section includes codes for exposure to electric transmission lines, x-rays and tanning beds, as well as contact with dry ice.

You'll also find codes here pertaining to uncontrolled and controlled fires in and out of buildings or structures. The codes can be very specific, such as for exposure to a sofa fire or a sofa fire due, specifically, to a burning cigarette. The next section deals with codes for contact with heat and hot substances, such as hot food, drinks or a hot bath.

While there are many codes in this section to choose from, remember that they simply provide information on how the injury occurred. In addition, recall that there is no national requirement for mandatory *ICD-10-CM* external cause code reporting. Reporting of ICD-10-CM codes in Chapter 20 *External Causes of Morbidity* is not required unless a provider is subject to a state-based external cause code reporting mandate, or if these codes are required by a particular payer.

Intentional Self-Harm (X71-X83)

Intentional self-harm (*X71-X83*) includes purposely self-inflicted injury and suicides or suicide attempts. Intentional self-harm by a discharging weapon may be categorized by pistol, revolver, shotgun, hunting rifle, machine gun, airgun or paintball gun. Sharp objects include glass, knives, swords or daggers.

Assault (X92-Y08)

An **assault** is an intentional act by one person that causes apprehension in another of imminent harmful or offensive contact. This section (*X92-Y08*) includes homicide and injuries inflicted by another person with the intent to injure or kill, by any means. It does not include injuries due to legal intervention, operations of war or terrorism. You'll find code categories similar to the intentional self-harm section, but here, the injuries are inflicted by another. In addition, you'll find a section for *perpetrator* of assault, maltreatment and neglect, which includes abandonment, emotional neglect, mental cruelty, physical abuse or neglect, sexual abuse and torture. A **perpetrator** is the person responsible for the external cause.

Event of Undetermined Intent (Y21-Y33)

You'll code to accidental intent if the intent of the cause of the injury or other condition is unknown or unspecified. For instance, all transport accident categories have assumed accidental intent. However, as the *ICD-10-CM* indicates: *Undetermined intent is only for use when there is specific documentation in the record that the intent of the injury cannot be determined. If no such documentation is present, code to accidental (unintentional).*

Legal Intervention, Operations of War, Military Operations and Terrorism (Y35-Y38)

Legal intervention, code block *Y35*, includes any injury sustained as a result of an encounter with any law enforcement official serving in any capacity at the time of the encounter, whether on-duty or off-duty. It also includes injury to a law enforcement official, suspect and bystander.

Code block *Y36 Operations of war* includes injuries to military personnel and civilians caused by war, civil insurrection and peacekeeping missions. *Military operations* (*Y37*), on the other hand, includes injuries to military personnel and civilians occurring during peacetime on military property and during routine military exercises and operations.

Open your *ICD-10-CM* to code block *Y38 Terrorism* to review the note included there: *These codes are for use to identify injuries resulting from the unlawful use of force or violence against persons or property to intimidate or coerce a Government, the civilian population or any sectment thereof, in furtherance of political or social objective.* You are also directed to use an additional code to identify the place of occurrence, which you'll study shortly.

Now, turn to the *Coding Guidelines* for more information on the correct coding of terrorism as an external cause.

- When the cause of an injury is identified by the Federal Government (FBI) as terrorism, the first-listed external cause code should be a code from category *Y38 Terrorism*.

- When the cause of an injury is suspected to be the result of terrorism, a code from category *Y38* should not be assigned.

- Suspected cases of terrorism should be classified as assault.

- For conditions occurring subsequent to the terrorist event, assign code *Y38.9*.

Now, let's move on to the next section of *External Causes of Morbidity*.

Complications of Medical and Surgical Care (Y62-Y84)

This section includes *complications of medical devices* and *surgical and medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure. Complications of medical and surgical care* codes are further divided into three sections:

- Misadventures to patient during surgical and medical care (*Y62-Y69*)

- Medical devices associated with adverse incidents in diagnostic and therapeutic use (*Y70-Y82*)

- Surgical and other medical procedures as the cause of abnormal reaction of the patient, or of later complication, without mention of misadventure at the time of the procedure (*Y83-Y84*)

Misadventures may be classified as failure of sterile precaution or failure in dosage during surgical or medical care. Mismatched blood, use of the wrong fluid and performance of the wrong procedure also fall within this section. Adverse incidents include the breakdown or malfunction of medical devices during use or after implantation.

Supplementary Factors Related to Causes of Morbidity Classified Elsewhere (Y90-Y99)

As you are aware, the external cause code is used to describe the cause, the intent, the place of occurrence and, if applicable, the activity of the patient at the time of the event, as well as the patient's status for all injuries and other health conditions due to an external cause. So far, you've discovered the various codes that explain the cause and intent of the external cause. This section focuses on the *place of occurrence* and the *activity*.

An activity code is used in conjunction with the place of occurrence code. **Place of occurrence** identifies where the injury occurred, while the **activity code** describes what the patient was doing at the time of the injury. You will assign both codes only at the initial encounter for treatment. Regardless of the number of external cause codes assigned, there should be only one place of occurrence, one activity code and one external cause status code assigned to an encounter. According to the *ICD-10-CM* manual, activity codes are not applicable to poisonings, adverse effects, misadventures or late effects.

External cause codes are supplemental to the diagnostic code, and should never be used as principal diagnosis codes. You are not required to report these codes to the Centers for Medicare and Medicaid Services (CMS). External cause codes are intended to provide data for research and analysis for injury prevention. Some physicians do not even report external cause codes except in cases of poisoning or adverse effects, or unless directed to do so by the principal diagnosis. You will need to verify with your employer whether you should apply external cause codes in other instances. The following rules apply to circumstances in which the provider requests coding of external causes in all cases.

- You might code the external cause with any diagnosis.

- To indicate how and where the accident occurred, if the information is known, you will code the external cause with any diagnosis in Chapter 19.

- You are to assign as many external cause codes as necessary to fully describe each cause of injury.

Now, take a moment to locate *Y99 External causes status* in the *Tabular List*. The note indicates: *A single code from category Y99 should be used in conjunction with the external cause code(s) assigned to a record to indicate the status of the person at the time the event occurred.* This means that any time you apply an external cause code, you'll also apply a code to indicate civilian activity done for income or pay, military activity, volunteer activity or other or unspecified external cause status.

Let's code an injury and include the external cause to give you some practice applying these codes.

SUBJECTIVE
A 10-year-old boy is seen in the physician's office with a right ankle injury. He was injured 24 hours ago when he fell down steps while walking at home.

OBJECTIVE
Ankle appears erythematous and swollen. It is tender to the touch. Patient walks with a hint of a limp. X-ray rules out fracture.

ASSESSMENT
Patient has an ankle sprain.

PLAN
Recommend ibuprofen as needed for pain.

For this scenario, you will code the diagnosis, as well as how and where the injury happened. Let's look at the steps.

1. The diagnosis is the sprained ankle. Using the coding pathway of *Sprain, ankle*, you find the tentative code of *S93.40-* in the *Index to Diseases and Injuries*. You'll complete that code by turning to the *Tabular List*. The right ankle is identified, and it is an initial encounter; therefore, the complete code is *S93.401A*.

2. Turn to the *Index to External Causes* to determine the codes to describe the cause, place of occurrence and activity. The cause of the injury is falling down the stairs, so you'll locate *Fall, falling, down, stairs, steps*, which suggests code *W10.9*. Turn to the *Tabular List* to verify the code. You'll see that the 7th character is required to describe the *initial encounter*. The final code is *W10.9XXA*.

3. You'll code the place of occurrence, or where the injury happened. Again, start with the *Index to External Causes*, and locate *Place of occurrence, residence, home* for code *Y92.009*. Checking with the *Tabular List* ensures this is a valid code.

4. You'll use the place of occurrence code in conjunction with the activity code. The patient was simply walking when the accident occurred. The coding pathway *Activity, walking* in the *Index to External Causes* provides code *Y93.01*, which you can verify as correct in the *Tabular List*.

5. Don't forget to add the external cause status from code block *Y99*! In the *Index to External Causes*, use *External cause status, leisure activity* as the coding pathway for code *Y99.8*.

6. Finally, you'll assign codes *S93.401A W10.9XXA Y92.009 Y93.01 Y99.8* to the SOAP note.

Nice work! You're ready to continue.

Sequencing External Causes

As you previously noted, you'll use as many external cause codes as necessary to fully describe the cause of the injury or condition. External cause codes are supplementary to the injury or condition code, and should not be listed as the principal diagnosis. Review the sequencing rules within the *Coding Guidelines* to assist with accurate coding.

The following list outlines the codes that take priority over all other external cause codes:

1. Child and adult abuse
2. Terrorism events
3. Cataclysmic events
4. Transport accidents
5. Intent
6. Cause of most serious diagnosis

In most situations, you'll list the cause or intent, followed by the place of occurrence and then the activity. If any cause is not documented, you will not list it. For instance, if the patient fell while hiking, but you don't know the location, you'll simply list the cause and activity, in addition to the injury code. In both cases, you'll also apply the external cause status from code block *Y99*.

Now, it's time to review what you've just learned about external cause codes by completing the following Practice Exercise.

Step 14: Practice Exercise 29-4

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Initial encounter for patient that fell from a skateboard while at the park, resulting in a sprained left wrist.**

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

2. **Initial encounter for a passenger on railway suffers 3rd-degree burns to front and back of both legs, involving 33% total body surface area, due to railway explosion.**

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

   ICD-10-CM: _____

3. **Two-car collision on the highway resulting in contusions of abdomen of passenger of second car, initial encounter**

    ICD-10-CM: _____

    ICD-10-CM: _____

    ICD-10-CM: _____

    ICD-10-CM: _____

4. **Subsequent encounter to check fractured distal radius of the right arm due to falling at home while showering**

    ICD-10-CM: _____

    ICD-10-CM: _____

5. **While riding his motorcycle, Edward suffered a burn on his right calf from the motorcycle's exhaust pipe. In the ED, Edward was found to have deep second-degree burns over 11 percent of his right calf.**

    ICD-10-CM: _____

    ICD-10-CM: _____

    ICD-10-CM: _____

    ICD-10-CM: _____

Step 15: Review Practice Exercise 29-4

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 16: Lesson Summary

Congratulations—you've completed another lesson in your ICD-10-CM coding course! As you are well aware, you've covered a tremendous amount of information. Whenever you use the *ICD-10-CM* manual, you will increase your understanding and coding skills along the way. Hopefully, though, you already have a solid idea of what's involved in coding medical conditions and diagnoses. You're doing great! Let's pause to complete the following Quiz before wrapping up the *ICD-10-CM*. Keep up the good work!

Step 17: Quiz 29

Once you've mastered the course content, locate this Quiz in your *Online Course* or your *Assignment Pack*. Read and follow the Quiz instructions carefully.

Endnotes

[1]   DeAngelis and Oestreicher. "Traumatic Enucleation From a High-Pressure Water Jet." *Arch Ophthalmol, 117*.1 (1999): 123-4. Web. 4 October 2013.

[2]   *Explosions and Blast Injuries: A Primer for Clinicians.* Centers for Disease Control and Prevention, 1 Feb 2013. Web. 4 October 2013.

[3]   *Abdominal Aorta.* InnerBody, 2013. Web. 4 October 2013.

[4]   *Fracture of the Shoulder Blade (Scapula).*OrthoInfo, Aug 2007. Web. 4 October 2013.

[5]   *General Medicine Fall – ER Visit.* MTSamples.com, n.d. Web. 4 October 1013.

[6]   *Torn Meniscus.* Mayo Clinic, 10 Feb 2011. Web. 4 October 2013.

[7]   *Anterior Cruciate Ligament (ACL) Injury.* MedlinePlus, 14 Aug 2011. Web. 4 October 2013.

Lesson 30
ICD-10-CM Chapters 21 and Comprehensive Exam

Step 1: Learning Objectives for Lesson 30

When you complete the instruction in this lesson, you will be trained to:

- Describe factors influencing health status and contact with health services.

- Explain the general notes that relate to Chapter 21 of the *Tabular List* in the *ICD-10-CM* manual.

- Apply the *Chapter-Specific Guidelines* as they relate to Chapter 21 of the *Tabular List*.

- Identify the diagnoses and assign the final codes for documented disorders and diseases.

- Assign ICD-10-CM codes for outpatient medical records.

Step 2: Lesson Preview

You're probably looking forward to getting through the last lesson in this set! Just think about how much you've accomplished already. Now, you'll learn about the final chapter of the *ICD-10-CM Tabular List*. Once considered supplementary classifications, Chapter 21 is now integrated into the *ICD-10-CM Tabular List*. Keep in mind that Chapter 21 codes may be used for principal or secondary diagnoses, depending on the circumstances of the encounter. As always, you'll learn when and how to use them and you'll gain some practice coding with them. You'll be a pro in no time!

After examining Chapter 21, you will assign the diagnostic codes for outpatient medical records for a variety of conditions. Now, let's get started with this lesson.

Step 3: Factors Influencing Health Status and Contact with Health Services (Z00-Z99)

You've made it to the last chapter of the *ICD-10-CM Tabular List*! The Chapter 21, Z codes represent reasons for encounters. When circumstances other than a disease, injury or external cause are documented, you will use a code from category *Z00-Z99*. According to the *ICD-10-CM* manual, these occasions may arise in two main ways. First, you'll use these codes when a person who may or may not be sick encounters health services for a current condition, to donate an organ or tissue, to receive prophylactic vaccinations or to discuss a problem that is in itself not a disease or injury. Second, you will also use these codes when some circumstance or problem is present that influences the person's health status, but is not in itself a current illness or injury. Z codes may be the principal or secondary diagnosis code, depending on the reason for the encounter. They are not procedure codes.

Now, let's briefly discuss *status* codes before examining the details of this chapter. A **status code** is important because it indicates the individual's health "status," which might affect the course of treatment and its outcome. For instance, let's say a patient complains of chest pain, and her status is "post coronary artery bypass graft" or "post CABG." If you code only to the chest pain, that code does not provide the entire story. The fact that the patient had the CABG indicates a previous problem with the heart. The current chest pain might relate to the CABG or previous problems, but these conditions also might not be related. The physician may order additional tests or require a higher level of service because of the uncertainty. You'll find a long list of status Z codes and categories in the *Chapter-Specific Guidelines*.

Persons Encountering Health Services for Examinations (Z00-Z13)

Encounters in this section include *examinations* and *administrative examinations*, medical observation, *follow-up exams* and *screenings*. Routine exams and check-ups are known as **examinations**, or simply as exams. **Administrative exams** are for pre-employment, sports physicals or paternity testing. If there is a suspected condition or diagnosis that the provider is ruling out, you will not code to either examination. If, however, a condition is discovered during the routine exam, you will list it as an additional code after the Z code. Finally, pre-existing or chronic conditions can be coded with the Z codes as secondary diagnosis.

Codes for encounters for medical observation or for examination and observation are in categories that are: *to be used when a person without a diagnosis is suspected of having an abnormal condition, without signs or symptoms, which requires study, but after examination and observation, is ruled-out*. Code blocks *Z03* and *Z04* should only be used in limited circumstances, and they will be listed as the principal diagnosis. Additional codes can be listed following the observation principal diagnosis.

A **follow-up exam** is continued surveillance following completed treatment of a disease, condition or injury. According to the *ICD-10-CM Coding Guidelines*, using a follow-up code implies that the condition has been fully treated and no longer exists.

Screening is testing for any number of disease indicators in seemingly well individuals, so that those who test positive can receive early detection and treatment. Testing performed to "rule out" or "confirm" a suspected diagnosis does not fall into the category of screening. When testing is documented for these purposes, you will code to the signs or symptoms of the unconfirmed diagnosis. If a condition is discovered during screening, you will code that condition as an additional diagnosis.

Genetic Carrier and Genetic Susceptibility to Disease (Z14-Z15)

Every person carries two copies of genes—one from each parent. A **genetic carrier** is a person who has inherited a genetic trait or mutation, but does not display that trait or show symptoms of the disease. However, a carrier can pass the abnormal gene to a child. A patient may be identified as a hemophilia A or cystic fibrosis carrier.

Likewise, some people may be identified as genetically susceptible to certain diseases, such as breast or prostate cancer. Genetic susceptibility to a disease means that an individual is born with a genetic makeup that makes it more likely to develop the disease.

Resistance to Antimicrobial Drugs (Z16)

Antimicrobial is the quality of destroying or inhibiting the growth of microorganisms and, especially, pathogenic microorganisms. **Antimicrobial resistance** (**AMR**) occurs when a patient is being treated for a condition and the provider identifies that the patient is resistant or non-responsive to the antimicrobial drug.

Antimicrobial Resistance

Antibiotics and similar drugs, together called antimicrobial agents, have been used for the last 70 years to treat patients who have infectious diseases. Since the 1940s, these drugs have greatly reduced illness and death from infectious diseases. Antibiotic use has been beneficial and, when prescribed and taken correctly, their value in patient care is enormous. However, these drugs have been used so widely and for so long that the infectious organisms the antibiotics are designed to kill have adapted to them, making the drugs less effective. People infected with antimicrobial-resistant organisms are more likely to have longer, more expensive hospital stays, and may be more likely to die as a result of the infection.

Reference: Centers for Disease and Control and Prevention Web site, at: http://www.cdc.gov/drugresistance/index.html.

Estrogen Receptor Status (Z17)

Breast cancer **estrogen receptor** (**ER**) status is useful in predicting potential benefits from endocrine therapy.[1] A score of estrogen receptor positive (ER+) means that estrogen is causing a tumor to grow, and that the cancer should respond well to hormone suppression treatments. Anti-estrogen therapy works by blocking hormone receptors so they can't signal the cancer cells to grow. A score of estrogen receptor negative (ER-) indicates that a tumor is not driven by estrogen. In this case, results need to be evaluated along with other tests to determine the most effective treatment.

Retained Foreign Body Fragment (Z18)

As you'll recall, you studied foreign bodies in Chapter 20 of the *ICD-10-CM Tabular List*. You know that a foreign body is anything in the body that is introduced through its openings. In addition, you discovered that you can code a residual foreign body in soft tissue or a splinter, which is a superficial injury, in conjunction with these codes when it is identified in the documentation. In fact, Chapter 20 instructs you to use an additional code to *identify any retained foreign body, if applicable (Z18.-)*. This section details those codes.

Foreign bodies are frequently overlooked during an initial evaluation, and not all patients present immediately following an injury.

"In one retrospective study, nearly 38% of patients had foreign bodies that were missed on initial wound inspection. Another study found that only 75% of soft tissue foreign bodies were presented within 48 hours, while patients with the remaining 25% presented weeks, months, and even years later. Additional reports have demonstrated subcutaneous soft tissue foreign bodies from splinters to bullet fragments found years after the traumatic event (eg, gunshot wound). Delayed foreign bodies can present as localized cellulitis, abscess, or regional inflammatory response."[2]

Now, review the following scenario and apply the accurate code.

> A 19-year-old female presented four and one-half months after an occupational injury from a punch-type machine. Although she was released from work restrictions, pain and swelling persisted in the affected right forefinger. An x-ray was performed to rule out a remaining bone fragment, and it was negative. However, it did reveal a possible foreign body. Exploration revealed a large fragment of metal embedded in the fingerpad. The fragment was removed, and the incision was closed with 3-0 nylon suture.

To code this scenario, use *Retained, foreign body fragments, metal* in the *Index* to locate code *Z18.10*. A quick check with the *Tabular List* confirms the code. Nice job! Now, let's move to a larger section of this chapter—the section relating to communicable diseases.

Persons with Potential Health Hazards Related to Communicable Diseases (Z20-Z28)

Communicable diseases spread from one person to another or from an animal to a person. The spread often happens via airborne viruses or bacteria, but also through blood or other bodily fluids. You will use the codes in this section to code for patients who receive medical treatment as a result of their contact, exposure or suspected exposure to various communicable diseases, such as rabies, rubella, viral hepatitis, HIV, anthrax, meningococcus and varicella. When a person is exposed to a disease but does not show signs or symptoms of the disease, you will use code category *Z20*. When you assign this code as a principal diagnosis, it indicates the need for testing. As a secondary diagnosis, code *Z20* identifies the potential risk for the person to contract the disease.

Take a look at the following SOAP note, and then practice coding the diagnosis.

SUBJECTIVE
A 9-year-old male who presents with a fever is seen by the family doctor. The boy's sister was diagnosed with chickenpox last week.

OBJECTIVE
Physical exam reveals a low-grade fever. No rash.

ASSESSMENT
Fever. Rule out chickenpox.

PLAN
Patient will be sent for a blood test to verify whether the varicella-zoster virus is present.

Chickenpox is not confirmed at this time, so you cannot code it. You will code the fever and the patient's exposure to the varicella virus. To do so, first locate *Fever* in the *Index to Diseases and Injuries*, where you will find the tentative code of *R50.9*. Be sure to verify this code in the *Tabular List*. Then, turn to *Exposure (to)* in the *Index*, and locate *varicella,* which has the tentative code of *Z20.820*. The *Tabular List* indicates that the code is correct. You will assign fever as the principal diagnosis because the fever is the reason for the visit. Then, you'll assign exposure to varicella as the coexisting diagnosis and the reason for the blood test. So, you'll assign *R50.9 Z20.820* to the SOAP note.

You will assign *Z23 Encounter for immunization* when a patient is seen for inoculations and vaccinations. The procedure code will identify the type of immunizations given. When the vaccinations are given as part of any routine childhood exam, you can assign *Z23* as a secondary code to the routine exam. If immunizations are typically given at a particular exam but not carried out due to contraindication or reasons of belief, you will apply the appropriate code from code block *Z28*.

Persons Encountering Health Services in Circumstances Related to Reproduction (Z30-Z39)

This section contains a wide variety of codes related to reproduction, such as those for contraceptive and procreative management, supervision of pregnancy, outcome of delivery and liveborn infants. You've encountered some of these code blocks previously in the course, so you'll briefly review the information here.

According to the *ICD-10-CM Coding Guidelines*, counseling Z codes are not used in conjunction with a diagnosis code when the counseling component of care is considered integral to standard treatment. In this section, you'll find the following counseling codes:

- *Z30.0-* Encounter for general counseling and advice on contraception

- *Z31.5* Encounter for genetic counseling

- *Z31.6-* Encounter for general counseling and advice on procreation

- *Z32.2* Encounter for childbirth instruction

- *Z32.3* Encounter for childcare instruction

In addition, the *Coding Guidelines* provide instruction for encounters for obstetrical and reproductive services:

- *Z34*—Always first-listed and not to be used with any other code in the OB chapter

- *Z3A*—May be assigned to provide additional information about the pregnancy, on the maternal record only

- *Z37*—Should be included on all maternal delivery records, never as the principal diagnosis

- *Z38*—Principal code on the initial record of a newborn baby

With this brief review complete, you're ready to move on to the next section of this chapter.

Encounters for Other Specific Health Care (Z40-Z53)

Open your *ICD-10-CM* manual to this section in the *Tabular List*, and read the note provided: *Categories Z40-Z53 are intended for use to indicate a reason for care. They may be used for patients who have already been treated for a disease or injury, but who are receiving aftercare or prophylactic care, or care to consolidate the treatment, or to deal with a residual state.*

So, what does that mean? To fully understand, it's important to know the meanings of *aftercare* and *prophylactic care.*

Aftercare Z codes are assigned when the initial treatment of a disease or injury is complete but continued care is required during the healing or recovery time. These codes are generally the principal codes because the conditions they specify are often the reason for the encounter. However, they should not be used if the treatment is directed at a current, acute condition. According to the *ICD-10-CM*: *aftercare Z codes should also not be used for aftercare for injuries*. Instead, you'll assign the injury code with the 7th character for subsequent encounter.

Prophylactic care includes measures taken to defend or protect a patient against a disease or condition. For instance, if a patient finds that she is genetically susceptible to breast cancer, she may decide to remove the breasts prior to being diagnosed with the condition.

Next, you'll encounter code blocks for the fitting, adjustment and/or management of prosthetics and devices. For example, the code for a hearing aid fitting will be found in this category. The coding pathway *Fitting, hearing aid* suggests the tentative code of *Z46.1*. Turn to the *Tabular List* and review the information there to confirm that it is the correct code.

Now, let's look at *Z52 Donors of organs and tissues*, which include autologous and other living donors. An autologous donation occurs when a person donates his own blood prior to a planned surgery, and uses the donation at that later time.

According to Dr. Matthew Kuehnert, Director of the Office of Blood, Organ, and Other Tissue Safety, "organ transplantation is, for most people who get a transplant, a lifesaving procedure, and the biggest problem is that there aren't enough organs to go around. It's very important for everyone to consider giving consent to be an organ and tissue donor, and to share that decision with their family."[3]

Codes found in this section are for living individuals who are donating blood or other body tissue.

Do Not Resuscitate Status (Z66)

A **do not resuscitate** order, or **DNR**, is a medical order written by a doctor that instructs healthcare providers not to do cardiopulmonary resuscitation (CPR) or advanced cardiac life support (ACLS) if breathing stops or if the heart stops beating. A DNR does not affect any treatment other than that which would require intubation or CPR.

Body Mass Index (Z68)

According to the CDC, "Body Mass Index (BMI) is a number calculated from a person's weight and height. BMI provides a reliable indicator of body fatness for most people and is used to screen for weight categories that may lead to health problems."[4]

To determine your BMI, multiply your weight in pounds by 703. Divide that answer by your height in inches. Then, again, divide that answer by your height in inches and you'll have your BMI. In the *ICD-10-CM Tabular List*, you'll see a BMI listing for both adults and pediatrics. BMI adult codes are for patients 21 years of age or older, while BMI pediatric codes are for those two to 20 years of age. The *ICD-10-CM* notes: *these percentiles are based on the growth charts published by the Centers for Disease Control and Prevention (CDC)*.

Let's take a look at an example to better understand this concept. Tonya, age 42, is 200 pounds and 63 inches tall. To determine her BMI, she multiplies 200 by 703, which equals 140,600. She then divides 140,600 by her height in inches, or 63. Then, she divides that answer by 63 again. Her BMI is 35.42. To code the BMI, locate *Body, mass index (BMI)* in the *Index to Diseases and Injuries*. Use the subterm *adult*, and then locate the range, which is *35.0-35.9* for code *Z68.35*.

According to the *Coding Guidelines*, several different clinicians involved in the care of a patient may document the information for BMI. Therefore, assignment of BMI may be based on medical records from clinicians who are not necessarily the patient's primary care provider. For example, a dietitian, rather than the physician, may document the BMI. The physician may use the dietitian's documentation to determine BMI; however, the physician must document an associated diagnosis of overweight or obesity. Finally, keep in mind that you should only report BMI codes as secondary diagnoses.

Persons with Potential Health Hazards Related to Family and Personal History and Certain Conditions Influencing Health Status (Z77-Z99)

In this section, you'll find long-term (current) drug therapy and history codes. You've encountered the long-term drug therapy codes previously, with the diabetes codes. The use of these additional codes provides useful information on circumstances that may affect a patient's care and treatment.

History codes are important because they might alter the type of treatment a physician orders. When you apply a personal history code, it indicates that the condition no longer exists, and the patient is no longer receiving treatment for that condition. The potential for recurrence or the development of other conditions still exists and, therefore, the patient requires careful monitoring. A family history of certain conditions causes the patient to be at a higher risk for those conditions, as well. You can assign history codes to any medical record, regardless of the reason for the visit.

To help clarify these guidelines, review the following SOAP note. In this example, you'll put to use what you know about screening, long-term drug therapy and history codes!

SUBJECTIVE
This pleasant 54-year-old female, with a history of left mastectomy due to ER+ breast cancer, was sent by her oncologist to have a fractional curettage. The patient states she has been on 20 mg tamoxifen once daily for the past 2 years. Her oncologist informed her that one of the side effects of tamoxifen is endometrial carcinoma and encouraged her to have this test done by her gynecologist.

OBJECTIVE
Blood pressure: 112/80. Pulse: 76, regular. Respiratory rate: 14. Temperature: 96.8 °F. Lungs: Clear to P&A. Tissue sample was taken from the endometrial lining. Patient tolerated procedure well.

ASSESSMENT
Histological confirmation was negative for carcinoma.

PLAN
Continue tamoxifen as ordered. Return if any abnormal cramping or bleeding occurs.

The physician can order fractional curettage when endometrial carcinoma is a possibility, from either personal or family history. In this case, a fractional curettage is justified because tamoxifen is being used to reduce the chances of the patient's breast cancer from reoccurring; a side effect of this drug is endometrial carcinoma. The reason for the visit is the screening, so this is the principal diagnosis. You will use a Z code to indicate that the patient has a personal history of malignant neoplasm; another Z code to identify the long-term use of tamoxifen; and a Z code for the screening. Let's walk through the coding steps.

1. Code for the screening. Returning to the *Index*, you'll locate *Screening, neoplasm (malignant) (of), breast* for code *Z12.39*. Verify that code in the *Tabular List*.

2. Code for the personal history of a malignant neoplasm. In the *Index*, use *History, personal (of), malignant neoplasm (of), breast* for code *Z85.3*. Verify that code in the *Tabular List*.

3. Code for the long-term use of tamoxifen. This time, you'll use *Long-term drug therapy, tamoxifen* as the coding pathway. Code *Z79.810* is the tentative code you'll confirm in the *Tabular List*. Here, you'll note that you need to use an additional code for estrogen receptor positive status.

4. Code for the estrogen receptor positive status. Return to the *Index*, and use *Status, estrogen receptor, positive* for code *Z17.0*. Verify that code in the *Tabular List*.

5. Finally, sequence the codes and assign *Z12.39 Z85.3 Z79.810 Z17.0* to the SOAP note. Nice work!

Now, it's time for a Practice Exercise to review and apply what you've learned. You're ready to demonstrate your coding expertise!

Step 4: Practice Exercise 30-1

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following conditions, and write your answers on scratch paper.

1. **Encounter for flu (influenza) vaccination**
   ICD-10-CM: _____

2. **Normal delivery of a single liveborn infant**
   ICD-10-CM: _____
   ICD-10-CM: _____

3. **Metastatic carcinoma to the brain, with a personal history of breast cancer**
   ICD-10-CM: _____
   ICD-10-CM: _____

4. **Chest pain, status postsurgical**
   ICD-10-CM: _____
   ICD-10-CM: _____

5. **An eight-month-old female is seen and counseled by her pediatrician for a well child exam and receives a DTaP vaccination. DTaP stands for diphtheria, tetanus toxoids and acellular pertussis.**

    ICD-10-CM: _____

    ICD-10-CM: _____

6. **Coding/Billing Challenge**

Use the following encounter form and dictation to create a CMS-1500 version 02/12 claim form using MedLook.

Roger Floyd, MD
NPI: 0102033210

Joyce Hart, MD
NPI: 0188123456

Scott Olson, MD
NPI: 0199654321

The Womens Clinic
1200 Carol Lane
Brown, CO 80001-4790
(970) 555-1010
EIN: 99-9889009
NPI: 0220332233

☑ 11 Physician Office
☐ 12 Private Residence
☐ 22 Outpatient Hospital
☐ 23 Hospital Emergency Room
Participating Provider ☑Y ☐N

Physician signature: *Joyce Hart, MD*

Patient Information

Name   Theresa K. Niles
Address   2777 Lincoln Avenue
City   Yampa   **State**   CO
ZIP   80004
Home Phone 970-555-9111

Date of Birth   11-16-1977
Sex   female

Insurance Information

Primary Insurance		Secondary Insurance	
Name	Blue Cross of Colorado	**Name**	Net Life
ID#	768311900	**ID#**	38-40848
Group#	318	**Group#**	629
Address	PO Box 99	**Address**	PO Box 32
City	Yampa	**City**	Yampa
State	CO **ZIP** 80004-2299	**State**	CO **ZIP** 80004-0629
Primary Insured Name Theresa		**Secondary Insured Name** Gary T. Niles	
DOB		**DOB/Sex**	1-29-1977 male
Relation to Patient self		**Relation to Patient** spouse	
		Address/Phone same as patient	

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Theresa K. Niles
Signature of patient (or parent of minor child)

I authorize the release of any information including diagnosis and treatment. I authorize my insurance carrier to pay directly to the doctor any benefits otherwise payable to me.

Gary Niles
Signature of patient (or parent of minor child)

Date of Service	*8/18/xx*	
Diagnosis	**Procedure**	**Charge**
	99385 gynecologic exam	*$78.00*

Today's Charge	$78.00
Copayment	$ 0.00
Balance	$78.00

Name: Theresa K. Niles
DOB: November 16, 1977
Date of Service: August 18, 20XX

GYNECOLOGICAL CONSULTATION REPORT

REASON FOR REFERRAL
Patient referred for pelvic examination as part of routine physical before beginning diet and exercise program. The patient is 10 pounds overweight, otherwise feeling fine.

PAST HISTORY
Habits: The patient does not smoke or drink.
Illnesses: Usual childhood diseases. No serious illnesses.
ALLERGIES: NO KNOWN DRUG ALLERGIES.
Family history: Parents and 4 siblings alive and well. No family history of breast cancer or uterine cancer.

REVIEW OF SYSTEMS
Gastrointestinal: Stools brown. No diarrhea or constipation. No nocturia or hematuria. Gynecologic: Last regular menses 2 days ago. Sexually active. No birth control methods used. Breast tenderness, only premenstrual.

PHYSICAL EXAMINATION
GENERAL: This is a well-nourished, well-developed female in no acute distress. Alert and oriented. Pulse: 80/min. Blood pressure: 100/80. Respiratory rate: 20/min. Temperature: 98.6 ºF.
NECK: No thyromegaly.
CHEST: Clear to auscultation and percussion. Heart: Regular rate and rhythm. Normal heart tones. No murmurs. Breasts: Symmetrical. No masses or discharge.
ABDOMEN: Soft and slightly full in the suprapubic region. No masses or organomegaly palpated.
PELVIC: Normal perineum. Bimanual: Uterus nongravid, anteflexed, and anteverted. No enlargement, masses or fixation. No adnexal masses or fixation. Cervical smears obtained. No cervical erosions. No cul-de-sac fluid.
RECTAL: No blood on the examining glove. Stool guaiac negative.

DATABASE
CBC normal. Electrolytes: Na 138, K 4.3, Cl 97, pH 7.4. Pap smear results pending. Stool guaiac negative.

ASSESSMENT
Normal gynecologic examination.

RECOMMENDATIONS
Call office in 1 week for results of Pap smear. Agree with diet plan.

Step 5: Review Practice Exercise 30-1

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 6: Medical Records Practice

Congratulations—you've made it through the *ICD-10-CM* manual! You now have the knowledge to locate and assign diagnostic codes. The lessons in your textbook contained an abundance of information pertaining to diseases and injuries. You not only learned about the conditions, but you also became accustomed to the coding process!

The rest of this lesson contains a variety of scenarios to help you become more familiar with coding situations. These scenarios provide real-life experiences in coding with the *ICD-10-CM* manual from a provider's dictation. When you code for a provider, you'll record only the ICD-10-CM codes. You will not write pathways or code descriptions, or record "NEC" or "NOS." It is only necessary to record the ICD-10-CM code. So, that is what you'll do here, too.

Now, let's start this comprehensive review of the ICD-10-CM codes and coding process. Focus on the coding steps you learned. Remember the outpatient coding rules. Finally, be sure you follow the sequencing guidelines. With these in mind, you'll code accurately, and with confidence!

Step 7: Practice Exercise 30-2

Use your ICD-10-CM manual to assign the correct diagnosis code(s) to the following scenario, and write your answers on scratch paper.

SUBJECTIVE
Patient underwent exploratory laparotomy 3 days previously for bowel obstruction. There were 2 days of fever postoperatively. Today is the 3rd postoperative day.

OBJECTIVE
There is redness and swelling of the wound with pus emanating from around the suture material.

ASSESSMENT
Postoperative wound infection.

PLAN
Obtain culture of wound for E coli. Open wound, debride with acetic acid and pack with W-70 dressings. Prescription for cephradine 500 mg 1 p.o. q.6 h.

    ICD-10-CM: _____

Step 8: Review Practice Exercise 30-2

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 9: Practice Exercise 30-3

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following scenario, and write your answers on scratch paper.

SUBJECTIVE
This is a 56-year-old female with a history of type 2 diabetes for the past 4 years and has been using insulin long-term. She has noticed decreased vision in both eyes for the past year. She was seen in the eye clinic 2 weeks ago where fluorescein angiography revealed vitreous hemorrhages. The patient was scheduled for vitrectomy to extract the contents of the vitreous chamber.

OBJECTIVE
Ophthalmoscopy reveals proliferative retinopathy resulting in blood staining the vitreous humor. Tonometer reveals tension in both eyes is 14.

ASSESSMENT
Diabetic retinopathy.

PLAN
Vitrectomy. Maintain control of diabetes and blood pressure.

     ICD-10-CM: _____
     ICD-10-CM: _____

Step 10: Review Practice Exercise 30-3

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 11: Practice Exercise 30-4

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following scenario, and write your answers on scratch paper.

No old films are available for comparison. Consolidation is present in the lower lobes bilaterally. A right-sided chest tube is present. The most proximal portion of the chest tube lies within the margins of the rib cage.

IMPRESSION
1) Bilateral lower lobe pneumonia.
2) No significant pneumothorax is evident.

     ICD-10-CM: _____

Step 12: Review Practice Exercise 30-4

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 13: Practice Exercise 30-5

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following scenario, and write your answers on scratch paper.

LUMBAR SPINE MRI WITHOUT CONTRAST
HISTORY
Low back pain.

TECHNIQUE
Sagittal and axial proton density and T2-weighted sequences were obtained through the lumbar spine.

COMPARISON
April 30, 20XX plain film lumbar spine.

FINDINGS
Examination demonstrates normal alignment of the lumbar spine. The conus medullaris is located posterior to the L1 vertebral body. There is no evidence of abnormal signal within the lumbar vertebral bodies.
Disc spaces:
L1-L2: Unremarkable.
L2-L3: Unremarkable.
L3-L4: At this level, there is mild disc desiccation. There is a small left lateral disc protrusion. There is mild left neural foraminal stenosis. There is no significant right neural foraminal stenosis. There is no significant spinal stenosis.
L4-L5: At this level, there is minimal diffuse disc protrusion. This does not cause significant neural foraminal stenosis or spinal stenosis.
L5-S1: At this level, there is a small central disc protrusion. This does not cause significant neural foraminal stenosis or spinal stenosis.

IMPRESSION
Very mild lumbar inflammatory spondylopathy. At the level of L3-L4, there is a left lateral disc protrusion.

    ICD-10-CM: _____
    ICD-10-CM: _____

Step 14: Review Practice Exercise 30-5

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 15: Practice Exercise 30-6

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following scenario, and write your answers on scratch paper.

ORTHOPEDIC CONSULTATION REPORT

REASON FOR REFERRAL
Continuous pain, right ankle and foot.

HISTORY OF PRESENT ILLNESS
This patient has severe arthritic destructive disease in the right subtalar joint. She cannot walk because of continuous pain in the ankle and foot. Any inversion or eversion causes immediate severe discomfort. The patient has had long-standing, severe osteoporosis and rheumatoid arthritis. In addition, she has been on long-term steroid therapy. The patient has spontaneously fractured ribs with delayed healing.

PAST HISTORY
Medications: Long-term corticosteroid therapy for rheumatoid arthritis.
Currently, prednisone 40 mg daily p.o.
Illnesses: Rheumatoid arthritis, osteoporosis.
ALLERGIES: NO ALLERGIES TO FOOD OR MEDICATION.
Social history: The patient was employed as a plumber until the age of 50 when progressive arthritis limited her ability to continue working.
Family history: There is no family history of cancer, diabetes. A paternal uncle and a sister have RA.

REVIEW OF SYSTEMS
Cardiorespiratory: Pleuritic pain and dyspnea and focal pain over the left 4th, 5th and 6th ribs began 1 week ago spontaneously. No history of trauma.

PHYSICAL EXAMINATION
GENERAL: This is a 65-year-old, 180-pound white female in moderate distress. Pulse: 100 and regular. Blood pressure: 140/110. Respiratory rate: 20, guarded. Temperature: 99.6 °F.
CHEST: There is pinpoint tenderness over the left 4th, 5th and 6th ribs in the left midaxillary line. Heart: PMI left midclavicular line. Regular rate and rhythm without murmurs. Lungs: Clear.
NEUROLOGIC: There is a decrease in sensation in the right ankle and foot. Cranial nerves 2-12 are intact.

DATABASE
A bone survey shows diffuse, widespread changes of rheumatoid arthritis with destruction of taloscaphoid axis and pronation of the right foot.

ASSESSMENT
1. Seropositive rheumatoid arthritis with severe destructive diseases of the subtalar joint, right ankle.
2. Spontaneous pathologic fractures, left ribs 4-6.
3. Osteoporosis.

RECOMMENDATIONS
The severe pain and limitation of motion of right foot argues in favor of triple arthrodesis with bone graft from the right iliac crest to the right subtalar joint and transfer of the peroneal tendons of the right ankle. It is well known that the patient has severe osteoporosis and spontaneously fractured ribs. However, because of the severity of the destruction of the right ankle, arthrodesis is recommended at this time.

> ICD-10-CM: _____
>
> ICD-10-CM: _____
>
> ICD-10-CM: _____
>
> ICD-10-CM: _____
>
> ICD-10-CM: _____

Step 16: Review Practice Exercise 30-6

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 17: Practice Exercise 30-7

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following scenario, and write your answers on scratch paper.

CHIEF COMPLAINT
Follow-up on diabetes mellitus, status post cerebrovascular accident.

HISTORY OF PRESENT ILLNESS
This is a 70-year-old male who has no particular complaints other than he has discomfort on his right side. We have done EMG studies. He has noticed it since his stroke about 5 years ago. He has been to see a neurologist. We have tried different medications, and it just does not seem to help. He checks his blood sugars at home 2-3 x a day. He kind of adjusts his own insulin himself. Re-evaluation of symptoms is essentially negative.

PAST HISTORY
Habits: He has a past history of heavy tobacco and alcohol usage.
Medications: Refer to chart.
ALLERGIES: REFER TO CHART.

PHYSICAL EXAMINATION
GENERAL: A 70-year-old male who does not appear to be in acute distress but does look older than his stated age. He has some missing dentition.
VITAL SIGNS: Weight: 118 pounds. Pulse: 80 and regular. Blood pressure: 108/72. Temperature 96.5.
SKIN: Dry and flaky.
CHEST: Cardiovascular: Heart tones are okay, adequate carotid pulsations. He has 2+ pedal pulse on the left and 1+ on the right. Lungs: Diminished but clear.
ABDOMEN: Scaphoid.
RECTAL: His prostate check was normal.
NEUROLOGIC: Sensation with monofilament testing is better on the left than it is on the right.

IMPRESSION
1. Diabetes mellitus, type 2 with long-term insulin.
2. Neuropathy.
3. Late effects of cerebrovascular disease.

PLAN
Refill his medications x 3 months. We will check a BMP. I have talked to him several times about a colonoscopy, which he has refused, and so we have been doing stools for occult blood. We will check a PSA. Continue with yearly eye exams, foot exams, Accu-Checks, and we will see him in 3 months and p.r.n.

ICD-10-CM: _____

ICD-10-CM: _____

ICD-10-CM: _____

Step 18: Review Practice Exercise 30-7

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 19: Practice Exercise 30-8

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following scenario, and write your answers on scratch paper.

HISTORY OF PRESENT ILLNESS
The patient is an 88-year-old white female, household ambulator with a walker, who presents to the emergency department this morning after incidental fall at home. The patient states that she was on the ladder on Saturday, and she stepped down off the ladder and felt some pain in her left hip. Subsequently fell injuring her left shoulder. It is unclear how long she was on the floor. She was taken by EMS to hospital where she was noted radiographically to have a left proximal humerus fracture and a nondisplaced left hip fracture. Orthopedics was consulted. Given the nature of the injury and the unclear events, an extensive workup was performed including a head CT and CT of the abdomen, which identified no evidence of intracranial injury and renal calculi only. She presently is complaining of pain to the left shoulder. She states she also has pain to the hip with motion of the leg. She denies any numbness or paresthesias. She states prior to this, she was relatively active within her home. She does care for her daughter who has MS. The patient denies any other injuries. Denies back pain.

PAST HISTORY
Medications: Presently: (1) Lipitor 20 mg daily. (2) Metoprolol 25 mg b.i.d. (3) Plavix 75 mg once a day. (4) Aspirin 325 mg. (5) Combivent aerosol 2 puffs twice a day. (6) Protonix 40 mg daily. (7) Fosamax 70 mg weekly. (8) Multivitamins including calcium and vitamin D. (9) Hydrocortisone. (10) Nitroglycerin. (11) Citalopram 20 mg daily.
Illnesses: Extensive including coronary artery disease, peripheral vascular disease, status post MI, history of COPD, diverticular disease, irritable bowel syndrome, GERD, PMR, depressive disorder and hypertension.
Operations: Includes a repair of a right intertrochanteric femur fracture.
ALLERGIES: (1) PENICILLIN. (2) SULFA. (3) ACE INHIBITOR.
Social history: She denies alcohol or tobacco use. She is the caretaker for her daughter who is widowed and lives at home.
Family history: Not obtainable.

REVIEW OF SYSTEMS
Patient is hard of hearing. She also has vision problems. Denies headache syndrome. Presently, denies chest pain or shortness of breath. She denies abdominal pain. Presently, she has left hip pain and left shoulder pain. No urinary frequency or dysuria. No skin lesions. She does have swelling to both lower extremities for the last several weeks. She denies endocrinopathies. Psychiatric issues include chronic depression.

PHYSICAL EXAMINATION
GENERAL: The patient is alert and responsive.
EXTREMITIES: In the left upper extremity, there is moderate swelling and ecchymosis to the brachial compartment. She is diffusely tender over the proximal humerus. She is unable to actively elevate her arm due to pain. The neurovascular exam to the left upper extremity is otherwise intact with a 1+ radial pulse. She does have chronic degenerative change to the MP and IP joints of both hands. In the left lower extremity, the thigh compartment is supple. She has pain with log rolling tenderness over the greater trochanter. The patient has pain with any attempt at hip flexion passively or actively. The knee range of motion is between 5° and 60° with no point specific tenderness, no joint effusion, and an intact extensive mechanism. She has 2-3+ bilateral pitting edema pretibially and pedally. The patient has a weak motor response to the left lower extremity. She has a 1+ dorsalis pedis pulse. Her sensory examination is intact plantarly and dorsally on the foot.

DATABASE
Patient's H&H is 13 and 38.7, white blood cell count is 6.9, and there are 198,000 platelets. Electrolytes: Sodium 137, potassium 4.1, chloride 102. CO2 is 27, BUN is 20, and creatinine 0.62. Urinalysis: The urine is clear yellow, 0-2 white cells, and no bacteria. Radiographs: Left shoulder series was performed which identifies a 3-part valgus-impacted left proximal humerus fracture with displacement of the greater tuberosity fragment, approximately 1 cm. There is no evidence of dislocation. There was an AP pelvis as well as left hip series, which identify a nondisplaced valgus-impacted type 1 femoral neck fracture. There is also evidence of severe degenerative disc disease with degenerative scoliosis of the LS spine. There is evidence of previous surgical repair of the right proximal femur with an intact intramedullary nail.

ASSESSMENT
This is an 88-year-old household ambulator with a walker, status post fall with injuries to left shoulder and left hip. The left shoulder fracture is a proximal humerus fracture, and the left hip is a nondisplaced femoral neck fracture.

PLAN

I have discussed this case with the emergency department physician as well as the patient. Patient should be admitted to medical service for medical clearance for surgery of her left hip, which will include a percutaneous screw fixation. Since the patient is on Plavix, I recommend that the Plavix be discontinued, and she should be placed on Lovenox 30 mg subcutaneous daily, which may be stopped 24 hours before the procedure. She will need cardiology clearance, which would include an echocardiogram in advance of the procedure. I have explained the nature of the injuries to the patient, the recommended surgical procedures, and the postoperative course and rehabilitation required thereafter. She presently understands and agrees with the plan.

ICD-10-CM: _____

ICD-10-CM: _____

ICD-10-CM: _____

ICD-10-CM: _____

ICD-10-CM: _____

Step 20: Review Practice Exercise 30-8

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 21: Practice Exercise 30-9

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following scenario, and write your answers on scratch paper.

PREOPERATIVE DIAGNOSIS

Persistent leukocytosis of unknown etiology.

POSTOPERATIVE DIAGNOSIS

Same, pending pathology.

PRIMARY PROCEDURE

ASPIRATION OF BONE MARROW FROM RIGHT POSTERIOR ILIAC CREST.

PROCEDURE

The patient was placed in a prone position. The posterior iliac crest was palpated, and the biopsy site was marked. A 26-gauge needle was used to inject 1% lidocaine solution subcutaneously. A 22-gauge needle was then used to infiltrate the deeper tissues with lidocaine. A #11 scalpel blade was used to make a 2 mm skin incision of the biopsy site. The bone marrow biopsy needle was firmly seated on the periosteum, advanced through the outer table of bone and into the marrow cavity with rotating motion and gentle pressure. It was advanced 2 mm. The stylet was removed, and a 10 mL syringe was attached to the needle hub. A brisk withdrawal of the plunger resulted in 2 mL of marrow aspiration. The site was observed for any excess bleeding, cleaned thoroughly with alcohol, and a gauze patch secured the site. The patient was in satisfactory condition with no operative complications noted.

ICD-10-CM: _____

Step 22: Review Practice Exercise 30-9

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 23: Practice Exercise 30-10

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following scenario, and write your answers on scratch paper.

PREOPERATIVE DIAGNOSIS
Hemorrhoids.

POSTOPERATIVE DIAGNOSIS
Internal hemorrhoids.

PRIMARY PROCEDURE
HEMORRHOIDECTOMY.

PROCEDURE
The patient was taken to the operating room and placed in the prone position. A large internal hemorrhoid was palpated. After allowing adequate time for the anesthesia to take effect, the hemorrhoid was grasped with a clamp while another clamp was placed at the base of the hemorrhoid. The hemorrhoid was excised above the clamp, and a running stitch going in the opposite direction was looped over the clamp. The clamp was then removed, and the stitch was tightened. The area was dressed and packed with gauze. The patient tolerated the procedure well and was discharged to the postanesthesia care unit.

ICD-10-CM: _____

Step 24: Review Practice Exercise 30-10

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 25: Practice Exercise 30-11

Use your *ICD-10-CM* manual to assign the correct diagnosis code(s) to the following scenario, and write your answers on scratch paper.

PREOPERATIVE DIAGNOSIS
Medial and lateral meniscus tears, left knee.

POSTOPERATIVE DIAGNOSIS
Bucket-handle tear of the medial meniscus and peripheral tear of the lateral meniscus, left knee.

PRIMARY PROCEDURE
ARTHROSCOPY WITH MEDIAL AND LATERAL MENISCECTOMIES, LEFT KNEE.

PROCEDURE

The patient was placed on the operating table in the supine position under general anesthesia, administered by the anesthesiologist. Arthroscopy was carried out beginning in the inferolateral portal.

After initial exploration, the medial compartment was explored. The arthroscopy exposed the meniscus which revealed a tear. The torn portion was removed with forceps.

Attention was then turned to the lateral compartment which also revealed a tear in the lateral meniscus. The torn portion was removed with forceps.

After completion of the meniscectomies, there were no other significant findings. Dressing was applied. The patient tolerated the procedure well and left the operating room in good condition.

> ICD-10-CM: _____
>
> ICD-10-CM: _____

Step 26: Review Practice Exercise 30-11

Check your answers with the Answer Key at the back of this book. Correct any mistakes you may have made.

Step 27: Lesson Summary

Your practice with diagnostic coding for health records is now complete! If you still feel a little unsure, that's perfectly normal. Review the Practice Exercise answers and compare them to your pathways. The best way to determine why you didn't reach the correct codes is to understand the pathways. As you continue to practice, you'll become faster and more proficient at coding. Now, let's move on to the Quiz.

Step 28: Quiz 30

Once you've mastered the course content, locate this Quiz in your *Online Course* or your *Assignment Pack*. Read and follow the Quiz instructions carefully.

Endnotes

[1] *Estrogen Receptor.* National Cancer Institute, n.d. Web. 4 October 2013.

[2] *Wound Foreign Body Removal.* Medscape, 17 September 2012. Web. 4 October 2013.

[3] *Infectious Disease Transmission during Transfusion and Transplanation.* Centers for Disease Control and Prevention, 12 August 2012. Web. 4 October 2013.

[4] *Body Mass Index.* Centers for Disease Control and Prevention, 13 September 2011. Web. 4 October 2013.

Pack 3
Medical Coding and Billing Specialist
Answer Key

Lesson 21

Practice Exercise 21-1

1. Which patient has not yet paid the invoice that was sent? **Felicia Cruz**

2. Which claim has the insurance company not yet paid? **Sara Paley**

3. What was the follow-up date for that claim? **4/17/XX**

4. Mountain States pays benefits of $289 for Sara Paley and there is no write-off amount. What, if anything, will Sara Paley owe on her bill? **$0.00**

5. There is no write-off amount for Mark Green's claim. This indicates that the doctor is not a(n) **preferred provider** for Mutual Insurance.

6. Mark Green paid his invoice on what date? **4/30/XX**

Practice Exercise 21-2

1. Inquiry **c. Asking an insurance company about a delayed claim**

2. Resubmission **a. Sending in a claim a second time with "SECOND BILLING" written at the top**

3. Narrative explanation **d. A further description of a procedure or other information on a claim**

4. State insurance commissioner **b. Oversees the state insurance regulations**

Practice Exercise 21-3

1. Paula Higgins

<table>
<tr><td colspan="2"></td><td>ACCOUNT NO.</td><td>DATE</td></tr>
<tr><td colspan="2"></td><td>XXXXX</td><td></td></tr>
</table>

LUKE RJOHNSON MD
100 SOUTH MAIN

BROWN, CO 80001-9898
(970)555-1111

Payment Options   O Check   O MC   O Visa

Check # _____   MC/Visa# _____

Expiration Date: _____   Signature: _____

PAULA HIGGINS
2159 WYNN LANE
BROWN, CO 80001

AMOUNT ENCLOSED $ _____

Billed $ 0.00

Return Above Portion with Payment

DATE	PROCEDURE	DESCRIPTION	FEE	INS	PATIENT	RECEIPTS
09/24/20XX	99212	OFFICE, EST PATIENT	42.00	42.00	0.00	
09/24/20XX	95120	ALLERGY SHOT	23.00	23.00	0.00	

Total Charges	65.00
Total Payments	0.00

Patient Obligation	0.00

2. Rebecca Bloom

GREG NORTH MD
800 MEDICAL COURT

BROWN, CO 80001-9898
(970)555-2222

ACCOUNT NO.	DATE
XXXXX	

REBECCA BLOOM
409 YORKSHIRE COURT
BROWN, CO 80001

Payment Options O **Check**   O **MC**   O **Visa**

Check # _____   **MC/Visa#** _____

Expiration Date: _____   **Signature:** _____

AMOUNT ENCLOSED $ _____

Billed $ 125.00

Return Above Portion with Payment

DATE	PROCEDURE	DESCRIPTION	FEE	INS	PATIENT	RECEIPTS
01/10/20XX	99214	OFFICE, EST PATIENT	102.00	102.00	0.00	
11/27/20XX	99213	OFFICE, EST PATIENT	69.00	0.00	0.00	
08/27/20XX	Ins.1	Payment				42.00
08/27/20XX	Credit					27.00
12/01/20XX	99283	EMERGENCY DEPARTMENT	125.00	0.00	125.00	
08/27/20XX	Ins.1	Payment				0.00

Total Charges	296.00
Total Payments	42.00

Patient Obligation	125.00

Practice Exercise 21-4

1. **Credit** is the merchant's acceptance of your promise to pay later for goods or services you receive immediately.

2. The document listing your credit history is called your credit **report**.

3. The document listing your credit history is important to potential **creditors** who are considering giving you credit.

4. Late payments, bankruptcies and defaults are called **negative credit information**.

5. People referred to as *credit risks* end up paying **higher** interest rates.

6. If a debtor fails to live up to his credit agreement, his account is **delinquent**.

7. If a check bounces, the bank returns the check with the letters **NSF** stamped across the check.

8. The person filing the action in small claims court is the **plaintiff**.

9. The person being sued in small claims court is the **defendant**.

10. The defendant's employer withholds a percentage of the defendant's pay each month and sends the money to the creditor. In order to do this, a legal document called a(n) **order of garnishment** is required.

Practice Exercise 21-5

1. Consent for physician reimbursement form **a. Authorization form for payment of insurance benefits to be paid directly to the physician**

2. Fax cover sheet **d. Form used when transmitting patient information**

3. Employee confidentiality statement **b. Confidentiality agreement**

4. Authorization form **c. Allows insurance claims to be processed with the use of a signature stamp**

Lesson 22

Practice Exercise 22-1

1. **Certified Coding Specialists (CCS)** are skilled professional coders with solid experience classifying medical data from patient records.

2. **AHIMA** is recognized as one of the industry's most active and influential advocates in Congress.

3. The **Certified Billing and Coding Specialist (CBCS)** exam focuses on converting a medical procedure and diagnosis into specific codes for submitting a claim for reimbursement.

4. The AMA speaks out on important issues like **patient rights** and the health of the nation.

5. The **CPC** exam tests the student on diagnostic and procedural codes, compliance and reimbursement policies.

6. In addition to coding the diagnosis and procedures for outpatient settings, the **CPC-H** exam also focuses on reimbursement procedures, such as fee updates and how to complete the UB-04.

7. The goal of the **AAPC** is to provide education, recognition, and certification for physician-practice procedural coders.

8. **CCS-P** coders have in-depth experience with diagnostic and procedural codes. They also are experts in health information documentation.

Practice Exercise 22-2

1. *BillingInsider* **AAPC**

2. *CPT Assistant* **AMA**

3. *Coding Clinic* **AHA**

4. *Coder's Desk Reference for Diagnoses* **OptumInsight**

5. *Perspectives in HIM* **AHIMA**

6. *Coder's Desk Reference for Procedures* **OptumInsight**

7. *Cutting Edge* **AAPC**

Lesson 23

Practice Exercise 23-1

1. The ICD originally was used to track **mortality statistics**.

2. The *Bertillon Classification of Causes of Death* was first used in the Americas in **Mexico**.

3. In 1946, the United Nations gave the responsibility for the ICD to the **World Health Organization**.

4. The United States adopted the *International Classification of Diseases, 9th Revision, Clinical Modification* (*ICD-9-CM*), based on the ICD-9, in **1979**.

5. A primary use of medical codes is to **communicate** to the insured the reason for a patient's medical visit.

6. Medical coding is a **statistics-gathering tool** for research, grants and financial analysis.

7. The *ICD-9-CM* outdated codes produce **inaccurate** and **limited** data.

Practice Exercise 23-2

1. The *ICD-10-CM* manual lists **d. diagnostic** codes.

2. Main terms appear in **b. boldface** type.

3. Information in parentheses following a main term is called a(n) **a. nonessential modifier** and has no effect on selecting the correct code.

4. In the *Tabular List,* **c. brackets** enclose synonyms, alternative wording or explanatory phrases.

5. **a. Parentheses** are used to enclose supplementary words.

6. An object not naturally occurring in the human body is a foreign body. **True**

7. NEC may be interpreted as "unspecified." **False**

8. Excludes1 and Excludes2 mean essentially the same thing. **False**

9. Inclusion terms may be synonyms or provide a list of various conditions included within a code classification. **True**

Practice Exercise 23-3

1. The first step in *ICD-10-CM* coding is to locate the code in the *Tabular List*. **False**

2. After locating the tentative code in the *Tabular List*, read the general notes. **True**

3. Unconfirmed diagnoses are coded in outpatient settings. **False**

4. Signs and symptoms that are routinely associated with a disease process should not be assigned as additional codes unless instructed by the classification. **True**

5. If you must code an acute and chronic condition with two separate codes, list the acute code as primary, followed by the chronic code. **True**

6. The *ICD-10-CM* forbids the use of combination codes. **False**

7. A late effect is a residual condition that occurs after the acute phase. **True**

8. You should never code impending and threatened conditions, as they are unconfirmed diagnoses. **False**

9. Laterality simply means to code bilateral. **False**

Practice Exercise 23-4

1. **A02.0** Poisoning, food, due to, salmonella, with, gastroenteritis

2. **A49.8** Infection, Bacteroides NEC

3. **A15.0** Tuberculosis, pulmonary (infiltrative)

4. **A21.1** Fever, rabbit—*see* Tularemia; Tularemia, with,

5. **A40.1** Sepsis, Streptococcal, group, B

6. **A52.00** Syphilis, cardiovascular

7. **A86** Encephalitis, viral

8. **A92.30** Fever, West, Nile

9. **A69.20** Disease, Lyme

10. **A54.01** Cystitis, gonococcal

Practice Exercise 23-5

1. **B20** AIDS (related complex)

   B59 Pneumocystis carinii pneumonia

2. **B05.3** Measles, with, otitis media

3. **B06.9** Measles, German—*see* Rubella; Rubella (German measles)

4. **B27.92** Mononucleosis, infectious, with, meningitis

5. **B08.4** Disease, hand, foot and mouth

6. **B35.3** Infection, fungus, foot

7. **B38.0** Fever, desert

8. **B76.9** Disease, hookworm

9. **B86** Scabies

10. **B20** Human, immunodeficiency virus (HIV) disease; Human, immunodeficiency virus (HIV) disease

B18.2 Hepatitis, viral, type, C, chronic

MUTUAL LIFE

HEALTH INSURANCE CLAIM FORM

PO BOX 911
DENVER, CO 801110911

APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE (NUCC) 02/12

PICA									PICA

1. MEDICARE (Medicare #)   MEDICAID (Medicaid#)   TRICARE (ID# DoD#)   CHAMPVA (Member ID #)   GROUP HEALTH PLAN [X] (ID#)   FECA BLK LUNG (ID#)   OTHER (ID#)

1a. INSURED'S I.D. NUMBER (For Program in Item 1)
4024679

2. PATIENT'S NAME (Last Name, First Name, Middle Initial)
TUCKER GREGORY S

3. PATIENT'S BIRTH DATE MM 09 DD 02 YY 1971   SEX M [X] F [ ]

4. INSURED'S NAME (Last Name, First Name, Middle Initial)
TUCKER GREGORY S

5. PATIENT'S ADDRESS (No., Street)
1801 PETERSON STREET

6. PATIENT RELATIONSHIP TO INSURED
Self [X]   Spouse [ ]   Child [ ]   Other [ ]

7. INSURED'S ADDRESS (No., Street)
1801 PETERSON STREET

CITY SPRINGTOWN   STATE CO

8. RESERVED FOR NUCC USE

CITY SPRINGTOWN   STATE CO

ZIP CODE 80002   TELEPHONE (Include Area Code) (970) 5553255

ZIP CODE 80002   TELEPHONE (Include Area Code) (970) 5553255

9. OTHER INSURED'S NAME (Last Name, First Name, Middle Initial)

10. IS PATIENT'S CONDITION RELATED TO:

11. INSURED'S POLICY GROUP OR FECA NUMBER
LA4832

a. OTHER INSURED'S POLICY OR GROUP NUMBER

a. EMPLOYMENT? (Current or Previous) YES [ ] NO [X]

a. INSURED'S DATE OF BIRTH MM 09 DD 02 YY 1971   SEX M [X] F [ ]

b. RESERVED FOR NUCC USE

b. AUTO ACCIDENT? YES [ ] NO [X]   PLACE (State)

b. OTHER CLAIM ID (Designated by NUCC)

c. RESERVED FOR NUCC USE

c. OTHER ACCIDENT? YES [ ] NO [X]

c. INSURANCE PLAN NAME OR PROGRAM NAME
MUTUAL LIFE

d. INSURANCE PLAN NAME OR PROGRAM NAME

10d. CLAIM CODES (Designated by NUCC)

d. IS THERE ANOTHER HEALTH BENEFIT PLAN? YES [ ] NO [X]   *If yes, complete items 9, 9a and 9d.*

READ BACK OF FORM BEFORE COMPLETING & SIGNING THIS FORM.

12. PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE. I authorize the release of any medical or other information necessary to process this claim. I also request payment of government benefits either to myself or to the party who accepts assignment below.
SIGNED SIGNATURE ON FILE   DATE XX XX XX

13. INSURED'S OR AUTHORIZED PERSON'S SIGNATURE I authorize payment of medical benefits to the undersigned physician or supplier for services described below.
SIGNED SIGNATURE ON FILE

14. DATE OF CURRENT ILLNESS INJURY or PREGNANCY (LMP) MM 05 DD 08 YY XX QUAL. 431

15. OTHER DATE QUAL. MM DD YY

16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION FROM MM DD YY TO MM DD YY

17. NAME OF REFERRING PROVIDER OR OTHER SOURCE
17a.
17b. NPI

18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES FROM MM DD YY TO MM DD YY

19. RESERVED FOR LOCAL USE

20. OUTSIDE LAB? YES [ ] NO [X] $ CHARGES

21. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY Relate A-L to service line below (24E)   ICD Ind. 0

A. B20   B. B182   C.   D.
E.   F.   G.   H.
I.   J.   K.   L.

22. RESUBMISSION CODE   ORIGINAL REF. NO.

23. PRIOR AUTHORIZATION NUMBER

24. A. DATE(S) OF SERVICE FROM			TO			B. PLACE OF SERVICE	C. EMG	D. PROCEDURES, SERVICES, OR SUPPLIES (Explain Unusual Circumstances) CPT/HCPCS MODIFIER	E. DIAGNOSIS POINTER	F. $ CHARGES	G. DAYS UNITS	H. EPSDT FAMILY	I. ID. QUAL.	J. RENDERING PROVIDER ID. #
MM	DD	YY	MM	DD	YY									
1 05	08	XX	05	08	XX	11		99213	AB	69 00	1		NPI	0304851124
2													NPI	
3													NPI	
4													NPI	
5													NPI	
6													NPI	

25. FEDERAL TAX I.D. NUMBER 86 8990600   SSN [ ] EIN [X]

26. PATIENT'S ACCOUNT NO. XXXXX

27. ACCEPT ASSIGNMENT? YES [X] NO [ ]

28. TOTAL CHARGE $ 69 00

29. AMOUNT PAID $ 0 00

30. Rsvd for Nucc Use

31. SIGNATURE OF PHYSICIAN OR SUPPLIER INCLUDING DEGREES OR CREDENTIALS (I certify that the statements on the reverse apply to this bill and are made a part thereof.)
DONALD ALLEN MD XX XX XX

32. SERVICE FACILITY LOCATION INFORMATION

33. BILLING PROVIDER INFO & PH # (970)5551834
SPRINGTOWN CLINIC
1824 PARK AVENUE
SRINGTOWN CO 800021824

SIGNED   DATE
a.   b.
a. 0304455166   b.

Lesson 24

Practice Exercise 24-1

1. **C71.0** Glioma, specific site NEC—*see* Neoplasm, malignant, by site; *Neoplasm Table*: Neoplasm, cerebrum, Malignant Primary

2. **C79.31** Carcinoma (*see also* Neoplasm, malignant, by site); *Neoplasm Table*: Neoplasm, brain NEC, Malignant Secondary

   C34.90 *Neoplasm Table*: Neoplasm, lung, Malignant Primary; unspecified part of unspecified bronchus or lung

3. **C81.90** Sarcoma, Hodgkin—*see* Lymphoma, Hodgkin; Lymphoma, Hodgkin; unspecified site

4. **D23.4** *Neoplasm Table*: Neoplasm, scalp, Benign

5. **D25.9** Fibromyoma, uterus (*see also* Leiomyoma, uterus); Leiomyoma, uterus

6. **C16.5** Adenocarcinoma (*see also* Neoplasm, malignant, by site); *Neoplasm Table*: Neoplasm, stomach, lesser curvature NEC, Malignant Primary

Practice Exercise 24-2

1. **D50.0** Anemia, iron deficiency, secondary to blood loss (chronic)

2. **D51.0** Anemia, Addison

3. **D56.0** Disease, Hb—*see* Disease, hemoglobin; Disease, hemoglobin or Hb, Bart's

4. **D57.00** Disease, sickle-cell, with crisis

5. **D61.818** Pancytopenia (acquired)

6. **D68.0** Disease, Von Willebrand's

7. **D69.0** Purpura, allergic

8. **D61.3** Anemia, idiopathic, aplastic

Practice Exercise 24-3

1. **E89.0** Hypothyroidism, postsurgical

2. **E10.641** Diabetes, type 1, with, hypoglycemia, with coma

3. **E21.0** Hyperparathyroidism, primary

4. **E28.2** Polycystic, ovary

Medical Coding and Billing Specialist

5. **E83.52** Hypercalcemia, hypocalciuric, familial

   C73 *Neoplasm Table*: Neoplasm, thyroid, Malignant Primary

HEALTH SERVICES INC

HEALTH INSURANCE CLAIM FORM

APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE (NUCC) 02/12

PO BOX 324
SPRINGTOWN, CO 800020324

PICA								PICA

1. MEDICARE	MEDICAID	TRICARE	CHAMPVA	GROUP HEALTH PLAN	FECA BLK LUNG	OTHER	1a. INSURED'S I.D. NUMBER (For Program in Item 1)
(Medicare #)	(Medicaid#)	(ID# DoD#)	(Member ID #)	X (ID#)	(ID#)	(ID#)	5601113

2. PATIENT'S NAME (Last Name, First Name, Middle Initial)
SCHMIDT BONNIE K

3. PATIENT'S BIRTH DATE MM DD YY SEX
06 25 1962 M ☐ F ☒

4. INSURED'S NAME (Last Name, First Name, Middle Initial)
SCHMIDT BONNIE K

5. PATIENT'S ADDRESS (No., Street)
1810 BLUEGRASS DRIVE

6. PATIENT RELATIONSHIP TO INSURED
Self ☒ Spouse ☐ Child ☐ Other ☐

7. INSURED'S ADDRESS (No., Street)
1810 BLUEGRASS DRIVE

CITY SPRINGTOWN STATE CO

8. RESERVED FOR NUCC USE

CITY SPRINGTOWN STATE CO

ZIP CODE 80002 TELEPHONE (Include Area Code) (970) 5559041

ZIP CODE 80002 TELEPHONE (Include Area Code) (970) 5559041

9. OTHER INSURED'S NAME (Last Name, First Name, Middle Initial)
SCHMIDT RICHARD J

10. IS PATIENT'S CONDITION RELATED TO:

11. INSURED'S POLICY GROUP OR FECA NUMBER
208

a. OTHER INSURED'S POLICY OR GROUP NUMBER
635007213

a. EMPLOYMENT? (Current or Previous)
YES ☐ X NO

a. INSURED'S DATE OF BIRTH MM DD YY SEX
06 25 1962 M ☐ F ☒

b. RESERVED FOR NUCC USE

b. AUTO ACCIDENT? PLACE (State)
YES ☐ X NO

b. OTHER CLAIM ID (Designated by NUCC)

c. RESERVED FOR NUCC USE

c. OTHER ACCIDENT?
YES ☐ X NO

c. INSURANCE PLAN NAME OR PROGRAM NAME
HEALTH SERVICES INC

d. INSURANCE PLAN NAME OR PROGRAM NAME
CHAMPVA

10d. CLAIM CODES (Designated by NUCC)

d. IS THERE ANOTHER HEALTH BENEFIT PLAN?
X YES NO ☐ *If yes, complete items 9, 9a and 9d.*

READ BACK OF FORM BEFORE COMPLETING & SIGNING THIS FORM.
12. PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE. I authorize the release of any medical or other information necessary to process this claim. I also request payment of government benefits either to myself or to the party who accepts assignment below.

SIGNED SIGNATURE ON FILE DATE XX XX XX

13. INSURED'S OR AUTHORIZED PERSON'S SIGNATURE I authorize payment of medical benefits to the undersigned physician or supplier for services described below.

SIGNED SIGNATURE ON FILE

14. DATE OF CURRENT ILLNESS INJURY or PREGNANCY (LMP) MM DD YY
10 17 XX QUAL 431

15. OTHER DATE MM DD YY
QUAL

16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION MM DD YY MM DD YY
FROM TO

17. NAME OF REFERRING PROVIDER OR OTHER SOURCE

17a.
17b. NPI

18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES MM DD YY MM DD YY
FROM TO

19. RESERVED FOR LOCAL USE

20. OUTSIDE LAB? $ CHARGES
YES ☐ X NO

21. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY Relate A-L to service line below (24E) ICD Ind. 0

A. E8352 B. C73 C. D.
E. F. G. H.
I. J. K. L.

22. RESUBMISSION CODE ORIGINAL REF. NO.

23. PRIOR AUTHORIZATION NUMBER

24. A. DATE(S) OF SERVICE FROM / TO	B. PLACE OF SERVICE	C. EMG	D. PROCEDURES, SERVICES, OR SUPPLIES (Explain Unusual Circumstances) CPT/HCPCS / MODIFIER	E. DIAGNOSIS POINTER	F. $ CHARGES	G. DAYS UNITS	H. EPSDT FAMILY	I. ID. QUAL.	J. RENDERING PROVIDER ID. #
1	10 17 XX 10 17 XX	11		99213	AB	69 00	1		NPI	0405891109
2									NPI	
3									NPI	
4									NPI	
5									NPI	
6									NPI	

25. FEDERAL TAX I.D. NUMBER SSN EIN
99 7653456 X

26. PATIENT'S ACCOUNT NO.
XXXXX

27. ACCEPT ASSIGNMENT?
X YES NO

28. TOTAL CHARGE
$ 69 00

29. AMOUNT PAID
$ 5 00

30. Rsvd for Nuccc Use

31. SIGNATURE OF PHYSICIAN OR SUPPLIER INCLUDING DEGREES OR CREDENTIALS (I certify that the statements on the reverse apply to this bill and are made a part thereof.)
LAURA K KNOTT MD XX XX XX
SIGNED DATE

32. SERVICE FACILITY LOCATION INFORMATION
a. b.

33. BILLING PROVIDER INFO & PH # (970)5551111
MEDICAL CARE CENTER
100 SOUTH MAIN
BROWN CO 800019898
a. 0665544004 b.

Practice Exercise 24-4

1. **F10.921** Delirium, alcoholic

2. **F21** Schizophrenia, borderline

3. **F42** Disorder, obsessive-compulsive

4. **F50.00** Anorexia, nervosa

5. **F63.2** Kleptomania

6. **F70** Subnormal, mental—*see* Disability, Intellectual; Disability, Intellectual, mild

7. **F30.12** Disorder, bipolar, single manic episode, moderate

MEDICAID

HEALTH INSURANCE CLAIM FORM

APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE (NUCC) 02/12

PO BOX 1461
DENVER, CO 802031461

			PICA									PICA		

1. MEDICARE	MEDICAID	TRICARE	CHAMPVA	GROUP HEALTH PLAN	FECA BLK LUNG	OTHER	1a. INSURED'S I.D. NUMBER (For Program in Item 1)
☐ (Medicare #)	☒ (Medicaid#)	☐ (ID# DoD#)	☐ (Member ID #)	☐ (ID#)	☐ (ID#)	☐ (ID#)	47324

2. PATIENT'S NAME (Last Name, First Name, Middle Initial)	3. PATIENT'S BIRTH DATE MM DD YY	SEX	4. INSURED'S NAME (Last Name, First Name, Middle Initial)
REYNOLDS SHELLY D	03 17 1999	M ☐ F ☒	

5. PATIENT'S ADDRESS (No., Street)	6. PATIENT RELATIONSHIP TO INSURED	7. INSURED'S ADDRESS (No., Street)
4575 DIXON COURT APT 7	Self ☐ Spouse ☐ Child ☐ Other ☐	
CITY YAMPA STATE CO	8. RESERVED FOR NUCC USE	CITY STATE
ZIP CODE 80004 TELEPHONE (Include Area Code) (970) 5556996		ZIP CODE TELEPHONE (Include Area Code) ( )

9. OTHER INSURED'S NAME (Last Name, First Name, Middle Initial)	10. IS PATIENT'S CONDITION RELATED TO:	11. INSURED'S POLICY GROUP OR FECA NUMBER
a. OTHER INSURED'S POLICY OR GROUP NUMBER	a. EMPLOYMENT? (Current or Previous) YES ☐ NO ☒	a. INSURED'S DATE OF BIRTH MM DD YY SEX M ☐ F ☐
b. RESERVED FOR NUCC USE	b. AUTO ACCIDENT? PLACE (State) YES ☐ NO ☒	b. OTHER CLAIM ID (Designated by NUCC)
c. RESERVED FOR NUCC USE	c. OTHER ACCIDENT? YES ☐ NO ☒	c. INSURANCE PLAN NAME OR PROGRAM NAME MEDICAID
d. INSURANCE PLAN NAME OR PROGRAM NAME	10d. CLAIM CODES (Designated by NUCC)	d. IS THERE ANOTHER HEALTH BENEFIT PLAN? YES ☐ NO ☐ If yes, complete items 9, 9a and 9d.

READ BACK OF FORM BEFORE COMPLETING & SIGNING THIS FORM.

12. PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE. I authorize the release of any medical or other information necessary to process this claim. I also request payment of government benefits either to myself or to the party who accepts assignment below.	13. INSURED'S OR AUTHORIZED PERSON'S SIGNATURE I authorize payment of medical benefits to the undersigned physician or supplier for services described below.
SIGNED SIGNATURE ON FILE DATE XX XX XX	SIGNED SIGNATURE ON FILE

14. DATE OF CURRENT ILLNESS INJURY or PREGNANCY (LMP) MM DD YY 05 01 XX QUAL 431	15. OTHER DATE QUAL MM DD YY	16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION MM DD YY MM DD YY FROM TO
17. NAME OF REFERRING PROVIDER OR OTHER SOURCE	17a. 17b. NPI	18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES MM DD YY MM DD YY FROM TO
19. RESERVED FOR LOCAL USE		20. OUTSIDE LAB? YES ☐ NO ☒ $ CHARGES

21. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY Relate A-L to service line below (24E) ICD Ind. 0	22. RESUBMISSION CODE ORIGINAL REF. NO.
A. F3012 B. C. D.	
E. F. G. H.	23. PRIOR AUTHORIZATION NUMBER
I. J. K. L.	

24. A. DATE(S) OF SERVICE FROM MM DD YY	TO MM DD YY	B. PLACE OF SERVICE	C. EMG	D. PROCEDURES, SERVICES, OR SUPPLIES (Explain Unusual Circumstances) CPT/HCPCS MODIFIER	E. DIAGNOSIS POINTER	F. $ CHARGES	G. DAYS UNITS	H. EPSDT FAMILY	I. ID. QUAL.	J. RENDERING PROVIDER ID. #
1	05 01 XX	05 01 XX	11		99213	A	69 00	1		NPI	0405891109
2										NPI	
3										NPI	
4										NPI	
5										NPI	
6										NPI	

25. FEDERAL TAX I.D. NUMBER SSN EIN 99 7653456 ☒	26. PATIENT'S ACCOUNT NO. XXXXX	27. ACCEPT ASSIGNMENT? YES ☐ NO ☐	28. TOTAL CHARGE $ 69 00	29. AMOUNT PAID $ 0 00	30. Rsvd for Nucc Use

31. SIGNATURE OF PHYSICIAN OR SUPPLIER INCLUDING DEGREES OR CREDENTIALS (I certify that the statements on the reverse apply to this bill and are made a part thereof.) CHARLES PETERSON MD XX XX XX SIGNED DATE	32. SERVICE FACILITY LOCATION INFORMATION a. b.	33. BILLING PROVIDER INFO & PH # (970)5551111 MEDICAL CARE CENTER 100 SOUTH MAIN YAMPA CO 800019898 a. 0665544004 b.

Practice Exercise 24-5

1. **G00.1** Meningitis, pneumococcal

2. **G24.3** Torticollis, spasmodic

3. **G81.11** Hemiplegia, spastic; affecting right dominant side

4. **G40.911** Epilepsy, intractable, with status epilepticus

5. **G51.0** Bell's, palsy

6. **G35** Sclerosis, multiple

Lesson 25

Practice Exercise 25-1

1. **H00.035** Abscess, eyelid; left lower eyelid

2. **H02.041** Entropion, spastic, right, upper

3. **H02.822** Cyst, sebaceous, eyelid—*see* Cyst, eyelid; Cyst, eyelid, right, lower

4. **H10.029** Pink, eye—*see* Conjunctivitis, acute, mucopurulent; Conjunctivitis, acute, mucopurulent; unspecified eye

5. **H10.503** Blepharonconjunctivitis; bilateral

6. **H18.11** Keratopathy, bullous; right eye

7. **H30.102** Retinitis (*see also* Inflammation, chorioretinal); Inflammation, chorioretinal, disseminated; left eye

8. **H35.153** Retinopathy, of prematurity, stage 4; bilateral

9. **H21.251** Iridoschisis; right eye

Practice Exercise 25-2

1. **H60.01** Boil (*see also* Furuncle, by site); Furuncle, ear, external—*see* Abscess, ear, external; Abscess, ear, external; right external ear

2. **H60.539** Otitis, externa, acute, contact; unspecified ear

3. **H61.121** Hematoma, auricle, nontraumatic—*see* Disorder, pinna, hematoma; Disorder, pinna, hematoma; right ear

4. **H65.32** Otitis, media, chronic, secretory—*see* Otitis, media, nonsuppurative, chronic, mucoid; Otitis, media, nonsuppurative, chronic, mucoid; left ear

5. **H68.013** Salpingitis, eustachian, acute; bilateral

6. **H73.001** Myringitis, acute; right ear

7. **H80.12** Otosclerosis, obliterative—*see* Otosclerosis, involving, oval window, obliterative; Otosclerosis, involving, oval window, obliterative; left ear

8. **H91.22** Loss, hearing (*see also* Deafness); Deafness, sudden; left ear

9. **H66.91** Otitis, media, chronic; right ear

    H72.2X1 Perforation, tympanic (membrane), marginal NEC; right ear

Practice Exercise 25-3

1. **I02.9** Chorea, rheumatic (chronic)

2. **I09.1** Endocarditis, rheumatic

3. **I10** Hypertension (benign) (essential)

4. **I15.2** Hypertension, secondary, due to, endocrine disorder

   E24.9 Cushing's, syndrome or disease

5. **I21.09** Infarction, myocardium (acute), ST elevation (STEMI), anterior (anterolateral)

6. **I09.0** Fever, rheumatic, inactive or quiescent with, myocarditis

7. **I21.19** Infarction, myocardium, transmural, inferior NEC

Practice Exercise 25-4

1. **I27.0** Hypertension, pulmonary, primary (idiopathic)

2. **I44.1** Wenckebach's block or phenomenon

3. **I69.951** Hemiplegia, following, cerebrovascular disease; affecting right dominant side

4. **I70.201** Arteriolosclerosis, extremities, leg, right

5. **I83.92** Varicose, vein—*see* Varix; Varix, leg, left

6. **I49.5** Syndrome, sick, sinus

MEDICARE

HEALTH INSURANCE CLAIM FORM

APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE (NUCC) 02/12

600 GRANT STREET
DENVER, CO 802034791

			PICA							PICA		

1. MEDICARE	MEDICAID	TRICARE	CHAMPVA	GROUP HEALTH PLAN	FECA BLK LUNG	OTHER	1a. INSURED'S I.D. NUMBER (For Program in Item 1)
X (Medicare #)	(Medicaid#)	(ID# DoD#)	(Member ID #)	(ID#)	(ID#)	(ID#)	770005613A

2. PATIENT'S NAME (Last Name, First Name, Middle Initial)	3. PATIENT'S BIRTH DATE	SEX	4. INSURED'S NAME (Last Name, First Name, Middle Initial)
MORGAN KAREN S	MM 11 DD 25 YY 1941	M ☐ F X	

5. PATIENT'S ADDRESS (No., Street)	6. PATIENT RELATIONSHIP TO INSURED	7. INSURED'S ADDRESS (No., Street)
3751 RIDGE ROAD	Self ☐ Spouse ☐ Child ☐ Other ☐	

CITY	STATE	8. RESERVED FOR NUCC USE	CITY	STATE
AVON	CO			

ZIP CODE	TELEPHONE (Include Area Code)		ZIP CODE	TELEPHONE (Include Area Code)
80000	(970) 5552929			( )

9. OTHER INSURED'S NAME (Last Name, First Name, Middle Initial)	10. IS PATIENT'S CONDITION RELATED TO:	11. INSURED'S POLICY GROUP OR FECA NUMBER
MORGAN KAREN S		NONE

a. OTHER INSURED'S POLICY OR GROUP NUMBER	a. EMPLOYMENT? (Current or Previous)	a. INSURED'S DATE OF BIRTH	SEX
MEDIGAP 561301	YES ☐ X NO	MM DD YY	M ☐ F ☐

b. RESERVED FOR NUCC USE	b. AUTO ACCIDENT?	PLACE (State)	b. OTHER CLAIM ID (Designated by NUCC)
	YES ☐ X NO		

c. RESERVED FOR NUCC USE	c. OTHER ACCIDENT?	c. INSURANCE PLAN NAME OR PROGRAM NAME
	YES ☐ X NO	MEDICARE

d. INSURANCE PLAN NAME OR PROGRAM NAME	10d. CLAIM CODES (Designated by NUCC)	d. IS THERE ANOTHER HEALTH BENEFIT PLAN?
HEALTH PLAN INC		YES ☐ NO ☐ If yes, complete items 9, 9a and 9d.

READ BACK OF FORM BEFORE COMPLETING & SIGNING THIS FORM.

12. PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE. I authorize the release of any medical or other information necessary to process this claim. I also request payment of government benefits either to myself or to the party who accepts assignment below.

SIGNED SIGNATURE ON FILE   DATE XX XX XX

13. INSURED'S OR AUTHORIZED PERSON'S SIGNATURE I authorize payment of medical benefits to the undersigned physician or supplier for services described below.

SIGNED SIGNATURE ON FILE

14. DATE OF CURRENT ILLNESS INJURY or PREGNANCY (LMP) MM 07 DD 19 YY XX QUAL 431	15. OTHER DATE QUAL MM DD YY	16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION MM DD YY MM DD YY FROM TO

17. NAME OF REFERRING PROVIDER OR OTHER SOURCE	17a.	18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES MM DD YY MM DD YY
	17b. NPI	FROM TO

19. RESERVED FOR LOCAL USE	20. OUTSIDE LAB? YES ☐ X NO	$ CHARGES

21. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY Relate A-L to service line below (24E)   ICD Ind. 0

A. I495	B.	C.	D.
E.	F.	G.	H.
I.	J.	K.	L.

22. RESUBMISSION CODE _____ ORIGINAL REF. NO. _____

23. PRIOR AUTHORIZATION NUMBER CM8402

24. A. DATE(S) OF SERVICE						B. PLACE OF SERVICE	C. EMG	D. PROCEDURES, SERVICES, OR SUPPLIES (Explain Unusual Circumstances)		E. DIAGNOSIS POINTER	F. $ CHARGES	G. DAYS UNITS	H. EPSDT FAMILY	I. ID. QUAL.	J. RENDERING PROVIDER ID. #
FROM MM	DD	YY	TO MM	DD	YY			CPT/HCPCS	MODIFIER						
1 07	19	XX	07	19	XX	22		33208		A	2400 00	1		NPI	0405891109
2														NPI	
3														NPI	
4														NPI	
5														NPI	
6														NPI	

25. FEDERAL TAX I.D. NUMBER	SSN	EIN	26. PATIENT'S ACCOUNT NO.	27. ACCEPT ASSIGNMENT?	28. TOTAL CHARGE	29. AMOUNT PAID	30. Rsvd for Nuccc Use
99 7653456		X	XXXXX	X YES ☐ NO	$ 2400 00	$ 0 00	

31. SIGNATURE OF PHYSICIAN OR SUPPLIER INCLUDING DEGREES OR CREDENTIALS (I certify that the statements on the reverse apply to this bill and are made a part thereof.) LAURA K KNOTT MD XX XX XX	32. SERVICE FACILITY LOCATION INFORMATION	33. BILLING PROVIDER INFO & PH # (970)5551111 MEDICAL CARE CENTER 100 SOUTH MAIN BROWN CO 800019898
SIGNED DATE	a. b.	a. 0665544004 b.

Practice Exercise 25-5

1. **J15.0** Pneumonia, Klebsiella

2. **J20.2** Bronchitis, pneumococcal, acute or subacute

3. **J32.0** Sinusitis, maxillary

4. **J44.1** Bronchitis, asthmatic, chronic, with, exacerbation (acute)

5. **J80** Syndrome, respiratory, distress, acute

6. **J96.20** Failure, respiratory, acute and chronic

MEDICARE

HEALTH INSURANCE CLAIM FORM
APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE (NUCC) 02/12

600 GRANT STREET
DENVER, CO 802034791

PICA		PICA

1. MEDICARE [X] (Medicare #) MEDICAID (Medicaid#) TRICARE (ID# DoD#) CHAMPVA (Member ID #) GROUP HEALTH PLAN (ID#) FECA BLK LUNG (ID#) OTHER (ID#)

1a. INSURED'S I.D. NUMBER (For Program in Item 1)
325001926A

2. PATIENT'S NAME (Last Name, First Name, Middle Initial)
SANCHEZ MARCO P

3. PATIENT'S BIRTH DATE   SEX
MM 08 DD 21 YY 1937   M [X] F

4. INSURED'S NAME (Last Name, First Name, Middle Initial)

5. PATIENT'S ADDRESS (No., Street)
2621 KINGS COURT
CITY BROWN   STATE CO
ZIP CODE 80001   TELEPHONE (Include Area Code) (970) 5551643

6. PATIENT RELATIONSHIP TO INSURED
Self [X] Spouse Child Other

7. INSURED'S ADDRESS (No., Street)
CITY   STATE
ZIP CODE   TELEPHONE (Include Area Code) ( )

8. RESERVED FOR NUCC USE

9. OTHER INSURED'S NAME (Last Name, First Name, Middle Initial)

a. OTHER INSURED'S POLICY OR GROUP NUMBER

b. RESERVED FOR NUCC USE

c. RESERVED FOR NUCC USE

d. INSURANCE PLAN NAME OR PROGRAM NAME

10. IS PATIENT'S CONDITION RELATED TO:

a. EMPLOYMENT? (Current or Previous) YES [X] NO

b. AUTO ACCIDENT? YES [X] NO PLACE (State)

c. OTHER ACCIDENT? YES [X] NO

10d. CLAIM CODES (Designated by NUCC)

11. INSURED'S POLICY GROUP OR FECA NUMBER
NONE

a. INSURED'S DATE OF BIRTH   SEX
MM DD YY   M F

b. OTHER CLAIM ID (Designated by NUCC)

c. INSURANCE PLAN NAME OR PROGRAM NAME

d. IS THERE ANOTHER HEALTH BENEFIT PLAN?
YES NO If yes, complete items 9, 9a and 9d.

READ BACK OF FORM BEFORE COMPLETING & SIGNING THIS FORM.

12. PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE. I authorize the release of any medical or other information necessary to process this claim. I also request payment of government benefits either to myself or to the party who accepts assignment below.
SIGNED SIGNATURE ON FILE   DATE XX XX XX

13. INSURED'S OR AUTHORIZED PERSON'S SIGNATURE I authorize payment of medical benefits to the undersigned physician or supplier for services described below.
SIGNED SIGNATURE ON FILE

14. DATE OF CURRENT ILLNESS INJURY or PREGNANCY (LMP)
MM 11 DD 03 YY XX QUAL. 431

15. OTHER DATE QUAL. MM DD YY

16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION
FROM MM DD YY TO MM DD YY

17. NAME OF REFERRING PROVIDER OR OTHER SOURCE
17a.
17b. NPI

18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES
FROM MM DD YY TO MM DD YY

19. RESERVED FOR LOCAL USE

20. OUTSIDE LAB? YES [X] NO $ CHARGES

21. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY Relate A-L to service line below (24E)   ICD Ind. 0
A. J9620 B. C. D.
E. F. G. H.
I. J. K. L.

22. RESUBMISSION CODE   ORIGINAL REF. NO.

23. PRIOR AUTHORIZATION NUMBER

24. A. DATE(S) OF SERVICE FROM MM DD YY	TO MM DD YY	B. PLACE OF SERVICE	C. EMG	D. PROCEDURES, SERVICES, OR SUPPLIES (Explain Unusual Circumstances) CPT/HCPCS MODIFIER	E. DIAGNOSIS POINTER	F. $ CHARGES	G. DAYS UNITS	H. EPSDT FAMILY	I. ID. QUAL.	J. RENDERING PROVIDER ID. #
1	11 03 XX	11 03 XX	23		31603	A	1690 00	1			NPI
2											NPI
3											NPI
4											NPI
5											NPI
6											NPI

25. FEDERAL TAX I.D. NUMBER SSN EIN [X]
33 0457789

26. PATIENT'S ACCOUNT NO.
XXXXX

27. ACCEPT ASSIGNMENT?
[X] YES NO

28. TOTAL CHARGE
$ 1690 00

29. AMOUNT PAID
$ 0 00

30. Rsvd for Nucc Use

31. SIGNATURE OF PHYSICIAN OR SUPPLIER INCLUDING DEGREES OR CREDENTIALS (I certify that the statements on the reverse apply to this bill and are made a part thereof.)
CHRISTINE JONES MD   XX XX XX
SIGNED   DATE

32. SERVICE FACILITY LOCATION INFORMATION
WESTON HOSPITAL
2002 MEDICAL COURT
BROWN CO 800019898
a. 0755622355 b.

33. BILLING PROVIDER INFO & PH # (970)5551514
CHRISTINE JONES MD
1414 SWALLOW STREET
BROWN CO 800019898
a. 0203048901 b.

Lesson 26

Practice Exercise 26-1

1. **K12.1** Stomatitis (ulcerative)

2. **K25.0** Ulcer, prepyloric—*see* Ulcer, stomach; Ulcer, stomach, acute, with, hemorrhage

3. **K26.5** Ulcer, duodenum (peptic), chronic, with, perforation

4. **K35.2** Appendicitis, with, peritonitis

5. **K44.0** Hernia, hiatal, with, obstruction

6. **K21.9** Refulx, gastroesophageal

Practice Exercise 26-2

1. **K56.49** Impacted, bowel, colon, rectum

2. **K74.60** Cirrhosis, liver

3. **K91.1** Syndrome, dumping (postgastrectomy)

4. **K29.70** Gastritis

   K25.9 Ulcer, gastric—*see* Ulcer, stomach; Ulcer, stomach

   K26.9 Ulcer, duodenum

Practice Exercise 26-3

1. **L02.02** Boil (*see also* Furuncle, by site); Furuncle, chin

2. **L23.81** Eczema (*see also* Dermatitis); Dermatitis, due to, hair (cat)

3. **L29.0** Itch, perianal

4. **L55.9** Sunburn

5. **L65.9** Baldness (*see also* Alopecia); Alopecia

6. **L93.0** Lupus, erythematosus

7. **L89.322** Ulcer, pressure, stage 2, buttock; left buttock; stage 2

   I69.952 Sequelae, disease, cardiovascular hemiplegia; left dominant side

8. **L03.011** Paronychia (*see also* Cellulitis, digit); Cellulitis, digit, finger—*see* Cellulitis, finger; Cellulitis, finger; right finger

HEALTH INSURANCE CLAIM FORM

APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE (NUCC) 02/12

BLUE CROSS OF IOWA

PO BOX 1677
SIOUX CITY, IA 511021677

PICA								PICA	

1. MEDICARE (Medicare #) · MEDICAID (Medicaid#) · TRICARE (ID# DoD#) · CHAMPVA (Member ID #) · GROUP HEALTH PLAN **X** (ID#) · FECA BLK LUNG (ID#) · OTHER (ID#)

1a. INSURED'S I.D. NUMBER (For Program in Item 1)
3211010

2. PATIENT'S NAME (Last Name, First Name, Middle Initial)
TUCKER SALLY R

3. PATIENT'S BIRTH DATE
MM 11 DD 26 YY 1970 SEX M ☐ F **X**

4. INSURED'S NAME (Last Name, First Name, Middle Initial)
TUCKER SALLY R

5. PATIENT'S ADDRESS (No., Street)
1801 PETERSON COURT
CITY SPRINGTOWN   STATE CO
ZIP CODE 80002   TELEPHONE (Include Area Code) (970) 5553255

6. PATIENT RELATIONSHIP TO INSURED
Self **X** Spouse ☐ Child ☐ Other ☐

7. INSURED'S ADDRESS (No., Street)
1801 PETERSON COURT
CITY SPRINGTOWN   STATE CO
ZIP CODE 80002   TELEPHONE (Include Area Code) (970) 5553255

8. RESERVED FOR NUCC USE

9. OTHER INSURED'S NAME (Last Name, First Name, Middle Initial)
TUCKER GREGORY S

a. OTHER INSURED'S POLICY OR GROUP NUMBER
4024679

b. RESERVED FOR NUCC USE

c. RESERVED FOR NUCC USE

d. INSURANCE PLAN NAME OR PROGRAM NAME
MUTUAL LIFE

10. IS PATIENT'S CONDITION RELATED TO:

a. EMPLOYMENT? (Current or Previous) YES ☐ **X** NO

b. AUTO ACCIDENT? YES ☐ **X** NO   PLACE (State)

c. OTHER ACCIDENT? YES ☐ **X** NO

10d. CLAIM CODES (Designated by NUCC)

11. INSURED'S POLICY GROUP OR FECA NUMBER
BA1503

a. INSURED'S DATE OF BIRTH
MM 11 DD 26 YY 1970 SEX M ☐ F **X**

b. OTHER CLAIM ID (Designated by NUCC)

c. INSURANCE PLAN NAME OR PROGRAM NAME
BC OF IOWA

d. IS THERE ANOTHER HEALTH BENEFIT PLAN?
X YES NO *If yes, complete items 9, 9a and 9d.*

READ BACK OF FORM BEFORE COMPLETING & SIGNING THIS FORM.
12. PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE. I authorize the release of any medical or other information necessary to process this claim. I also request payment of government benefits either to myself or to the party who accepts assignment below.
SIGNED SIGNATURE ON FILE   DATE XX XX XX

13. INSURED'S OR AUTHORIZED PERSON'S SIGNATURE I authorize payment of medical benefits to the undersigned physician or supplier for services described below.
SIGNED SIGNATURE ON FILE

14. DATE OF CURRENT ILLNESS INJURY or PREGNANCY (LMP)
MM 03 DD 03 YY XX QUAL 431

15. OTHER DATE QUAL   MM DD YY

16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION
FROM MM DD YY 02 TO MM DD YY

17. NAME OF REFERRING PROVIDER OR OTHER SOURCE
17a.
17b. NPI

18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES
FROM MM DD YY TO MM DD YY

19. RESERVED FOR LOCAL USE

20. OUTSIDE LAB? YES ☐ **X** NO $ CHARGES

21. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY Relate A-L to service line below (24E)   ICD Ind. 0
A. L03011   B.   C.   D.
E.   F.   G.   H.
I.   J.   K.   L.

22. RESUBMISSION CODE   ORIGINAL REF. NO.

23. PRIOR AUTHORIZATION NUMBER

24. A. DATE(S) OF SERVICE FROM MM DD YY	TO MM DD YY	B. PLACE OF SERVICE	C. EMG	D. PROCEDURES, SERVICES, OR SUPPLIES (Explain Unusual Circumstances) CPT/HCPCS · MODIFIER	E. DIAGNOSIS POINTER	F. $ CHARGES	G. DAYS UNITS	H. EPSDT FAMILY	I. ID. QUAL.	J. RENDERING PROVIDER ID. #
1 03 03 XX	03 03 XX	11		99212	A	42 00	1		NPI	0199654321
2									NPI	
3									NPI	
4									NPI	
5									NPI	
6									NPI	

25. FEDERAL TAX I.D. NUMBER
99 9889009   SSN ☐ EIN **X**

26. PATIENT'S ACCOUNT NO.
XXXXX

27. ACCEPT ASSIGNMENT?
X YES NO ☐

28. TOTAL CHARGE
$ 42 00

29. AMOUNT PAID
$ 0 00

30. Rsvd for Nucc Use

31. SIGNATURE OF PHYSICIAN OR SUPPLIER INCLUDING DEGREES OR CREDENTIALS (I certify that the statements on the reverse apply to this bill and are made a part thereof.)
SCOTT OLSON MD
XX XX XX
SIGNED   DATE

32. SERVICE FACILITY LOCATION INFORMATION
a.   b.

33. BILLING PROVIDER INFO & PH # (970)5551010
THE WOMENS CLINIC
1200 CAROL LANE
BROWN CO 800014790
a. 0220332233   b.

Practice Exercise 26-4

1. **M25.512** Arthralgia (*see also* Pain, joint); Pain, joint, shoulder; left

2. **M50.20** Hernia, intervertebral cartilage or disc—*see* Displacement, intervertebral disc; Displacement, intervertebral disc, cervical

3. **M50.90** Calcification, intervertebral cartilage or disc—*see* Disorder, disc, specified; Disorder, disc, cervical

4. **M54.5** Pain, low back

5. **M23.201** Tear, meniscus, old—*see* Derangement, knee, meniscus, due to old tear; Derangement, knee, meniscus, due to old tear, medial, lateral; lateral, left knee

   M23.204 Derangement, knee, meniscus, due to old tear, medial, lateral; medial, left knee

Practice Exercise 26-5

1. **M60.073** Myositis, infective, lower limb, foot; right foot

2. **M65.30** Trigger finger (acquired)

3. **M71.151** Bursitis, infective, hip; right

4. **M80.872** Osteoporosis, idiopathic—*see* Osteoporosis, specified type NEC; Osteoporosis, specified type, metatarsus; left

5. **M76.62** Tendinitis, Achilles; left leg

Lesson 27

Practice Exercise 27-1

1. **N04.9** Nephritis, with, edema—*see* Nephrosis; Nephrosis

2. **N15.1** Carbuncle, kidney—*see* Abscess, kidney; Abscess, kidney

3. **N30.00** Cystitis, acute

   B96.20 Infection, bacterial, as cause of disease classified elsewhere, Escherichia coli

4. **N45.4** Abscess, testis

5. **N60.21** Fibroadenosis, breast (periodic); right

6. **N81.12** Prolapse, vaginal—*see* Cystocele; Cystocele, female, paravaginal

7. **N91.0** Amenorrhea, primary

8. **N21.1** Stone, urethra

MOUNTAIN STATES

HEALTH INSURANCE CLAIM FORM

APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE (NUCC) 02/12

1801 SW VINE STREET
DENVER, CO 802176789

PICA									PICA

1. MEDICARE	MEDICAID	TRICARE	CHAMPVA	GROUP HEALTH PLAN	FECA BLK LUNG	OTHER	1a. INSURED'S I.D. NUMBER	(For Program in Item 1)
(Medicare #)	(Medicaid#)	(ID# DoD#)	(Member ID #)	X (ID#)	(ID#)	(ID#)	7752	

2. PATIENT'S NAME (Last Name, First Name, Middle Initial)
FOX BENJAMIN K

3. PATIENT'S BIRTH DATE   MM 12 DD 02 YY 1980   SEX M X F

4. INSURED'S NAME (Last Name, First Name, Middle Initial)
FOX BENJAMIN K

5. PATIENT'S ADDRESS (No., Street)
1227 COMET DRIVE APT 68

6. PATIENT RELATIONSHIP TO INSURED
Self X Spouse Child Other

7. INSURED'S ADDRESS (No., Street)
1227 COMET DRIVE

CITY SPRINGTOWN   STATE CO

8. RESERVED FOR NUCC USE

CITY SPRINGTOWN   STATE CO

ZIP CODE 80002   TELEPHONE (Include Area Code) (970) 5551001

ZIP CODE 80002   TELEPHONE (Include Area Code) (970) 5551001

9. OTHER INSURED'S NAME (Last Name, First Name, Middle Initial)

10. IS PATIENT'S CONDITION RELATED TO:

11. INSURED'S POLICY GROUP OR FECA NUMBER
120

a. OTHER INSURED'S POLICY OR GROUP NUMBER

a. EMPLOYMENT? (Current or Previous)   YES X NO

a. INSURED'S DATE OF BIRTH MM 12 DD 02 YY 1980   SEX M X F

b. RESERVED FOR NUCC USE

b. AUTO ACCIDENT?   PLACE (State)   YES X NO

b. OTHER CLAIM ID (Designated by NUCC)

c. RESERVED FOR NUCC USE

c. OTHER ACCIDENT?   YES X NO

c. INSURANCE PLAN NAME OR PROGRAM NAME
MOUNTAIN STATES

d. INSURANCE PLAN NAME OR PROGRAM NAME

10d. CLAIM CODES (Designated by NUCC)

d. IS THERE ANOTHER HEALTH BENEFIT PLAN?   YES X NO If yes, complete items 9, 9a and 9d.

READ BACK OF FORM BEFORE COMPLETING & SIGNING THIS FORM.
12. PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE. I authorize the release of any medical or other information necessary to process this claim. I also request payment of government benefits either to myself or to the party who accepts assignment below.

SIGNED SIGNATURE ON FILE   DATE XX XX XX

13. INSURED'S OR AUTHORIZED PERSON'S SIGNATURE. I authorize payment of medical benefits to the undersigned physician or supplier for services described below.

SIGNED SIGNATURE ON FILE

14. DATE OF CURRENT ILLNESS INJURY or PREGNANCY (LMP) MM 02 DD 18 YY XX QUAL 431

15. OTHER DATE QUAL   MM DD YY

16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION FROM MM DD YY TO MM DD YY

17. NAME OF REFERRING PROVIDER OR OTHER SOURCE

17a.
17b. NPI

18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES FROM MM DD YY TO MM DD YY

19. RESERVED FOR LOCAL USE

20. OUTSIDE LAB?   YES X NO $ CHARGES

21. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY Relate A-L to service line below (24E)   ICD Ind. 0

A. N211   B. _____   C. _____   D. _____
E. _____   F. _____   G. _____   H. _____
I. _____   J. _____   K. _____   L. _____

22. RESUBMISSION CODE   ORIGINAL REF. NO.

23. PRIOR AUTHORIZATION NUMBER

24. A. DATE(S) OF SERVICE FROM			TO			B. PLACE OF SERVICE	C. EMG	D. PROCEDURES, SERVICES, OR SUPPLIES (Explain Unusual Circumstances) CPT/HCPCS MODIFIER	E. DIAGNOSIS POINTER	F. $ CHARGES	G. DAYS UNITS	H. EPSDT FAMILY	I. ID. QUAL.	J. RENDERING PROVIDER ID. #
MM	DD	YY	MM	DD	YY									
1 02	18	XX	02	18	XX	22		52352	A	1661 00	1		NPI	
2													NPI	
3													NPI	
4													NPI	
5													NPI	
6													NPI	

25. FEDERAL TAX I.D. NUMBER 47 9823559   SSN EIN X

26. PATIENT'S ACCOUNT NO. XXXXX

27. ACCEPT ASSIGNMENT? X YES NO

28. TOTAL CHARGE $ 1661 00

29. AMOUNT PAID $ 0 00

30. Rsvd for Nucc Use

31. SIGNATURE OF PHYSICIAN OR SUPPLIER INCLUDING DEGREES OR CREDENTIALS (I certify that the statements on the reverse apply to this bill and are made a part thereof.)
GREG NORTH MD
XX XX XX
SIGNED   DATE

32. SERVICE FACILITY LOCATION INFORMATION
WESTON HOSPITAL
2002 MEDICAL COURT
BROWN CO 800019898
a. 0755622355 b.

33. BILLING PROVIDER INFO & PH # (970)5552222
GREG NORTH
800 MEDICAL COURT
BROWN CO 800019898
a. 0405674390 b.

Practice Exercise 27-2

1. **O00.2** Pregnancy, ovarian

2. **O03.9** Miscarriage

   Z3A.12 Pregnancy, weeks of gestation, 12 weeks

3. **O21.0** Hyperemesis, gravidarum

   Z3A.19 Pregnancy, weeks of gestation, 19 weeks

4. **O30.032** Pregnancy, twin, monochorionic/diamniotic; second trimester

   Z3A.24 Pregnancy, weeks of gestation, 24 weeks

Practice Exercise 27-3

1. **O34.210** Delivery, vaginal, following a previous cesarean delivery; single gestation

   Z37.0 Outcome of delivery, single, liveborn

   Z3A.38 Pregnancy, weeks of gestation, 38 weeks

2. **O44.13** Previa, placenta (partial) (with hemorrhage); third trimester

   Z3A.30 Pregnancy, weeks of gestation, 30 weeks

3. **O70.2** Delivery, complicated, by, laceration, perineum, third degree

   Z37.0 Outcome of delivery, single, liveborn

   Z3A.40 Pregnancy, weeks of gestation, 40 weeks

4. **O88.83** Embolism, pulmonary, in pregnancy, childbirth or puerperium—*see* Embolism, obstetric; Embolism, obstetric, puerperal

5. **O92.13** Cracked nipple, associated with, lactation

6. **O80** Delivery, normal

   Z37.0 Outcome of delivery, single, liveborn

   Z3A.38 Pregnancy, weeks of gestation, 38 weeks

Practice Exercise 27-4

1. **Z38.00** Newborn, born in hospital

   P05.10 Small, for gestational age—*see* Small for dates; Small-for-dates

   P04.3 Newborn, affected by, maternal (use of), alcohol

2. **Z38.31** Newborn, twin, born in hospital, by cesarean

   P07.35 Preterm, newborn, gestation age, 32 completed weeks

3. **Z38.01** Newborn, born in hospital, by cesarean

   P07.38 Preterm, newborn, less than 35 completed weeks—*see* Preterm, newborn; Preterm, newborn, gestation age, 35 completed weeks

   P84 Distress, fetal

4. **Z38.00** Newborn, born in hospital

   P08.1 Large, baby (4000g to 4499g)

5. **P22.0** Syndrome, respiratory, distress, newborn

   P05.14 Small-for-dates, with weight of, 1000-1249 grams

   P61.0 Thrombocytopenia, neonatal, transitory

   P00.0 Newborn, affected by, maternal, hypertensive disorder

Lesson 28

Practice Exercise 28-1

1. **Q05.7** Spina bifida, lumbar

2. **Q11.2** Hypoplasia, eye

3. **Q16.0** Absence, ear, congenital, external

4. **Q21.0** Disease, Roger's

5. **Q22.3** Fallot's, triad or trilogy

6. **Q27.0** Single, umbilical artery

Practice Exercise 28-2

1. **Q33.0** Honeycomb lung, congenital

2. **Q37.9** Cleft, palate, with cleft lip (unilateral)

3. **Q51.2** Double, uterus

4. **Q17.8** Dysplasia (*see also* Anomaly); Anomaly, auricle, ear

    Q76.49 Anomaly, vertebra

    Q71.892 Hypoplasia, finger (congenital)—*see* Defect, reduction, upper limb, specified type NEC; Defect, reduction, limb, upper, specified type; left

    Q71.812 Short, arm, congenital; left

    Q24.9 Disease, heart, congenital

Practice Exercise 28-3

1. **R03.0** Elevated, blood pressure, reading, no diagnosis of hypertension

2. **R07.89** Discomfort, chest

3. **R20.0** Numbness

4. **R29.818** Monoplegia, transient

Practice Exercise 28-4

1. **R40.3** State, vegetative, persistent

2. **R50.9** Pyrexia (of unknown origin)

3. **R53.83** Lethargy

4. **R87.619** Abnormal, papanicolaou, cervix

5. **R07.89** Pain, pleuritic

   R50.82 Fever, postoperative

MEDLINK

HEALTH INSURANCE CLAIM FORM

APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE (NUCC) 02/12

PO BOX 560
BROWN, CO 800010560

									PICA

| | | | | | | | | | PICA | |

1. MEDICARE	MEDICAID	TRICARE	CHAMPVA	GROUP HEALTH PLAN	FECA BLK LUNG	OTHER	1a. INSURED'S I.D. NUMBER (For Program in Item 1)
(Medicare #)	(Medicaid#)	(ID# DoD#)	(Member ID #)	X (ID#)	(ID#)	(ID#)	52960

2. PATIENT'S NAME (Last Name, First Name, Middle Initial)	3. PATIENT'S BIRTH DATE MM DD YY	SEX	4. INSURED'S NAME (Last Name, First Name, Middle Initial)
BLOOM RICHARD M	03 10 1977	M X F	BLOOM RICHARD M

5. PATIENT'S ADDRESS (No., Street)	6. PATIENT RELATIONSHIP TO INSURED	7. INSURED'S ADDRESS (No., Street)
409 YORKSHIRE COURT	Self X Spouse Child Other	409 YORKSHIRE COURT

CITY	STATE	8. RESERVED FOR NUCC USE	CITY	STATE
BROWN	CO		BROWN	CO

ZIP CODE	TELEPHONE (Include Area Code)		ZIP CODE	TELEPHONE (Include Area Code)
80001	(970) 5555875		80001	(970) 5555875

9. OTHER INSURED'S NAME (Last Name, First Name, Middle Initial)	10. IS PATIENT'S CONDITION RELATED TO:	11. INSURED'S POLICY GROUP OR FECA NUMBER
		WB02

a. OTHER INSURED'S POLICY OR GROUP NUMBER	a. EMPLOYMENT? (Current or Previous) YES X NO	a. INSURED'S DATE OF BIRTH MM 03 DD 10 YY 1977 SEX M X F

b. RESERVED FOR NUCC USE	b. AUTO ACCIDENT? YES X NO PLACE (State)	b. OTHER CLAIM ID (Designated by NUCC)

c. RESERVED FOR NUCC USE	c. OTHER ACCIDENT? YES X NO	c. INSURANCE PLAN NAME OR PROGRAM NAME MEDLINK

d. INSURANCE PLAN NAME OR PROGRAM NAME	10d. CLAIM CODES (Designated by NUCC)	d. IS THERE ANOTHER HEALTH BENEFIT PLAN? YES X NO If yes, complete items 9, 9a and 9d.

READ BACK OF FORM BEFORE COMPLETING & SIGNING THIS FORM.

12. PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE. I authorize the release of any medical or other information necessary to process this claim. I also request payment of government benefits either to myself or to the party who accepts assignment below.

SIGNED SIGNATURE ON FILE   DATE XX XX XX

13. INSURED'S OR AUTHORIZED PERSON'S SIGNATURE I authorize payment of medical benefits to the undersigned physician or supplier for services described below.

SIGNED SIGNATURE ON FILE

14. DATE OF CURRENT ILLNESS INJURY or PREGNANCY (LMP) MM 01 DD 27 YY XX QUAL 431	15. OTHER DATE MM DD YY QUAL	16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION MM DD YY MM DD YY FROM TO

17. NAME OF REFERRING PROVIDER OR OTHER SOURCE	17a. 17b. NPI	18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES MM DD YY MM DD YY FROM TO

19. RESERVED FOR LOCAL USE		20. OUTSIDE LAB? YES X NO $ CHARGES

21. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY Relate A-L to service line below (24E)   ICD Ind. 0

A. R0789	B. R5082	C.	D.
E.	F.	G.	H.
I.	J.	K.	L.

22. RESUBMISSION CODE   ORIGINAL REF. NO.

23. PRIOR AUTHORIZATION NUMBER

24. A. DATE(S) OF SERVICE		B. PLACE OF SERVICE	C. EMG	D. PROCEDURES, SERVICES, OR SUPPLIES (Explain Unusual Circumstances)		E. DIAGNOSIS POINTER	F. $ CHARGES	G. DAYS UNITS	H. EPSDT FAMILY	I. ID. QUAL.	J. RENDERING PROVIDER ID. #
FROM MM DD YY	TO MM DD YY			CPT/HCPCS	MODIFIER						
01 27 XX	01 27 XX	23		99283		AB	125 00	1		NPI	
										NPI	
										NPI	
										NPI	
										NPI	
										NPI	

25. FEDERAL TAX I.D. NUMBER 47 9823559	SSN EIN X	26. PATIENT'S ACCOUNT NO.	27. ACCEPT ASSIGNMENT? X YES NO	28. TOTAL CHARGE $ 125 00	29. AMOUNT PAID $ 20 00	30. Rsvd for Nuccc Use

31. SIGNATURE OF PHYSICIAN OR SUPPLIER INCLUDING DEGREES OR CREDENTIALS (I certify that the statements on the reverse apply to this bill and are made a part thereof.) GREG NORTH MD XX XX XX	32. SERVICE FACILITY LOCATION INFORMATION WESTON HOSPITAL 2002 MEDICAL COURT BROWN CO 800019898	33. BILLING PROVIDER INFO & PH # (970)5552222 GREG NORTH MD 800 MEDICAL COURT BROWN CO 800019898
SIGNED DATE	a. 0755622355 b.	a. 0405674390 b.

Lesson 29

Practice Exercise 29-1

1. Alyssa was at school playing on the monkey bars and came home with blisters on both hands. **Superficial Injury**

2. While landscaping his yard, Jim strained his hamstring. **Injury to Muscle, Fascia, Tendon**

3. Patty was brought in to the emergency department after being pinched between her fence and car. **Crushing Injury**

4. While playing soccer, Michaela tripped over the ball and broke her wrist when she landed on her hand. **Fracture**

5. Tom was running in a field and caught his foot on a root, causing him to fall. He tore the ligaments in his ankle and partially displaced his shoulder. **Subluxation and Sprain**

6. Kyle was running in to the house without shoes and caught his foot on a metal strip, puncturing the top of the foot. He was taken to urgent care and received five stitches to close the wound. **Open Wound**

Practice Exercise 29-2

1. **S02.2XXA** Fracture, traumatic, nose; initial encounter for closed fracture

   S00.12XA Black, eye; left eyelid and periocular area; initial encounter

   S00.83XA Contusions, face NEC; initial encounter

2. **S02.3XXA** Fracture, traumatic, orbit, orbital, floor (blow-out); initial encounter for closed fracture

3. **S05.71XA** Enucleated eye (traumatic, current); right eye; initial encounter

   S01.81XA Lacerations, forehead; initial encounter

4. **S06.6X7A** Hemorrhage, intracranial, traumatic—*see* Injury, intracranial, focal brain injury; Injury, intracranial, subarachnoid hemorrhage, traumatic; with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness; initial encounter

   S02.91XB Fracture, traumatic, skull; initial encounter for open fracture

5. **S12.000A** Fracture, traumatic, neck, cervical vertebra, first; initial encounter for closed fracture

   S12.100A Fracture, traumatic, neck, cervical vertebra, second; initial encounter for closed fracture

   S12.200A Fracture, traumatic, neck, cervical vertebra, third; initial encounter for closed fracture

   S12.300A Fracture, traumatic, neck, cervical vertebra, fourth; initial encounter for closed fracture

   S14.113A Injury, spinal (cord), cervical, complete lesion, C3 level; initial encounter

   R29.5 Paralysis, transient

6. **S23.153A** Dislocation, vertebra (traumatic), lumbar, joint between T9 and T10; initial encounter

7. **S42.031A** Fracture, traumatic, clavicle, acromial end (displaced); right clavicle; initial encounter for closed fracture

   S43.101A Dislocation, acromioclavicular (joint); right acromioclavicular joint; initial encounter

8. **S56.222A** Laceration, tendon—*see* Injury, muscle, by site, laceration; Injury, muscle, forearm, flexor, laceration; left arm; initial encounter

   S51.812A Wound, open, forearm, laceration—*see* Laceration, forearm; Laceration, forearm, left; initial encounter

9. **S72.352B** Fracture, traumatic, femur, shaft, comminuted; left femur; initial encounter for open fracture NOS

   S75.102A Avulsion, blood vessel—*see* Injury, blood vessel; Injury, blood vessel, femoral, vein; left leg; initial encounter

   S71.102A Wound, open, thigh; left thigh; initial encounter

10. **S82.51XB** Fracture, traumatic, malleolus—*see* Fracture, ankle; Fracture, ankle, medial malleolus; right tibia; initial encounter for open fracture NOS

    S97.01XA Crush, ankle; right ankle; initial encounter

11. **S90.821D** Blister, heel—*see* Blister, foot; Blister, foot *S90.82*-; right foot; subsequent encounter

12. **S93.514A** Rupture, traumatic, ligament (*see also* Sprain); Sprain, toe, interphalangeal joint; right lesser toe; initial encounter

13. **S01.81XA** Laceration, forehead; initial encounter

MOUNTAIN STATES

1801 SW VINE STREET
DENVER, CO 802176789

HEALTH INSURANCE CLAIM FORM

APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE (NUCC) 02/12

| | PICA | | | | | | | | PICA | |

1. MEDICARE   MEDICAID   TRICARE   CHAMPVA   GROUP HEALTH PLAN   FECA BLK LUNG   OTHER
(Medicare #)   (Medicaid#)   (ID# DoD#)   (Member ID #)   [X] (ID#)   (ID#)   (ID#)

1a. INSURED'S I.D. NUMBER   (For Program in Item 1)
345678

2. PATIENT'S NAME (Last Name, First Name, Middle Initial)
GIBBS STEVE K

3. PATIENT'S BIRTH DATE   MM DD YY   SEX
08 10 2010   M [X]   F

4. INSURED'S NAME (Last Name, First Name, Middle Initial)
GIBBS MICHAEL A

5. PATIENT'S ADDRESS (No., Street)
1343 OVAL STREET

6. PATIENT RELATIONSHIP TO INSURED
Self   Spouse   Child [X]   Other

7. INSURED'S ADDRESS (No., Street)
1343 OVAL STREET

CITY
WINDSOR   STATE CO

8. RESERVED FOR NUCC USE

CITY
WINDSOR   STATE CO

ZIP CODE
80520   TELEPHONE (Include Area Code) (970) 5557643

ZIP CODE
80520   TELEPHONE (Include Area Code) (970) 5557643

9. OTHER INSURED'S NAME (Last Name, First Name, Middle Initial)

10. IS PATIENT'S CONDITION RELATED TO:

11. INSURED'S POLICY GROUP OR FECA NUMBER
420

a. OTHER INSURED'S POLICY OR GROUP NUMBER

a. EMPLOYMENT? (Current or Previous)
YES   [X] NO

a. INSURED'S DATE OF BIRTH   MM DD YY   SEX
02 11 1979   M [X]   F

b. RESERVED FOR NUCC USE

b. AUTO ACCIDENT?   PLACE (State)
YES   [X] NO

b. OTHER CLAIM ID (Designated by NUCC)

c. RESERVED FOR NUCC USE

c. OTHER ACCIDENT?
YES   [X] NO

c. INSURANCE PLAN NAME OR PROGRAM NAME
MOUNTAIN STATES

d. INSURANCE PLAN NAME OR PROGRAM NAME

10d. CLAIM CODES (Designated by NUCC)

d. IS THERE ANOTHER HEALTH BENEFIT PLAN?
YES   [X] NO   If yes, complete items 9, 9a and 9d.

READ BACK OF FORM BEFORE COMPLETING & SIGNING THIS FORM.

12. PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE I authorize the release of any medical or other information necessary to process this claim. I also request payment of government benefits either to myself or to the party who accepts assignment below.

SIGNED   SIGNATURE ON FILE   DATE XX XX XX

13. INSURED'S OR AUTHORIZED PERSON'S SIGNATURE I authorize payment of medical benefits to the undersigned physician or supplier for services described below.

SIGNED   SIGNATURE ON FILE

14. DATE OF CURRENT ILLNESS INJURY or PREGNANCY (LMP)   MM DD YY
09 18 XX   QUAL 431

15. OTHER DATE   MM DD YY
QUAL

16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION   MM DD YY   MM DD YY
FROM   TO

17. NAME OF REFERRING PROVIDER OR OTHER SOURCE

17a.
17b. NPI

18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES   MM DD YY   MM DD YY
FROM   TO

19. RESERVED FOR LOCAL USE

20. OUTSIDE LAB? $ CHARGES
YES   [X] NO

21. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY Relate A-L to service line below (24E)   ICD Ind. 0

A. S0181XA   B.   C.   D.
E.   F.   G.   H.
I.   J.   K.   L.

22. RESUBMISSION CODE   ORIGINAL REF. NO.

23. PRIOR AUTHORIZATION NUMBER

| 24. A. DATE(S) OF SERVICE FROM | | | TO | | | B. PLACE OF SERVICE | C. EMG | D. PROCEDURES, SERVICES, OR SUPPLIES (Explain Unusual Circumstances) CPT/HCPCS   MODIFIER | E. DIAGNOSIS POINTER | F. $ CHARGES | G. DAYS UNITS | H. EPSDT FAMILY | I. ID. QUAL | J. RENDERING PROVIDER ID. # |
MM	DD	YY	MM	DD	YY									
09	18	XX	09	18	XX	23		12011	A	113 00	1		NPI	
													NPI	
													NPI	
													NPI	
													NPI	
													NPI	

25. FEDERAL TAX I.D. NUMBER   SSN   EIN
21 5432987   [X]

26. PATIENT'S ACCOUNT NO.
XXXXX

27. ACCEPT ASSIGNMENT?
[X] YES   NO

28. TOTAL CHARGE
$ 113 00

29. AMOUNT PAID
$ 20 00

30. Rsvd for Nucc Use

31. SIGNATURE OF PHYSICIAN OR SUPPLIER INCLUDING DEGREES OR CREDENTIALS (I certify that the statements on the reverse apply to this bill and are made a part thereof.)
ERIC SULLIMAN MD XX XX XX

SIGNED   DATE

32. SERVICE FACILITY LOCATION INFORMATION
WESTON HOSPITAL
2002 MEDICAL COURT
BROWN CO 800019898
a. 0755622355   b.

33. BILLING PROVIDER INFO & PH #   (970)5551717
ERIC SULLIMAN MD
1000 MAIN STREET
BROWN CO 800019898
a. 0377484809   b.

Practice Exercise 29-3

1. **T24.212A** Burn, thigh, left, second degree; initial encounter

   T21.24XA Burn, back (lower), second degree; initial encounter

   T31.10 Burn, extent (percentage of body surface), 10-19 percent, with 0-9 percent third degree burns

2. **T42.3X1A** *Table of Drugs*: Barbiturate NEC, Poisoning, Accidental; initial encounter

3. **T52.92XA** *Table of Drugs*: Nail polish remover, Poisoning, Intentional Self-harm; initial encounter

4. **T19.2XXA** Foreign body, entering through orifice, vagina; initial encounter

5. **T15.01XA** Foreign body, cornea; right eye; initial encounter

6. **T22.211A** Burn, forearm, right, second degree; initial encounter

   T31.0 Burn, extent (percentage of body surface), less than 10 percent

Practice Exercise 29-4

1. **S63.502A** Sprain, wrist; left wrist; initial encounter

   V00.131A *External Causes*: Accident, transport, pedestrian, conveyance, skate board, fall; initial encounter

   Y92.830 *External Causes*: Place of occurrence, park

   Y93.51 *External Causes*: Activity, skateboarding

   Y99.8 *External Causes*: External cause status, leisure activity

2. **T24.302A** Burn, legs—*see* Burn, lower, limb; Burn, lower, limb, left, third degree; initial encounter

   T24.301A Burn, lower, limb; Burn, lower, limb, right, third degree; initial encounter

   T31.33 Burn, extent, 30-39 percent, with 30-39 percent third degree burns

   V81.81XA *External Causes*: Accident, transport, railway vehicle occupant, explosion; initial encounter

   Y92.85 *External Causes*: Place of occurrence, railway line

   Y99.9 *External Causes*: External cause status

3. **S30.1XXA** Contusion, abdomen; initial encounter

   V43.62XA *External Causes*: Accident, transport, car occupant, passenger, collision (with), car; initial encounter

   Y92.411 *External Causes*: Place of occurrence, highway

   Y99.9 *External Causes*: External cause status

4. **S52.501D** Fracture, traumatic, radius, distal end—*see* Fracture, radius, lower end; Fracture, traumatic, radius, lower end; right radius; subsequent encounter for fracture with routine healing

   W18.2XXD *External Causes*: Fall, in, on, shower; subsequent encounter

   Note: Place of occurrence and activity code are only assigned at the initial encounter for treatment.

5. **T24.231A** Burn, calf, right, second degree; initial encounter

   T31.10 Burn, extent, 10-19 percent, with 0-9 percent third degree burns

   X16.XXXA *External Causes*: Burn, heating, appliance, radiator or pipe; initial encounter

   Y99.9 *External Causes*: External cause status

Lesson 30

Practice Exercise 30-1

1. **Z23** Vaccination, encounter for

2. **O80** Delivery, normal

   Z37.0 Outcome of delivery, single NEC, liveborn

3. **C79.31** Carcinoma (*see also* Neoplasm, malignant, by site); *Neoplasm Table*: Neoplasm, brain NEC, Malignant Secondary

   Z85.3 History, personal (of), malignant neoplasm (of), breast

4. **R07.9** Pain, chest

   Z98.89 Status, postsurgical NEC

5. **Z00.129** Examination, child (over 28 days old)

   Z23 Vaccination, encounter for

6. **Z01.419** Examination, gynecological

BLUE CROSS OF COLORADO

HEALTH INSURANCE CLAIM FORM

APPROVED BY NATIONAL UNIFORM CLAIM COMMITTEE (NUCC) 02/12

PO BOX 99
YAMPA, CO 800042299

			PICA					PICA		

1. MEDICARE	MEDICAID	TRICARE	CHAMPVA	GROUP HEALTH PLAN	FECA BLK LUNG	OTHER	1a. INSURED'S I.D. NUMBER (For Program in Item 1)
(Medicare #)	(Medicaid#)	(ID# DoD#)	(Member ID #)	X (ID#)	(ID#)	(ID#)	768311900

2. PATIENT'S NAME (Last Name, First Name, Middle Initial)
NILES THERESA K

3. PATIENT'S BIRTH DATE — MM 11 DD 16 YY 1977 — SEX M / F X

4. INSURED'S NAME (Last Name, First Name, Middle Initial)
NILES THERESA K

5. PATIENT'S ADDRESS (No., Street)
2777 LINCOLN AVENUE

6. PATIENT RELATIONSHIP TO INSURED
Self X   Spouse   Child   Other

7. INSURED'S ADDRESS (No., Street)
2777 LINCOLN AVENUE

CITY YAMPA   STATE CO

8. RESERVED FOR NUCC USE

CITY YAMPA   STATE CO

ZIP CODE 80004   TELEPHONE (Include Area Code) (970) 5559111

ZIP CODE 80004   TELEPHONE (Include Area Code) (970) 5559111

9. OTHER INSURED'S NAME (Last Name, First Name, Middle Initial)
NILES GARY T

10. IS PATIENT'S CONDITION RELATED TO:

11. INSURED'S POLICY GROUP OR FECA NUMBER
318

a. OTHER INSURED'S POLICY OR GROUP NUMBER
3840848

a. EMPLOYMENT? (Current or Previous)   YES   X NO

a. INSURED'S DATE OF BIRTH — MM 11 DD 16 YY 1977 — SEX M / F X

b. RESERVED FOR NUCC USE

b. AUTO ACCIDENT?   YES   X NO   PLACE (State)

b. OTHER CLAIM ID (Designated by NUCC)

c. RESERVED FOR NUCC USE

c. OTHER ACCIDENT?   YES   X NO

c. INSURANCE PLAN NAME OR PROGRAM NAME
BC OF COLORADO

d. INSURANCE PLAN NAME OR PROGRAM NAME
NET LIFE

10d. CLAIM CODES (Designated by NUCC)

d. IS THERE ANOTHER HEALTH BENEFIT PLAN?
X YES   NO   If yes, complete items 9, 9a and 9d.

READ BACK OF FORM BEFORE COMPLETING & SIGNING THIS FORM.
12. PATIENT'S OR AUTHORIZED PERSON'S SIGNATURE. I authorize the release of any medical or other information necessary to process this claim. I also request payment of government benefits either to myself or to the party who accepts assignment below.

SIGNED SIGNATURE ON FILE   DATE XX XX XX

13. INSURED'S OR AUTHORIZED PERSON'S SIGNATURE I authorize payment of medical benefits to the undersigned physician or supplier for services described below.

SIGNED SIGNATURE ON FILE

14. DATE OF CURRENT ILLNESS INJURY or PREGNANCY (LMP) — MM 08 DD 18 YY XX   QUAL 431

15. OTHER DATE — QUAL   MM DD YY

16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION — FROM MM DD YY 02   TO MM DD YY

17. NAME OF REFERRING PROVIDER OR OTHER SOURCE

17a.
17b. NPI

18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES — FROM MM DD YY   TO MM DD YY

19. RESERVED FOR LOCAL USE

20. OUTSIDE LAB?   YES   X NO $ CHARGES

21. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY Relate A-L to service line below (24E)   ICD Ind. 0

A. Z01419   B.   C.   D.
E.   F.   G.   H.
I.   J.   K.   L.

22. RESUBMISSION CODE   ORIGINAL REF. NO.

23. PRIOR AUTHORIZATION NUMBER

24. A. DATE(S) OF SERVICE FROM			TO			B. PLACE OF SERVICE	C. EMG	D. PROCEDURES, SERVICES, OR SUPPLIES (Explain Unusual Circumstances) CPT/HCPCS MODIFIER				E. DIAGNOSIS POINTER	F. $ CHARGES	G. DAYS UNITS	H. EPSDT FAMILY	I. ID. QUAL.	J. RENDERING PROVIDER ID. #
MM	DD	YY	MM	DD	YY												
08	18	XX	08	18	XX	11		99385				A	78 00	1		NPI	0188123456
																NPI	
																NPI	
																NPI	
																NPI	
																NPI	

25. FEDERAL TAX I.D. NUMBER   99 9889009   SSN   EIN X

26. PATIENT'S ACCOUNT NO.   XXXXX

27. ACCEPT ASSIGNMENT?   X YES   NO

28. TOTAL CHARGE $ 78 00

29. AMOUNT PAID $ 0 00

30. Rsvd for Nuccc Use

31. SIGNATURE OF PHYSICIAN OR SUPPLIER INCLUDING DEGREES OR CREDENTIALS (I certify that the statements on the reverse apply to this bill and are made a part thereof.)
JOYCE HART MD
XX XX XX
SIGNED   DATE

32. SERVICE FACILITY LOCATION INFORMATION

a.   b.

33. BILLING PROVIDER INFO & PH # (970)5551010
THE WOMENS CLINIC
1200 CAROL LANE
BROWN CO 800014790
a. 0220332233   b.

Practice Exercise 30-2

T81.4XXA Infection, postoperative wound; initial encounter

Practice Exercise 30-3

E11.319 Diabetes, type 2, with, retinopathy

Z79.4 Long-term drug therapy, insulin

Practice Exercise 30-4

J18.9 Pneumonia

Practice Exercise 30-5

M46.96 Spondylopathy, inflammatory, lumbar region

M51.26 Protrusion, intervertebral disc—*see* Displacement, intervertebral disc; Displacement, intervertebral disc, lumbar region

Practice Exercise 30-6

M05.771 Arthritis, rheumatoid, seropositive, specified, ankle; right

M24.871 Destruction, joint (*see also* Derangement, joint, specified type NEC); Derangement, joint, specified type, ankle; right ankle

M84.48XG Fracture, pathological, rib; subsequent encounter for fracture with delayed healing

M81.0 Osteoporosis

Z79.52 Long-term drug therapy, steroids, systemic

Practice Exercise 30-7

E11.40 Diabetes, type 2, with, neuropathy

I69.90 Late effect(s)—*see* Sequelae; Sequelae (of), disease, cerebrovascular

Z79.4 Long-term drug therapy, insulin

Practice Exercise 30-8

S42.202A Fracture, traumatic, humerus, proximal—*see* Fracture, humerus, upper end; Fracture, traumatic, humerus, upper end; left; initial encounter for closed fracture

S72.002A Fracture, femur, neck—*see* Fracture, femur, upper end, neck; Fracture, traumatic, femur, upper end, neck; left; initial encounter for closed fracture

W19.XXXA *External Cause*: Fall; initial encounter

Y92.009 *External Cause*: Place of occurrence, home

Y99.9 *External Cause*: External cause status

Practice Exercise 30-9

D72.829 Leukocytosis

Practice Exercise 30-10

K64.8 Hemorrhoids, internal

Practice Exercise 30-11

S83.212A Tear, meniscus, medial, bucket-handle; left; initial encounter

S83.262A Tear, meniscus, lateral, peripheral; left; initial encounter

Medical Coding and Billing Specialist