



Healthcare Office Manager

Instruction Pack 1

Lessons 1-8

Explore the possibilities

0204900LB01B-22



**U.S. Career
Institute**SM
Dream › Learn › SucceedSM

Healthcare Office Manager

Instruction Pack 1

- Lesson 1: Welcome to the World of Health Care**
- Lesson 2: The Frontline: The Medical Front Office**
- Lesson 3: Introduction to Medical Terminology—Word Parts**
- Lesson 4: Medical Terminology—Divide and Combine Terms**
- Lesson 5: Medical Terminology—Abbreviations, Symbols and Special Terms**
- Lesson 6: What Is a Medical Record?**
- Lesson 7: Record and File Management in the Medical Office**
- Lesson 8: First-rate First-aid Procedures**

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of U.S. Career Institute.

© Copyright 2010-2012, Weston Distance Learning, Inc. All Rights Reserved. 0204900LB01B-22

Acknowledgments

Professional Consultant

Mary Siegrist, M.S., RHIA

Authors

Leslie Ballentine, M.S.

Elizabeth Munson, Ph.D.

Jessica Roznowski

Editorial Staff

Trish Bowen, M.Ed.

Katy Little, M.L.I.S.

Courtney Pruitt-Sanderson, M.Ed., RHIA

Merry Perry, LPN

Bridget Tisthammer, B.S.

Lindsay Hansen

Sarah Rohr, M.A.

Design/Layout

Connie Hunsader

D. Brent Hauseman

Sandy Petersen

For more information contact:

U.S. Career Institute
Fort Collins, CO • 1-800-347-7899
www.uscareerinstitute.edu

Table of Contents

Lesson 1—Welcome to the World of Health Care

Step 1	Learning Objectives for Lesson 1	1
Step 2	Lesson Preview	1
Step 3	What Do Healthcare Office Managers Do?	2
Step 4	Career Options	3
	Where Will I Work?	4
	A Day in the Life of a Healthcare Office Manager	4
Step 5	Medical Office Happenings	6
	A Healthcare Office Manager’s Typical Day	6
	The Doctor’s Typical Day	8
Step 6	The Healthcare Team	9
	Physicians	9
	Nurses	9
	Nurse, Medical and Physician Assistants	10
	Support Staff	10
	Emergency Personnel	11
Step 7	Practice Exercise 1-1	11
Step 8	Review Practice Exercise 1-1	12
Step 9	Getting Personal	13
	Good Grooming	13
	A Positive Attitude	14
	A Sense of Humor	14
	Initiative	15
	Loyalty	15
	Tact and Discretion	15
	Good Judgment	15
	Thoughtfulness	16
	Dependability	16
Step 10	Let’s Get Down to Business	17
	Basic Business Skills	17
	Set Your Priorities	19
Step 11	Office Protocol and Procedures	21
	Office Protocol and Hierarchy	21
Step 12	Practice Exercise 1-2	23
Step 13	Review Practice Exercise 1-2	25
Step 14	Lesson Summary	25
Step 15	Mail-in Quiz 1	25
	Mail-in Quiz 1	26
	Endnotes	30

Lesson 2—The Frontline: The Medical Front Office

Step 1	Learning Objectives for Lesson 2	1
Step 2	Lesson Preview	1
Step 3	Administrative Equipment	2
	Basic Equipment	2
	Specialized Equipment	3
Step 4	Reception	4
	Open and Close the Office	4
	Interact with Patients	5
Step 5	Effective Phone Skills	7
Step 6	Schedule Appointments	8
	Gather Information	8
	Record Information	9
	Create a Schedule of Appointments for a Doctor	9
	Types of Appointment Systems	11
Step 7	Practice Exercise 2-1	17
Step 8	Review Practice Exercise 2-1	19
Step 9	Manage Mail and Office Correspondence	20
	Incoming Mail	20
	Outgoing Mail	23
	Handle E-mail	26
Step 10	General Office Management	27
	Replenish Supplies	27
	Policies and Procedures	28
	Time and Task Management	29
Step 11	Patient Education	30
Step 12	Practice Exercise 2-2	31
Step 13	Review Practice Exercise 2-2	34
Step 14	Lesson Summary	34
Step 15	Mail-in Quiz 2	34
	Mail-in Quiz 2	35

Lesson 3—Introduction to Medical Terminology—Word Parts

Step 1	Learning Objectives for Lesson 3	1
Step 2	Lesson Preview	1
Step 3	Word Parts	2
Step 4	Root Words	3
Step 5	Medical Terms	4
	The Combining Vowel	4
Step 6	Practice Exercise 3-1	5
Step 7	Review Practice Exercise 3-1	6

Step 8	Root Words	6
	The Functions of Root Words	7
Step 9	Pronounce Root Words	8
Step 10	Write Root Words	9
Step 11	Meanings of Root Words	9
Step 12	Practice Exercise 3-2	10
Step 13	Review Practice Exercise 3-2	11
Step 14	Prefixes	11
Step 15	Pronounce Prefixes	14
Step 16	Write Prefixes	15
Step 17	Meanings of Prefixes	15
Step 18	Practice Exercise 3-3	16
Step 19	Review Practice Exercise 3-3	17
Step 20	Suffixes	17
Step 21	Pronounce Suffixes	20
Step 22	Write Suffixes	21
Step 23	Meanings of Suffixes	22
Step 24	Practice Exercise 3-4	22
Step 25	Review Practice Exercise 3-4	25
Step 26	Lesson Summary	25
Step 27	Mail-in Quiz 3	26
	Mail-in Quiz 3	26

Lesson 4—Medical Terminology—Divide and Combine Terms

Step 1	Learning Objectives for Lesson 4	1
Step 2	Lesson Preview	1
Step 3	Divide Medical Terms	2
	Consonants, Vowels and the Role They Play	3
	A Little Practice	4
	Word Meanings	6
Step 4	Practice Exercise 4-1	9
Step 5	Review Practice Exercise 4-1	9
Step 6	Pronounce Word Parts	10
Step 7	Write Word Parts	10
Step 8	Meanings of Word Parts	10
Step 9	Practice Exercise 4-2	11
Step 10	Review Practice Exercise 4-2	12
Step 11	Practice Exercise 4-3	13
Step 12	Review Practice Exercise 4-3	13
Step 13	Combine Medical Terms	14
	Consonants, Vowels and the Role They Play	14
Step 14	Practice Exercise 4-4	16

Step 15	Review Practice Exercise 4-4	17
Step 16	Practice Exercise 4-5	17
Step 17	Review Practice Exercise 4-5	18
Step 18	Pronounce Word Parts	18
Step 19	Write Word Parts	19
Step 20	Meanings of Word Parts	19
Step 21	Practice Exercise 4-6	19
Step 22	Review Practice Exercise 4-6	21
Step 23	Lesson Summary	21
Step 24	Mail-in Quiz 4	21
	Mail-in Quiz 4	22

Lesson 5—Medical Terminology—Abbreviations, Symbols and Special Terms

Step 1	Learning Objectives for Lesson 5	1
Step 2	Lesson Preview	1
Step 3	Abbreviations	2
	Abbreviations in Hospitals	2
	Office Records	3
	Doctors	3
	Pharmacies	4
Step 4	Learn Abbreviations	4
Step 5	Meanings of Abbreviations	4
Step 6	Practice Exercise 5-1	5
Step 7	Review Practice Exercise 5-1	6
Step 8	Slang	6
	Medical Slang	6
	English Slang	6
Step 9	Slang Terms	7
Step 10	Meanings of Slang Terms	7
Step 11	Practice Exercise 5-2	8
Step 12	Review Practice Exercise 5-2	8
Step 13	Symbols	8
Step 14	Practice Exercise 5-3	9
Step 15	Review Practice Exercise 5-3	9
Step 16	Special Terms	10
	Eponyms	10
	Brand Names	11
	Acronyms	12
Step 17	Practice Exercise 5-4	13
Step 18	Review Practice Exercise 5-4	14
Step 19	Pronounce Acronyms	14

Step 20	Sound-alikes and Opposites	14
	Homophones (Sound-alikes)	14
	Antonyms (Opposites)	15
Step 21	Practice Exercise 5-5	15
Step 22	Review Practice Exercise 5-5	16
Step 23	Medical Plurals	16
	Rules for Medical Plurals	17
Step 24	Practice Exercise 5-6	17
Step 25	Review Practice Exercise 5-6	18
Step 26	Lesson Summary	18
Step 27	Mail-in Quiz 5	18
	Mail-in Quiz 5	19

Lesson 6—What Is a Medical Record?

Step 1	Learning Objectives for Lesson 6	1
Step 2	Lesson Preview	1
Step 3	It's All in the Name	2
	Why Keep Health Records?	2
	Who Uses the Record?	3
	Who Owns the Record?	4
Step 4	What Is in the Medical Record?	4
	Administrative Data	5
	Clinical Data	6
	What Does a Health Record Look Like?	6
Step 5	Practice Exercise 6-1	17
Step 6	Review Practice Exercise 6-1	19
Step 7	How Are Medical Records Organized?	19
	Source-oriented Record	19
	Problem-oriented Record	20
	Integrated Record	22
Step 8	What Is Documentation?	23
Step 9	How Do Providers Ensure Quality of Medical Records?	24
Step 10	What Is HIPAA?	25
Step 11	The Future Is Here: The Electronic Health Record	26
	Components of the EHR	26
	Goals of the Electronic Health Record	27
Step 12	Practice Exercise 6-2	28
Step 13	Review Practice Exercise 6-2	30
Step 14	Lesson Summary	30
Step 15	Mail-in Quiz 6	30
	Mail-in Quiz 6	31
	Endnotes	34

Lesson 7—Record and File Management in the Medical Office

Step 1	Learning Objectives for Lesson 7	1
Step 2	Lesson Preview	1
Step 3	File Management—What Is It?	2
Step 4	File in the Medical Office	3
	Inspect	3
	Index/Code	3
	Sort	4
	Store	4
Step 5	The Different Kinds of Filing Systems	4
	Alphabetic Filing	5
	Numeric Filing	5
	Alphanumeric Filing	10
	Other Types of Filing	10
Step 6	Rules Used to File Medical Records Alphabetically	12
Step 7	Practice Exercise 7-1	14
Step 8	Review Practice Exercise 7-1	17
Step 9	Alphabetic Filing Rules for Businesses and Institutions	17
	File Business Names	17
	File Institution Names	20
Step 10	Practice Exercise 7-2	22
Step 11	Review Practice Exercise 7-2	23
Step 12	Centralized and Decentralized Systems	23
	Centralized Filing	23
	Decentralized Filing	24
Step 13	Electronic Filing	25
Step 14	Filing Controls	27
	Chart Tracking System	27
	File System Audit	28
Step 15	Loose Filing and Circulation Systems	28
	Loose Filing	29
	Circulation Systems	30
Step 16	Keep EHRs Confidential	30
Step 17	Archive Medical Records	32
	Destroy Patient Information	33
	Medical Facility Closure	34
Step 18	Practice Exercise 7-3	34
Step 19	Review Practice Exercise 7-3	35
Step 20	Lesson Summary	35
Step 21	Mail-in Quiz 7	36
	Mail-in Quiz 7	36
	Endnotes	41

Lesson 8—First-rate First-aid Procedures

Step 1	Learning Objectives for Lesson 8	1
Step 2	Lesson Preview	1
Step 3	First Things First	2
	Proper Hand Washing	2
	Proper Gloving	3
Step 4	What Is a Medical Emergency?	4
	What Is the Emergency?	4
Step 5	Patient Triage	5
	Triage Systems	5
	Telephone Triage	7
	Face-to-face Triage	8
	What Should I Do When an Emergency Occurs in the Office?	9
Step 6	Practice Exercise 8-1	14
Step 7	Review Practice Exercise 8-1	16
Step 8	Rescue Breathing and CPR	17
	A = Blocked Airway	18
	B = Breathing	20
	C = Circulation	21
Step 9	Practice Exercise 8-2	25
Step 10	Review Practice Exercise 8-2	26
Step 11	The Top Ten List	26
	1. Anaphylaxis	26
	2. Asthma Complications	28
	3. Cardiac Arrest	29
	4. Diabetic Emergencies	30
	5. Drug Overdose	33
	6. Impaired Consciousness	34
	7. Poisoning	35
	8. Psychiatric Disorder	36
	9. Seizure	37
	10. Shock	38
Step 12	Practice Exercise 8-3	40
Step 13	Review Practice Exercise 8-3	42
Step 14	Lesson Summary	42
Step 15	Mail-in Quiz 8	43
	Mail-in Quiz 8	43
	Endnotes	50

Answer Key

Lesson 1	1
Practice Exercise 1-1	1
Practice Exercise 1-2	1
Lesson 2	2
Practice Exercise 2-1	2
Practice Exercise 2-2	3
Lesson 3	4
Practice Exercise 3-1	4
Practice Exercise 3-2	5
Practice Exercise 3-3	6
Practice Exercise 3-4	7
Lesson 4	8
Practice Exercise 4-1	8
Practice Exercise 4-2	8
Practice Exercise 4-3	9
Practice Exercise 4-4	10
Practice Exercise 4-5	10
Practice Exercise 4-6	11
Lesson 5	12
Practice Exercise 5-1	12
Practice Exercise 5-2	13
Practice Exercise 5-3	14
Practice Exercise 5-4	14
Practice Exercise 5-5	15
Practice Exercise 5-6	16
Lesson 6	16
Practice Exercise 6-1	16
Practice Exercise 6-2	17
Lesson 7	19
Practice Exercise 7-1	19
Practice Exercise 7-2	20
Practice Exercise 7-3	21
Lesson 8	21
Practice Exercise 8-1	21
Practice Exercise 8-2	22
Practice Exercise 8-3	23

Lesson 1

Welcome to the World of Health Care



Step 1 Learning Objectives for Lesson 1

- ❑ When you complete the instruction in this lesson, you will be trained to do the following:
 - Describe the duties of a healthcare office manager and the importance of this position to an organization.
 - Compare and contrast the various types of jobs available to healthcare office managers.
 - Explain how different types of medical personnel each ensure quality health care.
 - Describe the desirable character traits of healthcare office managers.
 - Outline the components that contribute to a professional appearance.
 - Summarize the business skills of an effective healthcare office manager.
 - Prioritize tasks efficiently.
 - Determine correct office protocol and procedures to various situations.
 - Define terms commonly used in a medical office.



Step 2 Lesson Preview

- ❑ Doctors spend their days performing many tasks; they examine and talk to patients, order tests and consult with other doctors. Nurses do everything from administer shots to record blood-pressure readings. Most people would agree that health clinics, doctor's offices and hospitals—as well as the doctors and nurses these places employ—often are a flurry of activity. Do doctors and nurses have time to fill out paperwork, greet patients and answer the phones? Do you usually see these medical professionals filing health records and typing business letters? Probably not. So, who is responsible for all of these tasks? Who watches out for the doctors and nurses who watch out for you and other patients?



Healthcare office managers ensure that the many activities of the office run smoothly.

That is where you come in as a healthcare office manager! In small clinics or large hospitals, healthcare office managers ensure that the many activities of an office run smoothly. Every day, office managers use their skills to connect people, organize the workplace and solve problems.

In this lesson, you will discover what a healthcare office manager does on a day-to-day basis. You will learn about the various types of jobs available to you in this field. You'll explore the environments you could work in and the different members of the healthcare team that you'll interact with. In addition, you will find out what qualities make a professional and successful healthcare office manager.

This course will teach you all of the essential skills you need to become an organized and professional healthcare office manager. Health care is one of the fastest growing fields today, and the skills you learn in this course will make you an essential and versatile member of the healthcare community.

Let's get started!



Step 3 What Do Healthcare Office Managers Do?

- When you walk into a healthcare facility, whom do you see first? When you call your new doctor for directions to his office, who gives you the help you need? The answer to both questions is: the healthcare office manager!

Effective and efficient healthcare office managers are always in demand. You will find many opportunities available to you in this field. Healthcare office managers perform a variety of duties—from answering phones to filing to assisting with patient records. They work with patients, doctors, nurses and many other healthcare professionals.

Hospitals and doctor's offices everywhere rely on their office managers. They depend on healthcare office managers to make a good impression to the public, communicate effectively and keep the office running smoothly. The following chart illustrates some of the duties that healthcare office managers carry out. Keep in mind that this chart is only the tip of the iceberg.

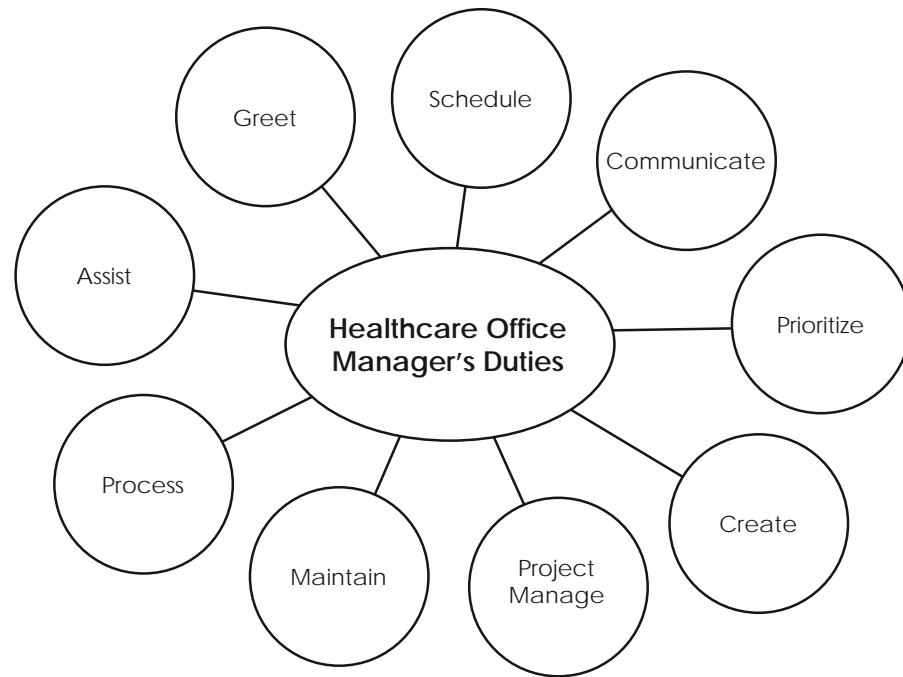


Figure 1-1: A healthcare office manager's duties

As you can see, healthcare office managers perform important duties in the medical office!



Step 4 Career Options

- ❑ One of the most exciting advantages of working as a healthcare office manager is the wide variety of places in which you can work. Do you feel comfortable in a crowded, busy and fast-paced setting? If so, working in a large medical office or hospital could be for you. There, you might schedule appointments, file medical records, greet patients, keep the office organized and enter patient information.

Maybe you prefer a quieter environment where you interact with only a few people. If so, consider a job as an office manager for a small medical clinic. In this setting, you might schedule appointments, greet patients, handle verbal and written correspondence, organize files and help to grow the practice.

Do you like working with patients of all ages? Would you want to work where you can see children every day and watch their progress through the years? Consider a job at a family physician's office. There, you might schedule appointments for patients, type and send correspondence, create and organize medical records and help the office run smoothly.

These are just a few of the options available to you. Let's explore your career options as a healthcare office manager; we'll first look at the different environments in which you can work. Then, we'll follow different healthcare office managers on the job, and observe their daily routines.

Where Will I Work?

As you know, there are a variety of healthcare facilities at which you might work. You may choose a physician's office, a clinic or a hospital. Let's examine these facilities in more detail.

Doctor's or Dentist's Office

One place healthcare office managers work is in a doctor's or dentist's office. Your office might have one main doctor or several. In a small practice, you might oversee a number of duties yourself. In a large practice, you might work alongside other office managers who will share the workload with you.

Urgent Care Clinic

Urgent care clinics are much like a doctor's office. However, this type of office moves at a faster pace because doctors treat patients with urgent or emergent injuries. This could be an exciting place to work, but it requires fast work and quick thinking.

Hospital

Hospitals also need healthcare office managers. You likely know what a hospital is, but the basic definition is as follows: A **hospital** is a healthcare facility that provides medical, nursing and other health-related services to patients. Hospitals tend to treat people with serious or sudden injuries or illnesses, or those who need different surgeries or services. This includes anything from emergency care to delivering a baby. Hospitals also have laboratories that provide information to help diagnose problems and services, such as physical therapy, to help patients recuperate from illnesses and injury.



You might want to work in a hospital if you enjoy a busy and fast-paced environment.

A Day in the Life of a Healthcare Office Manager

Now let's take a look at three different healthcare office managers and follow them through a portion of a day. This will give you an idea as to the environments they work in and the tasks they must complete. Keep in mind that these are very general examples. Later, we'll study the specific activities that occur in healthcare settings and take a closer look at the healthcare office manager's role.

At a Medical Center

Gina is the healthcare office manager for a doctor in a local medical center. She's worked at the center for more than 15 years, and many people there rely on her.

Gina's day begins at 7:30 a.m. She first checks her e-mail and phone messages. She receives a voice mail from Loren, the office billing clerk. He called to tell her he's staying home sick for the day. Gina oversees Loren and two other employees. Rather than call someone to cover for Loren, Gina decided she will cover his job duties for the day. At 8:30 a.m., the phone begins to ring. Gina fields two calls from patients requesting appointments, so she schedules both of

them to see the doctor. Gina then takes a call from a patient who wants a second opinion on a diagnosis that she received from another physician. Gina consults the doctor's schedule once again and books an appointment for later in the week.

It is now nearly 9 a.m. The doctor arrives with a stack of data that must be entered into a spreadsheet format. He also gives Gina several letters to type, proof and mail. Gina types the letters and proofreads her work, all the while fielding phone calls and greeting patients as they begin to arrive for the day's appointments. She mails the letters and starts to enter the data the doctor gave her into a spreadsheet format on the computer. However, an irate patient interrupts her. The patient demands to speak with the doctor and insists that she was billed incorrectly for a recent visit and procedure. She wants her bill fixed immediately. Gina listens and then calmly explains to the woman that the doctor is with another patient. Gina assures the woman that she can help her and shows her to the waiting area while she figures out what went wrong.

Gina pulls the patient's chart and reviews what the doctor documented. She then examines the patient's billing sheet. Gina contacts the billing and insurance company. After discussing the charges, she finds that the problem stems from the insurance company incorrectly denying a charge. Gina finally gets the insurance company to agree to pay the charge. She faxes the proper forms to the insurance company and documents the call. Gina feels proud to tell the patient she solved the dilemma. In addition, the patient leaves the office feeling content and reassured of the office's professionalism and quality.



It's 10 a.m., and Gina's day continues like this until 4:30 p.m. During this time, she constantly answers phone calls and e-mails, greets patients, enters data and schedules appointments. In the afternoon, she calls patients to remind them of their upcoming appointments.

At a Small Dentist's Office

Evan is the only office manager for a small dentist's office. He has worked for the dentist for about two years and is accustomed to doing a variety of tasks. He likes the small-office atmosphere and enjoys feeling like a part of the healthcare team.

Evan starts his day at 8 a.m. He files patients' records and organizes patient information until the dentist's office opens at 9 a.m. Then, he answers phone calls and greets patients as they arrive for their appointments. At 10:30 a.m., Evan prepares some paperwork to be mailed. He also checks the dental hygienists' stations to make sure they're well stocked with supplies.

Just before noon, the dentist swings by the front desk and asks if Evan could help design a brochure. The dentist gives Evan all the information that he wants in the brochure, and Evan gets to work at his computer. He prints out a rough draft of the brochure for the dentist and the hygienists to edit. Then, he spends the rest of the day working on the office payroll, taking phone calls, assisting patients and organizing files. His day ends at 5 p.m.

At a Hospital

Josh works two or three days a week as an office manager for the cardiology department of a hospital. The department has seven doctors and two full-time office managers. Josh has worked at the hospital for about six months. During that time, his list of responsibilities has grown. Josh schedules appointments, greets patients, files medical records and corresponds with insurance companies.

Josh begins work at 8 a.m. He looks through the appointment book to prepare himself for the day. For the next two hours, he schedules and cancels appointments and shows patients to waiting and examination rooms.

At 9:30 a.m., Josh types, proofs and mails a few letters to insurance companies. He also has some medical records that he must pull from the files for another department in the hospital. He spends the next few hours completing these tasks. At noon, Josh takes a lunch break, and another office manager answers the phones. When Josh returns from lunch, he helps the other office managers schedule appointments, answer phones, make photocopies and greet patients.

You now have a general idea as to some of the tasks healthcare office administrators must complete. But perhaps you want to know more about the specific occurrences in medical settings. We'll cover that topic next.



Step 5 Medical Office Happenings

- ❑ To understand the role of a healthcare office manager, you must know how employees gather information. Medical information includes patient data, insurance company information and doctors' procedures, diagnoses and other actions.

The Difference between Outpatient and Inpatient Settings

Outpatient settings include clinics, physicians' offices, outpatient surgery facilities and hospital emergency rooms. Inpatient settings include hospitals or other facilities where patients are admitted for an overnight stay.

To see how medical information is gathered, we'll look at another healthcare office manager's typical day. Let's follow along.

A Healthcare Office Manager's Typical Day

Dawn is the office manager for Hope Family Care, a small but busy practice that has two doctors. Patients arrive and check in for their appointments with Dawn at the front desk. She keeps track of the doctors' schedules on her computer. By 8:50 a.m., one of the two patients has arrived for her 9 a.m. appointment. She sits in the waiting room and fills out a "New Patient Questionnaire."

Once the patient finishes her questionnaire, she brings it to Dawn, who creates a new medical record. Dawn makes sure to label the folder correctly and enters the information from the questionnaire into the computer. She then puts the questionnaire in the patient's new medical record. Now there is a hard copy of the patient's medical record, as well as a file on the computer. Next, Dawn prints an **encounter form**, or **superbill**, which is a standard document that contains a list of the most common procedures that doctors perform. (Usually, an encounter form lists many types of procedures, from office visits and physical exams to x-rays and applying cast.) She then clips the encounter form to the patient's folder and places the folder in the "Patients to See" stack for the appropriate nurse.

It's 9 a.m., and the other patient just arrived for his appointment. He apologizes for being a little late. Dawn assures him that it's OK and proceeds to pull his medical record. (This patient has been to the office several times before, so he already has both a computer file and a paper file.) The medical records are thick manila folders with coded tabs according to the patient's last name. Dawn again prints an encounter form for the patient and uses a paperclip to attach it to his folder. She then places the file in the "Patients to See" stack for one of the nurses.

As both of the 9 a.m. appointments head off to see the doctors, the 9:30 a.m. appointments begin to arrive. The routine is similar to the first group of patients. They are established patients, so Dawn pulls their records, prints encounter forms and distributes the folders to the correct nurses.

At 9:20 a.m., the first doctor finishes his 9 a.m. appointment, a woman named Josie Kudlock. Mrs. Kudlock walks out of the examination room and gives the encounter form to Dawn. Dawn looks at the procedures that the doctor circled and quickly fills in an amount next to each one. She totals the bill—\$139—and has Mrs. Kudlock sign it. Mrs. Kudlock has medical insurance, so the medical office will send the bill to the insurance company without her paying an initial co-payment or the entire amount of the bill. Therefore, Mrs. Kudlock signs the bill to give the insurance company permission to pay the clinic directly and returns it to Dawn. Dawn then rips off the back copy for Mrs. Kudlock.



Some patients must pay a co-payment.

The nurse returned Mrs. Kudlock's file, so Dawn puts it in the "To Be Updated" basket. The folders in this basket need the doctors' dictation before a *medical transcriptionist* can transcribe them. A **medical transcriptionist** transcribes doctors' dictated notes into an accessible format. To transcribe this information, the MT calls a phone line that contains a voice record of the doctor's dictation.

Dawn then files the completed and signed encounter form in her "To Submit, Current" folder. The doctor completes an electronic version of the form and stores it in the patient's medical record file on the computer. The encounter form begins the lifecycle of a **medical bill**—a document generated when a patient receives medical care. The bill explains how much the patient will be charged.

When Dawn returns to her desk, she finds she has a voicemail. It is Hope Family Care's medical transcriptionist calling to verify some information that she needs. Dawn gathers the information and calls the transcriptionist back.

Dawn's day continues this way until she leaves at 5 p.m. During that time, she continually checks in patients, enters new questionnaires on the computer, creates records, retrieves records, completes encounter forms, answers the telephone and schedules and reschedules appointments.

At this point, you may be wondering what the day is like from a physician's perspective. Well, let's find out!

The Doctor's Typical Day

Dr. Anderson is one of the two physicians at Hope Family Care. He is one of Dawn's supervisors. Dr. Anderson sees his first patient at 9 a.m. He examines the patient, a man in his mid-50s, who explains he twisted his ankle while running to catch the elevator at work. Dr. Anderson listens while the patient tells him what's wrong—this is called the **chief complaint** because it's the main reason the patient came to the doctor. Then, Dr. Anderson examines the patient's ankle and recommends that x-rays be taken. The x-rays don't show a fracture; the ankle is only badly sprained, so Dr. Anderson provides the patient with crutches to use for the next few weeks.



The doctor listens while the patient tells him what's wrong. This is called the chief complaint.

Dr. Anderson follows a specific sequence of duties with every patient—complaint, diagnosis and treatment or procedure. With the 9 a.m. patient that we just mentioned, the sequence began with a **complaint** of “my ankle hurts.” It was followed by a **diagnosis**, which determines the patient's condition, aided by tests. In this case, the x-ray helped the doctor determine the ankle wasn't broken, only sprained. The sequence is completed with a **treatment** or **procedure**—the crutches.

When doctors or nurses perform these duties, they record them into a patient's medical record. The office's medical coding specialist eventually codes the diagnosis and treatment or procedure, along with any tests done.

After Dr. Anderson examines a patient, he completes an electronic encounter form to add to the patient's medical record on the computer. He also prints an encounter form and circles the procedures that he performed. The patient takes this form to the healthcare office manager. Dr. Anderson calls the office's medical transcription phone line and dictates notes about the patient's visit. The office's medical transcriptionist will later retrieve these sound files. This employee transcribes the files into a formatted medical report. In addition to these sound files, Dr. Anderson also writes some notes on the patient's record and types this information into the record stored on the computer, as well. When he concludes a visit with one patient, he's ready to see the next, and his day continues like this until the office closes at 5 p.m.

You now have a basic idea of the everyday activities in a healthcare facility. But there are more employees in a medical facility than just the doctor and office manager. Let's meet the rest of the healthcare team.



Step 6 The Healthcare Team

- ❑ You know how information flows in medical settings. You also understand what some healthcare employees do in a typical day. Now, let's look at some of the key players in hospitals and medical offices.

In most fields, teams of people work together to accomplish goals. This is true of the healthcare field, as well. As a healthcare office manager, you will not only deal with patients, but also different members of the healthcare team. This includes doctors, nurses, emergency personnel and more. Let's look more closely at some of your future co-workers.



Teams of people work together to accomplish goals.

Physicians

Physicians or medical doctors are the most prominent members of the healthcare team. They perform life-saving procedures, cure the sick and help heal wounds. Becoming a doctor of medicine is one of the most challenging career paths a person can choose. Not only do doctors earn four-year college degrees, but they must also complete medical school and one or more residency assignments. During residency, future doctors may work 85- to 100-hour weeks. Depending on the specialty doctors choose, they spend a minimum of 11 years getting their degree. Because of this huge commitment, doctors deservedly receive much of the attention in the medical field.

Though doctors have a challenging job, they could not do their jobs alone. Doctors rely on a lot of assistance from staff as they provide quality treatment. Nurses are one essential part of the medical staff.

Nurses

As professionals who perform a variety of tasks in the medical world, nurses must often follow through with the treatments physicians prescribe. Nurses observe and record symptoms and progress, assist in surgery and administer medication. It's also true that nurses must often perform the thankless jobs—cleaning up exam rooms and organizing supplies.

Without nurses, the number of patients a doctor sees in a day would drop dramatically. Because of nurses, doctors see more patients and can focus on patients who require the most care.

Nurse, Medical and Physician Assistants

Three other categories of personnel in the medical field include nurse, medical and physician assistants. **Nurse assistants**, also known as patient care technicians, help nurses with daily duties, such as paperwork, general organization and taking a patient's temperature, weight and blood pressure. Some nurse assistants also talk to patients and make sure they're comfortable.

Medical assistants perform two types of duties: administrative and clinical. They answer phones or administer medications; greet patients and then help them prepare for their exams; arrange hospital admissions, schedule appointments and even perform lab tests.

Physician assistants, or **PAs**, normally work under the supervision of a doctor. PAs work in the same areas as doctors and nurses, and duties might include stitching up a cut, taking a patient history and performing lab work.

Support Staff

Doctors and nurses rely heavily on support staff to keep a medical office, clinic or hospital running smoothly. As you might guess, each of these positions plays an important role in the medical world.

Medical Coding Specialists

A coding specialist typically works in an office or hospital. The **medical coding specialist** translates the doctor's written diagnosis and treatment into codes. Then the coder routes the codes to a *medical billing specialist* who uses the codes to complete insurance claims—bills for the doctor's services.

Medical Billing Specialists

Medical billing specialists perfectly illustrate how interrelated one job is to the next in a medical office. Remember, coding specialists code what occurs during a patient's medical visit, while **medical billing specialists** use the codes that medical coders assign. Billing specialists then complete the insurance forms necessary to collect payment from insurance companies. These specialists know that the doctor doesn't get paid unless the form is completed and filed correctly. Billing specialists have training in medical terminology, medical records handling and some basic coding.

Medical Transcriptionists

Another important part of the healthcare team is the *medical transcriptionist*. **Medical transcriptionists** listen to doctors' dictation on a tape or audio file, or call a phone line to retrieve the dictation and type and format what the doctor says during or after a patient's visit.

Emergency Personnel

Emergency personnel are yet another group of professionals with the sole responsibility of providing immediate medical assistance and transporting the patient to the hospital for treatment. When someone is hurt and needs an ambulance, these people respond. Police officers, fire fighters and other rescue professionals all have some level of medical training.

You've probably heard of *emergency medical technicians (EMTs)* and *paramedics*. **EMTs** take classes that enable them to stabilize patients who have a wide variety of emergency medical conditions. They are often members of ambulance crews and volunteer fire-fighting organizations. Paramedics have more training than EMTs. **Paramedics** are not only able to stabilize patients, but they can also begin treatments to cure patients, such as administering medication.

EMTs stabilize patients with different medical conditions and transport them to the hospital.



These are just some of the team members you will work with in your career as a healthcare office manager. Pause here and take your first Practice Exercise to review what you learned so far. Then, we'll examine healthcare office managers in more detail.

Step 7 Practice Exercise 1-1

For questions 1 through 7, select the best answer from the choices provided.

1. **Healthcare office managers typically complete the following tasks: ____.**
 - a. organize supplies and take patient vitals
 - b. assign medical codes to patients' diagnoses and treatments
 - c. schedule appointments and maintain records
 - d. transport victims to the hospital

2. **Sandra works at a facility that treats people with sudden injuries or illnesses. She works in the maternity ward at this healthcare facility. Sandra likely works in a(n) ____.**
 - a. hospital
 - b. dentist's office
 - c. doctor's office
 - d. urgent care clinic

3. **Mark works as a healthcare office manager. A new patient arrives at the office. Mark asks him to ____.**
 - a. fill out an encounter form
 - b. transfer his medical record
 - c. show proof of insurance
 - d. fill out a new patient questionnaire

4. **Andrew comes to your office with a broken finger. He tells the doctor about his injury. His broken finger is the ____.**
 - a. diagnosis
 - b. chief complaint
 - c. treatment
 - d. procedure

5. **Brenda works as a healthcare professional. She records patients' symptoms and helps with surgeries. Brenda likely works as a ____.**
 - a. nurse
 - b. physician
 - c. healthcare office manager
 - d. paramedic

6. **During Roger's typical work day, he completes insurance forms using medical codes. He then uses these codes to collect payment from insurance companies. Roger likely works as a ____.**
 - a. medical coding specialist
 - b. medical billing specialist
 - c. medical transcriptionist
 - d. healthcare office manager

7. **Manuel transports patients to the hospital, stabilizes patients and administers medication if necessary. Manuel likely works as a(n) ____.**
 - a. EMT
 - b. paramedic
 - c. physician
 - d. physician assistant

 **Step 8 Review Practice Exercise 1-1**

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



Step 9 Getting Personal

- You now know more about what healthcare office managers do on a daily basis. You also explored the different options available to you in this career, as well as where you might work and with whom you might work. In this section, you'll examine the qualities and skills that successful healthcare office managers possess.

Have you ever had a truly lousy experience with an office administrator? Perhaps she asked you to wait while she performed other tasks, or worse, ignored you altogether. Maybe the office administrator gave you misinformation or made you feel like your questions or concerns didn't matter. Did this person work in a healthcare setting or in another type of office?

Chances are that you remember the encounters you've had with poor office managers. You probably felt these employees weren't "people persons," were in the wrong line of work or were having a bad day that they took out on you. Now, think of a good experience you've had with an office administrator. What qualities did she have? Well, let's study some traits that good office managers have in common.

Effective office managers possess nine important personal qualities.

- Good grooming
- A positive attitude
- A sense of humor
- Initiative
- Loyalty
- Tact and discretion
- Good judgment
- Thoughtfulness
- Dependability

Let's explore each of these qualities in more detail.

Good Grooming

Office managers may be the first people that patients interact with when they enter a medical office. It's important that a healthcare office manager presents a professional image to make a good first impression on clients or patients. Healthcare office managers should dress appropriately for their work environment and present a business-like image—even when they dress casually. To maintain good grooming, healthcare office managers should keep their hands, nails and hair neat and clean and maintain good hygiene. Review the following list of grooming tips for more specifics about personal appearance while at work.

Grooming Tips

- Follow the dress code that your employer sets.
- Wear clothing that fits—not too big, not too small.
- Wear clean clothing free from stains, holes or wrinkles.
- Dress modestly while on duty—no cleavage or abdomen showing.
- Wear conservative makeup and hairstyles.
- Keep jewelry to a minimum.
- Keep nails clean and under 1 inch in length.
- Bathe and use deodorant.
- Avoid perfume and cologne. They may cause respiratory problems in patients.
- Wear clean, close-toed shoes.

A Positive Attitude

An office manager's positive attitude can rub off on the people around her. Remember that, as a healthcare office manager, you have the opportunity to make someone's day or ruin it. Patients' interaction with you can affect how they feel about your office overall. While it may take a little effort to stay upbeat and friendly all the time, practice a positive attitude. It will pay off in the end. Offer your patients a warm and welcoming smile as they enter the office, and smile even when you answer the phone.



Effective healthcare office managers have a positive attitude and a sense of humor.

A Sense of Humor

A good sense of humor can ease a stressful situation and helps you and other people to relax. On a bad day, you might want to explode and take your anger out on a patient or coworker. However, if you take a few deep breaths and laugh at yourself or the circumstances, it will help you to let go of the stress you feel. A sincere smile lets you share your sense of humor with people. It welcomes and reassures people and tells them that you value their business.

Initiative

It makes sense that employers look for **initiative**, or self-motivation, in healthcare office managers. This skill helps you to identify a problem and solve it. Patients and coworkers will remember when you offer a helping hand. This could also make a big difference the next time you are due for a raise or promotion. However, use caution when you take initiative. As a new employee, see what needs to be done within your range of duties, but observe the rules and typical behavior in your office. For example, it's Jana's first day at work at a large doctor's office. She decides to rearrange the furniture in the office waiting room without asking first. This is an example of initiative gone astray! Jana should have checked with a supervisor first before she moved the furniture.

Loyalty

Successful healthcare office managers also possess *loyalty*. **Loyalty** means you promote a positive image of your employer. This includes explaining and defending office policies to the public. Know what you can and cannot do for a patient, and remain friendly but firm when a patient makes an unreasonable demand. Also, keep office and patient information **confidential**, or secret, and don't share this information with others. All of these things show your loyalty to your office, coworkers and patients.

Tact and Discretion

Healthcare office managers use *tact* and *discretion* to disarm potentially volatile situations. **Tact** means you recognize a delicate situation and respond carefully. **Discretion** means you respect business practices, especially when it comes to keeping business and personal matters private. Perhaps a coworker loudly disagrees with office policy, or an angry patient makes a scene. You show that you can handle situations with tact and discretion if you calmly take these people aside and speak with them in private.

Good Judgment

As a healthcare office manager, using **good judgment** means that you think carefully about your choices and their consequences before you make a decision. In some ways, good judgment comes from experience. Once you begin your career as a healthcare office manager, watch how more experienced employees behave, and follow their good examples. Your ability to deal with different problems will increase day by day.



Office managers use tact and discretion to deal with difficult situations.

Thoughtfulness

Thoughtfulness goes right along with good judgment. **Thoughtfulness** is a sincere concern for others. Treat others as you want to be treated. When you battle for a parking space at the mall or someone fails to hold a door open for you, you might wonder if thoughtfulness has disappeared from daily life. But as a healthcare office manager, you can bring consideration back into style! Try to help everyone who calls or comes into your office. Be courteous and patient, and greet everyone with a positive attitude, even when people are rude to you.

Dependability

Dependability means that you account for yourself and your actions. Supervisors look for employees they can rely on. Office managers must meet deadlines and deliver what they promise. Are you punctual? Do you complete projects on time? Can you keep your word? If you answer *yes* to these questions, your dependability will shine through.

To review the traits we discussed, take a look at the list of Dos and Don'ts that follows. As you read through each item, think about which trait or traits it relates to.

Dos

As a healthcare office manager, you should:

- Display your commitment to your career—live a healthy lifestyle yourself.
- Be on time or early *every day*.
- Be reliable—perform the tasks required of you without reminders from your supervisor.
- Strive to do a complete and accurate job.
- Respect other professionals for their knowledge, just as you count on respect from others.
- Ask questions if you feel unsure about a policy or procedure.
- Maintain loyalty to your office and coworkers.
- Keep up-to-date on your skills. Join a professional association to stay informed, take seminars when possible and read current articles about office management.
- Find a trusted, experienced medical professional who can give you advice about your job.

Don'ts

As an effective healthcare office manager, you should also avoid certain actions.

- Don't share gossip and personal politics at work.
- Don't share personal problems with your patients.
- Don't expect your coworkers or supervisor to remind you to complete your duties.
- Don't speak poorly of your patients, your office or your coworkers.
- Don't break the confidence of patients and their health information.
- Don't attempt to “wing it.” Ensure you know the policies and procedures your job involves.
- Don't lie to try to cover up a mistake. Be honest to solve the problem quickly with the least amount of damage.



Step 10 Let's Get Down to Business

- ❑ Now that you know what personal qualities benefit you in your career as a healthcare office manager, let's take a look at some of the business skills that help you from day to day.

Basic Business Skills

A healthcare office manager has that title because he or she keeps an office running smoothly and works well with coworkers. A healthcare office manager's duties may include word processing, filing, answering phones and e-mails, using fax and copy machines, handling mail, scheduling appointments and keeping and organizing patient records.

Healthcare office managers must possess word-processing skills. You will spend a lot of time at the computer keyboard, and these skills will let you quickly complete letters, forms and spreadsheets. Office managers also should understand office filing systems. You may have to find a patient's file with little or no notice. Or maybe you'll need to add other paperwork to your office's current files. If you have a good understanding of your medical office's filing system, you will easily complete these tasks.

Nearly all office managers need to know how to use office technology such as photocopiers, phones, fax machines and computers. Consider this example:

Amy works as a healthcare office manager for a small practice. One afternoon, the nurse asks if Amy can clear a paper jam in the copier. Amy lends a helping hand. Then, just as she thinks she's figured out the problem, the phone rings. Amy quickly answers the phone, and because she memorized all of the staff's extensions, she transfers the call without even looking at the office phone list. Amy then returns to the copier and fixes the paper jam.

As you can see, Amy's knowledge of office technology allowed her to help the nurse and serve patients at the same time. If you understand the basic principles of technology, you'll operate each office machine with confidence.



Other basic tasks that you may perform as a healthcare office manager include handling office mail, taking notes, scheduling appointments and keeping and organizing patient records. You might also assemble and mail packages and sort and distribute incoming mail. An understanding of classes of mail and postage will help you accomplish these jobs. Perhaps, you'll need to keep a record of the office supply inventory or the funds in petty cash. Office managers who keep good records are recognized as organized and reliable.

As you can see, office managers perform many duties each day. While some of these tasks may seem minor, know that they are all important in the business world. They help a medical office run efficiently.

Communication

For office managers, effective oral and written communication skills are as important as the ability to type letters and prioritize tasks. Healthcare office managers spend a lot of time working with people, both patients and coworkers. And think of how much time they spend answering questions. As a healthcare office manager, you will give patients directions to the office. You may need to tell physicians the location of a specific file. You'll explain the medical records policy to a new nurse. Healthcare office managers field a lot of questions every day. Your ability to communicate your answers on paper and in person can make a big difference.

Organization

Supervisors also prize organized office managers. For example, let's say a nurse asks a healthcare office manager for a form. The office manager fumbles through several stacks of paper on her desk and then turns to shuffle through the files in the cabinet behind her. After a few minutes of looking around, she finds the requested form. Sure, she found the form, but was it just luck? The office manager's lack of organization skills might lead the nurse to question the office manager's ability. It will work to your advantage as a healthcare office manager to keep documents in order and have a clear desk. Remember that your skills help to efficiently run the office.

Multitasking

Think about our day-in-the-life-of examples earlier in the lesson. Gina, Evan and Josh all had to **multitask**, or handle several different jobs at one time. They answered phones while they typed reports and greeted patients while they filed records. As a healthcare office manager, you should expect to do the same without getting discouraged or flustered. If you have effective communication and organization skills, your ability to multitask will come easily.

Computer Use

Today, nearly every type of medical office imaginable uses computers. Office managers must know how to use word-processing software, e-mail and the Internet. Computers are becoming even more integrated with the work that healthcare office managers do. This means you may do more complex tasks, such as design a newsletter or brochure, enter data into a patient's computerized health record or process expense reports using accounting software. A general understanding of computers will make you a valuable resource in any office as a healthcare office manager.

Research Abilities

From time to time, doctors and dentists may ask healthcare office managers to research topics. You might need to gather the latest medical information on a certain subject so a dentist can quickly learn about it. Or you may research a new treatment for a doctor and type a report on the pros and cons. If you know where to research on the Internet or at the library, you will complete these projects quickly and with confidence. Your supervisors will know that they can come to you when they need answers fast.

As you learned, healthcare office managers have a variety of responsibilities. But how will you know which tasks to complete first? Well, that's where prioritizing can help.



Healthcare office managers may research topics for a doctor or dentist.

Set Your Priorities

Have you ever had so much to do that you felt you couldn't get everything done, even if you had all the time in the world? Prioritizing your tasks probably sounded like an impossible luxury! Healthcare office managers have a lot of experience with too many tasks and too little time. In that kind of situation, basic prioritization skills can save the day.

Early on in most healthcare managers' careers, they learn that they can't just work their way through tasks in the order that they receive each one. Just because your supervisor gives you a report to write doesn't mean that everything else goes on hold until you finish it. After all, imagine what would happen if a healthcare office manager stopped answering the phones and checking in patients so he could work on his report!

The key for the healthcare office manager who has multiple duties is to *prioritize*. **Prioritizing** means organizing tasks in order of importance. It is a simple concept, and healthcare professionals everywhere rely on the process. Using priority to organize your work efficiently reduces stress and increases your self-confidence. It also can result in excellent job reviews, a larger salary and a reputation as someone who gets the job done.

Here are some questions that might help you determine your priorities:

Questions to Answer When You Prioritize Projects at Work

1. Who gave this project to me?
2. When is this due?
3. How long will it take me to complete?
4. Will I need special materials, or do I need to do research?
5. What will happen to this project after I finish it?

Because you'll work for a medical office, you'll need some assistance from your supervisors to determine your priorities. Talk to your supervisors to find out the office's business goals. This will help you decide which duties are more important than others. Consider this example:

Ashley just started work as a healthcare office manager for a small dentist's office. She has a number of tasks to juggle. One morning, the dentist gives her a stack of postcards to address, stamp and mail to potential patients. She also has a huge stack of patient records to file. In addition to this work, Ashley must answer phones and assist patients who enter the office. So, should she ignore the phones and the patients and focus on mailing the postcards? How does she know which task is the priority?

Luckily, Ashley talked to the dentist on her first day of work to learn the office's business goals. The dentist told her that patients are the number-one priority. He stressed the importance of patient service and greeting each patient with a positive attitude and friendly smile. So, greeting the patients and answering the phones take priority over mailing the postcards and filing. Ashley can address and stamp postcards as long as she doesn't need to assist patients or answer a phone call.

Ashley has another way to help her prioritize, as well. When Ashley receives a project from the dentist or another coworker, she always asks if there's a deadline. This way, she can prioritize her assignments and make sure she completes her work on time. Ashley frequently works on a number of projects. Each afternoon before she leaves work, she writes a "Things to Do" list for the next day to help her stay organized. The list consists of all the current projects that Ashley must complete. She also writes the deadline and any details for each project on the list.

Interruptions fill a healthcare office manager's job. The days are often fragmented, the activities are varied and the deadlines make you feel that your job manages you rather than vice versa. Although there are many more detailed systems of prioritizing tasks, the "Things to Do" list can transform a chaotic and difficult job into a job you control...and enjoy!



Step 11 Office Protocol and Procedures

- ❑ Your office's hierarchy, along with office procedures and protocol, can affect your priorities as a healthcare office manager.

Office Protocol and Hierarchy

A successful healthcare office manager knows the services, structure and philosophy of the business. He recognizes the guidelines, rules and policies of the workplace. Lastly, an office administrator understands the medical office's hierarchy. Healthcare office managers won't always work for only one person. You may take phone calls, schedule appointments, type correspondence and manage projects for several different supervisors within your office. In this case, you must know **office protocol**, or the code of conduct in your workplace. Let's take a closer look at the hierarchy of an office.

Hierarchy

Healthcare office managers can set priorities if they understand the hierarchy in the office. **Hierarchy** is the medical office's organization of authority. Some offices have a chart that shows the hierarchy. These charts are also called organizational charts. Look at the sample organizational chart that follows.

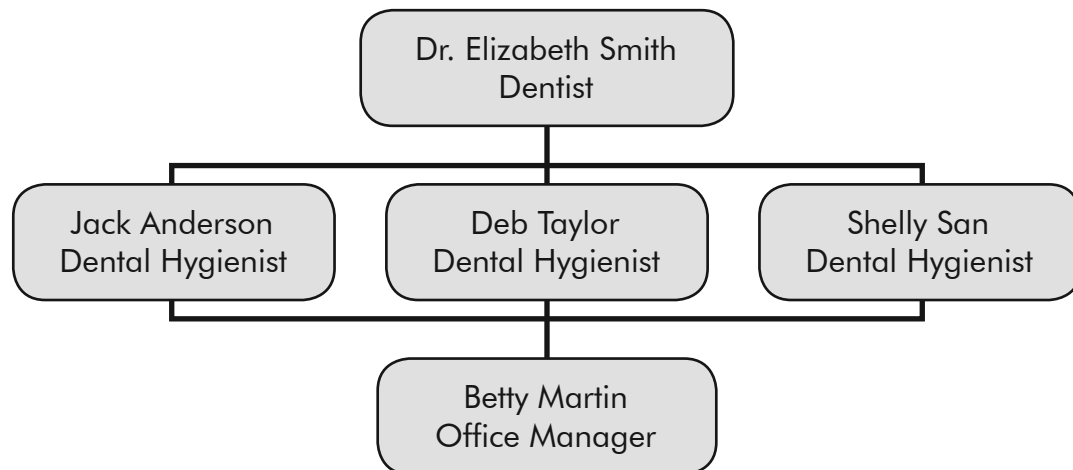


Figure 1-2: Organizational chart

When a vertical line connects two positions, the higher position on the chart supervises the lower position. Positions of equal authority are at the same height on the chart. In our sample chart, Dr. Elizabeth Smith supervises the three dental hygienists, as well as the office manager. The three dental hygienists supervise the office manager. Use an organizational chart to understand office politics and the lines of authority within your office.

Let's look at an example of office protocol. Lily works as an office manager at a large medical clinic. On any given day, Lily might have several high-priority projects to complete for the doctors and nurses in her clinic. When this happens, she follows office protocol. She does any of the doctors' projects first, as they are highest in the clinic's chain of command.

The doctors are of equal height on the clinic flow chart, which means they all carry about the same amount of power within the office. If all three have projects for Lily to complete, she prioritizes each one by urgency and considers how long it will take to complete each. However, Lily knows that in some situations, her boss may need her to complete a project that takes priority over her other tasks. In those cases, Lily always checks with the doctor to make sure it's OK if she postpones his project to work on something more urgent.

As you can see, Lily must keep in mind the office hierarchy when she manages her tasks. As a healthcare office manager, you, too, will need to learn your office's chain of command and how the office's organization chart works.

In addition to knowing the office protocol, you need to understand your office's *procedures*.



Your boss might need you to complete a task that takes priority over your other tasks.

Office Procedures

Procedures are the standards that an office dictates. While these often restate legal regulations, they mostly focus on office policies and methods to help all employees work together efficiently. For example, an office's procedures may require you to write all interoffice memos on a specific form. This way, with a quick glance, you can see who wrote what, when they wrote it and so on. Companies or offices often write their rules or procedures in an **employee handbook**—a compilation of company or office rules and regulations.

The Employee Handbook

Your office's employee handbook will contain a wealth of information to help you in your job as a healthcare office manager. Some information it may discuss includes:

- Hiring requirements
- Grounds for dismissal
- Disciplinary policy
- Resignation
- Dress code
- Work-area appearance
- Equipment and supply use
- Internet and e-mail use

- Proper office phone etiquette
- Lunch and break policy
- Office safety
- Work hours
- Vacation and sick time
- Pay periods
- Performance evaluations
- Insurance
- Retirement plans

As you can see, you will benefit greatly from reading the employee handbook and learning about your office's procedures. Now, before you take your first quiz, pause here and review what you've learned so far with another Practice Exercise.

 **Step 12 Practice Exercise 1-2**

For questions 1 through 8, select the best answer from the choices provided.

- 1. Ann works as a healthcare office manager. She greets patients with a smile and always is eager to help. She exhibits ____.**
 - a. good grooming
 - b. a positive attitude
 - c. thoughtfulness
 - d. loyalty
- 2. As a healthcare office manager, you strive to complete your work on time. Which personal quality are you exhibiting? ____**
 - a. Dependability
 - b. Good grooming
 - c. Good judgment
 - d. A sense of humor
- 3. To multitask means to ____.**
 - a. delegate work to other employees
 - b. focus on only one task at a time
 - c. handle several different jobs at a time
 - d. think carefully about your choices and their consequences before you make a decision

4. **What is the first question you should ask when you prioritize your work?** _____
 - a. Who gave this project to me?
 - b. When is this due?
 - c. How long will it take to complete?
 - d. What will happen to this project after I finish it?

5. **You have the following projects on your “Things to Do” list. Which one would you do first?** _____
 - a. Complete a doctor’s expense report that must be finished by next Monday.
 - b. Help one of your supervising medical office managers who is behind in preparing a presentation for tomorrow morning.
 - c. Take to the supply room and organize several boxes of medical supplies that UPS just delivered.
 - d. Type and mail several thank-you letters a doctor gave you from his trip to a medical conference last month.

6. **What is the difference between office protocol and office hierarchy?** _____
 - a. Office protocol is a workplace’s code of conduct. Hierarchy is the medical office’s organization of authority.
 - b. There is no difference.
 - c. Medical offices only use hierarchies; office protocol is reserved for government settings.
 - d. Office protocol is the medical office’s organization of authority. Hierarchy is a workplace’s code of conduct.

7. **An office’s _____ may dictate that all vacation requests be written on a calendar for everyone to consult.**
 - a. vacation policy
 - b. hierarchy
 - c. procedure
 - d. code of conduct

8. **If you had a question about office safety, you might consult the _____.**
 - a. chain of command
 - b. office hierarchy
 - c. book of procedures
 - d. employee handbook

 **Step 13 Review Practice Exercise 1-2**

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

 **Step 14 Lesson Summary**

- This lesson provided a lot of information about your new career as a healthcare office manager. You saw what a typical day looks like for a healthcare office manager. You explored the various environments you can work in, whom you'll work alongside and what tasks you'll complete.

You also examined the various traits and skills that a successful healthcare office manager has. You now have essential knowledge about grooming, communication, prioritizing and more—all of which will benefit you in your healthcare career. In addition, you explored several business skills that benefit office managers. Finally, you learned how to prioritize tasks and determine a medical office's protocol. In the next lesson, you will examine the medical front office in more detail. First, pause here to take your mail-in quiz. Good luck!

 **Step 15 Mail-in Quiz 1**

- Follow the steps to complete the quiz.
 - a. Be sure you've mastered the instruction and the Practice Exercises that this quiz covers.
 - b. Mark your answers on your quiz. Remember to check your answers with the lesson content.
 - c. When you've finished, transfer your answers to the Scanner Answer Sheet included. Use only blue or black ink on your Scanner Answer Sheet.
 - d. **Important!** Please fill in all information requested on your Scanner Answer Sheet or when submitting your quiz online.
 - e. Submit your quiz to the school via e-mail, mail, fax or, to receive your grade immediately, submit your answers online at www.uscareerinstitute.edu.

Mail-in Quiz 1

For questions 1 through 20, select the best answer from the choices provided. Each question is worth 5 points.

- 1. Michael wants to work in a moderately paced office with only one main doctor. He should consider working at a/n ____.**
 - a. urgent care clinic
 - b. small doctor's or dentist's practice
 - c. hospital
 - d. laboratory
- 2. The ____ is a standard document that contains a list of the most common procedures doctors perform.**
 - a. new patient questionnaire
 - b. medical bill
 - c. complaint
 - d. encounter form
- 3. Dr. Stevens determines that his patient suffers from chicken pox. This is the ____.**
 - a. chief complaint
 - b. diagnosis
 - c. treatment
 - d. complaint
- 4. Dr. Stevens then prescribes Calamine lotion and acyclovir for the patient's chicken pox. This is the ____.**
 - a. chief complaint
 - b. diagnosis
 - c. treatment
 - d. complaint
- 5. Marta works in a hospital. During her typical day, she assists the nurses on staff with paperwork and she also takes patients' temperature, weight and blood pressure. Marta likely works as a ____.**
 - a. doctor
 - b. nurse
 - c. nurse assistant
 - d. medical coding specialist

6. Daniel stabilizes patients with a variety of emergency medical conditions. He also transports them to the hospital. Daniel likely works as a(n) ____.
- physician
 - nurse
 - medical coding specialist
 - EMT
7. Sheila shows up for her first day on the job as a healthcare office manager. She spent an hour getting ready and arrives at the physician's office wearing a pair of grey slacks, a white blouse and black heels. She pulled her hair up into a bun and wore small pearl earrings and her wedding band. Before she left the house, she spritzed on her favorite body spray. Sheila ____.
- followed some of the tips for good grooming. However, she should not wear heels in a medical office
 - followed some of the tips for good grooming. However, she shouldn't wear perfume or body spray because it could affect patients
 - did not follow any of the tips for good grooming. Since Sheila works in a doctor's office, she should wear scrubs
 - followed all of the tips for good grooming and presented herself in a professional manner
8. These healthcare professionals often must work 100 hours a week during their residencies. ____
- Physicians
 - Nurses
 - Medical billing specialists
 - Healthcare office managers
9. You work as a healthcare office manager. One afternoon, a patient enters the office. He is upset about a bill he received, and he is looking for an argument. You take the patient into the back office to discuss the matter. What trait of an effective office manager did you use? ____
- Discretion
 - Initiative
 - Multitasking
 - Good judgment

10. Janet just started her new career as a healthcare office manager. She works alongside another healthcare office manager, Nancy. Nancy has worked as an office manager for 15 years and is a loyal and dedicated employee. Janet observes Nancy's admirable behavior and tries to model it. This demonstrates ____.
- discretion
 - tact
 - multitasking
 - good judgment
11. If you try to help everyone who calls or comes into your office, are courteous and patient, and greet everyone with a positive attitude, you are exhibiting which trait of a good healthcare office manager? ____
- Initiative
 - Thoughtfulness
 - Sense of humor
 - Positive attitude
12. As a healthcare office manager, you strive to be on time, complete your tasks before deadline and keep your work confidential. You are ____.
- positive
 - an excellent multitasker
 - dependable
 - thoughtful
13. An organizational chart shows ____.
- how a healthcare facility prioritizes its work
 - hierarchy
 - office protocol
 - the code of conduct in a workplace
14. You work as a healthcare office manager. One day, a patient comes into the office. The patient asks if Dr. Wick is on duty. When you tell her he is in the office, she rolls her eyes and says, "I can't stand Dr. Wick. He is such a jerk." You should ____.
- agree with her. You can't stand Dr. Wick either, so you tell her all about the rude things he's said to you
 - politely offer to have another doctor examine her
 - laugh and then tell her about all of the other jerks who work in your office
 - ask the patient to take her services elsewhere. You can't have patients bad-mouthing your coworkers

15. **Your best friend’s boyfriend, Paul, is a patient at the doctor’s office where you work. One day, you and your best friend are having coffee. She says, “Paul told me he saw you last week at his appointment. Did they find out what’s wrong with him?” You should ____.**
- tell her what his diagnosis was, but ask her not to repeat the information
 - give her detailed information about his medical record
 - photocopy Paul’s encounter form and give the copy to your friend
 - explain that you cannot discuss confidential patient information
16. **As a healthcare office manager, you should know how to use all of the following except ____.**
- computer
 - photocopier
 - x-ray machine
 - fax machine
17. **Elaine works as a healthcare office manager. Her desk has stacks of papers on it, and Elaine often has trouble finding various forms and files. Elaine needs to improve her ____ skills.**
- communication
 - organization
 - multitasking
 - research
18. **Denny answers patient phone calls, files records and greets incoming patients with ease. He demonstrates strong ____ skills.**
- communication
 - organization
 - multitasking
 - research
19. **Mandy’s supervisor, Claire, asked her to research a new x-ray machine available on the market. Claire told her to spend an hour or two researching this machine. Mandy knows she’ll need to use her computer for this project, and after she types up the report, Claire will share it with the office physician. What other information does Mandy need to prioritize this task? ____**
- She needs to know when it’s due.
 - She needs to know how much the x-ray machine costs.
 - Mandy has all of the information she needs.
 - Mandy needs to know why Claire wants this information.

20. One day, Dr. Moore asks Mandy to complete a high-priority project. He needs it finished by the end of the day. Mandy's coworker, another office manager, asks Mandy to help her file. She needs this done immediately. Mandy should _____.
- a. complete the project for the doctor because he is the highest in the office's chain of command
 - b. work on each project for an equal amount of time
 - c. help her coworker, since filing is part of her daily duties
 - d. help her coworker file and then ask her coworker to complete the doctor's project

Endnotes

- ¹ Green, Michelle A. and Mary Jo Bowie. *Essentials of Health Information Management: Principles and Practices*. Clifton, NY: Thomson Delmar Learning, 2005.

Congratulations
You've completed Lesson 1.



Don't wait for your quiz results to continue with Lesson 2.

Lesson 2

The Frontline: The Medical Front Office



Step 1 Learning Objectives for Lesson 2

- ❑ When you complete the instruction in this lesson, you will be trained to do the following:
 - Describe the administrative equipment used in a medical front office.
 - Explain front-desk responsibilities.
 - Discuss the fundamental components of effective phone skills.
 - Illustrate how to schedule appointments.
 - Determine the pros and cons of the various scheduling methods.
 - Describe the process to resolve canceled appointments, walk-ins and special office situations.
 - Explain how to handle mail in the medical office.
 - Describe time- and task-management techniques in the medical office.



Step 2 Lesson Preview

- ❑ In Lesson 1, you met several healthcare office managers. You followed each one through his or her typical day in a medical office. You learned about the various tasks they complete throughout the day. Now that you have that general overview, let's take a more in-depth look at the healthcare office manager's duties in the front office.

We'll begin with a review of the equipment you'll find in the medical front office. You'll then study reception duties. You'll examine the fundamentals of effective phone skills and explore how to handle special situations, such as angry patients, salespeople and children.

Then, we'll move on to appointments. As a healthcare office manager, you'll spend much of your time dealing with patients' appointments—making them, canceling them and rescheduling them. You'll also discover how to receive patients with and without appointments.

The next section of the lesson focuses on how to handle mail in the office. You'll examine the different classes of mail and how to handle ingoing and outgoing mail and office e-mail. Finally, we'll introduce you to general office management duties and techniques.

Are you ready? Let's get started!



Step 3 Administrative Equipment

- You probably have a general idea of what kinds of office equipment the medical office uses. In Lesson 1, we briefly discussed the equipment you'll use as a healthcare office manager. Let's review the tools you'll use in your work in more detail.

Basic Equipment

Basic equipment is just that: basic. You probably already know how to use most of these items. You may even use them in your everyday life! Calculators, copiers, fax machines and telephones with answering systems have become so integral to our daily lives that we often consider them necessities. You may know someone who checks his messages and e-mail the instant he walks in the house. Only a few decades ago, the first facsimile, or fax machine, was put into commercial use. With the advent of fax machines, transmission of data suddenly became instantaneous, and the possibility of a global economy was born. Now fax machines are so run-of-the-mill that many people have them in their homes. Technology has become an important tool in our lives. Let's take a look at some of the amazing inventions that we now consider commonplace.

- **Calculator**—Healthcare office managers need to know how to use a calculator to manage a number of different tasks in the medical office. A simple **calculator** (a mechanical device that performs various mathematical calculations) with 10 number keys that can perform basic mathematical equations is sufficient for the medical office.
- **Copy Machine**—Administrative staff uses the copier to make copies of insurance cards, encounter forms and other records. As a healthcare office manager, it's important that you remember to photocopy patients' insurance cards when they come in for a visit. You need to learn to load the paper, clear paper jams, change the toner and clean the copy machine in your medical office. Certain rules and regulations govern the use of copy machines. Any copyrighted materials require that you get permission before you make a duplicate. Make sure that you copy materials legally. And, of course, your code of work ethics would prevent you from using the copy machine for personal reasons without your employer's consent.
- **Fax Machine**—You'll use a fax machine to send copies of forms and records to other providers, hospitals or insurance companies. The same copyright regulations apply to the fax machine, so make sure to follow the law. The sensitive nature of some documents requires confidential faxing procedures. It's very important that faxes aren't sent to people who are not authorized to view the information. Make sure you know what you fax and who will receive it.



Healthcare office managers use a copy machine to duplicate important records and forms.

- **Telephone-answering System**—You use the phone system to store frequently called numbers, direct calls to appropriate personnel, arrange conference calls and use multiple lines to answer more calls at once. Some functions also allow you to schedule appointments on a daily calendar. Then, the phone can alert you when important meetings are coming up.
- **Answering Machines and Voicemail**—Most medical offices now use voicemail rather than answering machines. The advanced options of voicemail allow the medical office to answer its telephones 24 hours a day, and it saves staff time as it selects the correct call recipient without the help of a receptionist.

Specialized Equipment

Now, it's time to learn more about some of the devices that you may not be as familiar with. *Medical transcribers*, *microfilers* and *dictation machines* all assist in gathering and storing patient information. Doctors use dictation machines to make records of their notes and instructions. Medical transcribers, which you briefly learned about in Lesson 1, provide hard copies of doctors' notes for medical records, and microfilers convert large quantities of records into a small space. When used together, the transcriber, microfiche and dictation machine can minimize the area needed for records storage and ensure the accuracy of the information itself.

- **Medical Transcriber**—A **medical transcriber** allows you to listen to a voice recording while you type what you hear into a computer. Most medical offices use a word-processing program for their transcription requirements. The doctor records her patient exam notes over the phone. The transcription then accesses the audio file that links to her transcription software.
- **Microfilm**—A **microfilmer**, **imager**, or **microfiche**, is a machine used to reduce a document to a very tiny size and store it as a film image, either on a roll or on a microfiche. The document then becomes too small to actually read without magnification. When the information is needed, a microfilm reader/printer magnifies the image to normal size on a screen. The machine can also print a copy of the document in its original format. Keep in mind that this technology is dated and you will no longer use it to store new information. However, you may need to look up old patient information on a microfilmer.
- **Digital dictation service**—In years past, medical staff used a **dictation machine** to voice record notes. Usually, they used a hand-held, portable tape recorder, and they would pass their tapes on to the medical transcriptionist. These days, most physician's offices use a digital transcription service. The physician calls a phone line and dictates his notes. These notes then link to a computer network and the medical transcriptionist can access the audio file from her computer.



After the medical transcriptionist transcribes the doctor's notes, the computer stores the information in an electronic medical file.



Step 4 Reception

- ❑ The front desk of a medical office is often busy. Healthcare office managers greet patients, answer phones, field patient questions and assist the physician and other office staff. Physicians rely on the healthcare office manager. Let's examine some of the front-office duties in a medical office.

Open and Close the Office

As a healthcare office manager, you may open and close the office. Offices usually have specific procedures for opening and closing, which are written in a *policy and procedures manual* along with other office policies. Take a look at the following sample list of duties to open and close the office.

Open the Office

To open the office, you may perform some or all of the following tasks:

- Unlock doors.
- Check messages from the night before.
- Check e-mail messages.
- Check for lab results.
- Turn on computers and other machines.
- Double-check that all health records were pulled for the day's patients.
- Check the fax machine.

Close the Office

To close the office, you may perform these tasks:

- Ensure that the day's mail is read to go.
- Shut down computers and other machines.
- File health records and other paperwork from the day.
- Print a list of appointments and reminders for your boss for the next day.
- Count payments for the day, and prepare a bank deposit.
- Lock doors.



There's more to closing a medical office than just locking the doors.

Interact with Patients

As a healthcare office manager, you'll constantly interact with patients, whether it's in person, on the phone or via e-mail. Let's explore some skills to effectively interact with patients.

Greet Patients

When patients open the door to your medical office, you'll likely be the first person they see. Often, patients check in for the appointment at the front desk and receive paperwork to complete. Patients might need to provide insurance information, update their personal information or complete new patient questionnaires. Remember to photocopy patients' insurance cards for your files. In any event, you will help patients with their paperwork, gather forms they need to fill out and answer any questions they have.

Remember, you essentially represent your medical office, and your level of professionalism reflects the quality of your medical office. Some people feel anxious about visiting the doctor, so welcome the patients, help them feel comfortable and assist them with their questions.

In addition, since a medical office is a business, it will also receive visitors. Other visitors could include physicians, pharmaceutical representatives, medical sales representatives, former patients, relatives of patients and employees' family members. You should politely greet each of these visitors.

As you greet patients, you may face several special situations. Let's discuss how to handle each.

Handle Special Situations

Healthcare office managers must demonstrate another important quality in addition to those we discussed in Lesson 1. They must genuinely like people. Most people you meet in your job will be pleasant. However, a few may present difficult or challenging situations. Use your intuition, professionalism and respect for people to choose the right solution when problems arise. Let's examine some common situations that healthcare office managers encounter.

International Patients

The United States has been called the "great melting pot." People of all cultures and races live in communities small and large. Many speak a different language or talk with a heavy accent. Even the smallest medical clinic will sometimes encounter a patient from another country who may not speak English. Find out what language skills the office employees have. Several may be bilingual and can translate should the need arise. Simple patience and tolerance, as well as speaking slowly and clearly, will help in these situations. Also, watch nonverbal cues from patients, such as facial expression, nodding, shrugging, etc.

Disabled Patients

You may encounter patients who have slight hearing or visual impairments, or who are deaf, blind or wheelchair-bound. Treat everyone naturally, without making a fuss. Indicate where a disabled person might comfortably sit, or move a chair so there is room for a patient who uses a wheelchair.



Quiet children help maintain a professional office environment.

Children

You will likely work with children in your new career. Many children may become bored after being cooped up in an office. You can distract a child who is rowdy, nervous, tired or bored if you have a few children's books or magazines (in various reading levels), some crayons and scrap paper and some simple toys on hand. You can bet that everyone—the children, their parents, your coworkers and other patients—will appreciate it.

Unsolicited Salespeople

Some sales representatives will be welcome at your office. Salespeople, such as pharmaceutical representatives—provide information about current products, services, prices, delivery schedules and technical data to your office. Find out your medical facility's policy on salespeople.

Sometimes, you may have to turn away a salesperson whose products are not needed or wanted. Some salespeople can be pushy and insistent. Remember, this is their livelihood. But calmly repeat your apology until the person tires of your answer and leaves. Sometimes, it helps to recommend a more appropriate place or organization that the salesperson might try.

Angry or Rude Patients

The most difficult situation you may face as a healthcare office manager is an angry patient. When you encounter an angry patient, remain professional to calm him or her. There may be a good reason for the person's behavior. In any case, your ultimate goal is to turn an uncooperative patient into a cooperative one.

Do not blame the patient for the problem or situation. This only adds to the tension. Follow these tips to deal with difficult patients:

- Remain calm. Your anger or frustration will only stoke the flames of an upset patient's fire.
- Find a place to discuss the dilemma.
- Let the patient know you want to help. Ask questions to solve the problem.
- Listen carefully to what the person says, and clarify any points you don't understand. Listen to the entire story when possible.



Remember to keep your cool when you deal with hotheads.

- Don't criticize or act defensive. Remember, the person is probably not upset with you.
- In the rare instance that a patient seems highly aggressive, intoxicated or abusive, call security or a coworker to help and to act as a witness.

Keep these strategies in mind as you deal with different patients in your new career.

Next, let's look at another important responsibility of the front desk, answering the phone.



Step 5 Effective Phone Skills

- We can't mention the front desk without mentioning the telephone. You'll learn telephone professionalism in the supplement, *Develop a Professional Medical Phone Personality*, but we'll briefly discuss the importance of your telephone skills. In today's extremely competitive workplace environment, every contact with patients and coworkers needs to be a positive one—every first impression a favorable one.

When you answer the phone, you represent your medical office, and your professionalism reflects the quality of your organization. This is a huge responsibility. After all, a caller may easily detect irritation or an insincere desire to help. You should answer calls quickly, or the patient may take her business elsewhere.

The two fundamentals of effective phone skills include warm confidence and genuine concern. Used together, these traits will help you:

- Deal with the patient-service challenges effectively.
- Handle difficult callers with self-assurance.
- Reduce stress and maintain composure, even during a chaotic day.
- Improve marketing skills.
- Make a favorable impression on patients and coworkers.
- Create a sense of trust and preference for your organization in patients.

Another tip is to always answer the phone with a smile on your face. This helps you to answer with a friendly tone in your voice. Believe it or not, callers can "hear" whether you are smiling or not!

Let's face it. We've all tried calling organizations only to be frustrated by endless rings, being placed on hold seemingly forever, confusing voicemail systems and rude receptionists with few answers and little help. You don't want your callers to feel frustrated, so when the phone rings, treat the caller as you wish to be treated.

As you can see, phone skills are an essential part of your job as a healthcare office manager. Now, let's look at another important task—scheduling.



Step 6 Schedule Appointments

- ❑ As a healthcare office manager, you'll spend quite a bit of time scheduling **appointments**, or prescheduled meetings, for many patients. Appointments are the most common method used to manage time in the medical world. They keep work flowing and give people the opportunity to meet, discuss, interview, review, sell and teach. You will make, change and cancel appointments that patients, healthcare professionals or salespeople request with your organization, or that your supervisors request with others.

There's more to scheduling appointments than you might think. For instance, the doctors you work for might have different schedules. One doctor prefers to have her mornings open, so you must schedule all of her appointments in the afternoon. The other doctor prefers to have his appointments in the morning so he can meet with associates and pharmaceutical salespeople in the afternoon.

As a healthcare office manager, you need to use good judgment when you schedule appointments. Consider the following three items:

1. Your boss's preferences. Does he want Mondays and Fridays free of appointments? Will he or she see patients between noon and 2 p.m.?
2. Which appointment takes priority? How should you handle emergencies and urgent issues?
3. How much time does each appointment take, and how many minutes should you schedule between appointments? Do appointment times vary depending on the reason for the visit?



Proper scheduling utilizes your multitasking skills.

Gather Information

To schedule appointments, you must gather accurate information. Make sure you get the following details before you hang up the phone or let that person leave the office.

- **Name and date of birth**—Make sure you write the person's complete name, correctly spelled and as the patient wants it written. Write the pronunciation next to the entry if this will help you or your supervisor later. Also enter the patient's date of birth.
- **Telephone number**—Record the area code and the phone number of a daytime telephone for each patient. The number will save you time and effort when you need to cancel or rearrange appointments. If necessary, record a pager, extension number or cell phone number.

- **Reason for Appointment**—Some offices write the reason out completely, while others use code numbers or letters for this purpose; still others use specific phrases.
- **Insurance Information**—Gather the patient’s insurance information, including the insurance company name and the coverage type. If the patient is in the office, ensure you have an updated photocopy of her insurance card.
- **Referral Source**—It’s important to know how a patient was referred to a healthcare organization. Your office can study this information to see what kind of advertising works. Some medical professionals like to know who referred a patient, so they might mention it in the first appointment. (“I understand that a patient referred you.”) Many physicians send a thank-you note to each patient or medical professional who refers a new patient.

Record Information

When you record an appointment, offer the patient a choice of days and times, when possible. Then, enter the information into the computer or neatly in pencil if your office uses a paper-based appointment system—you may need to erase it later. Remember to include the patient’s phone number or other time-saving information. Before you go home each day, print a list of appointments and reminders for your boss for the next day.

If a patient cancels or changes an appointment, erase the old entry. If a patient is a no-show, note this in the appointment system.

Some medical offices allow for a certain amount of time in the morning and afternoon for emergency or urgent appointments; these are known as **buffer periods**.



Include time-saving information when you record a patient’s appointment.

Create a Schedule of Appointments for a Doctor

When you make a schedule of appointments for a doctor or supervisor, follow these general instructions:

- Understand your supervisor’s preferences, such as when and how to make appointments and what type of reminder she prefers. You might ask, “How would you like me to remind the pharmaceutical salespeople of the meetings we’ve scheduled?”
- Place a copy of the day’s schedule on the doctor’s desk or other designated location. Ask your supervisor to review the day’s calendar for accuracy.
- Enter appointments into the computer or calendar clearly.
- Avoid scheduling appointments too early or too late, based on office protocol—before 9 a.m. or after 4 p.m., for example.

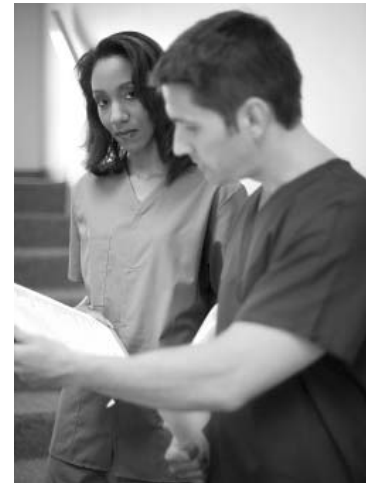
- Schedule appointments in blocks, if you can, instead of scattered throughout the day.
- Keep the doctor's appointment schedule lighter than usual a few days before and a few days after a business trip or vacation.
- Allow enough time for appointments—consider travel time when meetings are out of the office.
- Unless it's a lunch meeting, avoid scheduling appointments during the lunch hour.
- Don't make an appointment if you suspect the doctor doesn't want to meet with this person. You can say, "I'm only making appointments at Dr. Solvang's request for the next week. Please let me call you back after I speak with him."
- Record future appointments and events on the appropriate calendars or in the computer as soon as they are made.
- Place a reminder of critical due dates and anniversaries or birthdays on your calendar one week early.
- Record any necessary or new information on the calendar or in the computer along with the appointment.
- Keep your appointment books, computer files and calendars (for use as a tax history) for at least one full fiscal year (the office's 12-month financial reporting period), depending on the doctor's needs.
- When you start a new calendar, record recurring events first, such as due dates or annual medical conventions.

Now that you have some general information about how to set appointments, let's look at the different types of appointment systems.

Types of Appointment Systems

There are many different systems used to make appointments. The success of a system depends on how it fits with your office environment. For example, scheduled appointment systems work well for medical offices. Patients come into the office at a certain time for an appointment. This way, they have time to see the medical professional.

The success of an appointment system also depends on how well the healthcare office manager uses it. If she doesn't keep the system current, it won't work well as a time-management tool. For example, healthcare office managers must check appointment schedules regularly, taking care to note appointments that other office staff members make. If appointments are disregarded or double booked, the system fails. The best way to balance a day's workload is to choose an appropriate scheduling system and use it efficiently. Let's take a closer look at some appointment systems.



Keep everyone updated on schedule changes.

Open Office Hours

Open office hours means a person can walk into an office without an appointment. Open office hours don't usually work well in the average medical office unless it is a designated urgent care clinic that handles walk-ins.

Scheduled Appointment Systems

Many offices use scheduled appointment systems—especially medical offices. If Brit has an ear ache for two days, she calls her doctor's office and schedules an appointment at a particular time.

Offices that use scheduled appointment systems may make appointments every five minutes on a computer. These offices expect some people to be early, some to be late, some to be on time and some not to show up at all. People without appointments line up for service—they may have a long or short wait depending on the work flow of the day.

There are several different types of scheduled appointment systems. Let's examine a few of the most common ones.

Time-specified Appointments

In a **time-specified system**, each patient gets an assigned appointment time. The time units can be as little as 10 minutes or as much as an hour, depending on need. For example, in a dentist's office that uses 20-minute units, a dentist might request the healthcare office manager put a patient down for two units, or 40 minutes, for an appointment that week.

Usually, no one else has the same time-specified appointment. The advantages to this system are that a patient who arrives on time for an appointment won't need to wait long. Also, you can prepare a patient's file in advance. Finally, the patient receives the full attention of the caregiver she sees.

TUESDAY		MARCH 28, 20XX	
7:00 ^{AM}		1:00	
7:15		1:15	↓ Bruce J. Bell (924-2378)
7:30		1:30	↓ (Cap)
7:45		1:45	↓
8:00		2:00	↓ Jolene Ramsey (752-2222)
8:15		2:15	↓ (Exam & Clean)
8:30		2:30	↓ Jimmy Ramsey (")
8:45		2:45	↓ (Ch. Exam & Clean)
9:00	↓ Ronald J. Simpson (727-3480)	3:00	↓ BREAK/BUFFER
9:15	↓ (Exam & Clean)	3:15	↓
9:30	↓ Jane L. Owens (752-2626)	3:30	↓ Ramon Garcia (368-5252)
9:45	↓ (Exam & Clean)	3:45	↓ (Crown/Partial)
10:00	↓ Linda Martinez (368-4555)	4:00	↓
10:15	↓ (Root Canal)	4:15	
10:30	↓	4:30	(BUFFER)
10:45	↓	4:45	
11:00	↓ James Watts (727-3211)	5:00	
11:15	↓ (Crown)	5:15	
11:30		5:30	
11:45		5:45	
12:00 ^{PM}		6:00	
12:15		6:15	
12:30		6:30	
12:45		6:45	
EVENING		NOTES	
7:00			
8:00			
9:00			

The time-specified system assigns a block of time to each visitor.

The main disadvantage to this system is that there is no room for error. If a patient arrives late or cancels an appointment, it wastes time and throws off the schedule. To avoid wasted time, some offices **double book appointments**, or schedule two appointments at the same time, though this isn't common in medical settings.

The disadvantage to double booking is that when two patients show up at the same time, one patient has to wait. If most patients show up on a certain day, the office quickly falls behind schedule. With double booking, a medical office might fall behind for the entire day. Further, each visit becomes more rushed and impersonal as the doctor tries to make up time.

Wave Scheduling Appointments

The **wave-scheduling system** bases appointments on the average length of a routine visit. For example, consider a medical clinic that sees an average of four people an hour for about 15 minutes each. Using the wave system, the office administrator schedules four patients each hour, usually on the hour. The doctor sees the patients in the order that they arrive.

The wave system makes it easier for an office to adjust when patients arrive late. The late patients then must wait rather than the staff. Every hour, the staff begins again with a new group of patients. With this system, however, patients might feel that the clinic always runs behind schedule or that it's to their advantage to arrive late. Look at the following example.

MAY APRIL 10

	1:00
	1:15
	1:30
	1:45
Louise Mitchell, Barbara Jones, Eileen Boyd, 2:15, Renee Larson	2:00
	2:15
	2:30
	2:45
John Wilson, Kyle Martin, Terry Spaulding, Ken Manning	3:00
	3:15
	3:30
	3:45
Mike Long, Harry Jeffries, Sheila James, Dan Patterson	4:00
	4:15
	4:30
	4:45
	5:00
	5:15
	5:30
	5:45

Client Sign-In Sheet	
<i>Please Sign In</i>	
NAME	TIME
<i>Louise</i>	<i>1:55</i>
Barbara	2:00
<i>Eileen</i>	<i>2:15</i>
<i>Renee</i>	<i>2:40</i>
_____	_____
_____	_____
_____	_____
_____	_____

Using the wave system, the office manager schedules several people for the same time slot.

Note that Louise, Barbara, Eileen and Renee were all scheduled to arrive at 2 p.m. However, you see that Renee arrived 40 minutes late. If each preceding appointment took 15 minutes, she only had to wait five minutes. She actually benefits from arriving late.

Manage Walk-ins

While some organizations cater to walk-ins, nearly every office will sooner or later have to deal with such visitors.

Greet the Walk-in Visitor

- Give the walk-in patient the same courtesy as one with an appointment.
- Greet him, and ask the purpose of his visit.
- Give him your undivided attention.
- Don't let the visitor leave your desk empty-handed. Give something to each person you greet: the correct answer to a question, a needed form, directions to another department within the hospital and so on.

Each office treats visits from family members, salespeople and repair people differently. Make sure to refer to your office's policy and procedures manual and apply those policies and procedures with professionalism.

Appointment Scheduling Supplies and Equipment

To schedule appointments, you may use a medical appointment calendar, a typed list, appointment cards and reminder postcards. You might do all of your office's scheduling on a computer. As a healthcare office manager, the tools you use depend on your employee and employer preferences, as well as your own personal preferences.

Visitor's Log

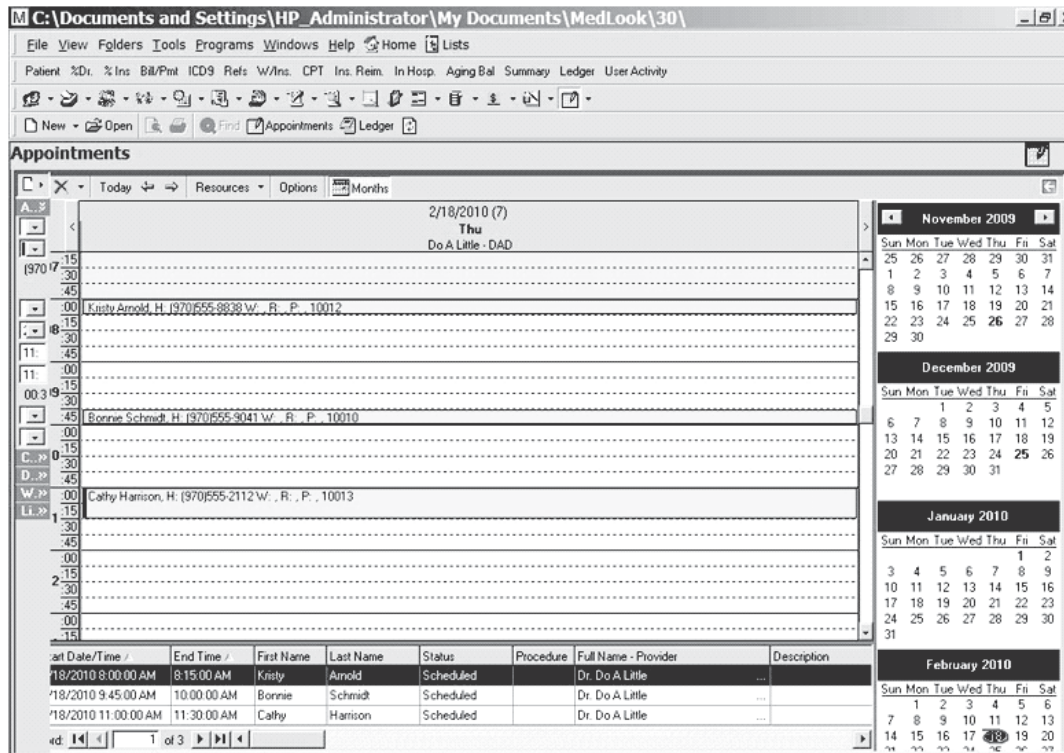
Many medical facilities use a *visitor's log* to stay organized and for security reasons. A **visitor's log** is a simple record of all patients and non-employees who visit the office. The log notes when the visitor arrived, left and the reason for the visit. Note that *Health Insurance Portability and Accountability Act (HIPAA)* regulations—which you'll learn about in a later lesson—require you to keep this log out of sight of other patients and specify that you only use the first names of patients. Another common practice is to use 4 x 4 labels, which the patient uses to sign in with. You'll then remove the label and adhere it to the patient's chart.

Appointment Book or Computer Program

There are many kinds of appointment books and computer programs used to schedule appointments. Most contain pages to record appointments for an entire year. Daily appointment books or computer programs have one or two pages per day, and the pages might be color coded. The divisions of units or time can be anywhere from 10 minutes to an hour or more each.

Weekly appointment books are designed to display one full week when open. Some books or programs divide each day into two or more columns, and you assign each column to a different staff member. This way, you can maintain or read several schedules at once.

The following sample is an appointment scheduler from a program called MedLook. This program allows you to enter appointments into the computer electronically. You will learn more about entering appointments into MedLook in a later lesson.



Appointments and calendars in MedLook

Appointment Cards

Have you ever gone to the dentist or eye doctor, and, following your checkup, scheduled your next appointment six months or a year in advance? It can be hard to remember an appointment so far away! Perhaps to help you remember, the healthcare office manager gave you an **appointment card** with the date and time of the appointment written on it, so you could keep it in your wallet or write the date on your calendar. Maybe a few weeks before your appointment, you received a reminder postcard in the mail. These are two techniques offices use to remind patients of their appointments.

APPOINTMENT	
For _____	
On _____	At _____ A.M. P.M.
HERBERT E. ZANDERVAN, M.D.	
850 W. OXFORD ST., SUITE 373	TELEPHONE
CAMBRIDGE, COLORADO 80210	303-555-1234

Appointment cards contain the date and time of a patient's future appointment.

As you can see, using a scheduling system can help you budget your time. When you work as a healthcare office manager, you may use some or all of the systems we discussed. But remember, the type of appointment system you use will depend on the medical setting in which you work. You must properly use these systems for them to work well.

Reschedule

When a patient calls to cancel an appointment, offer to reschedule her at that time. Find an available time slot, and repeat the new date and time for the patient. If the patient doesn't know when she can reschedule, make sure you note this. Find out from your supervisor if you need to reschedule canceled appointments at a future date.

Sometimes, doctors go out of town or are out of the office for a variety of reasons. They may attend a medical conference, have a family emergency, go on vacation, etc. If you need to cancel an appointment for a doctor, call the scheduled patient as soon as possible.

Follow these guidelines when you cancel an appointment.

1. Express regret on the doctor's behalf, but don't dwell on the apology. Do not mention confidential or private reasons.

WRONG: "Dr. Rudolph has decided to go to her sister's wedding after all." Or "I am so sorry Dr. Rudolph cannot make it. That puts you in a terrible bind, doesn't it?"

RIGHT: I am sorry that Dr. Rudolph won't be able to keep your appointment. She will be out of town."

2. Say that you must reschedule the appointment, and shift to a positive alternative.

WRONG: "I don't see how she'll be able to fit you in with her busy schedule next week."

RIGHT: "She is expected back in town Monday. Shall I set up another appointment for you early the following week?"

Now, let's pause to review the material with the Practice Exercise that follows.

 **Step 7 Practice Exercise 2-1**

- For questions 1 through 12, select the best answer from the choices provided.

1. **Marta needs to add up the total cost of office supplies for next month. To do this, she should use a ____.**
 - a. copier
 - b. fax machine
 - c. multi-line phone
 - d. calculator
2. **Dan uses the copy machine to ____.**
 - a. make photocopies of insurance cards
 - b. calculate dosages of medicine
 - c. forward calls to the transcriptionist
 - d. send copies of records to other physicians
3. **A ____ allows a person to listen to a recording of the doctor's notes and type them into a computer.**
 - a. dictation machine
 - b. medical transcriber
 - c. voicemail system
 - d. microfilmer

4. **Often, medical offices have specific procedures written in ____ along with other policies. This way, the medical office staff can refer to it for specific instructions on how to open the office or handle visitors.**
 - a. an employee training manual
 - b. transcription
 - c. a policy and procedure manual
 - d. a healthcare office manager list of duties

5. **When you open the office, make sure you ____.**
 - a. start the coffee
 - b. call the physician to tell her you've arrived
 - c. pull health records for the day's patients
 - d. print a list of appointments for the next day

6. **When you close the office for the day, ____.**
 - a. check the fax machine
 - b. turn on the computers
 - c. pull health records and charts for the next day's patients
 - d. count payments for the day, and prepare a bank deposit

7. **When you greet patients, welcome them, make them feel comfortable and ____.**
 - a. help them schedule their next appointment
 - b. answer any questions they may have
 - c. tell them to fill out their forms as quickly as possible
 - d. fax their medical records to their former doctor

8. **If you encounter a patient who doesn't speak English very well, speak ____, and watch for nonverbal cues.**
 - a. loudly and clearly
 - b. slowly and spell each word
 - c. to a staff member about hiring an interpreter
 - d. slowly and clearly

9. The ____ appointment system allows a patient to walk into an office without an appointment.
- open office hours
 - time-specified
 - walk-in
 - wave
10. Your medical office makes appointments every five minutes on the computer. What type of appointment system does your office use? ____
- The walk-in system
 - Time-specified system
 - Open office hours
 - Scheduled appointment system
11. A medical office might do all of the following to remind a patient of an appointment except ____.
- send the patient a reminder postcard
 - give the patient an appointment card with the time and date on it
 - e-mail a list of the day's patients, highlighting the patient's scheduled appointment time
 - call the patient to remind him of his appointment
12. The ____ system bases appointments on the average length of a routine visit.
- wave-scheduling
 - double-booked appointment
 - time-specified
 - open office hours

 **Step 8 Review Practice Exercise 2-1**

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



Step 9 Manage Mail and Office Correspondence

- ❑ As you can imagine, medical offices receive plenty of mail. In addition, staff in a medical office must send out letters, packages and postcards. As a healthcare office manager, you will manage the mail.

In practices large and small, a healthcare office manager receives all the different types of incoming mail and posts all of the outgoing mail. Larger businesses often have their own mail department or mailroom to sort mail for the whole facility. Even so, mail handling skills and knowledge are essential for a healthcare office manager.

Let's follow Barbara, a healthcare office manager for Carson Medical Center, as she takes care of her office's mail.



Properly process the mail to help the entire office to run smoothly.

Incoming Mail

Barbara sorts and distributes the incoming mail for two different departments. She sorts it first, then opens it and *date-stamps* it. Then, she places it in the appropriate employee's mailbox.

Receive Mail

First-class letters aren't the only kind of mail that arrives at Carson Medical Center. Barbara also sorts packages, journals, catalogs, magazines, brochures and even e-mails and faxes. The United States Postal Service (USPS) delivers some items, and private carriers, like UPS, deliver some items. Pat, the regular USPS carrier brings the mail at about 10 a.m. each day, but private messengers and carriers stop at the office throughout the day to drop off and pick up letters and packages. Barbara ensures that all the incoming mail makes it to the proper employee and all of the outgoing mail goes to the correct carrier.

Sort Mail

This morning, Barbara sorted and opened about 40 pieces of mail. With a large quantity, staying organized is critical. First, she divides the mail into separate stacks as follows:

1. Preference
2. First-class and Priority
3. Interoffice
4. Presorted Standard (Bulk)

Preference Mail

Preference mail includes *Express Mail*, certified or registered mail and, in some cases, letters marked Personal or Confidential. Generally, these materials are needed immediately.

In addition to the USPS's one-day Express Mail, other private carriers specialize in overnight delivery across the country or across the world. These include Federal Express, U.S. Express, DHL and Airborne.

First-class and Priority Mail

First-class mail includes letters, orders and bills weighing 13 ounces or less. **Priority mail** refers to mail and packages sent first-class weighing more than 13 ounces but less than 70 pounds. First-class and priority mail is important, but it has lower priority than the preference mail. Usually, overnight services wouldn't be used for these items.

Interoffice Mail

Memos, copies to file and directives (letters or notices sent to everyone within a medical facility) are in the category of interoffice mail. Although these items may need to be delivered quickly, handling them is easier because no outside mail service is involved.

Standard Mail (Bulk)

Much of the mail a business receives is standard mail. This mail used to be called "bulk mail." Retailers and other advertisers use this type of mail primarily to promote products and services. Standard mail is used when items that weigh more than 16 ounces (such as books, catalogs and parcels) are mailed. Parcel post, media mail and bound printed matter are all subclasses of standard mail.

Opening Mail

After she sorts the mail, Barbara opens each item and date-stamps it. She used to do this by hand, but the company just bought a machine that automates that process for her. Barbara never opens an envelope labeled *Personal* or *Confidential* unless it's addressed to her. After she opens non-confidential envelopes, she removes the contents and clips the envelope and any enclosures to the letter.

While some companies throw away the envelopes of incoming mail, other companies—like Carson Medical Center—ask that the envelope be kept. This preserves the postmark with its cancellation date and return address.

Date-stamping

Date-stamping, which sometimes records the hour and minute as well as the date, is important for verifying receipt of a potentially important item, such as payment of a bill. It also acts as a reminder for the person in charge of an incoming item. It helps ensure that she quickly acts upon customer complaints and problems. Barbara always stamps the mail in the same place. This way, anyone looking for the date stamp will know where to look on each piece of mail.

Mail Registers

Barbara uses a **mail register** to keep track of incoming and outgoing packages. She notes if they are registered, certified or insured, as well as the name of the carrier. Mail registers, also called mail logs, help her keep track of items that arrive in different packages at different times. This way, nothing gets lost or forgotten.



Some offices still use multiple hand stamps to help traffic the mail.

Distribute Mail

Barbara's final responsibility with incoming mail is to distribute it as soon as possible. While her last job had her deliver mail to everyone's desk, Carson Medical Center has a centralized wall of employee mailboxes. Barbara arranges each pile of mail with the highest priority items on top, down to the lowest priority—the standard mail items—on the bottom.

Forward Mail

Some mail inevitably gets sent to the wrong address. Barbara forwards this mail to help put it back on track. She re-mails it with an explanatory note for the post office. This service is free.

There are several reasons to forward mail:

1. If mail is addressed to a former employee or one who was transferred, cross out the given address, and write the updated address next to it:
"Please forward to 4415 Murietta Ave., Sherman Oaks, CA 91423."
2. If mail is addressed to previous building owners or tenants, and you don't have their new addresses, write:
"Addressee no longer at this address—no forwarding address available" or "Please return to sender—addressee no longer here."
3. If mail is addressed to someone you don't know, check to ensure this isn't a new employee or visiting consultant. If it isn't, write *"Addressee unknown."*

Outgoing Mail

At Carson Medical Center, Barbara also handles all outgoing mail. She must see that each item to be mailed gets sent with the right carrier. She also must ensure that each item is addressed correctly and that it gets sent in the right class of mail with the appropriate service, if applicable.

First, she prepares all the letters and packages for mailing. Then Barbara sorts them by mailing class depending on how fast each needs to arrive and at what cost. After that, she fills out the paperwork for any extra services, like registered or certified mail, and applies the postage.

Prepare Letters and Packages for Mailing

The best way to prevent lost or damaged mail is to address items correctly. Barbara follows the tips that the USPS gives.

The Address

All mail needs a mailing address and should have a return address. For both, include the following:

Name, if any

Business, if any

Street address, including apartment or post office box or rural route number

City, state abbreviation and ZIP code

Use ZIP Codes

The five digit *ZIP code* is very important in the processing and delivery of mail. The **ZIP code** identifies the item's destination or origin. You can find out a ZIP code from a ZIP code directory, online or from your local post office.

The first digit of a ZIP code represents a group of states. Each group is then divided into an average of 10 smaller areas. The second and third digits of your ZIP code each represent those smaller areas. The fourth and fifth digits of your code identify your post office.

In 1983, the USPS began to use an expanded *ZIP+4 code*. The additional four digits identify your city block or office building. The **ZIP+4 code** looks like this: 91001-3240. The longer code assists the postal service and can speed up the processing of your mail.



Packages require special attention.

Address with Barcodes

A service that allows speedier reading and sorting of mail is called **barcoding**. Carson Medical Center uses barcoding equipment that applies a coded bar to each piece of mail. It prints the coded bar on the lower right-hand corner of the envelope, which represents the ZIP+ 4 code plus two additional numbers to identify the receiver's address. Finally, a 12th number is added as a check digit. Today, word processing software can automatically add the barcode to an envelope.

Because the mail is already barcoded, the post office can sort it automatically. Not only does this save time and money for the post office, but Carson Medical Center gets a discount rate on mailings of at least 250 pieces. Plus, delivery is more accurate, and turnaround is speedier.

Classes of Business Mail

Barbara divided the outgoing mail into **classes**, or mail categories of different speeds of delivery and costs. For more information on different mail classes, check out the United States Postal Service Web site at www.usps.com, or visit your local post office.

Express Mail

If you have mail that must get to its destination in a hurry, you might use *express mail*. **Express mail** arrives the next day by noon or 3:00 p.m. to most addresses in the United States. This includes Sundays and holidays. Express mail is delivered 365 days a year and is automatically insured for \$100 against loss or damage. Also, it provides a signature proof of delivery upon request, as well as tracking information. However, express mail items must be mailed by a certain time. Check with your local post office for details.

First Class and Priority Mail

Most business mail travels first class. (Whenever Barbara sends material that isn't business-letter size, she stamps it "first class.") Generally, first class gets delivered overnight within a city and within two days inside a state. For distances greater than 600 miles, mail service should take three days but can take more.

Standard Mail

Businesses that do large mailings generally use standard mail. These companies can take advantage of discounts that the USPS offers if they presort, barcode and arrange their mail. Carson Medical Center uses standardized mail to send out its *Health News* monthly newsletter and other mass mailings.

Since standard mail is slower than first class, it's typically used for mail that doesn't need to meet a tight deadline. Check with your local post office for delivery times, bulk-mailing rules and discount prices.

Extra Mailing Services

Sometimes speed and cost aren't the only concerns with outgoing mail. Often, Barbara needs to know that an addressee received a letter and when, or she needs insurance on a valuable package. The following are different services that the USPS provides to meet these needs.



Since most mail travels by plane these days, "air mail" is seldom specified.

Registered Mail: Registered mail provides thorough security and insurance for articles up to \$25,000. It comes with a mailing receipt and access to online tracking of the delivery system.

Certificate of Mailing: This gives proof that an item was mailed.

Collect on Delivery (COD): While COD usually isn't used between offices, many companies use it as a way to send merchandise. The mailer collects the price of goods and postage upon delivery, which may not exceed \$1,000.

Delivery Confirmation: Delivery confirmation shows the date and time of delivery or all of the attempted deliveries.

Insured Mail: For protection against lost or damaged mail while it's in transit, the USPS offers insurance depending on the class and value of the item mailed.

Restricted Delivery: With restricted delivery, the mailer only delivers an item to the addressee or addressee's authorized agent. This is useful for confidential and very personal mail items.

Return Receipt: If you need proof of delivery, a return receipt is recommended.

Signature Confirmation: With signature confirmation, the addressee must sign as proof of delivery. The time and date are also noted. It is more expensive than a plain return receipt, but it is also more thorough.

Special Handling: While this isn't a form of insurance, mail items with Special Handling receive preferential treatment. This is great for goods like perishables.

Stop by your local post office and examine all the receipts of the different mailing services. Some of them can be combined—like registered mail and signature confirmation—to tailor your mailing needs to each item.

Apply Postage to Letters and Packages

Barbara checks each piece of mail to ensure it has the correct postage. For this, she uses a postal scale and a postal meter to save time and money.

Postal Scales

Postal scales weigh letters and packages to accurately calculate postage. Some electronic scales even compute the least expensive rates for items. This precise weighing of items and the accurate calculation of zone rates cuts costs considerably.

Postage Meters

A **postage meter** is a machine that imprints an accurate amount of postage on a mail item. Many businesses use a postage meter for convenience and speed. The meter offers many advantages. The postage meter:

- Ensures accurate postage
- Reduces time spent in manual stamping
- Produces stamps of any value, so there's no need to keep various denominations of stamps on hand
- Prints a high-quality stamp image
- Speeds mail delivery, since items are pre-canceled by meter
- Protects the business against unauthorized use of stamps



Postage meters imprint the postage on a piece of mail.

To use the postage meter, Barbara weighs each item on the postal scale. Then, she inserts each letter into the meter where the postage, postmark and date are imprinted. For items too big for the meter, the machine prints a sticker that Barbara applies to the package.

The post office maintains Carson Medical Center's active postage meter account and leases the meter to the business. Barbara monitors the amount of postage in the account and buys more from the post office when the center runs low.

Handle E-mail

Barbara receives numerous e-mails throughout the day and must organize and distribute them, as well. E-mail programs have simplified some of her responsibilities.

When she opens her e-mail account—which acts as both her mailbox and filing cabinet—she has a directory of folders to choose from: *inbox*, *outbox*, *drafts* and *junk mail*. While different e-mail programs use different names and formats, all of them share these basic features.

The **inbox** is a folder that saves all incoming mail in the order it was received. E-mails that haven't been opened are highlighted. Therefore, Barbara can tell at a glance which mail is new and which is old. Just like a normal mailbox, e-mail accounts receive junk mail, called **spam**. You can automatically set up spam to divert into a special junk-mail folder. This prevents Barbara from losing an important e-mail in a pile of unwanted ones.

When Barbara sends an e-mail, it saves in her **outbox** or **sent mail**, which are folders that contain a person's sent messages. Such folders allow her to keep track of her outgoing mail. With her busy schedule, sometimes Barbara needs more than one sitting to finish important or long e-mails. The **draft** folder in her e-mail account lets her save e-mails that she isn't finished writing.

There is yet another handy feature to help organize e-mail. When she receives a lot of e-mail on one topic, Barbara creates a new folder in her e-mail account to store all those messages in one convenient place.



Most businesses these days rely on e-mail to communicate.

Respond to Web Inquiries

Many medical facilities, such as hospitals and physician practices, have Web sites. Potential patients can learn more about the facility and ask questions through the site. In a larger facility, someone might be designated to address these inquiries, but typically this job belongs to a healthcare office manager. Inquiries can vary from questions about hours to whether the office accepts a particular insurance. If you don't know the information a person requests, you can either talk to someone in the office, research it yourself or forward the inquiry directly to another person. Either way, respond in a timely and professional manner. The inquiries come from your patients or potential patients, and your contact with them reflects on the practice.



Step 10 General Office Management

- ❑ In addition to managing health records, healthcare office managers have other responsibilities. They include ordering supplies, using time effectively, establishing policies and procedures and educating patients.

Replenish Supplies

Can't find a pen? No more copier toner? Running out of basic office supplies can frustrate you and the patient and reflects poorly on your medical office. Keep an inventory of your office's supplies, and order when they get low. This way, you never run out completely.

You can choose from many different office supply companies, but find out if your office prefers a particular company. Most likely, you can order through mail, fax, phone or the Internet.

Policies and Procedures

You briefly learned about the policy and procedures manual earlier in the lesson. As a healthcare office manager, you may need to help develop the manual or update it. Basically, a **policy and procedure manual** is a binder or booklet that holds written policies and procedures for your office. It serves as a reference for all of the office's employees, as well as a manual for training new employees.

Policy and procedure manuals may contain some of the following policy topics:

- Overtime
- Health insurance
- Vacation time/sick leave
- Work breaks
- Timekeeping
- Terminations

Procedures are step-by-step lists of how to perform particular tasks. These serve as an educational tool and reduce confusion about procedures. Every staff member should be able to offer ideas about the procedures in the manual. Each procedure should include the date that it was established so that if a new procedure is written, the old procedure can be recognized and removed.

Here are some procedure topics that could be included in a manual:

- Physical measurements, vital signs, temperature, pulse, respiration, weight and height
- Medical history and physical examinations
- Collecting and handling specimens
- Common emergencies and first aid
- Emergency preparedness
- Computer back-up procedures
- Office opening/closing procedures

Time and Task Management

Healthcare office managers have busy days, and effective time management is important. Sometimes, you might feel like there's never enough time to complete all the projects and tasks you need to. Follow these tips to help you make the most of your time.



Healthcare office managers have busy days, and effective time management is important.

Time-Management Tips

1. Write down your time-saving ideas. For example, if you know the post office gets busiest early in the morning, make your post-office run in the mid-morning or mid-afternoon. That way, you miss the rush, and don't waste time standing in line.
2. Invest the first 10 minutes of the morning planning your day. Invest the last 10 minutes of the day writing your goals, priorities and "Things to Do" list for the following day.
3. Though you also need to answer phones and greet patients, try to block out time to work undisturbed on important projects whenever possible.
4. Assign yourself deadlines to keep yourself focused on important projects.
5. Identify your prime times—times when you feel most alert and productive. If you are a morning person, plan your most important work for the morning hours. Plan your easiest tasks during your slower, less productive times.
6. Learn to say "no" or to delegate jobs to others when appropriate. When you delegate, you transfer and entrust your power or work to someone else. For example, Dolce works as a healthcare office manager. She needs to complete two large assignments by the end of the morning. She doesn't have enough time to do both jobs well. She asks her supervisor which task takes higher priority. Dolce then asks for help from her coworker, with her supervisor's permission, to complete the other less-urgent project.

Once you get more comfortable in your healthcare office manager position, your time-management skills will strengthen with practice. However, with so many different responsibilities, you may wonder how healthcare office managers stay on task. One way is through the use of goals. Let's learn more!

Set Goals

Set *goals* to help manage your projects and your time. **Goals** describe objectives that you want to achieve. To take control of your time, consider these steps to ensure successful goal-setting.

Steps to Successful Goal Setting:

1. Set challenging goals whenever possible.
2. Set realistic goals.
3. Set goals that work for YOU.
4. Set specific goals.
5. Set a variety of goals.
6. Set goals that provide pleasure.
7. Be flexible when you set goals.

You must set long- and short-range goals. For example, you may want to complete your Healthcare Office Manager course. This demonstrates a long-range goal—it may take some time to achieve. However, a first step—a short-range goal that you can achieve in relatively little time—might be to enroll in the course. Then you might set target dates by which you wish to complete each pack or each lesson.

Research shows that an individual often reaches a long-range goal of four or five years in only half the time—once an individual becomes dedicated to a goal. Moreover, people make better employees when they plan, set goals and make the most of their time.



Step 11 Patient Education

- ❑ All healthcare office managers can educate their patients. An informed patient feels more relaxed and cooperates more than an uninformed patient. For example, a patient injured his knee skiing earlier in the day and just finished his appointment with the doctor. The doctor recommended that he go to another office for an MRI on his knee. The patient feels a little uneasy about the test. The healthcare office manager provides him with a pamphlet about the MRI and answers his questions. The patient now better understands the test's purpose and procedure.

What kind of education do healthcare office managers provide? All kinds! As a healthcare office manager, you can provide information about medical facilities, health and wellness, therapeutic agencies and social services. In addition, you can answer administrative questions about policies and procedures. This knowledge can ease your patients' minds and increase their confidence in your medical facility.

In a moment, we'll wrap up this lesson. But, first, complete the Practice Exercise that follows.

 **Step 12 Practice Exercise 2-2**

- For questions 1 through 13, select the best answer from the choices provided.
1. **Examples of _____ mail include express mail, certified or registered mail and letters marked “Personal” or “Confidential.”**
 - a. preference
 - b. first-class
 - c. priority
 - d. standard

 2. **An average, everyday letter with a stamp travels by _____ mail.**
 - a. express
 - b. first-class
 - c. priority
 - d. standard

 3. **You should sort memos and directives as _____ mail.**
 - a. preference
 - b. priority
 - c. interoffice
 - d. standard

 4. **_____ records the day and time you receive an item in the mail.**
 - a. The post office
 - b. Date-stamping
 - c. Mail-tracking
 - d. A postage meter

 5. **You receive a piece of mail that was sent to the wrong address. You should _____.**
 - a. throw it away
 - b. place it in the “wrong address” file
 - c. open it
 - d. forward it

 6. **To prevent lost or damaged mail, you should _____.**
 - a. deliver it yourself
 - b. address it correctly
 - c. insure your mail
 - d. certify your mail

7. Dan's ZIP code is 12345. The "1" stands for a _____.
 - a. country
 - b. group of countries
 - c. state
 - d. group of states

8. Maggie's ZIP code is 45140. The "40" in the ZIP code represents a _____.
 - a. city block
 - b. specific post office
 - c. street
 - d. county

9. Yancey needs next-day delivery to mail a contract to someone in Montana. He should use _____ mail.
 - a. express
 - b. first class
 - c. priority
 - d. standard

10. Methods used to earn discounts from the USPS include presorting, _____ and arranging large mailings.
 - a. registering
 - b. certifying
 - c. insuring
 - d. barcoding

11. Meghan places a package on a _____ in her office and finds that it weighs 2 pounds and 4 ounces. The machine calculates the postage to be \$8.85.
 - a. postal scale
 - b. postage meter
 - c. postal scanner
 - d. postage vendor

12. Bert has a stack of 500 postcards that advertise the dental practice he works at. He runs each postcard through a _____, and the machine imprints an accurate amount of postage on each one.
 - a. postal scale
 - b. postage meter
 - c. postal scanner
 - d. postage vendor

13. **Bernadette arrives at work, Columbia Clinic, and turns on her computer. She opens her e-mail and sees that she has 15 new, incoming messages from patients in her ____.**
- a. inbox
 - b. outbox
 - c. spam folder
 - d. draft folder

For questions 14 through 17, match each service with its description.

- | | |
|-------------------------------------|--|
| 14. ____ Registered mail | a. Protects against loss or damage of an item while it's being mailed. |
| 15. ____ Insured mail | b. Gives delicate items preferential treatment. |
| 16. ____ Restricted delivery | c. Tells the mailer to only give the item to the addressee. |
| 17. ____ Special handling | d. Provides thorough security and insurance, as well as a mailing receipt and online tracking. |

For questions 18 through 20, select the best answer from the choices provided.

18. **Carol needs to complete two large projects in the next two hours. She knows she won't have time to complete both. Carol should ____.**
- a. set more short-range goals
 - b. set more long-range goals
 - c. plan her day more thoroughly
 - d. delegate work to a co-worker
19. **Daniel decides he wants to learn to transcribe medical dictations. To do this, he enrolls in a medical transcription course. Daniel's decision to learn about medical transcription describes a ____.**
- a. long-range goal
 - b. short-range goal
 - c. priority
 - d. delegation
20. **Daniel's action of enrolling in a medical transcription course describes a ____.**
- a. long-range goal
 - b. short-range goal
 - c. priority
 - d. delegation

 **Step 13 Review Practice Exercise 2-2**

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

 **Step 14 Lesson Summary**

- This lesson introduced you to valuable information about several important healthcare office manager duties. You now know how to effectively greet patients, answer questions and handle the phone calls that you're likely to receive. And, you gained a strong understanding of how to handle mail and schedule appointments.

We also discussed the healthcare office manager's daily tasks. You discovered new ways to manage your time, prioritize and set goals. The skills you learned in this lesson will benefit you throughout your career as a healthcare office manager. Now, it's time to put that knowledge to use and take another quiz.

 **Step 15 Mail-in Quiz 2**

- Follow the steps to complete the quiz.
 - a. Be sure you've mastered the instruction and the Practice Exercises that this quiz covers.
 - b. Mark your answers on your quiz. Remember to check your answers with the lesson content.
 - c. When you've finished, transfer your answers to the Scanner Answer Sheet included. Use only blue or black ink on your Scanner Answer Sheet.
 - d. **Important!** Please fill in all information requested on your Scanner Answer Sheet or when submitting your quiz online.
 - e. Submit your quiz to the school via e-mail, mail, fax or, to receive your grade immediately, submit your answers online at www.uscareerinstitute.edu.

Mail-in Quiz 2

For questions 1 through 4, match the piece of equipment on the left to its use on the right. Each question is worth 3.3 points.

- | | |
|------------------------------------|---|
| 1. ____ Fax machine | a. Answer and transfer calls without a receptionist |
| 2. ____ Voicemail | b. Voice record notes |
| 3. ____ Medical transcriber | c. Send copies of documents to other providers |
| 4. ____ Dictation machine | d. Type voice recorded notes into a computer |

For questions 5 through 16, select the best answer from the choices provided. Each question is worth 3.3 points.

5. **Microfilers ____.**
- a. produce copies that you can easily read
 - b. automatically fax documents directly from the microfilm
 - c. reduce the amount of space needed to store documents
 - d. provide good security because document retrieval is difficult
6. **It's your first day on the job, and your supervisor tells you that you need to open the office in the morning; however, he doesn't explain what you need to do. What should you do? ____**
- a. Ask another staff member.
 - b. Consult the policy and procedures manual.
 - c. Tell the office manager you can't do it.
 - d. Do what you think is best; someone will fix whatever you've done wrong.
7. **Nina works as a healthcare office manager. One day, while filing, a patient walks up to her desk and begins to yell at her about his bill. He claims he was overcharged and wants Nina to fix it immediately. Nina should ____.**
- a. remain calm
 - b. tell the patient he must calm down before she can help him
 - c. tell the patient she can't fix it; he needs to contact his insurance company
 - d. call security right away

8. **After Nina assists the angry patient, an unsolicited salesperson enters the office. She wants to speak with the doctor immediately about her product. Nina should ____.**
- page the doctor and ask him if he's available
 - ask the woman to leave unless she wants to deal with security
 - take the saleswoman's brochures and ask her to come back when the doctor is at lunch
 - turn the saleswoman away, then continue to repeat her apology until she leaves
9. **Nina's patient arrives extremely early for his appointment. It's a man and his six-year-old son, Tommy. Tommy is bored to tears, and his dad forgot to bring toys for him to play with. To quiet Tommy, Nina should ____.**
- give Tommy some scrap paper and crayons
 - ask Tommy's dad to please calm him down
 - sit in the waiting room and play with Tommy until it's time for his dad's appointment
 - move Tommy's dad's appointment ahead of the other patients
10. **Joani, the office billing specialist, is bilingual. She speaks both English and Spanish fluently. This skill is important because ____.**
- she can prepare insurance claims in both languages
 - Joani can market the doctor's practice to Spanish-speaking friends
 - Joani can teach Spanish to the rest of the staff
 - Joani can interpret when Spanish-speaking patients come in for an appointment
11. **The two fundamentals of effective phone skills are ____.**
- to pick up on the first ring and market the practice to the caller
 - to make a favorable impression in the first 10 seconds and never put callers on hold
 - warm confidence and genuine concern
 - professionalism and composure

12. One day, Nina stays home with a cold, so Ruth, the office's medical biller, answers the office phones. When the phone rings, she greets the caller, then places him on hold while she answers the next call. When she has all five lines on hold, she then goes back to Caller 1 and asks who he needs to speak with. By this time, the caller is angry and frustrated. What did Ruth do wrong, and how can she correct it? ____
- a. Ruth kept the callers on hold too long. She should transfer each call as it comes in and only put callers on hold if they need more assistance. She should then go back to the calls on hold in the order they were received and apologize for the wait.
 - b. Ruth should never put a caller on hold. She should handle calls in the order they come in. She should let the second line ring while she helps Caller 1 with his question.
 - c. Ruth answered too many lines at once. Since she didn't know how to handle the phones as well as Nina, next time, Ruth should take Lines 2 through 5 off the hook so they won't ring.
 - d. Ruth should never put a caller on hold. She should transfer each call as it comes in, apologize to those who need more assistance and ask them to call back later.
13. Appointments work better in the medical office than allowing walk-ins because ____.
- a. you can schedule appointments when the patient walks in the door
 - b. walk-ins don't allow the practice to have forms filled out beforehand
 - c. the office can prescreen patients who set appointments to make sure they can pay their bill
 - d. appointments keep work flowing and allow patients the time they need to discuss their problems

14. **The three basic things you should consider when you set appointments include your boss's preferences, the time given to each appointment and ____.**
- a. the amount of time in between each appointment
 - b. whether the appointment times should vary
 - c. which types of appointment should receive priority
 - d. when the doctor takes his lunch
15. **Maggie is making an appointment for Mr. Rogers. She has his name, date of birth, phone number, insurance information and the name of the referring physician. As she hangs up, she realizes she forgot one piece of information. What is it? ____**
- a. Mr. Rogers' address, so she can mail him a reminder postcard
 - b. The reason Mr. Rogers needs to see the doctor
 - c. Mr. Rogers' employer
 - d. Mr. Rogers' Social Security number
16. **Dr. Martin asks you to schedule a buffer period at 3 p.m. each day. During the buffer period, you can schedule ____.**
- a. old patients
 - b. new patients
 - c. patients who need a follow-up appointment
 - d. patients with an urgent or emergent problem

For questions 17 through 20, match the type of appointment system on the left with its advantages on the right. Each question is worth 3.3 points.

- | | |
|--|--|
| 17. ____ Open office hours | a. Easy for an office to adjust when patients arrive late |
| 18. ____ Scheduled appointment system | b. Patients with the most urgent need can be seen first |
| 19. ____ Time-specified appointments | c. Patients who arrive on time don't have to wait, and files are prepared in advance |
| 20. ____ Wave-scheduled appointments | d. Can accommodate patients who arrive early, on time, late or not at all |

For questions 21 through 24, read each sentence, and decide if it is an appropriate response to a patient when explaining a canceled appointment. Place an *a* by appropriate responses, and place a *b* by inappropriate responses. Each question is worth 3.3 points.

21. ____ “I’m sorry, but Dr. Akbar is unable to meet with you today. May I reschedule your appointment?”
22. ____ “I can’t reschedule you until next Friday, but Dr. Moore usually goes skiing on Fridays, so I’ll have to ask her if she wants to see you.”
23. ____ “Dr. Martinez left town for an emergency, but he will be back next Monday. Can I reschedule your appointment for Monday?”
24. ____ “Dr. Change forgot she had a medical conference in Toledo next week. Do you mind if we reschedule?”

For questions 25 through 30, select the best answer from the choices provided. Each question is worth 3.3 points.

25. **A young man arrives at the office with a sprained ankle. He doesn’t have an appointment. What should you do?** ____
- Tell him where the nearest emergency room is.
 - Greet him, and ask what the problem is. Determine if the injury is an emergency. If not, and you have a buffer period soon, schedule him for that time. If it is an emergency, help him locate the nearest urgent care clinic.
 - Greet him and determine if the sprain is an emergency. If so, ask the patient to wait in the nearest open exam room. Explain the situation to the doctor, and ask if she can see him before the next scheduled patient or during her lunch hour.
 - Give the patient a brochure on how to care for a sprain, and ask him to make an appointment for later in the week.
26. **Gretchen finished sorting the morning mail. Next, she should ____.**
- deliver it to the correct department
 - date-stamp it and make a copy
 - enter each piece in a mail register
 - open and date-stamp it
27. **To prevent lost or damaged outgoing mail, ____.**
- send it by express mail
 - use the ZIP+4 code
 - address it correctly
 - ensure that it has the correct postage

- 28. The best time to order supplies is when ____.**
- a. supply is getting low
 - b. supply is still high
 - c. the items run out
 - d. you have time to do it
- 29. When a medical office puts together a policy and procedures manual, ____.**
- a. every staff member should be able to offer input
 - b. only the medical office manager and physician should write the policies and procedures
 - c. the policies and procedures can't be revised
 - d. the less detailed it is, the better
- 30. Successful goal setting involves all of the following except ____.**
- a. set specific goals so that you can measure how well you're doing
 - b. set a variety of goals that work towards the completion of your project
 - c. be flexible so that when the situation changes, you can revise the goal
 - d. make goals unrealistic so that they provide a bigger challenge

Congratulations
You've completed Lesson 2.



Don't wait for your quiz results to continue with Lesson 3.

Lesson 3

Introduction to Medical Terminology—Word Parts



Step 1 Learning Objectives for Lesson 3

- ❑ When you complete the instruction in this lesson, you will be trained to do the following:
 - Explain word parts.
 - Define root word and describe how the term is used.
 - Form terms with prefixes, suffixes and root words and provide their meanings.



Step 2 Lesson Preview

- ❑ In the first two lessons, you learned about the day-to-day procedures in healthcare settings. You saw how medical professionals work together as a team. Hopefully the first two lessons taught you that health care is a very rewarding field. You will experience its satisfactions and live up to its challenges every day that you work as a healthcare office manager. And you know that skilled healthcare office managers are in high demand. Doctors, hospitals and clinics all need qualified healthcare office managers. In fact, many such positions remain unfilled due to a lack of qualified candidates. Most employers look for office managers who have schooling and experience, and with the training you receive in this course, you can count on learning the skills you need to find an entry-level position in this medical field!

In the following lessons, we will focus on one very important part of medicine—its language. Doctors, nurses and other healthcare personnel, including healthcare office managers, communicate in specialized terms that, at first, might sound like a foreign language. You've no doubt overheard medical conversations in your own visits to the doctor. As a healthcare office manager, you'll hear medical terminology in daily conversation. More importantly, you'll use this knowledge as you review medical records for diagnoses and procedures. Just think—you'll soon be a medical terminology guru! What used to sound foreign will someday become as familiar as your everyday conversation.



The training you receive in this course will help you to find the position you want.

Fear not, though, learning medical terminology is a lot easier than learning a foreign language. Medical terms can be broken down into easy-to-understand parts. In this lesson, we will introduce you to your new language—the language of medicine. In these next few steps, you'll learn the building blocks you need to learn how to break down any medical term. We'll discuss *root words*, *prefixes* and *suffixes* and explain how these word parts come together to form medical terms. Throughout the lesson, keep your flashcards handy as you will need to consult them as you study the following material, do the Practice Exercises and take the Mail-in Quiz.



Step 3 Word Parts

- Words are all around us. We use them every day to communicate. We use long words and short words, complex words and simple words. And there will always be words that are new to you. As a healthcare office manager, you will often be faced with medical terms. These terms might seem complex at times, but you can simplify them. In every sentence we speak, every letter we write, the words are constructed of parts. These parts give us clues to the words' meanings. Because you know this, you can break words down and figure out their meaning from their word parts.

Look at these words you already know:

telephone	microscope
microwave	telescope
television	

It's easy to split these words into parts:

telephone = tele + phone	microscope = micro + scope
microwave = micro + wave	telescope = tele + scope
television = tele + vision	

You see that some of these words contain some of the same parts. *Telel* is in three of the words. *Telescope* and *microscope* both have the word part */scope*.

So you see, words can be divided into smaller parts called **word parts**, and they are very important in learning medical terminology. Word parts are like building blocks. A child can take a dozen building blocks and make many different things, combining the blocks in different ways. The same is true of word parts. Many different words can be formed from a few word parts.



Step 4 Root Words

- The foundation for all words is the root word. The **root word** is the basic component of the terms we use to communicate. Many simple words contain only a root word without any other word parts:

book	cook
read	drive
joy	

We use word parts together with root words to make new and different words. This is usually done by adding either a prefix or a suffix. A **prefix** is a word part added to the beginning of a root word. Conversely, a **suffix** is a word part added to the end of a root word.

When other word parts are added to root words, a new word is formed and this new word means something slightly different. Below are some new words formed from the root words we just mentioned. A prefix or suffix has been added to each root word. Remember, a prefix is a word beginning. A suffix is a word ending.

booklet	a little book
reread	to read again
joyful	having the quality of joy
cooked	to cook sometime in the past
driver	a person who drives

In addition to prefixes and suffixes, different root words come together to form new words. Words made up of two or more root words are called **compound words**. Here are some examples:

book + shelf = bookshelf
drive + way = driveway
news + paper = newspaper

Understanding word parts helps us understand new words—even long and complicated words.

You may not know the word *recalculate*. But if you know what *calculate* means, and you know what the prefix *re/* means, then you know that *recalculate* means *to calculate again*.

In fact, you have probably made up some new words yourself just by making new combinations of word parts.

Let's review the word parts we've discussed. Think of these word parts as the building blocks of medical terms.

Word Parts	
Root Word	The root word provides the foundation or cornerstone of the word.
Prefix	A prefix attaches to the beginning of a root word to change its meaning.
Suffix	A suffix attaches to the end of a root word to change its word form or meaning.

Now let's take the basic concept of word parts and apply it to medical terms.

 **Step 5 Medical Terms**

- ❑ Medical terms may look long and complicated, but even the longest medical term can be broken down into small, easy-to-understand parts. Once you become familiar with the individual word parts, medical terminology becomes easy. Try to look at medical terms like little puzzles. You put together different pieces (root words, prefixes and suffixes) to form complete words.

Understanding some essential word parts will help you recognize medical terms. In your healthcare office manager career, you will use these word parts to look up terms in a medical dictionary. You'll soon find that your medical dictionary will become as well-worn as a beloved teddy bear, as you'll use it to confirm correct spellings and meanings. You will learn about each of these word parts, one at a time, in a simple, logical, easy-to-understand sequence. This will make it very easy for you to spell and understand even the longest and most complicated terms.

The Combining Vowel

Many medical terms contain a fourth word part that we have not yet discussed—the *combining vowel*. The **combining vowel** joins a root word to other word parts.

Here is an example of how the combining vowel is used. As you can see, not all terms have all four parts.

Medical Term	Root Word	Combining Vowel	Suffix
dermatology	dermat/	o	/logy
	means <i>skin</i>		means <i>the study of</i>
Dermatology means the study of skin.			

On the following page, two more medical terms show examples of word parts. These are compound words because they contain more than one root word.

Medical Term	Prefix	Root Word	Combining Vowel	Root Word	Suffix
neonatologist	neo/	nat/	o	log/	/ist
	means <i>new</i>	means <i>birth or born</i>		means <i>the study of</i>	means <i>one who specializes in</i>
A neonatologist is one who specializes in the study of the newborn.					

If you use a different prefix, you will have the following term:

Medical Term	Prefix	Root Word	Combining Vowel	Root Word	Suffix
Perinatologist	peri/	nat/	o	log/	/ist
	means <i>around</i>	means <i>birth or born</i>		means <i>the study of</i>	means <i>one who specializes in</i>
A perinatologist is someone who specializes in the study of the fetus and newborn (the time around the birth).					

These are two types of doctors you may find yourself working for as a healthcare office manager!

Before we move on, let's take a moment to look up one of the new terms you learned in your medical dictionary. Basically, a medical dictionary works much the same way a regular dictionary does—you simply use it to look up the spellings and definitions of medical terms. For example, if you came across the term *dermatology* and wanted to know what it meant, you'd thumb through your medical dictionary until you found the term. There is the definition—*the science that deals with the skin*. If you find it difficult to understand how to use your medical dictionary, feel free to call your instructor for guidance.

TIP If you have access to a computer and the World Wide Web, you can use an online medical dictionary to look up terms. An online medical dictionary can be found at <http://www.online-medical-dictionary.org/>. Feel free to check it out!

Let's review what you've learned so far with the following Practice Exercise.

 **Step 6 Practice Exercise 3-1**

For the following questions, fill in the blanks to complete each sentence.

1. The foundation word part of a medical term is called a(n) _____.
2. The word part that is attached to the end of a term is a(n) _____.

3. In a medical term, a prefix is found at the _____.
4. The word part that joins a root word and another word part is a(n) _____.
5. The word part that is attached to the beginning of a term is a(n) _____.
6. In a medical term, a suffix is found at the _____.
7. A suffix is attached to the word part called the _____.
8. A prefix is attached to the word part called the _____.
9. A combining vowel combines a word part and a(n) _____.
10. In the term *dermat/o/ology*, the word part */o/* is called a(n) _____.

 **Step 7 Review Practice Exercise 3-1**

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

 **Step 8 Root Words**

- As you previously learned in this lesson, word parts are the building blocks for all words, including medical terms. Up to this point, we have described word parts in a general manner. Now we will take a closer look at **root words**—the foundation of all words.

You will find many of the root words in this lesson familiar because they are used in everyday English as well as in medical terminology. The words we cover in this lesson are the most common of all medical root words.

You may wonder why medical terms are so long and complicated. Well, it's because these terms have very definite meanings. In medicine, one complicated word takes the place of four or five common words so that doctors can communicate exactly what they mean to other health workers. This prevents misunderstandings that can interfere with the patient's care. For example, the words *abdomen* and *stomach* may mean the same thing to you, but they have different meanings to a doctor. Because of this, doctors use different words for the *stomach* and the *abdomen*. You will learn the root words for these and other parts of the body in this lesson and in lessons to come.

Doctors and other healthcare workers use special medical terms because as professionals, they know it's important to communicate precise information about a patient's condition. As you learn to build words, you will also build your professional skills. You will be an important link in the healthcare team.

The Functions of Root Words

There are three interesting facts about root words.

Facts About Root Words

Root words are the foundation of a medical term.

Root words name body parts or body functions that the terms represent.

Most medical terms have at least one root word.

Look at these examples of root words:

Root Word	English Meaning
neur/	nerve
gastr/	stomach
scop/	examine
log/	study of
cardi/	heart
path/	disease

You can see these root words in the medical terms that follow. Even though you may not know the meaning of the medical term, you know the meaning of the root word you saw just a moment ago.

Medical Term	Meaning
neuritis	inflammation of nerves
gastritis	inflammation of the stomach
microscope	an instrument to examine small things
logic	a method of studying an area of thought
cardiac	relating to the heart
pathology	the process of the study of disease

Compound Words as Root Words

Some terms have two or more root words in them. They are called **compound words**. In the examples below, we will use the same root words we used previously.

Compound Word	Meaning
neuropathy	a disease process of nerves
gastroscope	an instrument to examine the stomach

Compound Word	Meaning
cardiologist	one who studies the heart
pathologist	one who studies disease

Notice that the combining vowel /o/ was used to join the root words.

Combining Forms of Root Words

Root words are sometimes awkward to pronounce. That is why you may see the combining vowel—usually the letter /o/—between the root word and other word parts. The combination of the root word and the combining vowel is the **combining form**. Look at the combining forms for the root words you saw previously.

Root Word	Combining Form	English Meaning
neur/	neur/o	nerve
gastr/	gastr/o	stomach
scop/	scop/o	examine
log/	log/o	study of
cardi/	cardi/o	heart
path/	path/o	disease

In this course, each new root word you learn will be in its combining form.

Root Word + Combining Vowel = Combining Form

Now that you know the basics about root words, we're going to move ahead and learn more about medical terms. First, practice pronouncing root words using the following exercise.



Step 9 Pronounce Root Words

- ❑ Follow these steps to learn how to pronounce root words.
 - a. Take your Quick-Learn Tutor and Set 1 flashcards out of your Quick-Learn Kit. Each flashcard contains many flashterms.
 - b. Find the first flashcard. It begins with Flashterm 1-1. Insert the card into the lower part of Side A of your Quick-Learn Tutor. Push the card up until Flashterm 1-1 appears in the left window.
 - c. Take out the pronunciation CD and put it in your CD player, or open the audio file.
 - d. Listen to a root word as it is pronounced. After you hear a root word, press pause.

- e. Look at the root word in the left window of your Quick-Learn Tutor. Practice pronouncing it out loud several times until you can pronounce it correctly and easily. Push the flashcard up until the meaning of the root word appears in the right window. Read the meaning of the root word.
- f. Repeat steps d and e, continuing with all the flashterms on Flashcard 1.
- g. When you have completed Flashcard 1, turn the card over for Flashcard 2. Proceed until you have pronounced all the root words for Set 1.
- h. Next, begin with Flashcard 1 and run the audio again. This time, pronounce each root word in order but do not stop the audio after each term.
- i. As you pronounce each root word, look at it on the flashcard. Listen to your own pronunciation of each root word. If you mispronounce one, put a check mark next to it with your pencil.
- j. Next, practice the root words you mispronounced by listening to the pronunciation audio again. Be sure you can pronounce each root word clearly and easily.

After you have finished pronouncing all of the root words for this lesson, move on to the next exercise—learning to write root words.

 **Step 10 Write Root Words**

- Follow these steps to learn how to write root words.
 - a. Insert Flashcard 1 into Side A of your Quick-Learn Tutor.
 - b. Look at each root word as it appears in the window and say it out loud. Write each root word on blank paper. Be sure to put a slash (/) between the root word and the combining vowel, just as you see it on the flashcard.
 - c. Push the card up until the meaning appears in the right window and read the meaning out loud. Write the meaning beside the root word. Writing these root words and meanings will help you learn them more easily. Here is an example of the first flashterm.

aden/o gland

- d. Do this for each flashterm for this set.

Finally, after you pronounce and write each term, learn the meanings of these root words in the next exercise.

 **Step 11 Meanings of Root Words**

- Follow these steps to learn the meanings of root words.
 - a. Again insert the flashcard for Set 1 into Side A of your Quick-Learn Tutor. Beginning with Flashterm 1-1, pronounce each root word out loud. Before you look at the meaning, see if you can remember it. Check yourself by pushing the flashcard up until you can see the meaning in the right window. Do this for each flashterm for this set.

- b. Now insert Flashcard 1 into Side B of your Quick-Learn Tutor. Push the card up until you see the meaning of Flashterm 1-1 in the right window. Read each meaning out loud. Before you look, see if you can remember the word part that goes with that meaning. Check yourself by pushing the flashcard up until you can see the root word in the left window. Do this for each flashterm for this set.
- c. Practice with the flashcards several times until you are familiar with the root words and their meanings. It's not necessary to memorize all the terms now. You will find that you begin to memorize medical terms as you use them throughout this course.

You may use your flashcards for all Practice Exercises and Mail-in Quizzes. However, the time you spend reviewing the flashterms now will mean less time spent looking them up later.

TIP After you finish your activities with a set of flashcards, return the flashcards, in order, to your Quick-Learn Kit. You can easily refer to them later, as needed, throughout the course.

 **Step 12 Practice Exercise 3-2**

Part I

- For each root word listed below, write the meaning. Define all the terms you know first. Then use your flashcards for terms that you don't know. Circle the terms you looked up on the flashcards.

Root Word	Meaning
1. append/o, appendic/o	_____
2. arthr/o	_____
3. derm/o	_____
4. muc/o	_____
5. hydr/o	_____
6. norm/o	_____
7. neur/o	_____
8. lith/o	_____
9. therm/o	_____
10. path/o	_____

Part II

For each meaning listed below, write the correct root word. Be sure to include the slash and the combining vowel. List all the terms you know first. Then use your flashcards for terms that you don't know. Circle the terms you looked up on the flashcards.

Meaning	Root Word
11. lung	_____
12. small intestine	_____
13. life	_____
14. liver	_____
15. giving rise to	_____
16. muscle	_____
17. pressure	_____
18. cut into	_____
19. kidney	_____
20. blood	_____

 **Step 13 Review Practice Exercise 3-2**

- Check your answers with the Answer Key at the back of this instruction pack. Correct any mistakes you may have made. Review your flashterms again, giving extra attention to terms circled in the Practice Exercise.

 **Step 14 Prefixes**

- If you consider the root word to be the boxcar on a train, the prefix is the engine and the suffix is the caboose. You know that prefixes attach to the front of root words while suffixes attach to the end of root words.



A prefix changes the meaning of a medical term. While the root word names a body part or body function, the prefix gives additional information about the medical term.

Facts about Prefixes

- A prefix gives additional information about a medical term.
- A prefix usually tells where, when or how.

Let's take a look at some examples of prefixes and their meanings. Notice that prefixes do not have combining vowels.

Prefix	Meaning
peri/	surrounding
brady/	slow
tachy/	fast
micro/	small, tiny
a/	without, absent

Now let's learn more about prefixes.

Fact about Prefixes

A prefix does not change the meaning of a root word, but it does change the meaning of the whole medical term.

In the following list, you see medical terms made from some of the root words you studied earlier. Notice that the prefix does not change the meaning of the root word. (Don't worry about the vowel endings on the root words for now. We'll explain this later.)

Medical Term	Meaning
renal	relating to the kidney
peri/renal	relating to surrounding the kidney
cardia	heart
brady/cardia	slow heart
tachy/cardia	fast heart

glossa	tongue
macro/glossa	large tongue
gastric	relating to the stomach
hypo/gastric	relating to below the stomach
leukocytosis	condition of white cells
a/leukocytosis	condition of absence of white cells

Fact about Prefixes

Many terms do not begin with a prefix.

A prefix attaches to the beginning of root word. If there is no prefix, the first word part you will see is the root word. Look at these examples.

peri/renal	starts with prefix
renal	starts with root word

Remember, a prefix only tells *where, when or how*. A root word tells *what*.

How do you tell if the beginning of the word is a prefix or a root? Well, one way is to see what happens when you remove the first word part. Look at the following example. You saw these terms a moment ago. The root word here means *heart*.

Medical Term	Meaning
cardia	heart
bradycardia	slow heart

When you take the prefix *brady/* away, the meaning of the term changes from slow heart to heart. However, the meaning of the root, *heart*, doesn't change, so you know that *brady/* is a prefix.

Facts about Prefixes and Root Words

- If you take away a prefix, you take away only the *where, when or how*.
- If you take away a root word, you take away the *what*—the basic meaning of the term.

Look at the next example. This term is a compound word. The “*what*” is a white cell. A white cell is one kind of cell—it is not a red cell or a liver cell. Look at what happens to the meaning of the term when we remove one of the two root words that make up the compound word.

Medical Term	Meaning
leuk/o/cyt/osis	condition of white cells
cyt/osis	condition of cells

When the root word leuk/o is removed, the meaning of the term changes from *white cells* to simply *cells*. The term cyt/osis means a condition of any kind of cells: red cells, white cells, liver cells and so on. The “what” of the term changed from *white cells* to *cells*. Therefore, leuk/o is a root word.

For now, all the prefixes you learn are followed by a slash. Look at these examples.

brady/ micro/ peri/

All the root words you learn have a slash between the root and the combining vowel. Look at these examples.

cardi/o leuk/o cyt/o



Step 15 Pronounce Prefixes

- ❑ Follow these steps to learn how to pronounce prefixes.
 - a. Take your Quick-Learn Tutor and your Set 2 flashcards out of your Quick-Learn Kit.
 - b. Find the first flashcard for Set 2. Insert the card into Side A of your Quick-Learn Tutor. Push the card up until the first prefix appears in the left window.
 - c. Put your pronunciation CD in your CD player or open the audio file. Advance to Flashcard Set 2.
 - d. Listen to each prefix as it is pronounced. After you hear a prefix, press pause.
 - e. Look at the prefix in the left window of your Quick-Learn Tutor. Practice pronouncing it out loud several times until you can pronounce it correctly and easily. Push the flashcard up until the meaning of the prefix appears in the right window. Read the meaning of the prefix.
 - f. Repeat steps d and e, continuing with all the flashterms on the flashcard.
 - g. When you complete the flashcard, turn the card over. Proceed until you have pronounced all the prefixes for Set 2.
 - h. Next, begin again with the first flashcard and run the audio. This time, pronounce each prefix in order but do not stop the audio after each term.
 - i. As you pronounce each prefix, look at it on the flashcard. Listen to your own pronunciation of each prefix. If you mispronounce one, put a check mark next to it with your pencil.

- j. Next, practice the prefixes you mispronounced by listening to the audio again. Be sure you can pronounce each prefix clearly and easily.

After you finish pronouncing all the prefixes in this set, move on to the next exercise—learning to write the prefixes.

 **Step 16 Write Prefixes**

- ❑ Follow these steps to learn how to write prefixes.
 - a. Insert the first flashcard for Set 2 into Side A of your Quick-Learn Tutor.
 - b. Look at each prefix as it appears in the window and say it out loud. Write each prefix on blank paper. Remember to include the slash.
 - c. Push the card up until the meaning appears in the right window and read the meaning out loud. Write the meaning beside the prefix.
 - d. Do this for each prefix for this set.

Finally, after you pronounce and write each term, learn the meanings of these prefixes in the next exercise.

 **Step 17 Meanings of Prefixes**

- ❑ Follow these steps to learn the meanings of prefixes.
 - a. Again insert the flashcard into Side A of your Quick-Learn Tutor. Pronounce each prefix out loud and then say the meaning. Check yourself by pushing the flashcard up until you can see the meaning in the right window.
 - b. Now insert the flashcard into Side B of your Quick-Learn Tutor. Push the card up until you see the meaning of the first flashterm in the right window. Read each meaning out loud and then say the prefix. Check yourself by pushing the flashcard up until you can see the prefix in the left window. Do this for each flashterm for this set.
 - c. Practice with the flashcards several times until you are familiar with the prefixes and their meanings. Don't struggle to memorize them. The more times you review your flashcards, the more familiar they will be to you.

TIP Remember to keep your flashcards in order even after you finish an activity so you can refer back to them easily.

A quick way to review flashcards from your lessons is to read down the flashcard without using the Quick-Learn Tutor. Let's do some review.

 **Step 18 Practice Exercise 3-3**

Part I

□ For each prefix listed below, write the meaning. Define all the terms you know first. Then use your flashcards for terms that you don't know. Circle the terms you looked up on the flashcards.

Prefix	Meaning
1. a/	_____
2. ec/, ecto/	_____
3. infra/	_____
4. peri/	_____
5. hypo/	_____
6. micro/	_____
7. dia/	_____
8. epi/	_____
9. hyper/	_____
10. intra/	_____

Part II

For each meaning listed below, write the correct prefix. Be sure to include the slash. List all the terms you know first. Then use your flashcards for terms that you don't know. Circle the terms you looked up on the flashcards.

Meaning	Prefix
11. under, inferior to	_____
12. half	_____
13. against, opposed	_____
14. all, every	_____
15. away from	_____

- 16. **between** _____
- 17. **slower than usual** _____
- 18. **gross, large** _____
- 19. **again, back** _____
- 20. **behind, back** _____

 **Step 19 Review Practice Exercise 3-3**

- Check your answers with the Answer Key at the back of this instruction pack. Correct any mistakes you may have made. Review your flashterms again, giving extra attention to terms circled in the Practice Exercise.

 **Step 20 Suffixes**

- A **suffix** is the word part attached to the end of a root word.

Why do we use suffixes? A suffix can change the word form or the meaning of a term. The **word form** tells you how the word functions in the sentence. Word forms are also referred to as parts of speech.

Two important parts of speech are the *noun* and the *adjective*.

A **noun** is the name of a person, place or thing. An **adjective** is a word that describes a noun. Here's an example.

The green candle has a distinct smell.
adjective noun adjective noun

The words *candle* and *smell* are nouns because they name a person, place or thing. The words *green* and *distinct* are adjectives because they describe nouns.

Some root words can function as both nouns and adjectives. All you have to do is change the suffix. Here's an example.

Noun	Adjective
courage	courageous

Compare these two sentences:

Courage is an important quality for a soldier to have.

The courageous man saved the boy's life.

In the first sentence, *courage* is a noun. It is a thing, a quality. In the second sentence, the word *man* is the noun, and the word *courageous* describes the man, making *courageous* an adjective.

Look at these examples of medical terms that switch from nouns to adjectives just by changing the suffix.

Some words can be either a noun or an adjective:
a comedy
a comedy show

Noun	Adjective
cardi/a	cardi/ac
gastr/ia	gastr/ic
muc/us	muc/ous
neur/osis	neur/al

Fact about Suffixes
A suffix can change a root word to a noun or an adjective.

The suffix determines whether a word is a noun or an adjective. Suffixes that make a word a noun are called **noun suffixes**. Suffixes that make a word an adjective are called **adjective suffixes**. No matter what root word they are joined to, a noun suffix always changes the word into a noun, and an adjective suffix makes the word an adjective.

Here is a table of some common medical suffixes. Notice that some of the suffixes are noun suffixes and some are adjective suffixes. Many noun suffixes don't really have a meaning. They are just used to show that the word is a noun.

Suffix	Noun or Adjective	Meaning
/y	noun	the process of
/a	noun	(no meaning)
/ia	noun	condition
/us	noun	(no meaning)
/osis	noun	condition
/ac	adjective	relating to
/ic	adjective	relating to
/ous	adjective	relating to
/al	adjective	relating to

When you learn suffixes later in this lesson, the flashcard will tell you which are noun suffixes and which are adjective suffixes.

Did you notice that many of the suffixes have the same meaning? If they have the same meaning, how do you know which one to use? Well only certain suffixes and certain root words can be combined. For example, each root word generally can be combined with only one adjective ending. Cardi/o is joined with /ac to form cardiac. Cardi/o is never joined with /ic, /al or /ous. The words cardiic, cardial and cardious do not exist.

To help you learn which suffixes go with which root words, we have taken many root words and combined them with the correct suffix. This will help you remember which suffixes go with which roots.

In the next few lessons, you will not only learn individual word parts but also complete medical terms—both nouns and adjectives.

Often a *root word* + *suffix* combination can itself be used as a word ending. You can think of this as a **combined suffix**. For example:

path/o + /y = /pathy

The combined suffix */pathy* can be joined to many other words.

cardiopathy myopathy neuropathy

These combined suffixes will be written on your flashcards as regular suffixes, but if you look closely, you'll be able to see the *root word* + *suffix* combination. Look at these examples.

Root Word	+	Suffix	=	Combined Suffix	Meaning
path/o	+	/y	=	/pathy	process of disease (noun)
path/o	+	/ic	=	/pathic	relating to a disease (adjective)
megal/o	+	/y	=	/megaly	process of enlargement (noun)
megal/o	+	/ic	=	/megalic	relating to enlargement (adjective)
cardi/o	+	/a	=	/cardia	heart (noun)
cardi/o	+	/ac	=	/cardiac	relating to the heart (adjective)

Before we move on, let's pretend for a moment that you know the term *cardiopathy*, which means heart disease, but you aren't sure if cardiopathy is in fact the correct spelling. You suspect it may be spelled cardiapathy instead. So what should you do? Well, simply look in your medical dictionary, following the terms until you find the correct spelling. In your dictionary you see that you were right the first time. The term is spelled cardiopathy!

Fact about Suffixes and Root Words

Most root words need either a noun suffix or an adjective suffix at the end of them.

Most root words can't stand alone as complete words—they need a suffix at the end of them. But like everything else in life, there are exceptions. For some root words, you don't need a suffix of any kind to form a complete word. These roots already are complete words. By dropping the combining vowel, these root words stand alone. They also work as suffixes themselves.

Listed are three examples of root words that don't need a suffix.

Root Word	Suffix (Noun)	Meaning
gram/o	/gram	picture, record, tracing
graph/o	/graph	machine that creates a tracing or recording
derm/o	/derm	skin

In this course you will be given more noun and adjective suffixes. Whenever you learn a new term, look to see which suffixes are used with which roots. That way you will begin to recognize which roots and suffixes belong together.

Now let's learn how to pronounce suffixes.



Step 21 Pronounce Suffixes

- ❑ Follow these steps to learn how to pronounce suffixes.
 - a. Take your Quick-Learn Tutor and your Set 3 flashcards out of your Quick-Learn Kit.
 - b. Insert the first flashcard for Set 3 into Side A of your Quick-Learn Tutor. Push the card up until the first flashterm appears in the left window.
 - c. Put your pronunciation CD in your CD player or open the audio file. Advance to Flashcard Set 3.
 - d. Listen to a suffix as it is pronounced. After you hear a suffix, press pause.
 - e. Look at the suffix in the left window of your Quick-Learn Tutor. Practice pronouncing it out loud several times until you can pronounce it correctly and easily. Push the flashcard up until the meaning of the suffix appears in the right window. Read the meaning of the suffix.
 - f. When you complete the flashcard, turn it over for the next flashcard for this lesson. Proceed until you have pronounced all the suffixes for Set 3.
 - g. Next, begin again with the first flashcard and run the audio again. This time, pronounce each suffix in order but do not stop the audio after each term.
 - h. As you pronounce each suffix, look at it on the flashcard. Listen to your own pronunciation of each suffix. If you mispronounce one, put a check mark next to it with your pencil.
 - i. Next, practice the suffixes you mispronounced by listening to the audio again. Be sure you can pronounce each suffix clearly and easily.

After you finish pronouncing all the suffixes for this set, move on to the next exercise—learning to write the suffixes. Before you do, though, let’s take a look at how you might encounter some of this terminology in your new career.

Now you know that the suffix *derm* means *skin*. Take a look at some related diagnosis and procedure codes that you may encounter. This segment of a common claims form contains a couple of dermatology codes.

Do you see the procedure code 15780? This codes the *dermabrasion* procedure for the total face. The code 709.2 shows the diagnosis as scar conditions.

14. DATE OF CURRENT: ILLNESS (First symptom) OR INJURY (Accident) OR PREGNANCY(LMP) MM DD YY		15. IF PATIENT HAS HAD SAME OR SIMILAR ILLNESS. GIVE FIRST DATE MM DD YY		16. DATES PATIENT UNABLE TO WORK IN CURRENT OCCUPATION FROM MM DD YY TO MM DD YY							
17. NAME OF REFERRING PHYSICIAN OR OTHER SOURCE		17a. I.D. NUMBER OF REFERRING PHYSICIAN		18. HOSPITALIZATION DATES RELATED TO CURRENT SERVICES FROM MM DD YY TO MM DD YY							
19. RESERVED FOR LOCAL USE				20. OUTSIDE LAB? \$ CHARGES <input type="checkbox"/> YES <input type="checkbox"/> NO							
21. DIAGNOSIS OR NATURE OF ILLNESS OR INJURY. (RELATE ITEMS 1,2,3 OR 4 TO ITEM 24E BY LINE) 1. L 709.2				22. MEDICAID RESUBMISSION CODE ORIGINAL REF. NO.							
2. _____ 3. _____ 4. _____				23. PRIOR AUTHORIZATION NUMBER							
A DATE(S) OF SERVICE From To		B Place of Service	C Type of Service	D PROCEDURES, SERVICES, OR SUPPLIES (Explain Unusual Circumstances) CPT/HCPCS MODIFIER	E DIAGNOSIS CODE	F \$ CHARGES	G DAYS OR UNITS	H EPSDT Family Plan	I EMG	J COB	K RESERVED FOR LOCAL USE
1				15780							
2											
3											
4											
5											
6											

Step 22 Write Suffixes

- ❑ Follow these steps to learn how to write suffixes.
 - a. Insert the first flashcard for Set 3 into Side A of your Quick-Learn Tutor.
 - b. Look at each suffix as it appears in the window and say it out loud. Write each suffix on blank paper.
 - c. Push the card up until the meaning appears in the right window and read the meaning out loud. Write the meaning beside the suffix.
 - d. Do this for each suffix for this lesson.

Finally, after you pronounce and write each term, learn the meanings of these suffixes in the next exercise.



Step 23 Meanings of Suffixes

- Follow these steps to learn the meanings of suffixes.
 - a. Again insert the first flashcard for Set 3 into Side A of your Quick-Learn Tutor. Pronounce each suffix out loud. Before you look at the meaning, see if you can remember it. Check yourself by pushing the flashcard up until you can see the meaning in the right window.
 - b. Now insert the flashcard into Side B of your Quick-Learn Tutor. Push the card up until you see the meaning of the first flashterm in the right window. Read each meaning out loud. Before looking, see if you can remember the suffix that goes with that meaning. Check yourself by pushing the flashcard up until you can see the suffix in the left window.
 - c. Practice with the flashcards several times until you are familiar with the suffixes and their meanings. You may use your flashcards for all Practice Exercises and the Mail-in Quizzes. Let's have a quick review.



Step 24 Practice Exercise 3-4

Part I

- For each suffix listed below, write the meaning. Define all the terms you know first. Then use your flashcards for terms that you don't know. Circle the terms you looked up on the flashcards.

Suffix	Meaning
1. /ectomy	_____
2. /gram	_____
3. /logy	_____
4. /ist	_____
5. /megaly	_____
6. /stasis	_____
7. /ac	_____
8. /meter	_____
9. /ism	_____
10. /oid	_____

Part II

For each meaning listed below, write the correct suffix. Be sure to include the slash. List all the terms you know first. Then use your flashcards for terms that you don't know. Circle the terms you looked up on the flashcards.

Meaning	Suffix
11. condition	_____
12. inflammation	_____
13. pathologic condition	_____
14. disease process	_____
15. pain	_____
16. look at	_____
17. withdrawing fluid	_____
18. go	_____
19. instrument to see with	_____
20. throughout the blood	_____

Let's take a moment to see how you will use some of the word parts you've learned. On the following encounter form, do you recognize some word parts?

Healthcare Office Manager

11/18/XX		50	-	0	50	-
DATE OF SERVICE	PREVIOUS BALANCE	CHARGE	PAYMENT	BALANCE		

<input checked="" type="checkbox"/> OFF	<input type="checkbox"/> OP	<input type="checkbox"/> IP	<input type="checkbox"/> HOME	<input type="checkbox"/> NH	<input type="checkbox"/> OTHER
OFFICE	CODE	FEE	SURGERY	CODE	FEE
	New Estab.		Casting	29	
Level I	99211		Type		
Level II	99202 (99212)	50	Casting materials	09906	
Level III	99203 99213		Diaphragm fitting	57170	
Level IV	99204 99214		Ear Irrigation	69210	
Level V	99205 99215		Electro/ Cyro surgery	17	
Eval. & Manag					
0-1 age	99381 99391		Excision skin lesion	11	
1-4 age	99382 99392				
5-11 age	99383 99393		Incision & Drainage	10	
12-17 age	99384 99394		Repair recent wound	12	
18-39 age	99385 99395				
40-64 age	99386 99396		Vasectomy	55250	
65-Older	99387 99397				
HOSPITAL SERVICE					
ADMIT	DIS		Spirometry	94010	
Initial			w/ Alupent	94060	
Level I	99221		Tonometry	92100	
Level II	99222		Flex sig	45330	
Level III	99223		w/ biopsy	45331	
Subseq-per-day			Medicare Flex Sig	G0104	
Level I	99231		EKG	93000	
Level II	99232		Interpretation only	93010	
Level III	99233				
ER			LABORATORY		
DischargeManagement	99238		Blood sugar	82948	
			CBC	85022	
			Exec. Profile	80054	
			HgbA 1C	83036	
			Hematest x3	82270	
			Medicare Hematest	G0107	
			Hematocrit	85013	
			Lipid Profile	80061	
			Mono-Test	86308	
			Pap smear	88150	
			Pregnancy test	81025	
			Prostate spec Antigen	86316	
			Strep screen	83518	
			Thyroid II profile	80091	
			Urinalysis (comp.)	81000	
			Urinalysis (dip)	81002	
			Urine Culture (dip)	87086	
			Wet Prep/ KOH	87210	
			Physical Prof	80050	
			Prenatal Prof II	86280	
			Chlamydia	87082	
			Drawing Fee	36415	
			Medicare Blood Draw	G0001	
			HIV	86689	
DRS. CARE - OTHER					
Prescription Mgmt	90862				
Newborn Care	99431				
Circumcision newborn	54150				
OTHER SERVICES					

DOCTOR'S NAME
and ADDRESS

NAME Brenton Niles					
Insurance Name Net Life			Group No. 629		
<input type="checkbox"/> Medicare <input type="checkbox"/> Medicaid		<input type="checkbox"/> None <input type="checkbox"/> Other		Policy Number 300-00-0848	
Birthdate 4-15-90	Sex F	Work Related <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Accident <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Subscriber's Name Gary Niles D.O.B.					
Check Patients Relationship To Insured		1 Self	2 Spouse	3 Child X	4 Other
Address 277 Lincoln Ave Youngstown, CO 80004					
Other Ins. Coverage Insured's ID No.					
I authorize the release of any medical information necessary to process this claim.					
SIGNED: <i>Gary Niles</i>			DATE: 11/18/XX		
I authorize payment of benefits to the undersigned physician.					
SIGNED: <i>Gary Niles</i>			DATE: 11/18/XX		
<input type="checkbox"/> 789.0	Abdominal pain	<input type="checkbox"/> 553.3	Hiatal hernia	<input type="checkbox"/> 787.7	Abnormal feces
<input type="checkbox"/> 536.8	Acid peptic dis	<input type="checkbox"/> 272.4	Hyperlipidemia	<input type="checkbox"/> 706.1	Acne
<input type="checkbox"/> 314.0	ADD	<input type="checkbox"/> 244.9	Hypothyroidism	<input type="checkbox"/> 477.9	Allergic rhinitis
<input type="checkbox"/> 331.0	Alzheimers	<input type="checkbox"/> 564.1	Irritable bowel syn	<input type="checkbox"/> 285.0	Anemia
<input type="checkbox"/> 300.0	Anxiety	<input type="checkbox"/> 729.82	Leg Cramps	<input type="checkbox"/> 716.9	Arthritis, nonsp
<input type="checkbox"/> 414.0	ASHD	<input type="checkbox"/> 627.2	Menopause	<input type="checkbox"/> 493.9	Asthma
<input type="checkbox"/> 724.5	Back pain	<input type="checkbox"/> 780.2	Near Syncope	<input type="checkbox"/> 601.9	BPH
<input type="checkbox"/> 466.0	Bronchitis, acute	<input type="checkbox"/> 733.00	Osteoporosis	<input type="checkbox"/> 682.9	Cellulitis
<input type="checkbox"/> 437.1	Cerebrovascular insuf	<input type="checkbox"/> 382.9	Otitis media	<input type="checkbox"/> 427.0	PAT
<input type="checkbox"/> 380.4	Ceruminosis	<input type="checkbox"/> 443.9	Peripheral Vasc. Disease	<input type="checkbox"/> 616.0	Cervicitis
<input type="checkbox"/> 786.5	Chest pain	<input type="checkbox"/> 462	Pharyngitis, acute	<input type="checkbox"/> 428.0	CHF
<input type="checkbox"/> 428.0	CHF	<input type="checkbox"/> 486	Pneumonia	<input type="checkbox"/> 486.9	Pregnancy, complicated
<input type="checkbox"/> 372.0	Conjunctivitis	<input type="checkbox"/> 380.10	Otitis Externa	<input type="checkbox"/> 601.9	Prostatitis
<input type="checkbox"/> 924.9	Contusion unsp	<input type="checkbox"/> 381.01	Serious Otitis Media	<input type="checkbox"/> 786.09	Shortness of breath
<input type="checkbox"/> 496	COPD	<input type="checkbox"/> 461.9	Sinusitis, nonspec	<input type="checkbox"/> 709.9	Skinlesionunknownbehavior
<input type="checkbox"/> 298.9	Dementia	<input type="checkbox"/> 701.9	Skin tags	<input type="checkbox"/> 296.0	Depression
<input type="checkbox"/> 782.1	Dermatitis nonspec	<input type="checkbox"/> 110.3	S/P breast cancer	<input type="checkbox"/> 250.0	Diabetes mellitus
<input type="checkbox"/> 617.9	Endometriosis	<input type="checkbox"/> 788.33	SUI	<input type="checkbox"/> 617.9	Endometriosis
<input type="checkbox"/> 381.81	Eustacian Tube Dysfunction	<input type="checkbox"/> 034.0	Strep throat	<input type="checkbox"/> 487.1	Flu Syndrome
<input type="checkbox"/> 726.90	Tendonitis	<input type="checkbox"/> 435.9	TIA	<input type="checkbox"/> 829.0	Fract/ unsp/ clsd
<input type="checkbox"/> 530.81	GERD	<input type="checkbox"/> 079.9	Viral Infection	<input type="checkbox"/> 558.9	Gastroenteritis
<input type="checkbox"/> 274.9	Gout	<input type="checkbox"/> 078.1	Warts, verruca	<input type="checkbox"/> 530.81	GERD
<input type="checkbox"/> 727.3	Gynecological exam	<input type="checkbox"/> 463	Tonsillitis	<input type="checkbox"/> 780.7	Fatigue General
<input type="checkbox"/> 784.0	Headache	<input type="checkbox"/> 463	Tonsillitis	<input type="checkbox"/> 610.1	Fibrocystic breast changes
		<input checked="" type="checkbox"/> 465.9	Upper respir infec	<input type="checkbox"/> 487.1	Flu Syndrome
		<input type="checkbox"/> 599.0	Urinary tract inf	<input type="checkbox"/> 829.0	Fract/ unsp/ clsd
		<input type="checkbox"/> 616.1	Vaginitis	<input type="checkbox"/> 558.9	Gastroenteritis
		<input type="checkbox"/> 435.9	Vasectomy	<input type="checkbox"/> 530.81	GERD
		<input type="checkbox"/> 078.1	Warts, verruca	<input type="checkbox"/> 274.9	Gout
		<input type="checkbox"/> 463	Tonsillitis	<input type="checkbox"/> 727.3	Gynecological exam
		<input type="checkbox"/> 463	Tonsillitis	<input type="checkbox"/> 784.0	Headache

PHYSICIAN'S SIGNATURE

I accept assignment I do not accept assignment

White - Office; Yellow - Insurance; Pink - Patient Copy

 **Step 25 Review Practice Exercise 3-4**

- ❑ Check your answers with the Answer Key at the back of this instruction pack. Correct any mistakes you may have made. Review your flashterms again, giving extra attention to terms circled in the Practice Exercise.

 **Step 26 Lesson Summary**

- ❑ Understanding how to “decipher” medical terminology is a special link to becoming an effective healthcare office manager. Although medical terms might seem complex, you now know that you can simplify them by breaking them down into word parts and then figuring out the meanings of the parts. Word parts are like building blocks because you can form many different words from a few word parts.

The foundation for all words is the *root word*, the basic component of terms. The root word names the body part or body function that the term represents. Most medical terms have at least one root word.

We use word parts together with root words to make new and different words. This is usually done by adding either a *prefix* or a *suffix*. *Prefixes* are word parts added to the beginning of a root word. A prefix gives additional information about a medical term, and a prefix usually tells *where*, *when* or *how*. A prefix does not change the meaning of a root word—but a prefix *does* change the meaning of the whole medical term. A *suffix* is a word part added to the end of a root word. The suffix determines whether a word is a noun or an adjective. Most root words need either a noun suffix or an adjective suffix at the end of them. *Combining vowels* are word parts that join a root word to another word part. Combining vowels make terms easier to pronounce.

It’s important that you understand word parts as a healthcare office manager. While this lesson may have strained your brain a little more than the previous ones, you’ve now learned about the building blocks you’ll need to “build” many medical terms! And don’t forget, you may consult a medical dictionary if you have a hard time finding the spelling or meaning of a medical term. The Practice Exercises in this lesson are important. If you skipped any or struggled to complete some of them, take a few moments to go back and work on them again. Doing so will prepare you for the quiz and build upon your medical foundation of knowledge.

✉ **Step 27 Mail-in Quiz 3**

- ❑ Follow the steps to complete the quiz.
 - a. Be sure you've mastered the instruction and the Practice Exercises that this quiz covers.
 - b. Mark your answers on your quiz. Remember to check your answers with the lesson content.
 - c. When you've finished, transfer your answers to the Scanner Answer Sheet included. Use only blue or black ink on your Scanner Answer Sheet.
 - d. **Important!** Please fill in all information requested on your Scanner Answer Sheet or when submitting your quiz online.
 - e. Submit your quiz to the school via e-mail, mail, fax or, to receive your grade immediately, submit your answers online at www.uscareerinstitute.edu.

Mail-in Quiz 3

For questions 1 through 15, select the best answer from the choices provided. Use your flashcards to answer these questions. Each question is worth 5 points.

1. **Words are often made up of smaller ____.**
 - a. prefixes
 - b. word parts
 - c. medical terms
 - d. sentences

2. **The foundation of a word is called a ____.**
 - a. root word
 - b. word's base
 - c. suffix
 - d. prefix

3. **Word parts can be called the ____ of words.**
 - a. ladders
 - b. building blocks
 - c. root words
 - d. grammar

4. **A word part that attaches to the end of a word is a ____.**
 - a. box car
 - b. prefix
 - c. combining vowel
 - d. suffix

5. **A prefix is found at the ____ of a word.**
 - a. end
 - b. middle
 - c. beginning
 - d. none of the above

6. **In many medical terms, the ____ joins a root word to a suffix.**
 - a. prefix
 - b. apostrophe
 - c. locomotive
 - d. combining vowel

7. **If driver means a person who drives, what does swimmer mean? ____**
 - a. To swim again
 - b. To swim past
 - c. A person who swims
 - d. A person who drives and swims

8. **Which of the following is a compound word? ____**
 - a. Bookshelf
 - b. Love
 - c. Booklet
 - d. Trust

9. **A suffix attaches to the word part called the ____.**
 - a. end
 - b. root word
 - c. prefix
 - d. adjective

10. A word that is made up of two or more root words is called a ____.
- combining vowel
 - compound word
 - double root
 - none of the above
11. In the term *neo/nat/o/log/ist*, the word part *nat/* is a _____.
- suffix
 - prefix
 - combining vowel
 - root word
12. In the term *neo/nat/o/log/ist*, the word part *neo/* is a _____.
- prefix
 - root word
 - combining vowel
 - suffix
13. In the term *dermat/o/logy*, the word part */o/* is called a _____.
- suffix
 - prefix
 - combining vowel
 - root word
14. If *reread* means to read again, what does *review* mean? _____
- To view again
 - To view backwards
 - To view sometime in the past
 - To view and read together
15. _____ is the correct spelling of the term that means any disease of the muscles.
- Myapathey
 - Myopathey
 - Myopathy
 - Myapathy

For items 16 through 20, select the correct root word for each meaning. Each question is worth 5 points.

16. **skull** _____

- a. criani/o
- b. crani/o
- c. neur/o
- d. cardi/o

17. **liver** _____

- a. lith/o
- b. hepat/o
- c. duct/o
- d. hist/o

18. **kidney** _____

- a. ren/o
- b. tens/o
- c. col/o
- d. enter/o

19. **clot** _____

- a. therm/o
- b. muc/o
- c. thromb/o
- d. myel/o

20. **stomach** _____

- a. enter/o
- b. hydr/o
- c. arthr/o
- d. gastr/o

Congratulations
You've completed Lesson 3.



Don't wait for your quiz results to continue with Lesson 4.



After a long day of helping people, most health professionals take a break to smile and have fun. Having fun after working hard has four benefits.

- It relieves stress.
- It exercises your face muscles.
- It isn't fattening.
- It's free.

If anything else in this world gave you these four benefits, you'd take as much of it as you could get. So every once in a while we'll take a fun break—just like this.

Some Just for Fun pages are for enjoyment. Some will tell you interesting things about language and the medical field. Some will give you a warm smile.

Most people use words that come from Greek and Latin every day. Here are some examples.

Greek	Latin
telephone	plumber
chemistry	alibi
therapy	medium
skeleton	honor

The English language has more ways to say something than any other language. That's because it contains words from so many languages. In fact, there are a lot of words in English that come from French. Here are some examples.

French		
humility	liberty	image

The English language also uses words that are Anglo-Saxon. They are usually three or four letters long. When you use a “four-letter word,” you are probably using an Anglo-Saxon word.

Look at these examples of common three- and four-letter words.

Anglo-Saxon

cat dog free

Medicine has been around a long time. The word parts you are learning come from Greek and Latin.

A long time ago, no one in England spoke English. The peasants spoke Anglo-Saxon. Peasants couldn't read or write. They could only speak their language. It was very simple. Speaking Anglo-Saxon meant you hadn't been to school and didn't have much in the way of gold and diamonds, or even food, for that matter. Anglo-Saxon words became our everyday words.

The only people who were educated were the clergy. They read and wrote Latin. They studied Greek when they wanted to do something really exciting. Therefore, anyone who spoke Latin or Greek was considered educated. As science developed, scientists used Latin and Greek so everyone would know they were educated. Greek and Latin words became our professional terms.

In 1066, the French invaded England. The French ruled England and owned the land. The French language gained importance. Eventually French words became our elegant words.

After many years, the English language grew from these roots. That's why in English today, there are usually three words (at least) for everything. If you consider where the different words come from, you can see why different words for the same thing may sound everyday, scientific or elegant. Look at these examples.

Anglo-Saxon	Latin or Greek	French
fire	conflagration	blaze
job	profession	affair
happy	felicitous	joyous
behind	posterior	derriere

Today, by choosing different words, English can still sound everyday, professional or elegant. Don't be afraid of long words. You will soon learn easy, step-by-step ways of breaking them down to the building blocks you have learned. In this section, you are learning the building blocks. In future sections, you will learn what the terms mean. Soon you will be using medical terms like a professional, because you will be a professional.



A long time ago, no one in England spoke English. The peasants spoke Anglo-Saxon but couldn't read or write.

Lesson 4

Medical Terminology—Divide and Combine Terms



Step 1 Learning Objectives for Lesson 4

- ❑ When you complete the instruction in this lesson, you will be trained to do the following:
 - Divide common medical terms into parts and define each part.
 - Properly combine prefixes, root words and/or suffixes to form medical terms that describe certain diagnoses and procedures.
 - Explain and define common terms used in the medical field.



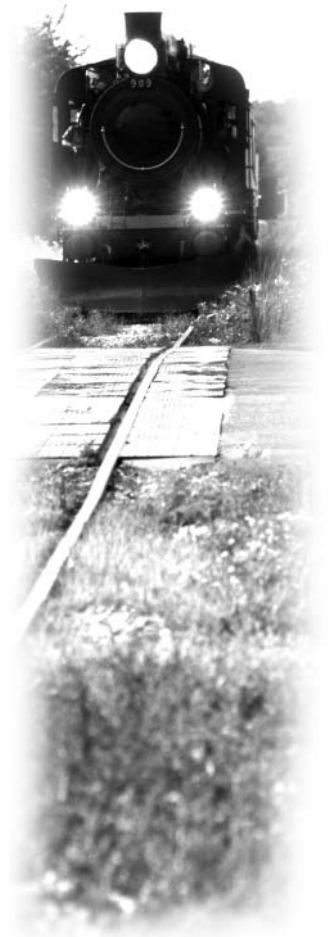
Step 2 Lesson Preview

- ❑ So far, you learned the word parts that fit together to form medical terms: prefixes, root words and suffixes. In this lesson, you learn how to take complete terms and divide them. You also learn how to combine word parts correctly to create new terms.

You may recall the train example in the last lesson—the root word is the boxcar, the prefix is the engine and the caboose is the suffix. When you divide medical terms, you can look at the entire train and determine the prefix, suffix and root word. This is important because you will sometimes encounter unfamiliar terms. If you can look at an unfamiliar word and divide it properly, you can then determine its meaning based on the word parts.

As a healthcare office manager, you might review medical records that don't have the correct medical term spelled out for you. This lesson shows you how to take these "plain English" descriptions and combine word parts to form the correct medical term. As you read this lesson, keep in mind that you will learn both the meanings of words and how to assemble them.

Throughout the lesson, have your flashcards and medical dictionary handy, as you will need to consult them as you study the following material, do the Practice Exercises and take the quiz. Your knowledge of medical terms will make you a valuable resource in the medical field—you will be able to communicate effectively with other healthcare providers, hospitals and insurance companies. Now, let's get started!





Step 3 Divide Medical Terms

- ❑ You learned about **word parts**—the building blocks of medical terms—and you can identify these building blocks in medical terms. By dividing medical terms into their word parts, you can recognize new or complicated medical terms. Then you can look them up in a dictionary more easily and spell them correctly.

Fact about Dividing Words

When you look for the word parts in a medical term, read from the end of the term to the beginning. This simple technique lets you “see” word parts more easily.

Let's look at the following example.

thermometer

If you read from the end of the word, the first word part you see is the suffix *meter*. Draw a slash to the left of *meter*.

thermo/meter

Continue reading from right to left. Next you see an *o*. This may be a combining vowel. Put in another slash. Continue reading from right to left. You see the root word *therm*.

therm/o/meter

Now give the meaning of thermometer starting with the suffix.

Word Part Starting with End of Word	Meaning
/meter	instrument to measure
o	(combining vowels have no meaning)
therm/	heat
• A thermometer is an instrument to measure heat.	

The following two examples further show you how to divide a medical term, reading from end to beginning, to find the meaning.

Word Part Starting with End of Word	Meaning
/genesis	creating
o	(combining vowels have no meaning)
carcin/	cancer of gland tissue
• Carcinogenesis means creating cancer of gland tissue.	

Word Part Starting with End of Word	Meaning
/plasty	restore through surgery
o	(combining vowels have no meaning)
maxill/	upper jaw
• Maxilloplasty means restoring the upper jaw through surgery.	

Of course, whenever you pronounce a term, you should read from the beginning of the term to the end, just as you would read any new word in English.

Consonants, Vowels and the Role They Play

When you divide medical terms, it is important to remember that a **consonant** is any letter of the alphabet except *a, e, i, o, u* and, for the purposes of working with medical terms, *y*.

Fact about Dividing Medical Terms

When a suffix begins with a consonant, there is a combining vowel between the root word and the suffix.

Let's take a look at a few examples.

Term with Suffix Beginning with Consonant	Meaning
cardi/o/ + gram	tracing of the heart
thromb/o/ + plasty	surgical repair of blood clot
thorac/o/ + centesis	withdrawing fluid from the chest
gastr/o/ + megaly	enlargement of the stomach

Because all the suffixes in these examples begin with a consonant, the combining vowel is used. (Did you notice in these examples that dividing slashes (/) were placed between each word part?)

Fact about Dividing Words

When the suffix begins with a vowel, there is no combining vowel between the root word and the suffix.

You already learned that **vowels** are the letters *a, e, i, o* and *u*. Also, *y* is considered a vowel when working with medical terms. Let's look at some examples.

Term with Suffix Beginning with Vowel	Meaning
arthr/ + algia	pain in joints
bi/ + opsy	look at living (tissue)

cardi/ + ac	relating to the heart
hemat/ + oma	blood tumor (lump)
cardi/o/path/ + y	disease of the heart

As you can see, the combining vowel was not used in the terms above before the suffix. The last term, *cardiopathy*, ends with the suffix /y. The suffix /y follows this vowel rule because it acts like a vowel here.

Fact about Dividing Words

There is a combining vowel between two root words in a compound word.

As you learned in Lesson 3, a compound word has two or more root words in it. Look at these examples. Notice the combining vowel between the root words. Also notice that the combining vowel remains even if the second root word begins with a vowel.

Compound Word with Combining Vowel	Meaning
cardi/o/log/ist	heart specialist
gastr/o/enter/o/logy	study of the stomach and bowels
therm/o/meter	instrument to measure heat

A Little Practice

Let's get a little practice in dividing medical terms. Look for word parts in the examples that follow. Read each term from the end of the term—from right to left. Put in slashes between word parts. Pay special attention to whether or not a combining vowel is present. Be careful. Not every *o* is a combining vowel, so use your flashcards if you need help.

- perirenal
- hemostasis
- neuritis
- hepatitis
- cranium
- pararenal
- appendectomy
- paraneural
- cardiology
- hepatomegaly



Break things into to manageable sizes to make them easier to handle.

Here is how you should divide these terms. Either way is correct as the combined suffix does not always need to be divided.

- peri/ren/al
- hem/o/stasis

neur/itis
 hepat/itis
 crani/um
 para/ren/al
 append/ectomy or append/ec/tom/y
 para/neur/al
 cardi/o/logy or cardi/o/log/y
 hepat/o/megaly or hepat/o/megal/y

Now give the meaning of these terms. Start at the end of the term and work to the left. Write the meaning in the blank lines. (The meaning you give doesn't have to be exactly the same as the one provided. We will use the meanings from your flashcards.)

peri/ren/al _____
 hem/o/stasis _____
 neur/itis _____
 hepat/itis _____
 crani/um _____
 para/ren/al _____
 append/ectomy _____
 para/neur/al _____
 cardi/o/logy _____
 hepat/o/megaly _____

The meanings for each of the previous terms are listed here:

peri/ren/al around (surrounding) the kidney
 hem/o/stasis control (hold in) blood
 neur/itis inflammation of nerve(s)
 hepat/itis inflammation of the liver
 crani/um (structure of the) skull
 para/ren/al beside (beyond) the kidney
 append/ectomy (the process of) removal of the appendix
 para/neur/al relating to beside a nerve
 cardi/o/logy (the process of) the study of the heart
 hepat/o/megaly (the process of) enlargement of the liver

The words “the process of” are enclosed in parentheses because they usually are left off when the word is defined in common speech. For example, *hepatomegaly* is commonly defined as enlargement of the liver, not *the process of enlargement of the liver*.

Word Meanings

People who work in the medical field often use shorter and simpler meanings of words to save time. As you become more familiar with medical terms, you probably will use simpler meanings also. Sometimes a simpler meaning of a word can be formed by reading the word from beginning to end.

Compare these simpler meanings that were given by an experienced healthcare professional to the meanings derived from word parts.

Term	Meaning Derived from Word Parts	Simpler Meaning
thermometer	instrument to measure heat	heat-measuring instrument
paraneural	relating to beside a nerve	next to a nerve
cardiology	(the process of) the study of the heart	heart specialty
hepatomegaly	(the process of) enlargement of the liver	liver enlargement

For now, simply start at the end of a word that is new to you. This will help you look for word parts that you recognize and help you give meanings for word parts. This is the easiest way to find word parts and give meanings. As you become more familiar with various word parts, feel free to use simpler meanings.

Now let’s examine a few word parts and their meanings. Remember, you may use your flashcards to find word part meanings, and as you learn more word parts, dividing medical terms will become easier!

Word Part	Meaning
bi/	two
/malacia	softening
syn/, sym/	together with
gynec/o	female
sarc/o	nongland tissue, flesh
vit/o	living, alive
chem/o	chemical, drug
meta/	change, beyond
maxill/o	upper jaw
nect/o	bind
/oma	tumor, mass

Before we move on to our first Practice Exercise, examine the two boxes that follow. The boxes list common prefixes and suffixes and their meanings. These boxes will help you as you divide and combine terms.

Prefix	Meaning
a-, an-	absence of, without, no, not
ag-, ac-, af-, ag-, al-, an-, ap-, ar-, as-, at-	toward, increasing
alb-	white
ambi-	both
ante	before
bio-	life
circum-	around
col-, com-, con-, cor-	together, with
contra	opposite, against
dia-	across, apart, complete knowledge, through
dis-	apart, separate
en-, em-	In
endo-	within, in, inner
ex-, e-	out, away
il-, im-, in-, ir-	not
juxta-	near, beside
milli-	one-thousandth
mono-	one, single
non-	not
post	after
primi-	first
pro-, pros-	before, forward, in front of
re-	back, behind
rube-	red
sub-	under, below
trans-	across, through, over, beyond
uni-	one

Suffix	Meaning
-ad	toward
-al	relating to, pertaining to
-algia	pain
-desis	binding
-ectomy	removal, excision
-emesis	vomit
-form	resembling, like
-genic, -genetic	beginning, originating, producing
-gnosis	about the patient's condition
-gram	recording, picture
-iasis	condition, formation of
-iatic	pertaining to medical treatment
-iatry	study or field of medicine
-ic	relating to, pertaining to
-ical	pertaining to
-itis	inflammation
-logist	specialist in the study of
-logy	study of
-ory	pertaining to
-osis	abnormal condition
-philia	attraction
-rrhexis	rupture
-scopy	process of visual examination

 **Step 4 Practice Exercise 4-1**

Part I

- Divide each medical term listed below by putting slashes between the word parts, including between root words and combining vowels. Remember, you don't have to divide a combined suffix. For example, *cardi/o/logy* and *cardi/o/log/y* are both correct. Do all the items you know first. Then use your flashcards for items that you don't know. Circle the items you had to look up on the flashcards. The first word is divided for you.

Part II

For each medical term listed below, write the meaning. Do all the items you know first. Then use your flashcards for items that you don't know. Circle the items you had to look up on the flashcards. We have given you the first answer to get you started.

Divide	Meaning
1. <i>cardi/o/megaly</i>	<u>enlargement of the heart</u>
2. <i>acromegaly</i>	_____
3. <i>macroglossia</i>	_____
4. <i>histology</i>	_____
5. <i>arthritis</i>	_____
6. <i>splenomegaly</i>	_____
7. <i>aleukocytosis</i>	_____
8. <i>thoracocentesis</i>	_____
9. <i>gastrectomy</i>	_____
10. <i>pulmonary</i>	_____

 **Step 5 Review Practice Exercise 4-1**

- Check your answers with the Answer Key at the back of this instruction pack. Correct any mistakes you may have made. Review your flashterms again, giving extra attention to items circled in the Practice Exercise.



Step 6 Pronounce Word Parts

- Now that you know the basics about dividing medical terms, follow these steps to learn how to pronounce word parts.
 - a. Take your Quick-Learn Tutor and your Set 4 flashcards out of your Quick-Learn Kit. Insert the first flashcard for Set 4 into Side A of the Tutor.
 - b. Put your pronunciation CD in your CD player or pull up the audio file. Advance to Flashcard Set 4.
 - c. Listen to a word part as it is pronounced. After you hear a word part, press pause.
 - d. Look at the word part in the left window of your Quick-Learn Tutor and practice pronouncing it out loud several times until you can pronounce it correctly and easily. Push the flashcard up and read the meaning of the word part.
 - e. Continue this process for all the flashcards for this set.
 - f. Next, put the flashcards in order and run the audio again. This time, pronounce each word part in order but do not stop the audio.
 - g. As you pronounce each word part, look at it on the flashcard. Listen to your own pronunciation of each word part. If you mispronounce one, put a check mark next to that flashterm.
 - h. Next, practice the word parts you mispronounced by listening to the audio again. Be sure you can pronounce each word part clearly and easily.



Step 7 Write Word Parts

- Follow these steps to learn how to write word parts.
 - a. Insert the first flashcard for Set 4 into Side A of your Quick-Learn Tutor.
 - b. Look at each word part as it appears in the window and say it out loud. Write each word part on blank paper. Remember to include the slash.
 - c. Push the card up until the meaning appears in the right window and read the meaning out loud. Write the meaning beside the word part.
 - d. Do this for each flashterm for this set.



Step 8 Meanings of Word Parts

- Follow these steps to learn the meanings of word parts.
 - a. Again insert the first flashcard for Set 4 into Side A of your Quick-Learn Tutor. Pronounce each word part out loud and then say the meaning. Check yourself by pushing the flashcard up until you can see the meaning in the right window.

- b. Now insert the flashcard into Side B of your Quick-Learn Tutor. Push the card up until you see the meaning of the first flashterm in the right window. Read each meaning out loud. Before you look, see if you can remember the word part that goes with that meaning. Check yourself by pushing the flashcard up until you can see the word part in the left window. Do this for each flashterm for this set.
- c. Practice with the flashcards several times until you are familiar with the word parts and their meanings. You may use the flashcards for the Practice Exercises and the Mail-in Quizzes.

 **Step 9 Practice Exercise 4-2**

Part I

- For each word part listed below, write the meaning. Do all the items you know first. Then use your flashcards for items that you don't know. Circle the items you had to look up on the flashcards.

Word Part	Meaning
1. carcin/o	_____
2. ox/o	_____
3. laryng/o	_____
4. cerebr/o	_____
5. /genesis	_____
6. axill/o	_____
7. /penia	_____
8. /tome	_____
9. /tomy	_____
10. /oma	_____

Part II

For each meaning listed, give the proper word part. Be sure to include the slash. Do all the items you know first. Then use your flashcards for items that you don't know. Circle the items you looked up on the flashcards.

Meaning	Word Part
11. self	_____
12. run	_____
13. chemical, drug	_____
14. with	_____
15. change, beyond	_____
16. rib	_____
17. female	_____
18. lower jaw	_____
19. brain	_____
20. many	_____

Step 10 Review Practice Exercise 4-2

- Check your answers with the Answer Key at the back of this instruction pack. Correct any mistakes you may have made. Review your flashterms again, giving extra attention to items circled in the Practice Exercise.

 **Step 11 Practice Exercise 4-3**

Part I

- Divide each medical term listed below by putting slashes between the word parts, including between root words and combining vowels. Remember, you don't have to divide a combined suffix. For example, cardi/o/logy and cardi/o/log/y are both correct. Do all the items you know first. Then use your flashcards for items that you don't know. Circle the items you had to look up on the flashcards. The first word is divided for you.

Part II

For each medical term listed, write the meaning. Do all the items you know first. Then use your flashcards for items that you don't know. Circle the items you had to look up on the flashcards. We provided the first answer to get you started.

Divide	Meaning
1. oste/o/malacia	softening of bone _____
2. sarcoma	_____
3. carcinoma	_____
4. connect	_____
5. maxillary	_____
6. laryngitis	_____
7. vital	_____
8. costal	_____
9. craniotome	_____
10. chemotherapy	_____

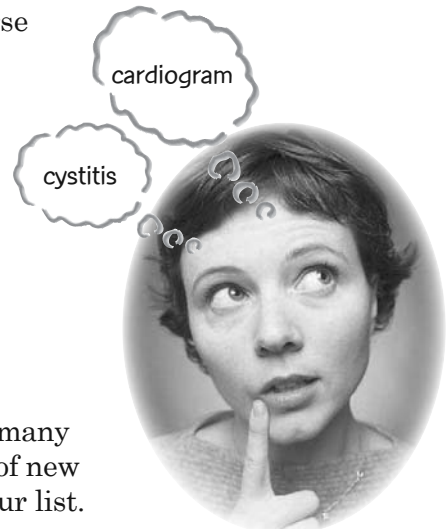
 **Step 12 Review Practice Exercise 4-3**

- Check your answers with the Answer Key at the back of this instruction pack. Correct any mistakes you may have made. Review your flashterms again, giving extra attention to items circled in the Practice Exercise.

 **Step 13 Combine Medical Terms**

- ❑ Combining word parts to form medical terms is just the reverse of dividing medical terms into word parts.

When you learned to divide medical terms, you gained the skill of recognizing long or complicated terms by dividing them into their word parts. Sometimes when doctors fill out bills and charts, they may use a term unclearly or incorrectly. If you know how to combine word parts, you can put together the correct medical term from its everyday English meaning. This is the reason for learning how to combine medical terms.



Knowing just a few word parts allows you to combine them into many different medical terms. Look at this example of the number of new terms you can form each time you add a new word part to your list.

Word Parts Learned	Terms You Can Form			
Root Words:	gastr/o	cyst/o	splen/o	
Suffixes:				
/ic	gastric	cystic	splenic	gastrosplenic
/itis	gastritis	cystitis	splenitis	
/ectomy	gastrectomy	cystectomy	splenectomy	
Prefixes:				
epi/	epigastric	epicystitis	episplenitis	
peri/	perigastric	pericystic	perisplenitis	pericystitis

If you only know a few word parts, you can combine them into many different medical terms.

Let's see now. You only needed to learn eight word parts to build 16 medical terms! Not bad. Just stick to the steps and before you know it, you will have learned many word parts the easy way. Word parts, like nickels and dimes, add up fast.

Consonants, Vowels and the Role They Play

Let's go over the important things to remember when you combine medical terms. These rules will help you when combining most Latin terms.

Fact about Combining Word Parts
 Use a combining vowel between a root word and a suffix that begins with a consonant.

Look at these examples of terms built from their English meanings. Each suffix begins with a consonant. That's why the combining vowel was used.

Meaning	Term with Suffix Beginning with Consonant	Combined Term
tracing of the heart	cardi/o/ + gram	cardi/o/gram
surgical repair of a blood clot	thromb/o/ + plasty	thromb/o/plasty
to cut into the stomach	gastr/o/ + tomy	gastr/o/tomy

Facts about Combining Word Parts

- Do not use a combining vowel between a root word and a suffix that begins with a vowel.
- Do not use a combining vowel between a prefix and a root word.

Look at these examples. The combining vowel is not used.

Meaning	Term with Suffix Beginning with Vowel	Combined Term
blood tumor (lump)	hemat/o/ + oma	hemat/oma
look at living (tissue)	bi/o/ + opsy	bi/opsy
relating to the heart	cardi/o/ + ac	cardi/ac

Fact about Combining Word Parts

Use a combining vowel between two root words in a compound word even when the second root word begins with a vowel.

Look at the following examples. The combining vowel is used between two root words. All of the root words are in boldface type.

Meaning	Compound Word	Combined Term
heart specialist	cardi /o/ log /ist	cardiologist
instrument to measure heat	therm /o/ meter	thermometer
study of the stomach and intestines	gastr /o/ enter /o/ log /y	gastroenterology
relating to water electrical activity	hydr /o/ electr /ic	hydroelectric

When you divide and combine terms in this course, it's helpful to identify the prefixes and suffixes in addition to the root words. For example:

Meaning	Prefix	Root(s)	Suffix	Medical Term
control blood		hem/o	/stasis	hemostasis
relating to around kidney	peri/	ren/o/	al	perirenal
enlargement of the liver		hepat/o	/megaly	hepatomegaly
inflammation of vessels		angi/o	/itis	angiitis
removal of the spleen		splen/o	/ectomy	splenectomy

Read from the beginning of the term to the end when you pronounce a term you created. And remember, read from the end of the term to the beginning when you check the meaning of a term you created.

Now, let's reinforce what you've learned so far with a few Practice Exercises.

 **Step 14 Practice Exercise 4-4**

- For each set of word parts, combine the parts into a medical term using the rules you learned in this lesson. Write the medical term and the meaning in the blank spaces below.

Word Parts	Medical Term	Meaning
1. gastr/o/enter/o /logy	_____	_____
2. oste/o /malacia	_____	_____
3. laryng/o /scope	_____	_____
4. carcin/o /oma	_____	_____
5. sarc/o /oid	_____	_____
6. muc/o /ous	_____	_____
7. thromb/o /osis	_____	_____
8. hepat/o /ic	_____	_____
9. peri/ col/o /itis	_____	_____
10. pulmon/o /ic	_____	_____

 **Step 15 Review Practice Exercise 4-4**

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

 **Step 16 Practice Exercise 4-5**

- In this Practice Exercise, divide the terms and give their meanings. Follow these steps:
 - a. Using a pencil, make slashes to divide the terms into word parts. Like this: cardi/o/log/ist
 - b. Write the meaning of the word in the blank space on the right.
Like this: cardi/o/log/ist one who specializes in studying the heart
 - c. You may refer to your flashcards if you need to.

Divide	Meaning
1. chemist	_____
2. craniotomy	_____
3. laryngectomy	_____
4. endoderm	_____
5. perihepatic	_____
6. polygastria	_____
7. thrombitis	_____
8. subhepatic	_____
9. retrogastric	_____
10. myeloid	_____
11. myopathy	_____
12. venous	_____
13. natal	_____
14. kleptomania	_____

- 15. neurosis _____
- 16. electric _____
- 17. arterial _____
- 18. cystic _____

 **Step 17 Review Practice Exercise 4-5**

- Check your answers with the Answer Key at the back of this instruction pack. Correct any mistakes you may have made. Review your flashterms again, giving extra attention to any items circled in the Practice Exercise.

 **Step 18 Pronounce Word Parts**

- Follow these steps to learn how to pronounce word parts.
 - a. Take your Quick-Learn Tutor and your Set 5 flashcards out of your Quick-Learn Kit. Insert the first flashcard for Set 5 into Side A of the Tutor.
 - b. Put your pronunciation CD in your CD player. Advance the CD to Flashcard Set 5.
 - c. Listen to a word part as it is pronounced on the CD. After you hear a word part, put the CD player on pause.
 - d. Look at the word part in the left window of your Quick-Learn Tutor and practice pronouncing it out loud several times until you can pronounce it correctly and easily. Push the flashcard up and read the meaning of the word part. Continue this process for all the flashcards for this set.
 - e. Next, put the flashcards in order and run the CD again. This time, pronounce each word part in order but do not stop the CD player.
 - f. As you pronounce each word part, look at it on the flashcard. Listen to your own pronunciation of each word part. If you mispronounce one, put a check mark next to that flashterm.
 - g. Next, practice the word parts you mispronounced by listening to the CD again. Be sure you can pronounce each word part clearly and easily.

 **Step 19 Write Word Parts**

- Follow these steps to learn how to write word parts.
 - a. Insert the first flashcard for Set 5 into Side A of your Quick-Learn Tutor.
 - b. Look at each word part as it appears in the window and say it out loud. Write each word part on blank paper. Be sure to include the slash.
 - c. Push the card up until the meaning appears in the right window and read the meaning out loud. Write the meaning beside each word part.
 - d. Do this for each flashterm for this set.

 **Step 20 Meanings of Word Parts**

- Follow these steps to learn the meanings of word parts:
 - a. Again insert the first flashcard for Set 5 into Side A of your Quick-Learn Tutor. Pronounce each word part and then say the meaning. Check yourself by pushing the flashcard up until you can see the meaning in the right window.
 - b. Now insert the flashcard into Side B of your Quick-Learn Tutor. Push the card up until you see the meaning of the first flashterm in the right window. Read each meaning out loud, and then say the word part. Again, check yourself by pushing the flashcard up until you can see the term in the left window.
 - c. Practice with the flashcards several times until you are familiar with the words and their meanings.
 - d. When you feel comfortable with the spelling, pronunciation and meaning of each word part, go on to the next step.

 **Step 21 Practice Exercise 4-6**

Part I

- Write the meaning for each word part listed below. Use your flashcards for items that you don't know. Circle any items you looked up on the flashcards.

Word Part	Meaning
1. lapar/o	_____
2. pneum/o	_____
3. ana/	_____

- 4. /physis _____
- 5. /pnea _____
- 6. bronch/o _____
- 7. cutane/o _____
- 8. mort/o _____
- 9. psych/o _____
- 10. phob/o _____

Part II

Write the correct word part for each meaning given below. Be sure to include the slash. Use your flashcards for items that you don't know. Circle any items you looked up on the flashcards.

- | Meaning | Word Part |
|--------------------------|-----------|
| 11. break down, dissolve | _____ |
| 12. bad, labored | _____ |
| 13. nose | _____ |
| 14. bear | _____ |
| 15. secrete | _____ |
| 16. ear | _____ |
| 17. eye | _____ |
| 18. kidney | _____ |
| 19. tonsils | _____ |
| 20. flow | _____ |

 **Step 22 Review Practice Exercise 4-6**

- Check your answers with the Answer Key at the back of this instruction pack. Correct any mistakes you may have made. Review your flashterms again, giving extra attention to any items circled in the Practice Exercise.

 **Step 23 Lesson Summary**

- In Lesson 4, you saw that medical terms consist of root words, prefixes and suffixes. By learning these word parts, you can divide a medical term into its word parts and derive its meaning. You can take an unfamiliar medical term, separate its root word from any prefixes or suffixes and determine what that word means. This is important because you cannot—and should not—memorize every single medical term healthcare providers use. But you can learn to divide and combine medical terms, and this skill will enable you to become a competent, professional healthcare office manager. You'll know how to break up unfamiliar medical terms so that you can look them up in your medical dictionary to determine the correct spelling and meaning.

Now don't get discouraged if you found this lesson a little challenging. The Practice Exercises in this lesson are important. If you skipped any or struggled to complete some of them, go back and work on them again. Doing so will help you with the upcoming quiz. U.S. Career Institute has successfully graduated thousands of men and women from its programs, and we want you to be one of the success stories! If you need a helping hand, call your instructor. And remember that we offer support even after you graduate and as you advance in your new career.

 **Step 24 Mail-in Quiz 4**

- Follow the steps to complete the quiz.
 - a. Be sure you've mastered the instruction and the Practice Exercises that this quiz covers.
 - b. Mark your answers on your quiz. Remember to check your answers with the lesson content.
 - c. When you've finished, transfer your answers to the Answer Sheet. Use only blue or black ink.
 - d. **Important!** Please fill in all information requested on your Answer Sheet or when submitting your quiz via e-mail.
 - e. Submit your quiz to the school via mail, e-mail or fax.

Mail-in Quiz 4

For questions 1 through 9, select the best term from the word bank to complete each sentence. Not all terms will be used. Each question is worth 4 points.

word parts	word roots	compound word	complex word
longer	shorter	many	a few
vowel	consonant	root word	prefix
Greek	Latin	beginning	middle

1. Analyze complicated medical terms by breaking them down into _____.
2. A word with two or more root words in it is called a(n) _____.
3. When you look for word parts in an unfamiliar medical term, you read from the end of the term to the _____.
4. People who work in the medical field often use _____ and simpler meanings of words to save time.
5. Knowing just a few word parts allows you to combine them into _____ medical terms.
6. The rules you learned in this lesson will help you when combining most _____ terms.
7. When a suffix begins with a(n) _____, there is a combining vowel between the root word and the suffix.
8. When the suffix begins with a vowel, there is no combining vowel between the _____ and the suffix.
9. Do not use a combining vowel between a(n) _____ and a root word.

For questions 10 through 25, write your answer in the space provided. Each question is worth 4 points.

10. The correct way to divide the word *thermometer* is _____.
11. The correct way to divide the word *gastroenterology* is _____.
12. The meaning of the term *splenology* is the study of the _____.
13. *Axill/o* means _____.
14. *Nect/o* means _____.
15. The prefix that means *opposite, against* is _____.
16. The correct spelling of the term formed from the word parts *acr/o* + *arthr/o* + */itis* is _____.
17. The term in the previous question means _____.
18. The term that means “before delivery” is _____.
19. A patient diagnosed with hepatomegaly has _____.
20. Combine word parts correctly for a term that means “disease of the heart.”

21. Hyperemesis refers to _____.
22. The term used to describe “toward the head” is _____.
23. The term that means “pertaining to the treatment of children” is
_____.
24. A doctor who specializes in _____ views tiny objects with a scope.
25. An organism that is toxigenic is producing _____.

Healthcare Office Manager Mail-in Quiz 4

1. Fill in your **student ID** and your **course code** below.

STUDENT ID NUMBER _____ COURSE CODE _____

2. Be sure your **name** and **address** are filled in below.

3. **Transfer your answers** to this cover sheet.

For School Use Only:
Grade: _____

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

U.S. Career Institute
2001 Lowe Street
Fort Collins, CO 80525

HC-02

This Space for Instructor Use

↑ Fold on dotted line

1. _____

7. _____

2. _____

8. _____

3. _____

9. _____

4. _____

10. _____

5. _____

11. _____

6. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

21. _____

22. _____

23. _____

24. _____

25. _____

Congratulations
You've completed Lesson 4.



Don't wait for your quiz results to continue with Lesson 5.

Lesson 5

Medical Terminology—Abbreviations, Symbols and Special Terms



Step 1 Learning Objectives for Lesson 5

- ❑ When you complete the instruction in this lesson, you will be trained to do the following:
 - Recognize common medical abbreviations and slang.
 - List and explain common symbols.
 - Describe eponyms, acronyms and homophones.
 - Differentiate between terms that sound alike.
 - Determine terms that are opposites.
 - Convert singular medical terms to plurals and recognize medical plurals.



Step 2 Lesson Preview

- ❑ Imagine you run into a good friend who has a hard time keeping in touch with his family. When you ask him, “Did you write that e-mail to your brother?” he shakes his head no. Now look closely at the question you asked. The sentence, “Did you write that e-mail to your brother?” illustrates the complexity of the English language.

Your question contained three *sound-alikes*—the words *you*, *write* and *to* sound the same as other words (*ewe*, *right* or *rite* and *too* or *two*). *Sound-alikes*, *medical plurals* and *opposites* are just three types of medical terms we’ll cover in this lesson. *You* (not *ewe*) will also learn some common medical *abbreviations* and *symbols*.

As a healthcare office manager, you will often encounter terms that may sound or look alike, such as hypertension and hypotension. Not only do these terms sound alike, but they’re also opposites. Hypertension refers to high blood pressure, and hypotension refers to low blood pressure. You may need to determine if the term you see is, indeed, the correct term. Additionally, as you’ll soon find out, healthcare providers use many abbreviations and symbols. It seems only natural since many medical terms are long and complex! If you are familiar with these abbreviations and symbols, you’ll easily be able to convert them into the correct medical terms.

It’s amazing how much you already know about medical terminology from the previous two lessons. This knowledge will allow you to understand the language used in your new career. Healthcare providers will appreciate your knowledge. So let’s get started with this lesson about special terms!



Step 3 Abbreviations

- ❑ Doctors frequently use shortened versions of longer words or phrases. These shortened versions of words and phrases are called **abbreviations**. Abbreviations are extremely useful to a doctor because they save valuable time. Because it is important to be completely accurate, doctors and hospitals get together and produce lists of approved abbreviations—abbreviations they all agree on and understand.

Abbreviations in Hospitals

The Joint Commission (formerly known as JCAHO) requires hospitals to keep a list of acceptable abbreviations. Only the accepted abbreviations may be used in the medical records for that hospital.

Here are some common abbreviations used in hospitals:

Abbreviation	Meaning
CCU	Coronary care unit
ECU	Emergency care unit
ER	Emergency room
ICU	Intensive care unit
IP	Inpatient
OP	Outpatient
OR	Operating room
PAR	Postanesthetic recovery
postop	Postoperative
preop	Preoperative
RTC	Return to clinic
RTO	Return to office



Abbreviations save doctors valuable time.

Office Records

The rules for abbreviations are more relaxed for the records in individual offices. However, any bills or insurance forms that are typed must follow the hospital's list of abbreviations.

Abbreviation	Meaning
BP	Blood pressure
C	Celsius, centigrade
c/o	Complains of
CP	Chest pain
Dx	Diagnosis
F	Fahrenheit
H&P	History and physical
Ht	Height
Hx	History
L	Left
L&W	Living and well
P	Pulse
PE or Px	Physical examination
pH	Hydrogen concentration (acidity/alkalinity)
PI	Present illness
PMH	Past medical history
pt	Patient
R	Right
R/O	Rule out
T	Temperature
Tr or Tx	Treatment
VS	Vital signs
Wt	Weight
WDWN	Well-developed and well-nourished
y.o. or YO	years old

Doctors

Doctors sometimes have their own personal abbreviations. As a healthcare office manager, you will need to learn these personal abbreviations. This will help you communicate more effectively with your clients or employer.

Pharmacies

Lists of medications and treatments that a pharmacy prepares are included in the medical record, and they appear on the insurance forms filed by the doctor's office or hospital. Usually Latin abbreviations are used for these medications and treatments.

On your flashcards, beside each Latin lower case abbreviation you will see the full Latin phrase. You will not need to learn the Latin words—just the punctuation and the everyday meaning.



Medications often use Latin abbreviations.

Step 4 Learn Abbreviations

- ❑ It's important to be familiar with common medical abbreviations, so take some time to practice saying and writing medical abbreviations using the following exercise. Because pronunciation is not an issue with abbreviations, there is no CD to go with this flashcard set.
 - a. Take your Quick-Learn Tutor and your Set 6 flashcards out of your Quick-Learn Kit. Insert the first flashcard into Side A of the Tutor.
 - b. Look at each abbreviation as it appears in the window and say it out loud. Write each abbreviation on blank paper.
 - c. Push the card up until the meaning appears in the right window and read the meaning out loud. Write the meaning beside each abbreviation.
 - d. Do this for each flashterm for this set.

Step 5 Meanings of Abbreviations

- ❑ Follow the instructions to learn the meanings of abbreviations.
 - a. Again insert the first flashcard for Set 6 into Side A of your Quick-Learn Tutor. Pronounce each abbreviation and look at how it is spelled. Then say the meaning. Check yourself by pushing the flashcard up until you can see the meaning in the right window.
 - b. Now insert the flashcard into Side B of your Quick-Learn Tutor. Push the card up until you see the meaning of the first flashterm in the right window. Read each meaning out loud and then say the abbreviation. Again, check yourself by pushing the flashcard up until you can see the meaning in the left window.
 - c. Practice with the flashcards several times until you are familiar with the abbreviations and their meanings. Don't struggle to memorize them. You may always look up abbreviations.

 **Step 6 Practice Exercise 5-1**

- For each abbreviation or acronym listed below, write the meaning. Do all the items you know first. Then use your flashcards for items that you don't know. Circle the items you had to look up on the flashcards.

Abbreviation/Acronym	Meaning
1. CO ₂	_____
2. mg	_____
3. O ₂	_____
4. n.p.o.	_____
5. NBS	_____
6. EBV	_____
7. kg	_____
8. TPR	_____
9. IM	_____
10. q.n.s.	_____
11. b.i.d.	_____
12. DOB	_____
13. Dx	_____
14. IV	_____
15. stat	_____
16. q.a.m.	_____
17. GB	_____
18. Sx	_____
19. Rx	_____
20. FUO	_____

 **Step 7 Review Practice Exercise 5-1**

- Check your answers with the Answer Key at the back of this instruction pack. Correct any mistakes you may have made. Pay particular attention to any items you circled.

 **Step 8 Slang**

- There are two types of *slang* you may encounter in the medical field—medical slang and English slang.

Medical Slang

Medical slang words are informal abbreviations for longer medical terms. For example, *sedimentation rate* is called *sed rate*. The *laboratory* is the *lab*. Doctors use medical slang frequently for the same reason they use abbreviations—to save time.

Fact about Medical Slang

If you encounter slang in the doctor's notes, use the full term the slang represents. For example: If the doctor wrote, "The patient was prepped for appy," you would know to write appendectomy.

Some medical slang terms are used so frequently that they become accepted medical terms. *Exam* and *prep* are two examples of this.

English Slang

English slang words are highly informal words rarely used in professional writing.

Facts about English Slang

Obscene or offensive statements are never put in any medical report, including patient files, insurance forms and patient charts, unless the patient is being quoted (in this case, use quotation marks around the quoted statement). If the patient is not being quoted, the offensive or obscene statement would be deleted.

- Correct: The patient said, "I fell down and hurt my ass."
- Incorrect: The patient is a pain in the ass. (Leave out this entire sentence.)

 **Step 9 Slang Terms**

- ❑ Follow the instructions to learn how to read and write slang terms.
 - a. Take out your Quick-Learn Tutor and your Set 7 flashcards. Insert the first flashcard into Side A of your Quick-Learn Tutor.
 - b. Look at each slang term as it appears in the window and say it out loud. Write the slang term on blank paper.
 - c. Push the card up until the meaning appears in the right window and read the meaning out loud. Write the meaning beside each slang term.
 - d. Do this for each flashterm for this set.

 **Step 10 Meanings of Slang Terms**

- ❑ Follow the instructions to learn the meanings of slang terms.
 - a. Again insert the first flashcard for Set 7 into Side A of your Quick-Learn Tutor. Pronounce each slang term and then say the meaning. Check yourself by pushing the flashcard up until you can see the meaning in the right window.
 - b. Now insert the flashcard into Side B of your Quick-Learn Tutor. Push the card up until you see the meaning of the first flashterm in the right window. Read each meaning out loud; then say the slang term. Again, check yourself by pushing the flashcard up until you can see the meaning in the left window.
 - c. Practice with the flashcards several times until you are familiar with the words and their meanings.

Let's pause here to review what you've learned about slang terms.

 **Step 11 Practice Exercise 5-2**

Match the slang words with the medical terms they stand for.

- | | | |
|-----------|-------|---|
| 1. sibs | _____ | a. medications |
| 2. prep | _____ | b. nullipara, woman with no deliveries |
| 3. meds | _____ | c. pathology |
| 4. ab | _____ | d. siblings, brothers and sisters |
| 5. exam | _____ | e. abortion |
| 6. path | _____ | f. primipara, woman with one previous birth |
| 7. appy | _____ | g. temperature |
| 8. primip | _____ | h. prepare, preparation |
| 9. nullip | _____ | i. appendectomy, appendicitis |
| 10. temp | _____ | j. examination |

 **Step 12 Review Practice Exercise 5-2**

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

 **Step 13 Symbols**

The **symbols** used in medicine are no different from those used in everyday life. When you use symbols, you must be sure the symbol is well known. To give you a better understanding of which symbols are acceptable, we will go through the main rules you need to remember.

Facts about Using Symbols

- When you use symbols, do not leave a space between the symbol and the numeral.
- However, *do* leave a space between a numeral and the symbol x. This symbol means “by” in dimensions, as in 6 x 9.

Let's take a look at the following list of symbols, what they mean and how they are used.

Symbol	Meaning	Example
°C	degrees Celsius	32° C
°F	degrees Fahrenheit	98.6° F
&	and (between capital letters only)	D&C
x	times, by	x 3 days, 2 x 3 x 5
+	plus (urine; reflexes)	3+
:	ratio; ___ to ___	1:2
/	per, vision test	2/day; 20/20
/	over (blood pressure)	120/80
-	minus, ___ to ___ (range), through	-2, 4-5, II-XII
-	suture size	3-0 (000) silk
#	number	#16 Fr, #3-0 silk

 **Step 14 Practice Exercise 5-3**

Fill in the appropriate symbol used with each term below. You may refer to the list of symbols in Step 13.

1. _____ **temperature (Celsius or Fahrenheit)**
2. _____ **number**
3. _____ **suture size**
4. _____ **over (blood pressure)**
5. _____ **and (between capitals)**
6. _____ **minus**
7. _____ **vision**
8. _____ **ratio**

 **Step 15 Review Practice Exercise 5-3**

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



Step 16 Special Terms

- ❑ In medical terminology, just as in the rest of the English language, there are *special terms* that have specific rules. These **special terms** include proper nouns and other capitalized words, sound-alikes and opposites. Now we're going to talk about which words require special treatment, such as capitalization. You also will learn about two special classes of terms: *eponyms* and *acronyms*.

Eponyms

In addition to the medical terms you learned to combine and divide in previous lessons, medical reports contain other information, such as laboratory test results, special medical abbreviations and the names of medical equipment and procedures. Often these words include **proper names**—that is, brand names or the names of people. You must capitalize proper names.

It was the custom in the past to use a person's name to identify his or her medical inventions or discoveries. The kinds of things named for people include:

- a new disease; a symptom or sign of disease
- an anatomical structure
- a new instrument, test or examination method

An **eponym** is a term formed from a person's name. The person's name is given to the name of his or her discovery or invention to indicate that person did the research and made the discovery. One example is *Bell's palsy*.

Fact about Eponyms

An eponym has two parts:

1. The person's name as an adjective.
2. The type of invention or discovery as a noun.

Eponym Adjective	Eponym Noun	Meaning
Bell's	palsy	facial paralysis
Pott's	clamp	surgical instrument
Chiba	needle	long biopsy needle
McBurney's	point	examination location for the appendix
Kaposi's	sarcoma	unusual skin cancer

Because an eponym includes a person's name, you won't be able to divide it into medical word parts. You do, however, capitalize the proper name in the term, but not the noun.

If you use an eponym frequently enough, you will probably memorize how it is spelled. Otherwise, you will have to look in your medical dictionary for the proper spelling of eponyms.

Luckily, most eponyms can easily be found in the dictionary because they are listed under the noun part of the phrase. Look at these examples of some medical dictionary listings.

Eponym	Listed in Medical Dictionary Under
Bell's palsy	palsy
Kaposi's sarcoma	sarcoma
McBurney's point	point

Because it is difficult to remember the meanings of eponyms, it is becoming less common for medical discoveries or inventions to be named for people. It is now considered more professional to use a properly combined medical term rather than an eponym. Nonetheless, doctors use eponyms frequently.

Brand Names

In the past, an eponym told you the name of the person who took credit for a discovery or an invention. Some names of medical products indicate that a company owns the patent for an invention or discovery. **Brand names** are like eponyms because they demonstrate who discovered the procedure, diagnosis or disease. The kinds of new brand name eponyms you see today are for the following:

- a genetic cell line or tissue culture product
- equipment or instruments
- drugs or therapy methods

Look at these examples: General Electric CT scanner, Pen.Vee K penicillin and Phillips' milk of magnesia.

Don't worry if you can't pronounce some eponyms. Like your own name, there are usually a number of different ways to pronounce them. All you need to be able to do is to find the correct spelling in the dictionary. Before we move on to *acronyms*, let's take one more look at some common eponyms.

Common Eponyms

- Babkin reflex
- Cantor tube
- Charcot’s syndrome
- Colles’ fracture
- Cooley’s anemia
- Epstein-Barr virus
- Erb’s palsy
- Gordon’s reflex
- Halsted suture
- Hodgkin’s disease
- Hodgkin’s sarcoma
- Kaposi’s sarcoma
- Laennec’s cirrhosis
- Legg’s disease
- McBurney’s point
- Miller-Abbott tube
- Pauley’s point
- West Nile virus



Mosquitos are known to spread West Nile virus.

Acronyms

An **acronym** is a word formed using the initials from a group of words or from word parts. Here are some acronyms you probably already know:

Acronym	Stands for
IRS	Internal Revenue Service
USA	United States of America
DMV	Department of Motor Vehicles

Acronyms are a special kind of abbreviation. Doctors use acronyms because they save time. Instead of writing the very long names of some diseases and procedures, the doctor simply uses the acronym. Here are some examples of some common medical term acronyms.

Medical Term or Phrase	Acronym
cardiopulmonary resuscitation	CPR
complete blood count	CBC

To form acronyms, take the first letter of each word in a phrase or by taking the first letter of the word parts. For example, FTD stands for **F**lorist **T**elegraph **D**elivery, and NG stands for **n**as**o**gastric. Not every word in the phrase has to be represented in the acronym. Small, nonessential words are usually omitted. For example, EENT stands for eye, ear, nose and throat.

Acronyms are usually pronounced by saying the letters one by one. However, if the letters of the acronym spell a word or can be pronounced as a word, then the acronym may be pronounced as if it were a word. Let's take a look at a few examples.

Acronym	Pronounced
EEG	Say the letters—Ee-ee-gee
ELISA	Pronounce the word—El-ee-sah

In fact, some acronyms that are pronounced like words actually become words if they are used often enough. The word *laser* began as an acronym for the phrase Light Amplification by Stimulated Emission of Radiation. No one bothers to say the whole phrase any more because laser is an accepted word. The same is true of the word scuba, which stands for self-contained underwater breathing apparatus.

Fact about Acronyms

Write acronyms in capital letters with no periods or spaces between the letters. For example, CBC stands for complete blood count and NSVD stands for normal spontaneous vaginal delivery.

When you hear a new acronym, be sure to look it up and find out what it stands for. This helps you write, type and spell acronyms correctly. You can find most common acronyms in a medical dictionary.

 **Step 17 Practice Exercise 5-4**

- Let's practice forming acronyms. Listed are complete medical phrases. Write the correct acronym for each phrase. Notice how the acronym is formed by taking the initials of the words or word parts in the phrase.

Medical Phrase	Acronym
1. blood urea nitrogen	_____
2. white blood count	_____
3. Venereal Disease Research Laboratory	_____
4. rheumatoid arthritis	_____
5. human immunodeficiency virus	_____
6. Physician's Desk Reference	_____
7. (The) pupils (are) equal, round (and) reactive (to) light (and) accommodation	_____
8. electr/o/encephal/o/gram	_____

9. eye, ear, nose (and) throat _____

10. intra/muscular _____

Step 18 Review Practice Exercise 5-4

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

Step 19 Pronounce Acronyms

- Follow the instructions to learn how to pronounce acronyms.
 - a. Put the pronunciation CD in the CD player. Advance the audio CD to Flashcard Set 8.
 - b. Put the first flashcard for Set 8 into Side A of your Quick-Learn Tutor.
 - c. Listen to each acronym as it is pronounced. Put the CD player on pause after each acronym.
 - d. Practice pronouncing each acronym until you can pronounce it clearly and easily. You do not need to memorize the meaning of an acronym—only learn to form it and look up its meaning on the flashcard.
 - e. Do this for each flashcard for this set.

Step 20 Sound-alikes and Opposites

- Two types of word pairs may occasionally present challenges. They are *homophones* and *antonyms*.

Homophones (Sound-alikes)

At the beginning of this lesson, we called the words “to” and “too” sound-alikes. Well, the more technical term for words that sound alike is **homophone**. These words are not spelled alike, and they have different meanings, but when homophones are pronounced, they sound the same. The English language is full of homophones. Look at these examples:

- principle—principal
- seen—scene
- two—too
- meddle—medal

As you can see, each of these four pairs of words looks different, but they sound the same. As you work with medical records, doctors, insurance companies and others, make sure that you distinguish between homophones when you hear information. You certainly wouldn’t want to meddle in the business’s principle scene when you really needed to know if the principal had seen the medal. Okay, so that’s a stretch, but you get the idea!

Antonyms (Opposites)

Antonyms are words or word parts that have opposite meanings. Sometimes these words sound similar to each other, which can cause problems for someone with no training. Let's take a look at these two antonyms:

- hypotension (low blood pressure)
- hypertension (high blood pressure)

In your work as a healthcare office professional, make sure the terms you use make sense. Did the doctor mean what she wrote?

Consider the following situation. If you know that normal blood pressure is 120/80, which term below is correct?

- The patient has *hypertension* with a blood pressure of 90/60.
- The patient has *hypotension* with a blood pressure of 90/60.

In this context, *hypotension* is correct because 90/60 is lower than 120/80.

Let's take a moment to review what you've learned in this section.

Step 21 Practice Exercise 5-5

- Some of the more common antonym pairs are listed below. You already practiced their meanings with your flashcards. Write the meaning of each term in the blank space. Refer back to your flashcards if you need to do so.

1. **micro/** _____
macro/ _____
2. **ante/** _____
retro/ _____
3. **pre/** _____
post/ _____
4. **hypo/** _____
hyper/ _____
5. **eu/** _____
dys/ _____
6. **inter/** _____
intra/ _____

- 7. **con/** _____
contra/ _____

- 8. **tachy/** _____
brady/ _____

- 9. **ana/** _____
cata/ _____

- 10. **ab/** _____
ad/ _____

- 11. **infra/** _____
supra/ _____

- 12. **/malacia** _____
/sclerosis _____

- 13. **a/** _____
(not using this prefix is the antonym)

- 14. **endo/** _____
ecto/ _____

For question 15, write your response in the space provided.

- 15. **Describe homophones, and provide two examples.**

 **Step 22 Review Practice Exercise 5-5**

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

 **Step 23 Medical Plurals**

- Many medical terms follow special medical plural rules. Some medical words even have two plural forms, one that follows the normal English rule and one that follows the medical rule. When there are two ways to make a medical term plural, generally doctors use English rules when dictating reports for patients or other non-medical people, and they use medical rules when reports go to other doctors or into the medical chart. Since medical plurals and English plurals sound very different, it will be easy for you to tell which rule the doctor is following.

Rules for Medical Plurals

In some cases, medical plurals are formed by changing suffixes. In other cases, letters in the root word must be changed in addition to changes in the suffix. The following chart shows you how to form medical plurals. Follow this chart to form medical plurals.

Ending With	Change To	Example
/um	/a	medi/um—medi/a (mee-dee-uh)
/us	/i	calcul/us—calcul/i (cal-cue-lie)
/a	/ae	lamin/a—lamin/ae (lam-in-ee)
/is	/es	diagnos/is—diagnos/es (dy-ag-no-seez)
/itis	/itid/es	arthr/itis—arthr/itid/es (ar-thrit-a-deez)
i/on	i/a	criteri/on—criteri/a (cry-teer-ee-ah)
ax	ac/es	thorax—thorac/es (thore-a-seez)
ix	ic/es	cervix—cervic/es (serv-eh-seez)
ex	ic/es	index—indic/es (in-deh-seez)
yx	yc/es	calyx—calyc/es (kay-luh-seez)

Step 24 Practice Exercise 5-6

- In this exercise, let's practice forming plurals using the medical rules you just learned and some of the terms you used previously in this course. All of the terms in this Practice Exercise follow the medical plural rules we gave you. You do not need a dictionary to do this exercise.

Look at each word and write the medical plural of each word in the blank space on the right.

Singular	Medical Plural
1. synthesis	_____
2. centrum	_____
3. vena	_____
4. nervus	_____
5. ganglion	_____

 **Step 25 Review Practice Exercise 5-6**

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

 **Step 26 Lesson Summary**

- Congratulations! You've almost completed the last of three lessons that introduced you to the language of medicine—medical terminology, which you need to effectively and professionally perform your job as a healthcare office manager. You learned about word parts (root words, prefixes and suffixes), and how to divide and combine a medical term and derive its meaning using its word parts. In this lesson, we talked about how to use abbreviations and symbols in your work. This lesson also presented information about such special medical terms as eponyms, acronyms, homophones (sound-alikes), antonyms (opposites) and plurals.

Now that you have learned the essential building blocks of medical terminology, you're one step closer to a successful medical career. All of this knowledge will make your job that much easier. You'll be able to figure out and research complex or unfamiliar medical terms, abbreviations and symbols.

Are you ready to move forward? Take a few moments to review your lesson, and good luck on the quiz!

 **Step 27 Mail-in Quiz 5**

- Follow the steps to complete the quiz.
 - a. Be sure you've mastered the instruction and the Practice Exercises that this quiz covers.
 - b. Mark your answers on your quiz. Remember to check your answers with the lesson content.
 - c. When you've finished, transfer your answers to the Scanner Answer Sheet included. Use only blue or black ink on your Scanner Answer Sheet.
 - d. **Important!** Please fill in all information requested on your Scanner Answer Sheet or when submitting your quiz online.
 - e. Submit your answers to the school via e-mail, mail, fax or, to receive your grade immediately, submit your answers online at www.uscareerinstitute.edu.

Mail-in Quiz 5

For questions 1 through 13, select the best answer from the choices provided. Remember, you may use your flashcards and/or your medical dictionary to answer these questions. Each question is worth 4 points.

1. **Shortened versions of phrases are called ____.**
 - a. eponyms
 - b. abbreviations
 - c. antonyms
 - d. opposites

2. **____ are required to keep a list of acceptable abbreviations.**
 - a. Hospitals
 - b. Insurance forms
 - c. Billing services
 - d. None of the above

3. **CCU is the abbreviation for ____.**
 - a. intensive care unit
 - b. critical care unit
 - c. cubic centimeter units
 - d. coronary care unit

4. **The term postop means ____.**
 - a. postoperative
 - b. postopportunity
 - c. postanesthetic operation
 - d. preoperative

5. **An H&P is a ____.**
 - a. head and palate exam
 - b. history and prognosis
 - c. history and physical
 - d. height and pulse exam

6. **The words *their* and *there* are examples of ____.**
 - a. homophones
 - b. antonyms
 - c. acronyms
 - d. eponyms

7. A physical examination can be abbreviated as _____.
 - a. Rx
 - b. Px
 - c. Px or PE
 - d. health treatment

8. DOB is the abbreviation for _____.
 - a. date of billing
 - b. doctor of birthing
 - c. date of birth
 - d. two times a day

9. The correct abbreviation for “diagnosis” is _____.
 - a. dg
 - b. Dx
 - c. Dgs
 - d. ds

10. There are two types of slang you may encounter: ____ slang and English slang.
 - a. uncommon
 - b. insurance
 - c. medical
 - d. offensive

11. What medical slang terms are now accepted as medical terms? ____
 - a. Exam
 - b. Prep
 - c. Hypo
 - d. Both a and b are accepted.

12. When using the *times* or *by* symbol (×), you ____ leave a space between the symbol and the numeral.
 - a. do not
 - b. do

13. *Primip* is slang for _____.
 - a. a premature infant
 - b. premenopausal
 - c. primipara, woman with one previous birth
 - d. premenstrual

For items 14 through 17, match the symbol with its meaning. Each question is worth 4 points.

14. _____ °C a. degrees Fahrenheit
15. _____ °F b. times, by
16. _____ × c. and
17. _____ & d. degrees Celsius

For items 18 through 21, match the symbol with its meaning. Each question is worth 4 points.

18. _____ / a. per; over
19. _____ : b. number
20. _____ # c. ratio
21. _____ + d. plus

For questions 22 through 25, select the best answer from the choices provided. Each question is worth 4 points.

22. **When a person's name or a brand name is included in a medical term, that term is called an _____.**
a. egonym
b. eponym
c. acronym
d. antonym
23. **_____ are formed by taking the first letter of each word in a phrase or by taking the first letter of the word parts.**
a. Acronyms
b. Eponyms
c. Opposites
d. Homonyms
24. **Which of the following acronyms is not paired correctly with its term? _____**
a. IRS—Internal Revenue Service
b. EKG—electrocardiogram
c. CBC—complete brain cortex
d. USA—United States of America
25. **You _____ capitalize the proper name part of an eponym.**
a. do
b. do not

Congratulations
You've completed Lesson 5.



Don't wait for your quiz results to continue with Lesson 6.

Lesson 6

What Is a Medical Record?



Step 1 Learning Objectives for Lesson 6

- ❑ When you complete the instruction in this lesson, you will be trained to do the following:
 - Describe the medical record and its importance in the healthcare field.
 - Describe the information included in a medical record.
 - Explain how medical records are organized.
 - Explain the importance of documentation in medical records.
 - Summarize HIPAA regulations.
 - Describe the Electronic Health Record.



Step 2 Lesson Preview

- ❑ The last thing Janelle remembered as she sat down to study in her community college library was feeling slightly woozy. And that was it. When she regained consciousness, she was lying on a stretcher in the emergency room of the community hospital, staring at the overhead lights. “You passed out,” said the nurse’s aide. “When the EMTs got there, they pulled your health record and found out that you’re diabetic. Good thing—we’d have thought you were drunk,” she added with a wink at Janelle. “Don’t worry, you’ll be fine,” the nurse’s aide said reassuringly.



Up-to-date health records can save lives in emergencies.

Miraculous? Maybe—and maybe not. What is this mysterious health record that was mentioned, and what information does it contain? Why do we have them, who uses them and who owns them? We’ll explore all of these questions in this lesson. You’ll also learn how to manage and store medical records and the regulations that protect them. Let’s get started!



Step 3 It's All in the Name

- ❑ The terms health record, medical record, patient record and healthcare record tend to be used interchangeably in the health profession. For this course, we'll use the terms medical record and health record most often. Before we get ahead of ourselves, let's define *medical record*.

The **medical record**, or **health record**, is a document that is a legal and business record of any healthcare services provided to a person in any part of the healthcare system. In Janelle's case, the nurse's aide refers to an electronic health record that's available to EMTs in the field. An electronic health record is simply a health record that is in electronic form, in a computer system. Electronic health records have existed in a number of different forms for many years, but a single health record for each person isn't yet universally available electronically to everyone, everywhere. We'll discuss the electronic health record in greater detail later in this lesson.

Why Keep Health Records?

Do you get the oil changed in your car? Do you rotate the tires? Do you take it in for maintenance when it reaches a certain mileage as the manufacturer suggests? What do you do with those records about your car maintenance? Many people simply stick them in the glove box without too much thought. However, if your battery fails and you suspect it's still under warranty, wouldn't it be nice to have all your service information stored in an organized way? Then you could efficiently retrieve the information you need and determine who will pay for that new battery!

As you might suspect, humans are far more complicated than cars. This makes it that much more important to have a comprehensive record of health care! There are many reasons why we keep medical records. With an accurate medical record, you can:

- identify the patient
- record results of tests and treatments
- justify diagnoses and treatments
- offer information to all providers involved in the patient's care
- detail the patient's previous care for future providers
- maintain a record of services for billing third-party payers
- provide the healthcare facility with a legal business record
- provide tools for evaluating patient care
- provide documentation for study and research
- give healthcare providers data for planning delivery of services and marketing

You may be asking, “Why is it so important to keep such detailed records?” Because the main purpose of the health record is to help ensure **continuity of care**—health care that takes into account all the health care that a patient received in the past and is receiving from other healthcare providers. A healthcare record gives the people treating a patient the information they need to make decisions about any additional care or treatment. The record serves as a way for healthcare providers to communicate with each other about the patient. It documents what has happened in the past and helps providers, in conjunction with the patient, plan the future. For example, if you go to the doctor with severe stomach pains, it would be important for the doctor to know that you already had your appendix removed, so she wouldn’t consider an appendectomy!



Continuity of care means that all previous treatments and medications have been considered when planning a new treatment.

There are other good reasons, not directly related to the patient, to maintain healthcare records, including:

- to provide reimbursement information to insurance companies and other third-party payers
- to provide legal information to support the interests of the patient, care providers and the facility
- to evaluate the quality of care that the patient receives after the fact
- to provide data for other purposes, such as research, education, public policy, planning and epidemiological studies (studies that deal with disease epidemics)

The information in the health record can be used for personal reasons, such as when someone wants to evaluate the care that a specific patient received. It can also be used impersonally; sometimes researchers request a random selection of health records for study.

Who Uses the Record?

Now that you know the many reasons to keep records, you can take a guess as to the many people who use health records. Here are only some of the people who use health records and the possible reasons these people use information from a health record.

- **The patient**—to forward to a new physician
- **The primary care physician**—to compare this year’s cholesterol level to last year’s level
- **Nurses or other medical staff in the physician’s office**—to confirm which antibiotic upset the patient’s stomach and which antibiotic is preferable

- **Administrative staff in the physician's office**—to confirm which pharmacy to call the prescription refill in to, as well as to confirm the last time the patient requested a refill
- **A third-party payer**—to reimburse the physician for health care provided
- **A government epidemiologist**—to research the relationship between people of a certain age, gender and weight and the incidence of certain types of health problems, including susceptibility to influenza

Notice that the people who use information from the health record may or may not need access to the entire record. Some people who need health information only need some of the information, not necessarily access to the entire record.



Health records have a variety of uses in the medical office.

Who Owns the Record?

Lots of people need information from the health record and use it for many reasons, but who owns the record, anyway?

The answer may come as a surprise to you. You, as the patient, own the information; however, the facility owns the paper the record is printed on. Therefore, a medical facility can charge patients for copies of their medical records.

When you review your health record, you may find information that you believe to be inaccurate. You may request that the entity providing health care to you amend the record to correct that inaccuracy. However, the healthcare provider may choose not to change the record. In that case, you have the right to make a written statement clarifying the information and have that statement filed in the health record.

The provider is responsible for following federal and state regulations about how long to keep records, where to store them, and in what form to store them—such as on a CD-ROM or other electronic means.



Step 4 What Is in the Medical Record?

- ❑ You now know a lot about health records—why we keep them, who might want to see them and who owns the information in them. But exactly what is in the health record? Why is it so useful? Part of the information in a health record is administrative; part is clinical.

Administrative Data

You can probably take a guess at the administrative data, or information, included in a health record—it's the information you usually update each time you visit a physician. The two purposes of this administrative, or demographic data, are to uniquely identify the patient and to help the staff in the healthcare facility process the record efficiently. There are four types of administrative data: demographic and financial information, consents, authorizations/acknowledgements, and advance directives. Demographic information is found on the face sheet and is collected when the patient arrives for his/her appointment. A patient's financial information is also collected at this time but kept separate from the patient's face sheet in a medical record. The only financial information found on a face sheet is social security number and insurance information.

Examples of demographic information include:

- Name
- Date of birth
- Gender
- Race or ethnic origin
- Marital status

Some examples of financial information include:

- Insurance information
- Social Security Number
- Expected payer
- Name of the policyholder
- Gender of the policyholder
- Patient's relationship to the policyholder
- Policyholder's employer

Aside from helping staff efficiency and ensuring that the correct person receives treatment, administrative data is useful for many other reasons. Research studies examine types of treatment and how effective that treatment is. In recent years, researchers are discovering that men and women contract some diseases, such as heart disease, at different times and respond to treatment in different ways. Race and ethnicity data is similarly useful. The information about the number of years a person has been in school is used as an informal way to measure a patient's socioeconomic status—information that researchers and public policymakers can use to track the equality of medical care. Even the occupation listed helps researchers track job-related injuries that may not be reported at a workplace, such as carpal tunnel syndrome.

Also, demographic data gives medical staff valuable information about the type of treatment that may be the most appropriate for a particular patient. The information about residence, marital status and living arrangements tells a physician how many people are available to care for a patient. For example, a widow living alone might require daily home health care, while a widow whose daughter lives with her may require only weekly or twice-weekly care.



Patients' health records must reflect changes in patients' personal information, such as address, marital status or insurance coverage.

Clinical Data

In addition to administrative data, the physician also needs to know the patient's personal, medical and family history. However, it's not always the same information at each healthcare facility you use. For example, your primary care physician probably keeps a record of your allergies and childhood immunizations. If you have your wisdom teeth extracted, the oral surgeon needs to know about the allergies, but she doesn't need information about your chicken pox vaccine. Because each facility is different, the health record is different—so we'll look at a standard health record for a physician's office.

What Does a Health Record Look Like?

When you look at a standard health record, you'll find the following basic forms inside:

- Patient Questionnaire or Face Sheet
- Patient History Form
- History and Physical Examination Report
- Physician's Orders
- Diagnostic Orders
- Consent Forms

If the patient must enter the hospital, you'll find these forms as well:

- Progress Notes
- Diagnostic Reports, such as laboratory and radiology reports
- Consultation Reports
- Operative Reports
- Discharge Summary
- Patient Instructions

In addition, you may find these less common forms:

- Genogram
- Past Medical History (This is typically found on the H&P form.)
- Personal/Sociocultural History
- Usual Childhood Diseases
- Advanced Directives

Let's examine these forms in more detail by following Sierra Martinez, a single, Hispanic, 23-year-old, as she goes to her family physician. Sierra lives at her childhood home with her mother, works full-time and goes to community college part-time.

Sierra called the office this morning to make an appointment with Dr. Mora because she suspects that she may have a respiratory tract infection. About two weeks ago, she had what she thought was a cold and toughed it out, taking over-the-counter medication for about a week. At that point, she felt well enough that she knew she didn't have a cold anymore, but she never quite got rid of her cough and never felt 100 percent herself. Since then, she's felt increasingly run down and has continued coughing. Sometimes she feels feverish. She's missed a couple of classes and called in sick to work once, which she can't afford to do.

Because Sierra's symptoms have lasted so long, the receptionist scheduled Sierra for one of their buffer periods before lunch.

Patient Questionnaire, or Face Sheet

Sierra receives a *patient questionnaire* when she arrives for her appointment with Dr. Mora. The **patient questionnaire** is a preprinted or customized form that asks for information about the patient. Usually, three patient questionnaires are provided—one for demographic information, another for personal history and still another for the patient's medical history. The patient completes the forms in the waiting room and returns them to the healthcare office manager. In some practices, the patient questionnaires are provided to the patient to complete prior to the appointment. See Figure 6-1 for an example of the patient questionnaire.

The alternate method used to gather patient information is through an *oral interview*. The **oral interview** consists of asking the patient questions and filling out the form for her. Privacy is important during the oral interview. The interviewer may handwrite the information or type it into a computer system.

The patient's history provides valuable information to the physician.

In a hospital setting, patients give information through an oral interview. For instance, Joe visits Lakeview Hospital. He goes to the admissions department and sits down with the admissions clerk. The clerk takes Joe's information and enters it into the computer system. She enters his name, address, insurance information and so on. She then generates a face sheet. This sheet begins Joe's medical record for his visit at Lakeview Hospital.

PATIENT INFORMATION

Please complete this form.

NAME: Sierra Martinez

ADDRESS: 1810 Bluegrass Drive
Springtown, CO 80002

HOME PHONE: 970-555-9041

WORK PHONE: 970-555-6001

DATE OF BIRTH: 5/4/87 AGE: 23

SEX: Male _____ Female X

MARITAL STATUS: Married _____ Single X
Separated _____ Divorced _____
Widowed _____

PERSON TO CONTACT IN EMERGENCY AND PHONE:
Mrs. Juana Martinez 970-555-9041

EMPLOYED: Full Time X Part Time _____
Retired _____ Not Employed _____

EMPLOYER: Big Box Discount Store

COMPANY ADDRESS: 1924 Main Street
Springtown, CO 80002

PHONE: 970-555-6001

STUDENT STATUS: Full Time _____
Part Time X

INSURANCE COMPANY: HSI

Insured's ID: 560-00-1113

Group Number: 208

Address: PO Box 324
Springtown, CO 80002

Name of Insured: Sierra

Date of Birth: _____

Employer: _____

Patient's Relationship
to Insured: Self

OTHER INSURANCE: Tricare Extra

Insured's ID: 635-00-7213

Group Number: _____

Address: 4500 Cherry Creek Dr South, Box 64
Denver, CO 80222

Name of Insured: Erik Martinez

Date of Birth: September 15, 1961

Employer: USAF - Retired, deceased

Patient's Relationship
to Insured: daughter

Figure 6-1: Sample patient questionnaire

Patient History Form

Sierra may also complete a *patient history form* (Figure 6-2). The **patient history form** includes her personal, medical and family history. Sierra's **personal history** includes her occupation, marital status and diet and exercise routine. Her **medical history** consists of hospitalizations, surgeries, injuries, medical problems and illnesses.

Sierra's **family history** includes the ages, state of health, diseases and death of family members. The purpose of this section is to look for hereditary etiologies and risk factors for disease. Hereditary diseases include heart disease, diabetes, cancer or mental illness. Current infectious diseases within the family are also listed. Specific questions about your relatives may give you and the physician valuable medical information, such as whether breast cancer runs in your family. Dr. Mora is familiar with Sierra's family history. Dr. Mora treated Sierra's father, who died of a heart attack five years ago. He was 44. She asks Sierra other questions about any recent changes in her mother's health.

Other questions Dr. Mora asks Sierra will be more general. For example, she asks Sierra if she enjoys living with her mother and how her mother is coping with her father's death. The physician remarks that Sierra has a very busy life and asks what coursework she's taking at the community college.

The History and Physical Examination Report

The next form created for the medical record is the *History and Physical Examination Report*. The **History and Physical Examination Report** documents all information about the patient's visit. This report is divided into two sections: *History* and *Review of Systems*.

History

The history records the patient's chief complaint and the history of the present illness. As you know, the chief complaint is the reason for the patient's visit. It should include any conditions, signs or symptoms that the patient is experiencing. **Symptoms** can indicate disease or the patient's condition. Sierra's chief complaint is coughing, occasional fever and fatigue.

The History section also includes the **History of Present Illness**—the chronology of the onset of the chief complaint and any previous medical evaluation and treatment for the problem. Sierra explains the history of her illness to Dr. Mora.

COMPREHENSIVE MEDICAL HISTORY

This important information is confidential. No one other than your healthcare provider will have access or knowledge of this information without your express written consent. Thank you for taking the time to fill out this lengthy form. Completion of this history allows us to provide you the most complete medical care possible. This form will be reviewed with you during your visit.

General Information:

Patient Name: Sierra Martinez DOB: 5/4/87 SS# 555-50-5000
 Date of your last complete physical exam: 2/9/xx Date of last chest x-ray: NA
 Date of your last cholesterol screening: 2/9/xx Date of your last dental exam: 12/10/xx
 Date of your last eye exam: 6/24/xx Date of your last sigmoidoscopy: NA
Women: Date of last mammogram: NA **Men:** Date of last PSA: _____
 Date of last pap smear: 2/9/xx Date of last rectal/prostate exam: _____

Immunizations:

Measles/Mumps/Rubella Date: 1992 Pneumonia Date: None Hepatitis B: 1998
 Tetanus/Diphtheria/Polio Date: 1994 Influenza Date: 11/xx Varicella Zoster: 2000

Past Medical History: (check those that apply)

AIDS or HIV: Yes No Chicken pox: Yes No Measles: Yes No
 Mumps: Yes No Polio: Yes No Epilepsy: Yes No
 Cancer: Yes No Rheumatic fever: Yes No
 Whooping cough: Yes No Infectious mononucleosis: Yes No
 Scarlet fever: Yes No Blood or plasma transfusions: Yes No

Hospital/Surgical History:

Illness or operation: None Date: _____

Allergies:

Please list and drug, food, contact or environmental substances to which you have had an allergic or bad reaction.
None

Medications:

Please list any prescription medications, over the counter medications, vitamins, herbs or nutritional supplements that you are now taking. Please include the dosage amount and the times a day you take them.
Leestrin
Multivitamin

Social History:

Occupation: Clerk Marital status: S Children: 0
 Do you currently smoke or chew tobacco? Yes No If no, have you in the past? Yes No
 How many packs per day? 1/2
 Do you drink alcohol, beer or wine? Yes No If no, have you in the past? Yes No
 How many drinks per week? _____
 Do you currently drink coffee and/or tea? Yes No If yes, how many cups per day? _____
 Do you exercise daily/weekly? Yes No How often? 3 times a week
 Do you use seatbelts while driving? Yes No
 Do you wear a helmet while riding a bike? Yes No
 Do you use illicit drugs? Yes No If yes, how often/how much? _____
 Do you have any risk factors for HIV infection? Yes No
 Have you ever been exposed to anyone with tuberculosis? Yes No
 Have you had excessive exposure to sun due to work or recreation? Yes No
 Are you currently experiencing unusual stress? Yes No Explain: _____
 Are there any environmental risks involved in your job or home environment? Yes No Explain: _____

Figure 6-2: Sample patient history form, page 1

Family History

			Age (or age at death)	List serious illnesses
Mother	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<u>47</u>	<u>High cholesterol</u>
Father	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<u>44</u>	<u>Heart disease (deceased)</u>
Sisters	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<u>NA</u>	
	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
Brothers	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<u>NA</u>	
	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
	<input type="checkbox"/> Yes	<input type="checkbox"/> No		

Women only:
 Date of first menstrual period: 1991 Date last period began: 3/15/XX Regular? Yes No
 Age at menopause: NA Difficulty with periods? Yes No Specify: _____
 No. of children born: Alive: NA Cesarean: _____ Premature: _____ Stillborn: _____ Miscarriage: _____
 Describe any complications: _____

Which of the following conditions are you currently being treated or have been treated for in the past (please check)

<input type="checkbox"/> Heart disease/Murmur/Angina	<input type="checkbox"/> Shortness of breath	<input type="checkbox"/> Eye disorder/Glaucoma	<input type="checkbox"/> Diabetes
<input type="checkbox"/> High cholesterol	<input type="checkbox"/> Asthma	<input type="checkbox"/> Seizures	<input type="checkbox"/> Kidney/Bladder problems
<input type="checkbox"/> High blood pressure	<input type="checkbox"/> Lung problems/cough	<input type="checkbox"/> Stroke	<input type="checkbox"/> Liver problems/Hepatitis
<input type="checkbox"/> Low blood pressure	<input type="checkbox"/> Sinus problems	<input type="checkbox"/> Headaches/Migraines	<input type="checkbox"/> Arthritis
<input type="checkbox"/> Heartburn (reflux)	<input type="checkbox"/> Seasonal allergies	<input type="checkbox"/> Neurological problems	<input type="checkbox"/> Cancer
<input type="checkbox"/> Anemia or blood problems	<input type="checkbox"/> Tonsillitis	<input type="checkbox"/> Depression/Anxiety	<input type="checkbox"/> Ulcers/Colitis
<input type="checkbox"/> Swollen ankles	<input type="checkbox"/> Ear problems	<input type="checkbox"/> Psychiatric care	<input type="checkbox"/> Thyroid problems

By signing below, I hereby certify that to the best of my knowledge all the information I have furnished on this form is complete, true and accurate.

Patient/Guardian signature: Sierra Martinez Date: 3/29/XX

Provider Notes:

Provider Signature: [Signature] Date: 3/29/XX

Figure 6-2: Sample patient history form, page 2

Review of Systems

The second half of the History and Physical Examination Report is the record of any signs or symptoms in the organ systems of the body. This helps to pick up any abnormality that was overlooked in the History section. The information in this section comes from the patient's own description, not the doctor's hands-on physical examination. Again, Sierra reported a lingering cough, fever and fatigue, which the doctor records.

The following areas are usually included in the Review of Systems:

- General
- Skin
- HEENT: Head, ears, eyes, nose and throat. It is used in a full report and is an exception to the rule of not using acronyms in report headings.
- Neck
- Breasts
- Respiratory
- Cardiac
- Gastrointestinal
- Genitourinary
- Gynecologic
- Musculoskeletal
- Peripheral vascular
- Neurologic
- Hematologic
- Endocrine
- Psychiatric

Dr. Mora looks at Sierra's eyes and examines her face, ears, nose, throat and neck. While doing so, she asks Sierra about smoking. Sierra admits that she started smoking again recently after having quit for two years. The doctor continues her examination and listens to Sierra's heart and chest and asks her to cough. She feels her lymph nodes. Sierra had been into the office for a general physical examination just four months earlier, so Dr. Mora checks the results of her blood work from that examination.

The information from the medical history and the physical examination report give the physician the foundation for forming the diagnosis—the doctor’s opinion as to what’s wrong with a patient. In Sierra’s case, Dr. Mora formed a diagnosis and agreed with Sierra’s suspicion that she probably has a respiratory tract infection.

Physician’s Orders

Next, it’s time to figure out what to do about Sierra’s diagnosis—what procedure to take, or the **physician’s orders**. She prescribes a course of antibiotics, and after conferring with Sierra and checking her medical history to find out what has worked best for her in the past and to be sure she has no drug allergies, she selects a penicillin-related antibiotic.

Dr. Mora also discusses with Sierra the dangers of smoking, especially given Sierra’s father’s death at an early age from heart disease. Sierra is also taking oral contraception, and smoking while on oral contraception can cause complications. Dr. Mora strongly recommends that Sierra stop smoking and gives her information about quitting. Because she successfully quit for two years, she advises her to try again without using any nicotine aids, such as a patch.

If the physician hadn’t been able to arrive at a diagnosis, this section of the medical report could have included diagnostic orders, such as a blood test or an x-ray. If she suspected Sierra had a more serious medical condition, her orders could have included a referral. Physicians must also order admission or discharge from hospitals or other healthcare facilities, as well as treatments, such as radiation therapy.



All medications the doctor prescribes are noted in the patient’s health record.

Progress Notes



Progress notes keep the medical team informed about the patient’s progress.

If the physician had admitted Sierra to the hospital, the healthcare professionals treating her would provide *progress notes*. **Progress notes** document how the patient responds to treatment. The notes are written at intervals into the patient’s record.

For example, Sierra’s aunt, Melissa, was admitted to the hospital because she was coughing up blood and was too weak to walk. Her physician ordered diagnostic tests that revealed severe pneumonia and put her on high-powered antibiotics and various intravenous fluids. After two days, Melissa could sit up in bed and eat soft foods. After four days, Melissa was walking. The nurses and her physician noted these responses to treatment in progress notes in her health record.

Let’s learn about a few more types of reports that are included in a health record.

Diagnostic, Consultation and Operative Reports

Depending on the circumstances, a health record may include other types of reports. **Diagnostic reports** include the results of tests the physician ordered for the patient, such as a radiologist's report on an x-ray.

The physician may call another healthcare professional, such as a pharmacist, a specialist or an occupational therapist, for a consultation. These professionals assess the patient and add their consultation reports to the health record. For instance, a physical or occupational therapist may determine whether a patient who has undergone back surgery is ready for assistance in sitting, standing and walking.

Having surgery adds many reports to a health record. For example, the anesthesiologist writes a report detailing what medications were given before the operation, along with their effect; the anesthetic agent used during the procedure, the amount, and its effects; and the patient's condition throughout the procedure.

After surgery is complete, the patient spends time in the recovery room. A separate form is added to the record. This form describes the patient's condition upon arrival in the recovery room, the patient's progress as she comes out of the anesthetic and her condition on release to a regular room.

The operation itself is also reported on, and that report is included in the health record. The **operative report** includes the names of the surgeons and assistants; the date, duration and name of the procedure; preoperative diagnosis and postoperative diagnosis; the description of the surgical approach and findings; and a host of other details—including the number of sponges used in the procedure!

If the surgeon removed tissue as part of the operation, that tissue may be sent to a pathologist—who then generates a report. Pathologists report about tissues removed during biopsies and other types of surgeries. They also report on autopsies after a patient has died.

Other special types of reports that may be added into a health record include obstetric data, a labor and delivery record, descriptions of physical therapy and diagnostic results like EKG reports.

Discharge Summaries and Patient Instructions

When a healthcare facility releases a patient—remember, on the order of a physician—the physician dictates a *discharge summary*, which the facility adds to the patient's health record. A **discharge summary** is a concise statement of the reason for admission, a list of the findings from examinations and tests, procedures and therapies and the patient's responses to these procedures and therapies. The patient's condition on discharge is also part of this report.

The **patient instructions** specify the amount of activity the patient should pursue; the types of medications prescribed and instructions for taking these medications; the patient's diet; other information that healthcare professionals have given, such as how to care for a wound; and expectations for follow-up visits. Usually, this is way too much information for the patient, or even the responsible family member, to remember. That's one of the best reasons that instructions are put in writing.

Consent Forms

You may associate the terms *consent* and *informed consent* with hospitals. Well, it's true that hospitals require a special consent to authorize any procedure—whether the procedure will be used as a diagnosis or as a type of therapy—that isn't routine. For example, you give consent for x-rays (which are diagnostic) and for surgeries (which are forms of therapy, or cures).

Consent forms must include the procedure, explained in language the patient can understand; the risks of the procedures; any alternatives available; and the information or treatment that the procedure will (hopefully) provide. The patient, or parent or guardian, if the patient is a minor, must sign the consent form before the procedure can be performed.

You may have signed other consent forms without really being aware of it. All healthcare settings—even a physician's office—receive written consent from patients (or parents or guardians) for treatment, though emergency situations have special legal considerations. You've probably also signed a form that gives your physician permission to share information about you with people who need to know it—usually, insurance companies or other third-party payers. Another form lists the rights of the patient while under care at the facility; the patient must be informed of her rights and sign a form indicating she has been informed of them.



The patient's medical record may be the size of a large book by the time she leaves the hospital.

Other Types of Documentation

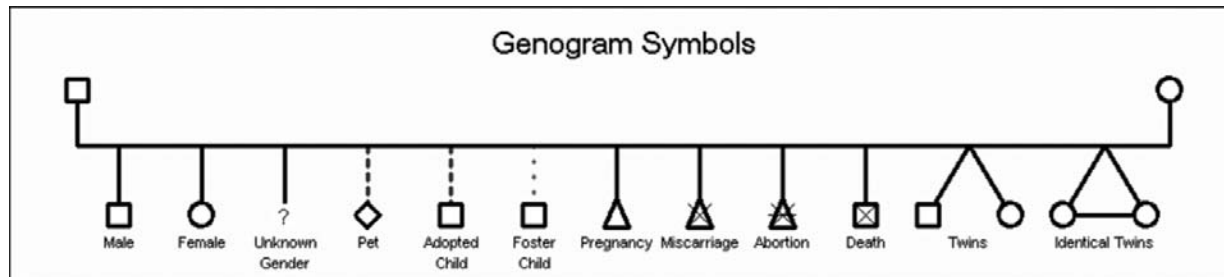
Let's go over a few other types of forms that you may see in the medical office.

Encounter Form or Superbill

As you may recall, the encounter form, also called a superbill, is a standard form that contains a list of the most common procedures and procedure codes the doctor performs at that office. During the patient visit, the doctor will circle the procedure codes for the procedures she performed. The encounter form is then forwarded to the medical biller, who uses it to file a claim with the patient's insurance company.

Genogram

A genogram maps out relationships and traits that may otherwise be missed. It resembles a family tree, but it also includes additional relationships among individuals.



A genogram allows the physician and patient to quickly identify and understand patterns in family history.

Past Medical History

The doctor lists all prior diseases, accidents, surgeries or conditions on the **Past Medical History** form.

Personal/Sociocultural History

The **Personal/Sociocultural History** form includes the patient's occupation, hobbies or recreation, foreign travel, marital status and environment. The purpose of this topic is to list the patient's exposure to etiologic agents, such as chemical toxins, infectious agents and risk factors for disease.

Usual Childhood Diseases (UCHD)

The **Usual Childhood Diseases**, UCHD, lists any childhood diseases such as chicken pox that the patient had as a child. Some other types of childhood diseases which are now preventable are measles, mumps, rubella, diphtheria, tetanus, pertussis, Haemophilus influenza type B and polio.

Advanced Directives

Advanced directives are instructions to medical providers in special medical situations. Examples of advanced directives include living wills and durable powers of attorney. Although law doesn't require that patients provide these directives in the health record, patients must be informed of their right to include these instructions if they wish.

All of the reports and types of information that you reviewed serve different purposes. Some reports, such as the patient and medical history report, are common to all medical records, while specialized reports like the genogram are not always necessary. The physician or nurse will tell you which forms you'll need for each patient.

Let's pause here to review what you've learned so far about medical records.



Step 5 Practice Exercise 6-1

☐ For questions 1 through 13, select the best answer from the choices provided.

1. **The healthcare record is also called a(n) ____.**
 - a. employee record
 - b. doctor's report
 - c. patient care record
 - d. health record

2. **An accurate medical record can do all of the following EXCEPT ____.**
 - a. provide documentation for study and research
 - b. identify the patient
 - c. list the amount the patient owes
 - d. justify diagnoses and treatments

3. **Who owns the medical record? ____**
 - a. The patient
 - b. The doctor's office
 - c. The insurance company
 - d. The patient's family

4. **A patient's ____ data can include her full name, date of birth and gender.**
 - a. subjective
 - b. demographic
 - c. objective
 - d. history

5. **____ history includes a patient's social habits and employment information.**
 - a. Personal
 - b. Patient
 - c. Medical
 - d. Past

6. **Under ____, the doctor will list all prior diseases, accidents, surgeries or conditions.**
 - a. History of Present Illness
 - b. Genogram
 - c. Family History
 - d. Past Medical History

7. _____ includes the ages, state of health, diseases and death of family members.
 - a. Symptoms
 - b. Past Medical History
 - c. Family History
 - d. Personal/Sociocultural History

8. The _____ History includes the patient's past medical history including family health, hospitalizations, surgeries, injuries, medical problems and illnesses.
 - a. Personal
 - b. Patient
 - c. Medical
 - d. Past

9. A radiologist's report on the patient's x-ray will appear on a(n) _____.
 - a. consultation report
 - b. operative report
 - c. review of systems
 - d. diagnostic report

10. If you need to go to the hospital, your doctor submits a _____.
 - a. consent form
 - b. diagnostic order
 - c. progress note
 - d. physician's order

11. A form used in the hospital to document how the patient is responding to treatment is called a _____.
 - a. consent form
 - b. diagnostic order
 - c. progress note
 - d. physician's order

12. Your boss, a surgeon, had a nightmare that he left a scalpel in Mrs. White's abdomen. He asks you to pull the medical record to check the instrument count. Where will you find this information? _____.
 - a. On the progress notes
 - b. In the operative report
 - c. On the discharge summary
 - d. On the patient's advanced directives

13. The doctor suspects her patient may have malaria. She wants to find out if the patient has travelled to an area where the disease is common. Which report should you give her? _____
- Past Medical History
 - Patient Questionnaire
 - Personal/Sociocultural History
 - History and Physical Examination Report

For question 14, write your answer in the space provided.

14. Choose one person who uses the health record, and discuss how he or she might use it.

Step 6 Review Practice Exercise 6-1

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

Step 7 How Are Medical Records Organized?

- Do you file your receipts every month as you pay bills or do you toss papers into a drawer until income tax time? Do you balance your checkbook by hand or use the computer? Either choice is a type of filing system, but one may work better for you than the other.

Just as you can choose any number of filing systems for your own information, health records can also be organized in different ways. Let's take a look at some of the different formats used to organize a health record.

Source-oriented Record

The traditional way to keep a health record is to organize the information in it according to the source of the information in a **source-oriented record**. In this context, a *source* refers to the role of the person who's adding the information.

In a source-oriented record, all of the radiologist's reports are filed in one section of the medical record.



For example, in a source-oriented record that a hospital keeps, the physician's notes are added to the Medical section. Nursing staff notes are added in the Nursing section. Radiology reports are separate from pathology reports, but both are also part of the Medical section. The most recent additions to each section are usually kept as the top page of that section. Because the report is separated into sections, it's easy to find some kinds of information. A physician who wonders about lab results looks in the Laboratory section of the report; the most recent lab results would be on top. Perhaps you can see why the source-oriented record is a popular format!

But not so fast! Integrating information relating to a particular diagnosis can become a problem. For example, if a physician wanted to see all of the information relating to swelling in a patient's legs, she would have to search through all the sections to see what tests had been ordered, what treatments had been tried and how effective those treatments had been.

Problem-oriented Record

The problem-oriented record was developed, in part, to address some of the limitations of the source-oriented record. The **problem-oriented record** documents the medical treatment based on a logical and organized plan and has four parts:

- **Database**—a list of data collected about every patient, including chief complaint, current condition, medical history, physical examination and baseline laboratory data. This database serves as the equivalent to the medical history and clinical examination.
- **Problem list**—a list of titles, numbers and dates of particular problems. The list serves as a guide to the information in the rest of the record. This can be a collection of symptoms or a fully formed diagnosis. A problem can be social (a person needs daily care but has no support system to provide it), financial (a person has no insurance to cover medical supplies, such as gauze and catheters) or medical (a person has an eye infection). A problem list can also document past problems, such as a history of recurring eye infections or glaucoma due to diabetes.
- **Initial plan**—a preliminary way to address each problem, whether it's more investigation; treatment of some kind, such as medication; or patient education.
- **Progress notes**—using the special SOAP report structure, these notes document what has happened to the patient. Hospitals do not typically use this format, though you may encounter the SOAP format in a medical office during your career.

SOAP Report

A SOAP report includes:

- S Subjective complaint
- O Objective findings
- A Assessment
- P Plan

S—Subjective Complaint

The patient's reason for seeing the doctor is the **subjective complaint**. To obtain the subjective complaint, ask the patient detailed questions such as:

- What caused you to seek treatment today?
- What symptoms do you have?
- How long have you felt this way?
- Have you had this problem before?

O—Objective Findings

Objective findings include the physician's observations during the patient's exam, diagnostic tests and further care. Here are some examples of objective information:

- Physical measurements
- Physical examination findings
- Diagnostic reports
- Treatment plan and outcome

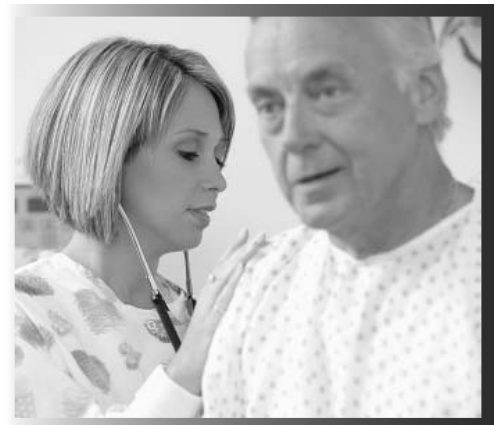
This objective information, or data, comes from several sources.

Data Sources

Primary sources of information about a patient documents the care provided to the patient. It includes direct observation of the patient by the medical practitioner, x-rays, scans and similar documents. Information from **secondary sources** includes data selected from these primary sources and put into another form, such as a cancer registry or committee minutes.

Let's look at an example of these two sources of data.

Carl is an inpatient at a behavioral health center. He was admitted for observation by his psychiatrist because Carl is experiencing problems with his medication for schizophrenia. As aides, counselors and physician assistants care for Carl, they record clinical information in Carl's health record. The psychiatrists on staff add progress reports. In addition, the facility's medical staff holds a daily meeting to review the progress of each patient. All observations of Carl's condition are recorded in the meeting minutes. The minutes of these meetings are also included in Carl's health record.



Physical exams reveal many hidden health problems.

In Carl's case, the primary sources of information include reports about his progress from the psychiatrist, aides, counselors and other staff. The meeting minutes containing medical staff observations are secondary sources.

A—Assessment

The **assessment** is the healthcare provider's evaluation of the problem. This is her judgment, opinion or estimation. She might state, "The patient has a migraine headache."

P—Plan

The **plan** is the provider's procedure to resolve the problem, whether the next steps are diagnostic, therapeutic or educational. A doctor might state, "The patient will keep a log of diet, stress and exercise for the next three weeks to look for a pattern," or, "The patient will take over-the-counter pain reliever as needed."

As you can see, the problem-oriented record is quite detailed and includes a wealth of information. It links each piece of documentation to a specific problem and provides a view of the whole patient. On the other hand, because it is so detailed, filling out the reports can be time-consuming and healthcare practitioners need special training to use this system.

Integrated Record

An integrated record tries to overcome some of the limitations of both the source-oriented record and the problem-oriented record.

The **integrated record** format files reports chronologically—in reverse order, with the most recent reports on top—with less division by source. Some hospitals integrate reports completely; others integrate physician notes with notes from additional services, such as physical therapy, and keep progress reports separated by discipline.

An integrated record is fairly easy to use and less time-consuming as a problem-oriented record. It also keeps all the information on one particular patient episode together, just as the problem-oriented record does. However, it's hard to compare one type of information quickly. For example, to find laboratory results, you have to flip through the record chronologically.



Sometimes you need to compare information from several different types of records.



Step 8 What Is Documentation?

- ❑ You know that medical records serve as a valuable source of communication. In addition, medical records act as an important resource for legal protection, financial reimbursement, education, quality assurance and medical research. But if the records report inaccurate or incomplete information, the physician can't prove that his treatment, or even his diagnosis, was justified. Therefore, documentation is the key component of medical records.

Documentation is the written record of the services that the provider performs. When the physician dictates the diagnosis and procedure for the medical records, these eventually end up on the medical bill, courtesy of the medical transcriptionist and medical billing specialist. Patients get billed for services received based on what the physician documents.

A physician's dictation substantiates the charges on the medical bill. Because dictation records diagnoses and procedures, it contains a lot of the same information that ends up on medical bills.

Look at the following example of dictation that notes the diagnosis and procedure of Becky Johnson's physician visit.

PATIENT: Becky Johnson

Problem: Patient was walking down stairs to front door landing at her home. She slipped on the carpeted stairs, fell and heard a snapping sound in her right ankle. The ankle reveals swelling with discoloration due to bruising. She complains of pain and tenderness with movement and touch.

Intervention: Three-view ankle x-ray is reviewed. X-ray reveals medial malleolus fracture. The ankle was immobilized using a boot cast.

Evaluation: Patient is diagnosed with a medial malleolus fracture. She is to keep the foot elevated and apply ice packs PRN for swelling. Darvocet-N 50 q.4h. PRN for pain.

If you didn't understand everything in the previous example, don't worry. Just examine the way a physician's dictation looks.

Physician documentation also represents a database for reimbursement decisions for Medicare, Medicaid, third-party insurance coverage, workers' compensation and pension payments. If services are provided but not documented, the healthcare provider will not be reimbursed. In other words, if it's not documented, it didn't happen. Let's take a look at a quick example.

Dr. Anderson biopsies a skin lesion on a patient's face and removes two skin tags. A biopsy means to remove and examine a living tissue sample. Dr. Anderson documents the biopsy but fails to document the removal of the skin tags. The insurance company receives a claim indicating both procedures and then requests the medical record to confirm the procedures performed. But remember, the doctor only documented the biopsy. Because Dr. Anderson failed to document the removal of the skin tags, the insurance company will only reimburse for the biopsy procedure. Not a pleasant outcome for the patient or the doctor!

Let's look at another example—this one also illustrates the importance of documentation.

A new patient comes to a local clinic with a complaint of ear pain. The physician takes the patient's history, and she then performs an exam. She circles the level of service on the encounter form and discharges the patient with a prescription for antibiotics. After the patient leaves, the doctor dictates the service; however, a nurse interrupts her, and she ends the dictation after she documents the patient's history. The medical transcriptionist later retrieves the audio file. She edits the dictation and then gives this document to the medical coder. The coder reads the dictation and notes that the level of service that the physician circled on the encounter form does not match the transcriber's notes. In this case, the coder may contact the medical billing specialist to bill the service at the documented level or contact the physician to correct this error.

So you can see how important the accuracy of documentation—written and verbal—is to everyone working in the healthcare field. Now let's move on to study the quality of medical records.



Step 9 How Do Providers Ensure Quality of Medical Records?

- ❑ You may wonder how medical facilities keep the records consistent with so many different parts and organization methods. Thankfully, various organizations and government regulations require and enforce medical record standards. One such organization is the Joint Commission. The Joint Commission has information management standards for hospitals, long-term care facilities, physicians' offices and other medical facilities. The Joint Commission only accredits medical facilities that follow the commission's standards.

The government also has medical record regulations. For example, healthcare providers need to meet federal regulations to participate in the Medicare program. These regulations are known as the Conditions of Participation. The Joint Commission models its standards after the Conditions of Participation. The **Conditions of Participation** outline specific standards such as:

- Medical record entries must be legible, complete and authenticated and dated.
- Records must be retained for *at least* five years, and in some states, even longer. Check the record of retention schedule for the state you work in. Some states, for instance Colorado, require facilities to keep adult health records for 10 years.
- Those who enter information into a medical record must be identified and authenticate their entry.
- Hospitals need to make sure the nurses keep a nursing care plan for each patient.¹

When providers follow the Joint Commission and federal guidelines, they guarantee that insurers will accept their medical claims documentation, and they will receive payment.

Now let's look at a major piece of legislation that will affect how you handle medical records, HIPAA.



Step 10 What Is HIPAA?

- ❑ Congress enacted the **Health Insurance Portability and Accountability Act**, or **HIPAA**, in 1996. This bill has two main objectives. The first objective is to ensure the continuation of health insurance coverage for workers and their families during times of job change or loss (**portability**). The second (**accountability**) is to increase the effectiveness of the healthcare system while protecting health data integrity, confidentiality and availability and preventing fraud and abuse.

Many experts believe that HIPAA is the most sweeping healthcare legislation in the last 30 years. Its provisions affect nearly everyone who works in the healthcare field. Providers, payers, medical billers, clearinghouses—it affects anyone who deals with electronic healthcare transactions and confidential patient information.

HIPAA consists of five **titles**, or **sections**, that place various legal requirements on the healthcare industry.

Of these five titles of HIPAA, Administrative Simplification—Title II, Subtitle F—has probably had the greatest impact on most healthcare practices. The Administrative Simplification portion of HIPAA aims to simplify healthcare jobs.

Medical claims and billing specialists may find it difficult to keep track of the different requirements, codes, attachments and claim forms that various private and government-sponsored healthcare plans. Other administrative matters also consume a high percentage of a provider's resources: determining eligibility, checking on referral authorizations and tracking paper claims.

People in the healthcare industry have long recognized the problems that arise from variations in how its segments do business. The HIPAA Administrative Simplification legislation addresses this lack of consistency.

Administrative Simplification (HIPAA Title II, Subtitle F) sets up nationally consistent regulations in four main areas:

- Privacy Standards Rule
- Electronic Transaction Standards Rule
- Security and Electronic Signature Standards Rule
- Standard Identifiers Rule

HIPAA will affect you in your career as a healthcare office manager. You will learn more about each of these four areas of HIPAA in Lesson 22. Now let's briefly examine electronic health records.



Step 11 The Future Is Here: The Electronic Health Record

- ❑ At the beginning of this lesson, you read about Janelle, who fainted at her school library. Luckily, EMTs could pull her electronic health record and learn she was diabetic. Now, in some states, EMTs and paramedics can pull patient records from large databases from the ambulance computer! In 2009, Indiana became the first state to offer this technology, but it will likely become more common in the near future. You can see how access to this information helps both the patient and the healthcare provider. But what exactly is an *electronic health record*? You learned earlier in this lesson that an **electronic health record (EHR)** is a computerized record of the patient's health status. It includes information about visits, the patient's health status, allergies, prescriptions, treatments, lab services and coding support.

Today it's a national goal in the United States to replace all paper records with computer-based systems by 2014. The United States Department of Health and Human Services has declared: "The consistent, nationwide adoption and use of secure EHRs will ultimately enhance the quality and value of health care."² As of 2009, the federal government created a system of financial incentives to encourage healthcare providers—hospitals, clinics and private practices—to adopt and effectively use EHRs.

The EHR is revolutionizing patient care because it provides physicians with more information regarding the course of care for their patients. Now, the patient's record can be brought up on a computer almost instantly, rather than having to round up paper documents. This makes it easy to view the person's health history across time—you get the whole picture versus a snap shot. The record can alert the physician to allergies, drug interactions and even when the patient is ready for a prescription refill.

Lesson 25 covers the electronic health record in great detail, but for now, let's briefly review the contents and purpose of the EHR.

Components of the EHR

The EHR contains the same information that a paper medical record contains. Specifically, it includes:

- Administrative data
- Laboratory data
- Radiology data
- Pharmacy data for filling prescriptions
- Computerized physician order entry for ordering laboratory and imaging testing as well as medications
- Clinical information such as providers' visit notes, operative notes, discharge summaries and transcribed documents
- Medical device data so the provider can monitor medication pumps, for example

Goals of the Electronic Health Record

The EHR aims to improve the accuracy and accessibility of patient records. The EHR will better organize and manage patient information. This in turn will also reduce medical errors, improve patient care and reduce costs.

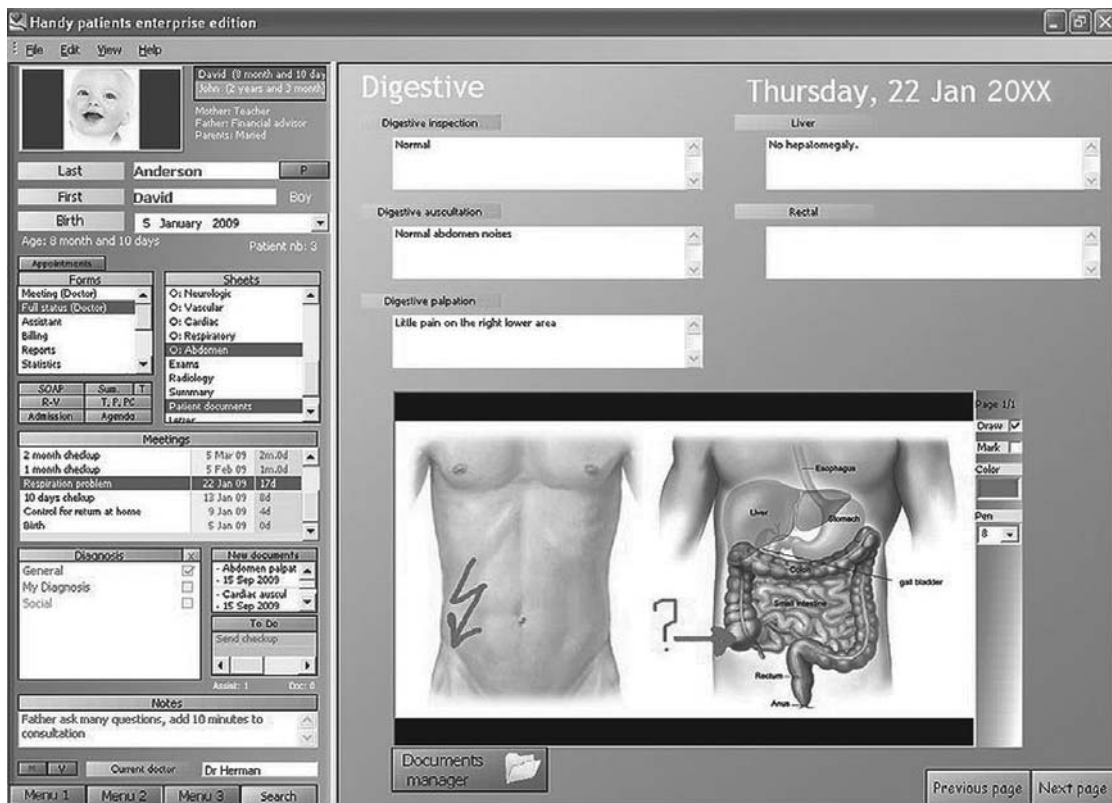


Figure 6-3: Sample electronic health record

Eventually, the goal is to have all electronic health records accessible to all practitioners. The system is not quite there yet, but as it approaches, it is estimated to save billions in healthcare costs! This means savings in better utilization of resources, healthcare efficiency and patient safety.

Want More Information?

- If you'd like to read more about HIPAA before Lesson 22, visit www.cms.gov/HIPAA.
- To learn more about the electronic health record, visit www.healthit.hhs.gov.

Let's pause here for a brief review of the information you've learned in this section. Then we'll summarize the lesson and you'll be ready for the quiz.



Step 12 Practice Exercise 6-2

□ For questions 1 through 10, select the best answer from the choices provided.

1. **Fairview Medical created a patient file for Mr. Ruiz. The nurse recorded notes in the nursing section. The radiologist then recorded her x-ray reports in the Radiology section. After the physician determines Mr. Ruiz suffers from a fractured wrist, he records the diagnosis in the Medical section. Fairview Medical used a(n) ____.**
 - a. SOAP report
 - b. source-oriented record
 - c. problem-oriented record
 - d. integrated record

2. **Sarah Engle's information is organized in a problem-oriented record. The doctor diagnoses her condition as strep throat. He records this information in the ____.**
 - a. database
 - b. problem list
 - c. initial plan
 - d. progress notes

3. **To treat Sarah's strep throat, the doctor prescribes antibiotics. He records this information in the ____.**
 - a. database
 - b. problem list
 - c. initial plan
 - d. progress notes

4. **Markus visits his doctor and complains of severe abdominal pain. He's experienced this pain for three days. When the doctor completes a SOAP report, she documents this information under ____.**
 - a. S—Subjective complaint
 - b. O—Objective findings
 - c. A—Assessment
 - d. P—Plan

5. **Carla visits her doctor. During the visit, the nurse takes her blood pressure. She records this information under ____.**
 - a. S—Subjective complaint
 - b. O—Objective findings
 - c. A—Assessment
 - d. P—Plan

6. **Daniella receives an MRI which scans her for blood vessel blockages. This is a(n) _____ of information.**
 - a. subjective form
 - b. objective form
 - c. primary source
 - d. secondary source

7. **The Conditions of Participation require healthcare providers to ____.**
 - a. type all medical record entries
 - b. keep records for ten years
 - c. keep provider information anonymous
 - d. keep nursing care plans for each hospital patient

8. **HIPAA helped Jonah keep healthcare coverage after he got laid off from his mechanic job. This describes ____.**
 - a. portability
 - b. accountability
 - c. transference
 - d. Conditions of Participation

9. **Electronic health records aim to ____.**
 - a. make patient records more accessible to the general public
 - b. ensure better insurance coverage for patients
 - c. improve accessibility of patient records
 - d. reduce diagnostic errors

10. **_____ of information about a patient documents the care provided to the patient.**
 - a. Secondary sources
 - b. Primary sources
 - c. Objective
 - d. Subjective

For question 11, write your answer in the space provided.

11. Summarize the different information included in a medical record.

 **Step 13 Review Practice Exercise 6-2**

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

 **Step 14 Lesson Summary**

- A large part of your job as a healthcare office manager deals with medical records. In this lesson, you learned the importance of medical records. You know that various people use patient records for a number of reasons. You also examined the information a record contains and how it's organized.

In addition, you explored how providers ensure quality medical records. You then learned about HIPAA legislation and how it affects you work as a healthcare office manager. Then, finally you discovered the direction the medical field is taking toward electronic health records.

Now, it's time to review all of the information you acquired about medical records and put it to use in your quiz. Good luck!

 **Step 15 Mail-in Quiz 6**

- Follow the steps to complete the quiz.
 - a. Be sure you've mastered the instruction and the Practice Exercises that this quiz covers.
 - b. Mark your answers on your quiz. Remember to check your answers with the lesson content.
 - c. When you've finished, transfer your answers to the Scanner Answer Sheet included. Use only blue or black ink on your Scanner Answer Sheet.
 - d. **Important!** Please fill in all information requested on your Scanner Answer Sheet or when submitting your quiz online.
 - e. Submit your answers to the school via e-mail, mail, fax or, to receive your grade immediately, submit your answers online at www.uscareerinstitute.edu.

Mail-in Quiz 6

For questions 1 through 20, select the best answer from the choices provided. Each question is worth 5 points.

1. **Accurate health records ____.**
 - a. give information to other providers involved in a patient's care
 - b. give information to other patients with similar conditions
 - c. reduce a patient's insurance costs
 - d. predict test results

2. **____ might use the health record to confirm which medications a patient is allergic to.**
 - a. The patient
 - b. The nurse
 - c. Administrative staff
 - d. A third-party payer

3. **A.J. arrives at his new doctor's office. The healthcare office manager gives her three forms to fill out about demographic information, personal history and medical history. A.J. received a ____.**
 - a. health record
 - b. consent form
 - c. patient history form
 - d. patient questionnaire

4. **Chandra went to the hospital to have her appendix removed. After surgery, the doctor recorded how Chandra responded to treatment. She also noted her recovery status. The doctor documented this information in the ____.**
 - a. patient history form
 - b. review of systems
 - c. physician's orders
 - d. progress notes

5. **During Chandra's surgery, a report was created that listed her surgeon's name, Dr. Wings; the assistants' names, Melanie Hamilton and Charles Thurgood; the date of the surgery, March 9th and much more information. This information was recorded in the ____.**
 - a. progress notes
 - b. diagnostic report
 - c. consultation report
 - d. operative report

- 6. Before Chandra's surgery, she received a form that explained appendectomy risks include pneumonia and collapse of small airways. It included other information, such as surgery results, alternatives and more. Chandra received a(n) ____.**

 - a. consent form
 - b. consultation report
 - c. patient instruction form
 - d. operative report

- 7. Chandra's medical record describes what happened to her, including her initial complaint, the doctor's findings, the doctor's finding of appendicitis, and her recommendation of surgery. You would find this information in the ____.**

 - a. laboratory section of a source-oriented record
 - b. initial plan of a source-oriented record
 - c. progress notes of a problem-oriented record
 - d. first page of an integrated report

- 8. Again, in Chandra's case, when her doctor recommended surgery, she recorded this information in the ____ section of the SOAP report.**

 - a. Subjective complaint
 - b. Objective findings
 - c. Assessment
 - d. Plan

- 9. Imagine Chandra's medical record is organized in a different way. In this record, her recent appendix surgery report appears on the top of the record. Following that, her record holds a report about a concussion from two years ago, and then a report about the birth of her son four years before that. This describes a(n) ____ record.**

 - a. integrated
 - b. problem-oriented
 - c. source-oriented
 - d. primary source

- 10. Wakefield Clinic wants to receive accreditation from the Joint Commission. To do this, they must ____.**

 - a. follow the commission's standards
 - b. retain their records for three years
 - c. create patient nursing plans
 - d. join the Joint Commission board of directors

11. **HIPAA has laws that protect the confidential nature of a patient’s medical record. This refers to ____.**
 - a. portability
 - b. accountability
 - c. transferability
 - d. accessibility

12. **The Administrative Simplification section of HIPAA aims to ____.**
 - a. make healthcare records more accessible
 - b. make healthcare jobs more simple
 - c. protect patient privacy
 - d. reduce insurance costs for hospitals

13. **Which of the following is true of electronic health records? ____**
 - a. They are becoming obsolete in the healthcare world.
 - b. They are less accurate than paper records
 - c. They contain the same information as paper records.
 - d. Doctors prefer to rely on paper records.

14. **Pinewood Medical Center uses forms that list the office’s most common procedures and procedure codes. This form is a(n) ____.**
 - a. superbill
 - b. genogram
 - c. advanced directive
 - d. patient history form

15. **Dr. Webber sees Gigi for an appointment. He discusses her symptoms, which include a headache, cough and sore throat. He then asks how long she’s had these symptoms; she says for one-and-a-half weeks. He then asks if she’s ever had similar symptoms before. Gigi says she hasn’t. Dr. Webber records this information in the ____ section of the SOAP report.**
 - a. Subjective complaint
 - b. Objective complaining
 - c. Assessment
 - d. Plan

16. **The healthcare record is owned by ____.**
 - a. the government
 - b. a medical facility
 - c. the healthcare patient
 - d. the patient, but the healthcare facility owns the paper the information is printed on

17. **The four types of administrative data include ____.**
- demographic and financial information, consents, authorizations and advance directives
 - name, Social Security number, insurance carrier and address
 - financial, clinical, diagnostic and consent
 - treatment, progress, clinical and diagnostic
18. **Anne’s medical record is organized in reverse order. The report from the x-ray she just received appears on top. Anne’s medical record is a(n) ____ record.**
- chronological
 - integrated
 - problem-oriented
 - systems
19. **HIPAA aims to ____.**
- convert all paper health records to EHRs
 - standardize the SOAP format
 - publicize health records
 - ensure portability and accountability
20. **____ aims to improve the accessibility of patient records.**
- HIPAA
 - The Joint Commission
 - The Conditions of Participation
 - The electronic health record

Endnotes

- ¹ Johns, M.L. (2002). Health Information Management Technology: An Applied Approach. American Health Information Management Association: Chicago.
- ² <http://healthit.hhs.gov> “HITECH Priority Grants Program: Health Information Extension Program, Facts-At-A-Glance”6-54

Congratulations
You've completed Lesson 6.



Don't wait for your quiz results to continue with Lesson 7.

Lesson 7

Record and File Management in the Medical Office



Step 1 Learning Objectives for Lesson 7

- ❑ When you complete the instruction in this lesson, you will be trained to do the following:
 - Discuss the purpose of and steps used in filing.
 - Explain different filing systems.
 - Apply alphabetic, numeric, alphanumeric and other filing system rules.
 - Explain the features of electronic filing.
 - Explain filing controls used to maintain and secure records.
 - Describe how to archive, destroy and handle a closing facility's medical records.



Step 2 Lesson Preview

- ❑ Have you ever searched for a book in the library, put your canceled checks in order, alphabetized your recipe cards or DVDs or looked up a number online or in the phonebook? If so, then you have experience with some or all of the four primary methods of filing in this lesson. Medical facilities everywhere use these filing methods, and chances are good that you will use them in your career.

A medical facility's filing system is its memory. This system can range from a small Rolodex of business cards to many cabinets of thick files—like all the patient records at a doctor's office. With technology today, you'll find electronic filing systems are quite common, and many are similar to paper filing systems.

However a healthcare office manages its documents and it often uses multiple systems, knowing how and where to store information and how to retrieve it is an important skill on an office manager's resume. The ability to find information the first time, especially when others can't, is a sign of an effective healthcare office manager.



Effective office managers can find a file the first time.

Even though filing systems vary among medical offices and facilities, virtually all of them follow basic rules of filing. Let's examine the fundamentals of filing and discuss electronic filing.



Step 3 File Management—What Is It?

- A few file management terms allow everyone to communicate effectively. The first step to master filing is to understand this vocabulary.

Record—A **record** is a document or an item to be filed, or a file itself. Records can take many forms, such as paper, electronic files, CDs, cassette tapes, computer printouts, computer files, e-mails, cards, microfilm, charts, maps, photographs and optical disks.

Caption—Also called the **title**, a **caption** is the heading under which a record is filed. If a file isn't electronic, the caption is printed or typed on a file folder, index card or whatever container holds the record. Here are four sample captions (using four different filing systems):

Four Sample Captions

Insurance Companies—Standard Insurance, Ltd (Filed by company classification)

#4456-B Hiza, Sarah A (Filed numerically)

STONE, Howard P (Filed by surname)

LOUISIANA—Tulane Hospital (Filed geographically)

Unit—A **unit** consists of each part of the caption that is used to arrange the name in filing order. For example, *Lee Wherry Brainerd* has three units; *(The) Northern Healthcare Center (of) Texas* has four units since small, unimportant words are not used for filing purposes and are put in parentheses. Also, use commas or slashes between units when filing paper-based items.

Indexing— **Indexing** determines the most important part of a name or caption. Then that word or words are brought to the beginning of the filing label or electronic filing label, if necessary. Take a look at some examples of indexing.

Original Order of Words

James R. Michelson

Gregory Johns Plumbing Co.

Words in Indexing Order

Michelson, James R.

John, Gregory, Plumbing, Co.

Divisions/Subdivisions—**Divisions** and **subdivisions** are the large and small classifications under which records are filed. For example, examine how the business entries in a phonebook are divided into types of businesses. These also are called **headings** and **subheadings**.

Chronological—To file something in **chronological** order is to do so in the order of occurrence (date and time). The most recent record usually is put at the front of a file or beginning of an electronic file.

Cross-referencing—**Cross-referencing** is a note that indicates other places within a filing system where a record may be located. Such references can be made in electronic filing systems, as well. Records should be filed under the most logical, important classification, then cross-referenced under other possible classifications. For example, if the record you file has the caption *Nagel, Whitman & Freidman, Pediatricians*, you'd file it under *Nagel*, and add cross-referencing notes under *Whitman*, *Freidman* and *Pediatricians*. This makes it easier for authorized personnel to find any file. In a paper filing system, cross-referencing cards usually are kept in a card-file box. Sometimes, a cross-reference sheet is placed in a file as the first page.



Step 4 File in the Medical Office

- Now that you're familiar with the basic terms of filing, let's follow Angie, an office manager for a dentist, as she walks us through the four steps to filing: inspect, index/code, sort and store. Her office uses an electronic filing system for patient records, but it keeps paper copies of these records, too.

Inspect

“At the end of the day, I make sure the paper files for all the day's patients are put back correctly. Alan, the dentist, sometimes wants some of the files left out because the patient is coming back the next day, or he is still making changes to the patient's electronic files on the computer and will need to print that information and add it to the paper file later. The rest of the paper files, though, are ready to return to storage. When I pull up a file on the computer for an incoming patient, I note the date on the record. When he's finished with a file, Alan signs the record electronically. That tells me the file is complete and the paper version is ready to be printed and filed. So, my first filing step is checking for that signature. The last office I worked at used a date stamp instead of a signature, but the idea's the same.”



The four steps of filing are inspect, index/code, sort and store.

Index/Code

“Since our files are patient records, we file both electronically and manually by name. Whenever I have new documents to add to a patient's file—like x-rays or invoices—I always put the patient's name on the printed document just like it is on the file—last name first. I put it in the same place on the document so that I always know where it is. Also, I've found that paper clips tend to get stuck on other documents, so I use staples for paper records instead.”

Sort

“Our electronic filing system sorts patient records alphabetically for us. To save time and to make sure all paper records are filed accurately, first I do a rough sort where I divide the files into two piles—the first half of the alphabet and the second half. Then I do a fine sort and alphabetize each pile.”



Your office might sort records alphabetically.

Store

“The last step is, of course, to put the paper files away in the row of file cabinets we have. If I’ve done a good job inspecting, indexing and sorting, then this is easy. I make sure to file the patient records in the correct place and face them all the same way. It’s a good idea not to overcrowd file drawers. I leave at least four inches of unused space in each drawer, so taking out and refiling records is easier. Our electronic filing system stores all of our patient records on the computer system.”



Step 5 The Different Kinds of Filing Systems

- ❑ As was stated previously, there are several primary filing systems. For instance, Angie’s office files patients’ records alphabetically. Each healthcare office manager uses one of the four common filing systems: alphabetic, geographic, numeric or subject. Although a medical office may not use some of these systems, it’s important to be familiar with all of them. A successful system—no matter which you use and whether it’s paper- or computer-based—should meet the following qualifications:
 - Files should be easy and logical to find.
 - The information in the file should be up-to-date and accurate.
 - The system and the filing process should be cost effective.
 - The filing system should have room to grow.

Let’s look at each of these systems more closely. As you read this section, keep in mind that you’re mainly studying how to file paper records. The electronic filing system in whatever medical facility you work in will perform much of the filing work for you when it comes to EHRs.

Alphabetic Filing

The alphabet is a convenient basis for filing systems because almost everyone knows the alphabet. In fact, the **alphabetic filing** method accounts for more than 80 percent of all filing done in today’s working world. Records in a number of fields are filed according to the names of people, businesses, schools, organizations, churches and so on. In medical facilities, patient records can be filed by last name, though this is more common in smaller physician practices than in large hospitals and clinics. The alphabetical filing process has two parts: choose the order for the units within the caption (index/code) and file the captioned items in alphabetical order (sort and store).

As you already know, a name or caption is composed of one or more units. Here is how those units look in an indexing list. This list is alphabetized according to the rules of alphabetic filing.

Unit 1	Unit 2	Unit 3
Biden	J.	
Biden	Joseph	W.
Bidenstock	Albert	E.
Bidenwahl	B.	F.



The alphabetic filing method accounts for more than 80 percent of all filing done in today’s working world.

Actually, all filing systems use the alphabet to some extent. Employees who file medical records must understand and use the accepted rules for organizing names in alphabetic order. We’ll study these rules for alphabetic filing later in the lesson.

Numeric Filing

With **numeric filing**, each file is assigned a number. Lawyers, architects, accountants, engineers, insurance brokers, pharmacists and contractors often assign numbers to their clients and projects. Some medical facilities assign numbers to patient records. Numeric filing helps when dealing with confidential information since numbers are anonymous. Such filing systems also are useful when large quantities of files are involved because you never run out of numbers to assign. For this reason, many large medical facilities use numeric filing systems—the two most common being terminal-digit filing and middle-digit filing.

The disadvantage of such systems is that it is time-consuming when you need to look for a file number. If a number isn’t known, you consult an alphabetic card file. Then you find the file sequentially under its number. The advantages to numeric systems are that they are easy to use once you learn how they work. Also, misfiling is reduced because numbers are easier to locate than the spelling of names.

Straight Numeric Filing

In **straight numeric filing**, sometimes known as **consecutive filing**, records are filed by patient number, from lowest to highest. The following list of patient numbers has correct filing in a straight numeric system.

The advantages of this system include the following:

- It's easy to use and requires little training.
- Retrieving records is easy.
- New files are always added at the end, so physical space is easier to manage.
- Using a number instead of a patient name is inherently more secure—an unauthorized person must know the patient number to access a specific patient's information.

This system includes some disadvantages, as well.

- A multiple-digit number is difficult to remember during the filing process, so it can be easy to transpose numbers and misfile records; the more digits in the patient number, the bigger the problem.
- Because files are always added to the end of the system, the physical space around those files can get crowded if more than one person tries to file or pull records.

101234
101245
111113
111236
121237
141118
150007

Straight numeric filing

Serial Numbering

A **serial numbering system** is similar to counting on your fingers. Every time a facility treats a person, whether it's a small doctor's office or a large hospital chain, the patient is assigned a new number, and a new health record is created.

If you're treated in the emergency room one night and sent home, but you return the next afternoon, you will receive two different numbers. Your patient records will be stored in two different places in the records system. In a paper-based system, that might mean two separate filing cabinets; in a computer-based system, it's two separate records in a database. When your physician asks for your health records related to this problem, the records department has to pull all the records from their separate locations.

This system tends to be popular in healthcare facilities that don't have computer software that makes it easy to find a previous number for a patient. After all, simply assigning a new one for each encounter doesn't require any kind of special equipment. On the other hand, having records in separate folders in different locations makes it more time-consuming to give a physician all of a patient's records.

Unit Numbering

Another way to number a health record is to give the patient the same number each time she is treated at the facility. Each encounter is stored in a record in the same physical folder (or is related in the computer software) in the same location—this is a **unit numbering system**.

Louisa was scheduled for a hip replacement and was assigned a number the first time she went to the hospital for her pre-surgery evaluation. The day of her surgery, she was reassigned that number. When she returned to the hospital for physical therapy, she received the same number again.

Facilities that use unit numbering rely on computer software that makes it easy to find a patient in the system and retrieve the patient's existing number.

Some facilities use Social Security numbers as the unit number. For example, the Department of Veterans Affairs' health facilities use them because each veteran has a Social Security number. Sometimes, facilities treat people who don't have these numbers, such as a foreign exchange student. In such cases, the facility uses a system to generate a **pseudonumber**—a number that is in the same format and works within the existing healthcare system but isn't a real Social Security number.

A Social Security number used to file health records raises a few issues:

- More than one patient can have the same pseudonumber.
- The nine-digit number is long, which makes it hard to file.
- Some patients have more than one Social Security number.
- Social Security numbers are used for many purposes, such as public records and financial records, which means that an unauthorized person could get health information if he has a patient's Social Security number.

Some facilities use a family numbering system, in which each person in a household receives a related number. For example, the head of a household (whether a man or woman) is given a 01 prefix; the firstborn child receives a 03 prefix. Then the household is given the same patient number. For example, the Carter family's patient number is 18462; Mrs. Carter, as head of the household, is 01-18462, her husband is 02-18462, and her first child is 03-18462. Her second child is 04-18462, and her third child is 05-18462. This system is popular in healthcare facilities that treat whole families—perhaps in a neighborhood health clinic or a family practitioner's office. Records are easy to find, even if family members have different names.

However, family numbering systems can be pretty complicated when the makeup of the family changes. Divorce, remarriage, patients growing up and becoming heads of their own households—all these circumstances require a new number and a cross-reference to the old number. Generally, unit numbering is preferred to serial numbering because it makes it easier to keep all information about a patient in the same place—which improves the continuity of health care for that patient.

Serial-unit Numbering

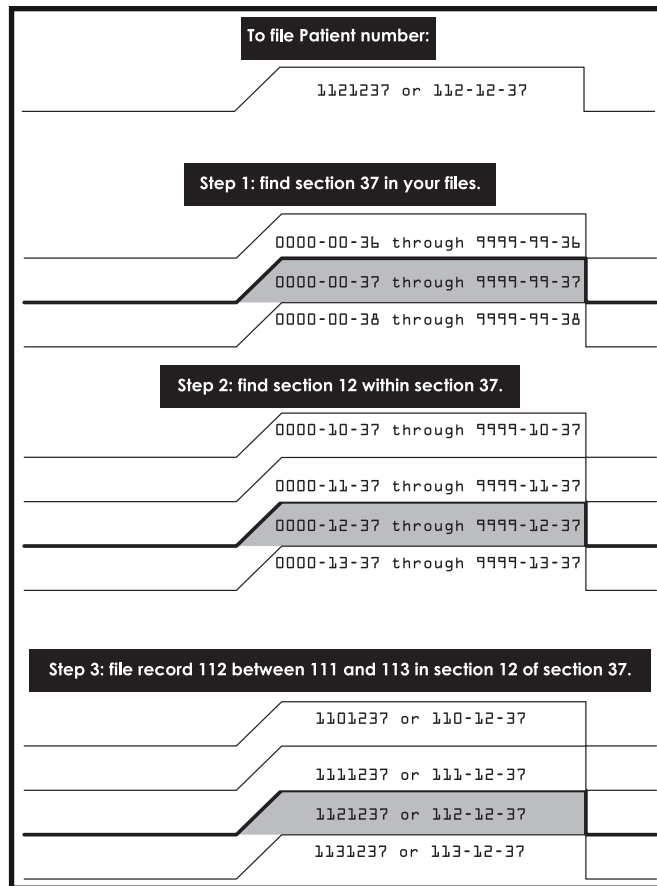
A blend of the serial numbering system with the unit numbering system, called a **serial-unit numbering system**, overcomes some of the limitations of both of those systems.

In serial-unit numbering, a patient gets a new number each time she is admitted to a healthcare facility, as in the serial system. However, all the patient's previous records are given this new number and physically located in the new file, and a cross-reference note in the old file shows where the records currently exist. So, for example, when Louisa (who had a hip replacement) shows up for her post-surgery physical therapy appointment, she still receives a third patient number for her three visits related to one particular surgery. However, the records from her pre-surgery consultation and the surgery itself are renumbered and put with her new physical therapy records. This system makes it easy to assign numbers and keeps all of a patient's records together.

Terminal-digit Filing

Terminal-digit filing, or **reverse numeric filing**, overcomes some of the issues of straight numeric filing. In a terminal-digit filing system, the patient number is divided into sets of two digits, from right to left. The first two sets correspond to specific sections of the filing system, and the third set is filed in straight numeric order.

Here's an example. Melissa is filing patient records and has record 1121237 in her hand. She divides the patient number 1121237 into sets from the right: 112-12-37. Her first step is to find section 37. Then, within section 37, she locates section 12 (between section 11 and 13). Then she files record 112 between record 111 and 113.



Terminal-digit filing has some advantages over straight numeric filing.

Notice that the terminal digits—in Melissa’s case, file number 112—can be as long as they need to be; they aren’t limited to just two digits. (The **terminal digits** are the last numbers used in filing when you use this system.) The terminal digits aren’t limited to two digits so that it is harder for unauthorized people to find records and so that the files all grow at an even rate.

The following patient numbers are in the correct order in a terminal-digit filing system:

- 15-00-07
- 01-32-09
- 13-09-13
- 11-11-13
- 14-11-18
- 10-12-34

Middle-digit Filing

Middle-digit filing is similar to terminal-digit filing—the record number is divided into sets of digits in the same way, but the middle set of digits is the one that you use first, and then the left set. So if Melissa is filing patient record 141237, she starts in the same way, by separating the record number into groups of two digits: 14-12-37.

Then she finds section 12, locates subsection 14 and puts the record between 14-12-36 and 14-12-38. Take a look at the same set of file numbers from the section about terminal-digit filing. Now they're in the proper order for a middle-digit filing system:



15-00-07
13-09-13
11-11-13
14-11-18
10-12-34
01-32-09

Middle-digit filing has the same advantages and disadvantages as terminal-digit filing. Also, it can be somewhat easier to use because you can look through the file drawer and see the last two digits of the numbers increasing numerically. However, the record numbers must be six digits to make the division into groups of two work correctly.

Alphanumeric Filing

Some medical facilities combine alphabetic and numeric systems. The most common combination system is called an **alphanumeric system**. For example, your medical clinic may label documents with an alphabetic prefix before a number: C-84005. One well-known alphanumeric system is called the **Dewey Decimal System**, which libraries throughout the world use.

Now, how do medical facilities choose the numbers they'll assign to patient records? Well, when we talk about assigning a patient number to a patient health record, we're giving a patient a **unique identifier**—a number associated only with that patient.

Other Types of Filing

The filing methods discussed above cover the ones you'll most likely encounter in the medical office. Depending on your job duties, you may file documents other than medical records. Review these other filing options available to you.

Use **geographic filing** when location is the most important consideration. Though not used for medical records, geographic filing can help in many situations. For instance, perhaps a hospital files each of its freestanding clinics in the state by facility location.

If you need to arrange material by topic rather than by name, choose a **subject file**. Again, though not used with medical records, you may encounter this method during your career. A hospital might file information about the pharmaceutical companies it deals with by subject, or the drugs or products the company sells. In this system, divide files by subject, and then code and alphabetize files within each subject.

No type of filing is more challenging or requires better judgment than subject filing. Because records may be filed under more than one caption, a subject file needs an alphabetic cross-reference system that lists all of the captions under which an item might be filed. This is called a **relative index**.

Cross reference when:

1. The caption refers to more than one person.
A.J. Wherry
SEE Hoote, Wherry & Gordon Family Practice
2. You might logically look for the name in more than one place.
McLee Medical Center
SEE Hospitals
3. The caption is a name with different possible spellings.
Karen Leigh
SEE Lee
4. The name of the organization can be referred by its initials and full name.
AMA
SEE American Medical Association

As you read about these filing methods, you may wonder why you need to know all of this. After all, electronic filing systems take care of most of this automatically, right? Well, yes, that's true. But remember that the computer-based patient record that you learned about previously in this course is not universal. Yes, some offices use EHRs, but many offices still keep paper files, and some medical facilities still do not use EHRs or electronic filing methods at all. In short, even though you may never use what you've studied here, it's good information to have just in case you ever need it!



Step 6 Rules Used to File Medical Records Alphabetically

- Now that you understand the different filing methods, let's study the rules you'll use to file medical records in healthcare facilities. As you read each rule, we'll provide examples that show the two parts of filing: choosing the order for the units within the caption (index/code) and filing the captioned items in alphabetical order (sort and store).

Rule 1: Last Name First

When filing medical records, treat each part of an individual's name as a separate unit—last name, first name, then middle name/initial (if any). Arrange patient names with the last name first, followed by the first name and middle initial. Look at the examples that follow. Note that the period after an initial is not used when entering this information into an electronic filing program.

Name	Unit 1	Unit 2	Unit 3
Karen L. Sampath	Sampath	Karen	L
Marvin Shackle	Shackle	Marvin	
Linda O. Smith	Smith	Linda	O

Rule 2: Alphabetic Order

File medical records in alphabetic order. Compare the first units of the names, letter by letter. Look at second units only when the first units are identical. Consider third units only when second units are identical and so on. If two names are exactly the same, the medical records should be filed by birth date from the oldest patient to the youngest. If two patients have the same name and date of birth, file the records by address (city name, state name, street name and street number).

Name	Unit 1	Unit 2	Unit 3
Bobbie L. Barker	Barker	Bobbie	L
Charles R. Barker	Barker	Charles	R
Charles T. Barker	Barker	Charles	T

Rule 3: Nothing Comes before Something

A name with an initial or single letter comes before a name that begins with the same letter. A name that consists of one word comes before a name that consists of the same word plus other words. Remember that you don't include the punctuation (period) that normally follows an initial when entering this information into an electronic filing program.

Name	Unit 1	Unit 2	Unit 3
H. Johnson	Johnson	H	
H. L. Johnson	Johnson	H	L
Henry L. Johnson	Johnson	Henry	L
Henry Leroy Johnson	Johnson	Henry	Leroy

Rule 4: Prefixes

Treat a prefix (like the *Mc* in *McGovern*) as part of the name, not as a separate unit. Sometimes there is a space between the prefix and the name. Still, treat the name as one unit.

Some common prefixes are *D', De la, Della, Den, Des, Di, Du, El, Fitz, Il, L', La, Las, Le, Les, Lo, Los, M', Mac, Mc, O', Per, Saint, San, Santa, Santo, St., Ten, Ter, Van, Van de, Van der, Von, Von der.*

Consider all prefixes as they are spelled, except *St.*, which is handled as though spelled out: *Saint*.

Name	Unit 1	Unit 2	Unit 3
J. Van de Kamp	Vandekamp	J	
Mary Vontrap	Vontrap	Mary	
S. Von Trap	Vontrap	S	

Rule 5: Hyphenated Names

When filing a record with a hyphenated name, treat the hyphenated part of a name (*Redford-Brown*) as one unit (*Redfordbrown*), ignoring the hyphen.

Name	Unit 1	Unit 2	Unit 3
Shelly M. Smythe	Smythe	Shelly	M
Ken Smythe-Jones	Smythejones	Ken	
Chuck Twing	Twing	Chuck	
Marie S. Twing-Gold	Twinggold	Marie	S

Rule 6: Titles

This rule varies by medical facility; however, most facilities ignore a title when used with a last name plus one or more names (*Dr. Elaine Warren*). A title is treated as a unit if it is used with only one part of an individual's name (*Dr. Jasper*), though this should not be found on medical records. If a married woman is given the title *Mrs.* and her husband's first name (for example, *Mrs. Robert Smith*), and you know her first name, use it. If you do not know her first name, treat her husband's first name and the title *Mrs.* as separate units. However, again, this should not be found on medical records.

Name	Unit 1	Unit 2	Unit 3
Dr. Nancy Anson	Anson	Nancy	
Dr. Crosby	Crosby	Dr	
Mrs. John Dill	Dill	Mary	(you know her name)
Mrs. Peter Mann	Mann	Peter	Mrs (you don't know her name)

Rule 7: Abbreviations Following the Name

Again, this rule varies by medical facility; however, most facilities ignore any abbreviations following an individual’s name, such as *M.D.*, *CPA*, *Ph.D.*, *Jr.*, *Sr.*, *II*, *III*, etc.

Name	Unit 1	Unit 2	Unit 3
Lee Conrad, CPA	Conrad	Lee	
C. Bryant Treen, III	Treen	C	Bryant

Rule 8: Abbreviated Names and Nicknames

While nicknames and abbreviated names should not be used on medical records, if they are found, many medical facilities treat an abbreviated name (such as *Wm.* for *William*) as though it were spelled out. Use a nickname (like *Dick* for *Richard*) only if it is the true name or if the true name is not known.

Name	Unit 1	Unit 2	Unit 3
Geo. Franklin	Franklin	George	
Chas. N. Wilton	Wilton	Charles	N
“Tex” (Dwayne) Giff	Giff	Dwayne	

Before we learn some additional alphabetic filing rules used in medical offices for files other than patient records, let’s take a moment to review what you’ve learned so far.

 **Step 7 Practice Exercise 7-1**

For questions 1 through 8, select the best answer from the choices provided.

- 1. In a(n) _____ numbering system, a patient gets the same number each time she receives treatment at the facility.**
 - a. serial-unit
 - b. unit
 - c. serial
 - d. alphabetic

- 2. Facilities that use unit numbering rely on _____ to find a patient in the system and retrieve the patient’s existing number.**
 - a. a good filing system
 - b. computer software
 - c. an excellent receptionist
 - d. a big filing cabinet

3. In _____ numbering, a patient gets a new number each time she is admitted to a healthcare facility—however, all the patient’s previous records get this new number and physically appear in the new file, and a cross-reference note in the old file shows where the records currently exist.
 - a. serial-unit
 - b. alphabetic
 - c. unit
 - d. serial

4. The _____ filing system uses the patient’s last name, first name and middle name or initial to file records.
 - a. alphanumeric
 - b. name
 - c. numeric
 - d. alphabetic

5. In _____ numeric filing, record filing is by patient number, from lowest to highest.
 - a. serial
 - b. unit
 - c. consecutive
 - d. straight

6. The advantages of the straight numeric system include all of the following except _____.
 - a. retrieving records is easy
 - b. new files always appear at the end, so physical space is easier to manage
 - c. it’s hard to use and requires a lot of training
 - d. using a number instead of a patient name is inherently more secure—
an unauthorized person must know the patient number to access a
specific patient’s information

7. Multiple-digit numbers are difficult to remember during the filing process, so it can be easy for users to transpose numbers and misfile records. This is a disadvantage of the _____ numeric system.
 - a. straight
 - b. reverse
 - c. consecutive
 - d. terminal

8. In _____ filing, the record number is divided into sets of digits, and the middle set of digits is the one that you use first, and the left set is second.
- a. straight numeric
 - b. terminal-digit
 - c. middle-digit
 - d. reverse numeric

Write each of the following individual names in order, according to the rules you just read.

Name	Unit 1	Unit 2	Unit 3
9. Candy Dickinson	_____	_____	_____
10. H. Albert Dickins	_____	_____	_____
11. Harold Fuller	_____	_____	_____
12. Harold M. Fuller	_____	_____	_____

Now, put the names in alphabetic order. Remember to use commas or slashes between units.

Alphabetic Sequence:

- 13. _____
- 14. _____
- 15. _____
- 16. _____

Write each of the following individual names in order, according to the rules you just read.

Name	Unit 1	Unit 2	Unit 3
17. Father Luis	_____	_____	_____
18. Harold Fuller, Sr.	_____	_____	_____
19. Mrs. Carl Dantz	_____	_____	_____
20. Jill DeCant	_____	_____	_____

Now, put the names in alphabetic order. Remember to use commas or slashes between units.

Alphabetic Sequence:

- 21. _____
- 22. _____
- 23. _____
- 24. _____

 **Step 8 Review Practice Exercise 7-1**

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

 **Step 9 Alphabetic Filing Rules for Businesses and Institutions**

- It's true that filing medical records is the bulk of the filing that medical office managers do. However, medical facilities do keep information about other businesses and institutions. For example, a hospital might have files on the different janitorial, pharmaceutical or software companies it uses. A medical clinic probably keeps files about the banks it uses or the universities it does research alongside. Let's begin with the alphabetic filing rules that pertain to business names.

File Business Names

Filing business names is a little different than filing the names of people. However, if you follow these rules, you won't have a problem.

Rule 9: First Word First

When you file the names of businesses and organizations, consider each word in the name as a separate unit. File each name in the order it is written, except when a business name includes the last name of a person plus one or more parts of that person's other names. (Frank Baum Pharmaceuticals). In that case, file the last name first (Baum / Frank / Pharmaceuticals). Consider a title in a business name as a unit; treat abbreviated titles as though they were written out, except Mr., Mrs. and Ms.

Name	Unit 1	Unit 2	Unit 3
Dr. Clear Water	Doctor	Clear	Water
Bob Sage Insurance	Sage	Bob	Insurance

Rule 10: Articles, Conjunctions and Prepositions

Ignore small, unimportant words (articles, conjunctions and prepositions) in the name of a business unless it is a distinctive part of that name. These include: *a, an, the, and, but, for, in, of*, etc. You may put these ignored words in parentheses.

Name	Unit 1	Unit 2	Unit 3
Oz Home for Children	Oz	Home (for)	Children
The Graduate Books	The*	Graduate	Books
Young & Roth	Young (&)	Roth	
Zed the Janitor	Zed (the)	Janitor	

*The is a distinctive part of the business name in this case because it is a play on the name of the movie *The Graduate*.

Rule 11: Abbreviations

Consider an abbreviated word as though it were written in full (*Co.* stands for *Company*).

Name	Unit 1	Unit 2	Unit 3
Equipment Mfg. Corp.	Equipment	Manufacturing	Corporation
Nat'l House of Healing	National	House (of)	Healing

Rule 12: Single Letters

Consider single letters as separate units if they are not abbreviations. Hyphenated initials count as one unit.

Name	Unit 1	Unit 2	Unit 3
J & V Pharmacy	J (&)	V	Pharmacy
W S Rentals	W	S	Rentals

Rule 13: Hyphenated Names

Treat hyphenated parts of a business name as one unit and omit the hyphen.

Name	Unit 1	Unit 2	Unit 3
Do-Rey Law Firm	Dorey	Law	Firm
Dura-Bilt Equipment	Durabilt	Equipment	

Rule 14: Compound Words

Treat compound words as one unit when a name may be written as one word, two words or hyphenated (such as North West).

Name	Unit 1	Unit 2	Unit 3
China Air Lines	China	Air Lines	
South West Law	South West	Law	
Southwestern Janitorial Co.	Southwestern	Janitorial	Company

Rule 15: Possessives and Contractions

Ignore and omit the apostrophe in possessives (Kim’s) and contractions (What’s).

Name	Unit 1	Unit 2	Unit 3
That’s My Company	Thats	My	Company
Tracy’s Flowers	Tracys	Flowers	

Rule 16: Numbers

Consider a number as though it were written in words; treat the entire number as one unit. Express the number in the fewest possible words (1,200 is twelve hundred, not one thousand two hundred).

Name	Unit 1	Unit 2	Unit 3
42 Skiddoo Company	Forty two	Skiddoo	Company
Sandco No. 5	Sandco	Number	Five
7th Street Garage	Seventh	Street	Garage

Rule 17: Parts of Geographic Names

Consider each part of a geographic name as a separate unit; hyphenated words are one unit with the hyphen omitted.

Name	Unit 1	Unit 2	Unit 3
Ft. Worth Club	Fort	Worth	Club
Tri-City Airlines Co.	Tricity	Airlines	Company

Rule 18: Addresses

When two names are identical, alphabetize by address. Start with city or town (Arlington, VA, comes before Peoria, IL); if the city or town names are the same, go to the state (Springfield, Illinois, comes before Springfield, Massachusetts). Continue this way through street name, street directions (North, Southwest) and then building numbers (from the lowest to the highest).

The example that follows begins with *Unit 2*, since all the first units are identical (Stan’s).

Name	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Stan’s Chicago, IL	Stans	Chicago	Illinois		
Stan’s Newark, DE	Stans	Newark	Delaware		
Stan’s Curson St. Newark, OH	Stans	Newark	Ohio	Curson	Street
Stan’s Damien Ave. Newark, OH	Stans	Newark	Ohio	Damien	Avenue

Now that you’ve studied the business-name rules, let’s move on to institution names.

File Institution Names

Now for the more challenging rules—those that pertain to institution names.

Rule 19: Banks and Financial Institutions

File each part of the name of a financial institution as it is written.

Name	Unit 1	Unit 2	Unit 3
First Bank of Denver	First	Bank (of)	Denver
People’s Savings & Loan	Peoples	Savings (&)	Loan

Rule 20: Hotels and Motels

File the names of hotels, motels, inns and the like using general business rules—except if *Hotel* or *Motel* or the like is the first word; then put the distinctive part of the name first.

Name	Unit 1	Unit 2	Unit 3
Hotel New Hampshire	New	Hampshire	Hotel
New York Lodge	New	York	Lodge
Lodge Yorkshire	Yorkshire	Lodge	

Rule 21: Hospitals and Religious Institutions

File each part of the name of a hospital or religious institution in its written order.

Name	Unit 1	Unit 2	Unit 3
Glendale Baptist Church	Glendale	Baptist	Church
Temple Israel of Vian	Temple	Israel (of)	Vian
Temply County Hospital	Temply	County	Hospital

Rule 22: Educational Institutions

Consider each part of the names of colleges, universities and other schools and libraries in their written order unless *College* or *University* is the first word. If a word like *College* or *University* is the first word, choose the distinctive part of the name first. Use the last name first if an individual's name occurs in the name of the educational institution.

Name	Unit 1	Unit 2	Unit 3
University of Iowa	Iowa	University (of)	
John Williams College	Williams	John	College
Wyoming High School	Wyoming	High	School

Rule 23: Government Names

There are three parts to this final rule: federal, state and local and foreign government names. Note that local, state and federal listings in your telephone directory are filed using these rules.

1. The first three units of a federal government name are *United States Government*; next consider the name of the department; then consider the name of the bureau, division, commission and other subdivision.

Name	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
U.S. State Dept. Protocol Division	United States	Government	State	Department	Protocol	Division	

2. File the name of a state, county, city or town government office under the distinctive word first, followed by the word *State*, *County* and so on. Count this classification as a unit, even if it does not appear in the name. Finally, file under the name of the department or other subdivision.

Name	Unit 1	Unit 2	Unit 3	Unit 4
Iowa Dept. of Commerce	Iowa	State	Department (of)	Commerce

3. File a name that pertains to a foreign nation under the distinctive name of the country first, followed by the classification *Republic*, *Kingdom*, etc.

Name	Unit 1	Unit 2	Unit 3	Unit 4
Republic of Chad Labor Dept.	Chad	Republic (of)	Labor	Department

In a moment, we'll look at how information within medical records is organized. However, before we do so, you should give yourself a pat on the back for working with the filing rules. With time and practice, you'll soon be a filing pro! Let's practice these rules before moving on.

 **Step 10 Practice Exercise 7-2**

Write each of the following business names in order, according to the rules you just read.

Name	Unit 1	Unit 2	Unit 3
1. Laura's Laundry Co.	_____	_____	_____
2. Mr. Clean Carpets	_____	_____	_____
3. North West Medicine	_____	_____	_____
4. 4th Street Patrol	_____	_____	_____

Now, put the names in alphabetic order. Remember to use commas or slashes between units.

Alphabetic Sequence:

- 5. _____
- 6. _____
- 7. _____
- 8. _____

Write each of the following special names in order, according to the rules you learned. Remember to use commas or slashes between units.

Name	Unit 1	Unit 2	Unit 3
9. Colorado State College	_____	_____	_____
10. Bank of Newtown	_____	_____	_____
11. Republic of Ireland	_____	_____	_____
12. Ft. Smith Hospital	_____	_____	_____

Now, put the names in alphabetic order.

Alphabetic Sequence:

- 13. _____
- 14. _____
- 15. _____
- 16. _____

 **Step 11 Review Practice Exercise 7-2**

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

 **Step 12 Centralized and Decentralized Systems**

- Now that you know how to sort and file patient records, it's time to look at the physical space—the room or rooms—in which facilities store health records.

Filing for health records can be in a *centralized* or a *decentralized system*. In a **centralized filing system**, all records have storage in one place. In a **decentralized filing system**, health record storage is in the various departments in which records originate. To show the difference, we'll use a hospital as an example.

Centralized Filing

The Cherry Hills Hospital uses a centralized filing system. The ground floor of the eight-story main hospital building houses health records for that building and for each of the two standalone clinics (one for surgery and physical therapy, one for radiation and chemotherapy) associated with the hospital. All three facilities are within the same city block.

Francis, the facility's records manager, and her staff share the ultimate responsibility for maintaining the health record system. Only Francis and her staff are allowed to file records or pull records. The hospital uses multi-part forms—the type without carbon paper—so that the primary record is in Francis's care, but she also keeps a secondary record of the patient's name and number in another location. For example, a copy of patient Sharon's file appears in the physical therapy clinic so that the staff can quickly locate her file when she comes for post-surgery physical therapy.

The advantages of a centralized filing system include the following:

- Clear responsibility for record-keeping.
- All patient information is in one place.
- Health records are easier to secure because unauthorized people are immediately obvious to staff members.

The disadvantages of this type of system include the following:

- Francis and her staff are dedicated exclusively to filing and retrieving records.
- Records may be too far away from a department for a patient to receive the best care; for example, departments on the eighth floor are far from the records on the first floor.
- Due to the distance between departments and the records, departments may create their own, unauthorized recordkeeping systems or make copies of records; this makes it difficult to insist that only one location contains all patient information.

Now, let's take a look at decentralized filing systems.

Decentralized Filing

The McIntyre Valley Hospital operates much like the Cherry Hills Hospital. However, it uses a decentralized filing system. The department that admits the patient creates and maintains the records for that patient.

For example, Ginger works in the neonatal intensive care unit. When an infant is admitted to that unit, Ginger creates a health record, which then stays in that department. Each stand-alone center maintains its own files—for example, the physical therapy department maintains separate files from the surgery department.

One advantage of a decentralized filing system is that you don't need to hire, train, promote or pay a separate office staff just to handle files. Most importantly, records are physically near the people providing patient care, which gives providers easy access to a full set of information.

The disadvantages of a decentralized system include the difficulty of finding the department that stores a particular patient's record. A patient who is initially admitted in one department and then moves to another may have more than one record, and a provider in a very large facility may not have easy access to health records in a different location. Also, it's harder for staff members to maintain consistent and complete records.



Step 13 Electronic Filing

- For the most part, what you've learned so far in this lesson about filing is applicable in medical facilities that keep paper medical records. You know that EHRs are health records that are created, stored, organized, edited, retrieved and maintained on the computer. As EHRs become prevalent, more healthcare facilities will use electronic filing systems to keep track of their patients' information. While many medical facilities choose to keep both an electronic and paper-based version of every medical record, some facilities scan old paper records into the computer to eliminate the hardcopies. Eventually, EHRs will replace paper-based records.

EHRs have advantages to paper files that include flexibility, connectivity and efficiency. So how, exactly, are EHRs more flexible than paper-based records? Well, they provide a tremendous amount of information so the physician doesn't have to spend the encounter getting the patient's history. The physician has the lab results, imaging reports, medications lists and chart notes available on the computer before he sees the patient. In addition, EHRs have functions that go beyond the capabilities of paper files. Some perform electronic prescribing, allergy checking, drug-interaction checking and remote chart access. EHRs can display information in different ways for the physicians, nurses and office managers. For example, if a physician wants to see data in detail or search for information by date, EHRs allow her to do so. Similarly, displaying information in different ways can protect the confidentiality of a patient's information. Those who don't need to see every detail of a EHR aren't allowed full access.

Another advantage to EHRs is their connectivity. They provide communication links that allow different people who use different systems to access EHRs. In paper-based records, pieces of paper have to be taken from place to place. With EHRs, information can be sent in electronic format.

Finally, EHRs are more efficient than paper-based records. Paper-based records often are needed in more than one place at a time. This can be troublesome, especially if the facilities that need the records are not in the same area. With EHRs, more than one facility can access a patient's information at the same time because the information is available electronically. One of the most efficient aspects of the EHR is that files are not lost or misfiled. For example, it's a problem if an x-ray report is not yet filed in a patient's record but the patient already is in the office for a follow-up exam. Similarly, it's frustrating for medical office staff members when files are missing. With EHRs, there aren't lost files because the information is in one location—the computer system!



Paper-based records are often needed in more than one place at a time.

Take a look at the following table to see how paper-based records and EHR systems compare when it comes to organizing, filing and retrieving information.

Paper Medical Records	Electronic Health Record Systems
Record is identified by patient name, some kind of medical record number and other identifiers that make it easier to find in the filing system.	An EHR provides distinct identifying information for each patient and identifiers to locate the digital record among any number of other records.
Paper medical records typically contain demographic and insurance information, along with a list of medical problems, medications and allergies. A staff member must update the records so they're current and accurate.	An EHR maintains this information and shares any updated information when it's needed.
A paper medical record contains office or progress notes in chronological sequence. These are browsed by literally flipping through pages until the desired entry is located.	An EHR stores progress notes and provides quick access by date of visit, provider or other search criteria, as well as the ability to browse by diagnosis and prescription.
Progress notes in a traditional paper record might be produced by dictation/transcription, free handwriting or form completion.	Some EHRs automatically create the progress notes as the patient's visit occurs.
Laboratory and radiology reports, as well as correspondence, are filed in more or less chronological order.	EHRs store reports in a variety of ways to provide rapid access and quick reference. The staff can access specific lab results and patient reports by searching by demographic and identifying information.
To pull a file, a staff member must go to the file room and locate the correct last name. The first name is located and confirmed, and then the chart is pulled. It's difficult to find a chart that is in use by someone else or that has been incorrectly filed.	An EHR is never lost, out or misfiled. It is always exactly where it should be. After all, an EHR may be accessed from any point in a healthcare facility that has access to medical records.
A healthcare provider writes a paper prescription for the patient to take to a pharmacy, documents the prescription and checks for drug interactions and allergies.	If the EHR has a prescription-writing capability, it performs the allergy and drug interaction checking or provides a quick reference so someone can manually check for these concerns.

As you might guess, the filing of EHRs opens another can of worms when it comes to keeping patient information confidential. Let's discuss this topic now.



Step 14 Filing Controls

- We've talked a little about security issues relating to recordkeeping, and we'll talk more about security later in this lesson. Most filing systems include a system of rules that govern how a person can gain access to the files. Many of these rules, or **controls**, are for security purposes—as part of a system to prevent unauthorized people from getting healthcare information about a patient.

Chart Tracking System

To gain accreditation, health information management departments in healthcare facilities must have a system that controls movement of charts in and out of the file area. This system, usually called a **charge-out system**, specifies:

- who can request records
- how long that person or department may keep the record
- the method used to transfer records from one department to another

When the appropriate department of a healthcare facility receives a request for files, only authorized staff members can pull those patient files.

Let's look at an example. Cindy works in the surgery center affiliated with Cherry Hills Hospital (which has a centralized filing system) and is authorized to request health records. Each morning, she reviews the next afternoon's scheduled surgeries—on Monday, she asks for the files for patients scheduled for surgery Tuesday afternoon.

Cindy also reviews the patients who have come in for outpatient surgery, and forwards their charts either to physical therapy, or back to the centralized records system if they've been discharged. The charge-out system specifies that she keep patient records only 48 hours, so on a Friday afternoon, she has already returned the health records from Wednesday afternoon.

In the hospital's trauma center, a staff member phones the records department when a patient comes into the emergency room, and the records staff pulls and delivers health records immediately.

Cherry Hills Hospital uses a computer-based chart-tracking system, but Cindy has been in health care for her entire professional career and remembers using paper-based request forms. In both systems, paper or plastic reminders, or **outguides**, appear in the physical location where the health record should be filed. These guides let an office manager know at a glance that records are missing.



Chart tracking systems ensure that healthcare staff knows where records are located.

Remember, the main purpose of a chart-tracking system is to ensure that the records staff knows where a record is at any given time. Keeping track of records maintains patient privacy and record security and improves patient care—providers don't have to wait while staff members hunt all over for a health record. When the shift changes, new staff also know where records are, even though those records were checked out 12 hours earlier by someone else.

File System Audit

It's one thing to have a system in place—and to list policies and procedures—but making sure staff members follow those policies, account for health records and file records correctly is something else entirely.

Periodically, office managers should *audit* the file area. Although the term **audit** sounds intimidating, it's really just a formal check to be sure that the chart-tracking system is working properly. In a busy hospital, someone might do an audit every day; other facilities may audit their files weekly or monthly. The more frequently you audit the files, the more likely it is that you will correct small mistakes before they become large ones. And mistakes are bound to happen—healthcare professionals are human, just like everybody else.

Think of it this way. Imagine that you're the parent of two children between the ages of eight and 12. You have to keep track of two sets of music lessons, hockey practice, soccer practice, ballet class, church activities and dinner with Grandma. If you only check in with your kids once a month, they'll probably forget at least one practice, be late to a team meeting and forget what Grandma looks like altogether. However, going over the family calendar twice a week gives you and the kids a good chance of making everything happen on the day it's supposed to happen—and possibly even at the right time!

In the records department, color-coding files helps make health records with incorrect filing more visible; a person doing an audit should also keep an eye open for outguides—sometimes the person who returned the files to the proper location didn't remove the outguides. Either way, an outguide indicates there is something missing.



Step 15 Loose Filing and Circulation Systems

- ❑ By now, you have a good sense of some of the issues in health records filing—how to organize the files, the issues relating to physical space, how a facility can keep track of who has what record and for how long and how to avoid file loss, both inside and outside the file area.

If you've ever done paperwork of any kind, though, you know that life doesn't always fit neatly into a system. If you file receipts after you pay bills, you know you receive bills for some things monthly and some things less often—you may pay your insurance every six months or yearly, the newspaper may bill every other month, garbage collection or heating bills may be quarterly. Even if you plan for those oddities when you set up your system, other issues arise—maybe a bill is late one month, and it arrives after you've already paid the rest.

So, how do you organize your bills? Where do you put them until you get a free moment? What if you're upstairs, where you pay bills and the late bill is stashed away downstairs? Going downstairs means that you might get distracted or that someone may ask you to do something else. What is the most efficient way to organize how you handle your paperwork? As you can see, there are many little things that can throw off your entire system!

The same is true in the world of health records. Not all paperwork arrives exactly when it should. Also, sending people running around a hospital with files isn't the most efficient way to get files to the departments that requested them—but what is? Let's turn our attention to loose filing and circulation systems.

Loose Filing

Although the health record should be complete by the time it reaches the healthcare office manager, that's not always the case. Other departments—pathology or radiology—may still have paperwork related to that patient that is not yet in the health record. This paperwork, known as **loose filing**, includes healthcare information that belongs with the patient record but appears after the record is already in the health information system.

These reports must eventually go into the patient's health record file. It seems like a small task until you consider that some hospital facilities have 300 to 500 beds and process hundreds of records every day. Each healthcare facility has a different system for handling this paperwork. The following are some of the ways facilities handle loose filing:

Division of labor—Workers on a particular shift, such as the afternoon shift, do all the filing because that shift tends to be quieter than other shifts. Staff members may rotate the responsibility for performing all the filing for a specific period of time, such as a week.

One point of contact—One person in the health information management department handles all loose filing, from mail to records. This person separates the loose filing into piles to make it easier for the rest of the staff to file later.

Saving time—The paperwork is included in the physical file folder, but does not have to be in a particular order. If someone needs to see the record, the paperwork is available, and is formally added at that point; however, most of the time, the records are in archives, so including them in the file folder is enough.

It is important to note that although different healthcare facilities have different systems for handling loose filing, they all have systems—keeping up with loose filing is an important part of maintaining accurate healthcare records.

Circulation Systems

Previously, you learned about chart-tracking systems in which people can request certain patient charts 24 hours before they actually need them. In emergencies, of course, someone in the department can call for the chart and receive it quickly.

You'll recall that Cindy is the surgery center employee at Cherry Hills Hospital whose job includes requesting records for the next day's patients and returning records for patients whose surgery is complete. After she requests a file, what happens? Does it magically appear on a desk somewhere?

A healthcare facility's **circulation system** gets records from one place to another in the healthcare system. Any number of systems work, from fax machines and computers to a messenger who hand-carries records. Often, health information staff members set up a schedule and physically wheel a cart from department to department, dropping off and picking up healthcare records.

Other technologies that facilities use include tubes like the ones at drive-through windows of banks, a small elevator system or a conveyor belt. However, these technologies are giving way to fax and computing systems, along with the good old-fashioned carts.

Step 16 Keep EHRs Confidential

- ❑ In the previous lesson, you learned a little about HIPAA regulations—legislation beginning in the 1990s that requires, among other things, healthcare facilities to put safeguards in place to protect patient privacy.

HIPAA brought security issues to the forefront of the health information management profession. However, security has always been a big concern in the healthcare world. HIPAA legislation was spurred, in part, by advances in computer technology and the vision of an all-electronic health record; however, paper health records also must be secure. Maintaining the privacy of patients and the security of health records is a vital part of the work of a healthcare professional.

Creating a secure environment for health information may be more complicated than you think. Consider the following:

Many types of information must have protection—health records, employee information, financial data and physician data. For example, how do you determine appropriate access to information about children or elderly people who suffer abuse? What about physician credentialing information? What about birth records?



Confidentiality is vital in health care.

Security systems require administration. Who is responsible for granting access? Someone must be responsible for checking out keys, providing passwords and granting access if someone forgets a key or password. Who really requires access to computer-related information, and who doesn't? Does the contract with the recycling center specify shredding sensitive documentation? Is monitoring of this shredding service necessary?

Compliance can be problematic. Employees may not understand the importance of securing certain types of information and may release information. New employees need some form of orientation to a specific security system, and existing employees need to know when a system changes. What happens when an employee no longer works in a particular healthcare facility? Should the facility change passwords and locks? Should someone debrief the employee in some way? Further, what happens to employees when they breach security, even unknowingly? What are the penalties?

Policies should be both general—to outline the purposes of securing information—and specific. A secure environment must account for all types of electronic access to health information, whether through cell phones, the Internet, pagers, fax machines or e-mail. In addition, the secure environment must consider issues as mundane as the janitorial staff member who has routine access to physical space but no need to access the protected information there.

Healthcare facilities must have security policies in place to handle any of these situations. The policies should be clear and specific enough that all employees know how to secure information, but they also need some kind of flexibility to cover new situations—such as new technology—as they arise.

When you handle a patient's medical information, think of it as the actual information. Just as you would close the door and provide drapes to protect the patient's privacy, use common sense to protect the patient's medical record. Some situations may seem innocent, but your first responsibility is to maintain the patient's privacy. Look at the following situation.

Problem: A patient is sitting in the waiting room as another patient leaves. The patient in the waiting room asks you, "Was that Jenny Smith? I lost track of her and would like to catch up. Could you give me her phone number?"

Solution: Avoid mentioning the patient's name, and, of course, keep her phone number confidential. You can reply, "I'm sorry. I can't give out anyone's phone number," or "I know you wouldn't want me to give your number to anyone without your permission."

Now that you know how to keep files confidential, let's move on to another topic: archiving.



Step 17 Archive Medical Records

- ❑ Paper medical records that are kept in a storage area and rarely accessed are known as **inactive**, or **archived**, records. Electronic medical records stored on a computer system within the healthcare facility or on a computer system at an external location are said to be kept in a **digital archive**. State and federal laws dictate the length of time that a healthcare facility must keep inactive records. State laws vary. For example, some states establish a time frame based upon the **statute of limitations**, which is the time frame in which a person may file a lawsuit. Because most healthcare facilities keep medical records for longer than is necessary, they must consider the cost of storing these records. Some ways for medical facilities to cut costs when it comes to storing medical records include **purging**, or removing inactive records from the facility, and storing paper records on microfilm, disks or in computer systems.

Medicare CoP require medical facilities that include hospitals, long-term care facilities, specialized providers and home health agencies to keep health records for at least five years. Check the retention requirements in your state. Some states, such as Colorado, require facilities to retain records for 10 years. The Joint Commission doesn't offer a requirement for a medical facility's length of record retention. Healthcare facilities must comply with Medicare CoP and state and federal laws when it comes to the length of time that they must retain inactive medical records. If Medicare CoP says records may be destroyed after five years, but state law says records must be retained for 10 years, obviously, healthcare facilities will need to keep the records for 10 years. In other words, these facilities must retain inactive medical records for the period of time that meets all Medicare CoP requirements and state and federal laws.

Every medical facility should have a **record retention schedule** for patient information. This schedule describes the information that will be retained, as well as the length and manner of retention. As you might guess, the manner of retention can be somewhat problematic as many healthcare facilities have to store more paper medical records than they have room for. So what's a facility to do? Well, there are several **alternative storage** options: *off-site*, microfilm and *optical-disk imaging*.

When records are stored **off-site**, it means that a healthcare facility has placed its patients' information in a location outside the facility. A contract that outlines cost, storage, transportation method, security and access of records should be negotiated with the off-site record storage company.¹ One drawback of this method is that even though the medical facility no longer has direct control of the medical records, it still must be able to vouch for the security and accessibility of the patient information.

When you choose an off-site storage company, you must consider several factors:

- **Cost**—The cost of services should be stated in the company's contract. Use the number of records stored, the amount of the storage space required and the type of records stored to determine the cost.
- **Security**—The company should outline training procedures for employees, as well as policies and procedures for safeguarding and securing the records in storage.

- **Access to records**—The contract should state how often the records will be delivered and outline the procedures for requesting records.
- **Record transport**—Records should be transported in a timely fashion.

You learned in Lesson 2 that when medical records are put on microfilm, they are scanned and put on film that looks similar to a negative of a photograph. Each piece of film is reviewed; the original medical record is compared to the film. This ensures that all of the record was microfilmed and is usable. Once this is verified, the paper medical records can be destroyed.

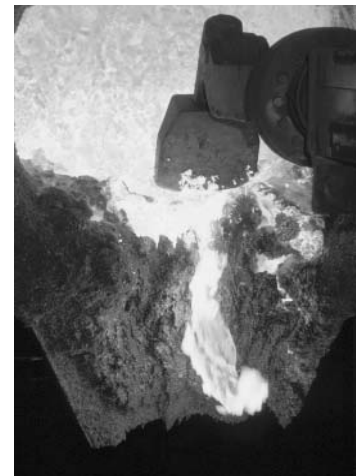
Lastly, when medical records become **optical-disk images**, the paper records are converted to electrical images (scanned into the computer) and stored on optical disks. Each scanned page is indexed with a patient record number. This allows medical personnel to scan different pieces of one patient's medical record at different times. (Because each page is indexed, the complete record can be found at any time.)²

Destroy Patient Information

So what happens when a medical facility has stored patient records for the required amount of time and then is able to destroy them? Well, federal and state policies dictate how medical records should be destroyed, and each healthcare facility must have a procedure for record destruction. Healthcare facilities must retain a **certificate of destruction** for each record destroyed. The medical facility keeps this certificate indefinitely, and the certificate should list the date and method of destruction, the person who supervised the record destruction, the records destroyed and confirmation that the destruction occurred in the normal course of business.³

Notification of destruction must be placed in the most prominent newspaper in the healthcare facility's community for two weekends in a row. Patients then receive four weeks to request their medical record. If a patient requests the record, the original record is given to him along with a signed document stating he received the original. The physician's office maintains this record. After these four weeks, any records that have not been claimed may be destroyed.

You may wonder how medical records are destroyed. Paper medical records are dissolved in acid, crushed into a powder or burned. Electronic records and the back-up files are destroyed with **magnetic degaussing**, which changes the magnetic fields on a computer medium and therefore renders records unusable.⁴ Electronic records and back-up files also can be **overwritten**, which means the original data is covered with other data. A chemical recycling process destroys microfilm.



Paper medical records can be dissolved in acid, crushed into a powder or burned.

Medical Facility Closure

From time to time, hospitals, doctor's offices and medical clinics close for one reason or another. The medical records these facilities hold are the responsibility of the closing facility, and state and federal regulations, as well as professional organizations, dictate how these records should be handled.

If a medical facility closes but is not sold to another healthcare entity, the patient records become the property of the state health department and are stored there. When a healthcare facility is sold to another medical entity, the health records are included in the sale, and the new medical entity becomes responsible for these records.⁵

Letters or newspaper announcements must notify patients when a medical facility closes. Patients should be informed of the date of closure, new location of health records and procedures for access to their medical records after the facility closes. (Usually, a written request for the medical record is required.)

You learned a lot about maintaining medical records. Let's pause here to review all of this information.

Step 18 Practice Exercise 7-3

For questions 1 through 7, select the best answer from the choice provided.

1. **One advantage of EHRs is ____.**
 - a. patients' information is available to the general public
 - b. more than one person can access the record at one time
 - c. they must be taken place to place
 - d. they don't need to follow HIPAA rules

2. **Elmhurst Medical only allows healthcare professionals to keep a patient record for 48 hours. This rule applies to ____.**
 - a. HIPAA regulations
 - b. electronic filing methods
 - c. file audits
 - d. a charge-out system

3. **Healthcare facilities often perform formal checks called ____ to make sure their chart-tracking system works properly.**
 - a. file audits
 - b. charge-out systems
 - c. outguides
 - d. annual reviews

4. **Mandy handles all of the mail and patient records at her clinic. Her clinic uses ____ to handle loose filing.**
 - a. division of labor
 - b. one point of contact
 - c. time saving
 - d. a circulation system

5. **As a healthcare office manager, remember to ____.**
 - a. share patient information
 - b. check with the patient before you share her information
 - c. keep patient information confidential
 - d. only share information from an EHR

6. **Vineyard Clinic decides to store all patient information older than ten years on computer disks. They then store these disks in a warehouse. This is known as ____.**
 - a. confidentiality
 - b. screening
 - c. digitalizing
 - d. purging

7. **A campus clinic decides to get rid of old patient data. They simply erase old information by covering it up with new patient information. This is called ____.**
 - a. archiving
 - b. microfilming
 - c. magnetic degaussing
 - d. overwriting

 **Step 19 Review Practice Exercise 7-3**

- Check your answers with the answer key at the back of this instruction pack. Correct any mistakes you may have made.

 **Step 20 Lesson Summary**

- File management is an indispensable skill for the healthcare office manager. With a strong understanding of how filing works, you can jump confidently into any filing system—whether it's organized alphabetically, numerically, geographically or by subject. In this lesson, you studied filing terminology; you learned definitions for everything from units to indexing. And you discovered the steps to successful filing and how to apply the alphabetic filing system rules.

You now can discuss the features of EHRs, and you know a bit about what electronic filing systems are capable of. This lesson also reiterated the importance of keeping healthcare information confidential and secure. When medical records are put in storage and not often used, they are said to be archived. You read about how long archived records must be kept, how to properly destroy medical records and what happens to medical information when a healthcare facility closes.

This lesson also provided you with the standards for storing medical information. You studied how to uphold the quality of medical records through quality standards and filing, chart tracking, audits, loose-filing standards, circulation systems and security requirements.

Next, we'll discuss some important first-aid procedures. But, first you must complete the quiz that follows.

Step 21 Mail-in Quiz 7

- Follow the steps to complete the quiz.
 - a. Be sure you've mastered the instruction and the Practice Exercises that this quiz covers.
 - b. Mark your answers on your quiz. Remember to check your answers with the lesson content.
 - c. When you've finished, transfer your answers to the Scanner Answer Sheet included. Use only blue or black ink on your Scanner Answer Sheet.
 - d. **Important!** Please fill in all information requested on your Scanner Answer Sheet or when submitting your quiz online.
 - e. Submit your answers to the school via e-mail, mail, fax or, to receive your grade immediately, submit your answers online at www.uscareerinstitute.edu.

Mail-in Quiz 7

For questions 1 through 25, select the best answer from the choices provided. Each question is worth 4 points.

1. **You need to file a record for The Central Clinic of Cleveland. This caption has ____ units.**
 - a. two
 - b. three
 - c. four
 - d. five

2. **You need to file the following patient encounters for Julia Sanchez chronologically: March 3, 2010, x-ray; January 1, 2010, x-ray; April 21, 2010, physical therapy. You should file them in this order ____.**
 - a. April 21, 2010, physical therapy; January 1, 2010, x-ray; March 3, 2010, x-ray
 - b. January 1, 2010, x-ray; April 21, 2010, physical therapy; March 3, 2010, x-ray
 - c. January 1, 2010 x-ray; March 3, 2010, x-ray; April 21, 2010, physical therapy
 - d. March 3, 2010, x-ray; April 21, 2010, physical therapy, January 1, 2010, x-ray

3. **You file a record for Ronchetti & Weber Dental. You should file the record under ____.**
 - a. *Dental* and add a cross-reference for *Weber*
 - b. *Weber* and add a cross-reference for *Ronchetti*
 - c. *Dental* and add a cross-reference for *Ronchetti* and *Weber*
 - d. *Ronchetti* and add a cross-reference for *Weber* and *Dental*

4. **Roberta receives three new patient files. She creates folders with the last name first and files their records. This is the ____ step of filing.**
 - a. inspect
 - b. index/code
 - c. sort
 - d. store

5. **Though different filing systems exist, you should follow general rules. One rule to remember is ____.**
 - a. create a file system that only you understand, to protect patient records
 - b. conserve space and only use the minimum amount needed to store records
 - c. create an instruction list for staff that details your filing method
 - d. the system and process should be cost effective

6. **Andrew works for Shady Oaks Medical. The facility uses alphabetic filing. Andrew needs to file records for the following patients: Joe M. Smith, Joseph Smith, Josephine Smythe and Joelle Smyth. He should file them in this order: ____.**
 - a. Smith, Joe M; Smith, Joseph; Smyth, Joelle; Smythe, Josephine
 - b. Smith, Joseph; Smith, Joe M; Smythe, Josephine; Smyth, Joelle
 - c. Smyth, Joelle; Smythe, Josephine; Smith, Joe M; Smith, Joseph
 - d. Smyth, Josephine; Smith, Joe M; Smith, Joseph; Smythe, Josephine

7. **Sophia works at Trusty Dental. The office uses straight numeric filing. Sophia has the following file numbers: 10176, 10189, 12346, 11599, 22245. She should file them in this order: _____.**
- a. 10176, 10189, 12346, 11599, 22245
 - b. 22245, 11599, 12346, 10189, 10176
 - c. 10176, 10189, 11346, 11599, 22245
 - d. 10189, 10176, 11599, 11346, 22245
8. **Manchester Medical uses a serial numbering system. Anneliese visits the facility on two different occasions. Once for a sprained ankle and once for the flu. The facility assigns her _____.**
- a. the same number for each visit, but files her record in different locations
 - b. a new number for each visit, and files her record in different locations
 - c. the same number for each visit and files her record in one location
 - d. a new number for each visit and files her record in one location
9. **Billingham OB/GYN files patient records according to Social Security numbers. They store each encounter in the same patient record. Billingham uses a _____ system.**
- a. serial numbering
 - b. unit numbering
 - c. terminal-digit
 - d. middle-digit
10. **Ross works for Peterson Pediatrics. The office uses terminal-digit filing. Ross needs to file the following records: 150009, 141119, 11117, 013205, 131205. Ross should file the records in this order: _____.**
- a. 13-12-05, 01-32-05, 15-00-09, 11-11-17, 14-11-19
 - b. 01-32-05, 11-11-17, 13-12-05, 14-11-19, 15-00-09
 - c. 01-32-05, 13-12-05, 11-11-17, 15-00-09, 14-11-19
 - d. 15-00-09, 11-11-17, 14-11-19, 13-12-05, 01-32-05
11. **Peterson Pediatrics decides to switch their filing system to middle-digit filing. Ross has the same five records. He should now file them in this order: _____.**
- a. 15-00-09, 11-11-17, 14-11-19, 13-12-05, 01-32-05
 - b. 13-12-05, 01-32-05, 15-00-09, 11-11-17, 14-11-19
 - c. 11-11-17, 14-11-19, 15-00-09, 01-32-05, 13-12-05
 - d. 01-32-05, 13-12-05, 11-11-17, 15-00-09, 14-11-19

12. Tabitha labels records with the first initial of a patient's last name and then a unique identifier. For example, Shirley Taylor comes to the office for a check-up. Tabitha creates a folder labeled ____.
- S-12345
 - ST-12345
 - T-12345
 - TAY-12345
13. Tabitha uses a(n) ____ filing system.
- alphabetic
 - numeric
 - chronological
 - alphanumeric
14. Jennie receives pharmaceutical information from numerous companies. One day, she receives a pamphlet about Lunesta, a sleep aid. Jennie files the pamphlet in the *Insomnia* folder. Jennie uses ____ filing.
- alphabetic
 - numeric
 - geographic
 - subject
15. Erika needs to file the following patient records: R. T. Mason, R. Mason, Roberta Mason, Roberta T. Mason. She should file them in this order: ____.
- Mason R T; Mason R, Mason; Mason Roberta; Mason Roberta T
 - Mason Roberta T; Mason Roberta; Mason R T; Mason R
 - Mason R; Mason R T; Mason; Mason Roberta; Mason Roberta T
 - Mason Roberta; Mason Roberta T; Mason R; Mason R T
16. Liz needs to file the following patient records: Manny McDonald, Melissa MacDonald, Martin M'Gillicutty and Mona MacMerlin. She should file them in this order: ____.
- Mgillicutty Martin; MacMerlin Melissa; McDonald Manny; MacMerlin Mona
 - Manny McDonald; Martin M'Gillicutty, Melissa MacDonald, Mona MacMerlin
 - MacDonald Melissa; MacMerlin Mona; McDonald Manny, Mgillicutty Martin
 - McDonald Manny; MacDonald Melissa; MacMerlin Mona; Mgillicutty Martin

17. **Drew must file records for Trevor Raymond Richards, IV; Dr. Beverly Clearwater, and “Bubba” Bill Banks. He should file them as follows: ____.**
- Banks Bubba; Clearwater Beverly Dr; Richards Richards IV Trevor Raymond
 - Banks Bill; Clearwater Beverly; Richards Trevor Raymond
 - Banks Bill Bubba; Clearwater Beverly, Richards Trevor R IV
 - Banks Bill; Clearwater Beverly Dr; Richards IV Trevor
18. **Penny needs to file a record for The Medical Center of Northglenn. She should file it as follows: ____.**
- (The) Medical Center (of) Northglenn
 - Northglenn Medical Center of
 - Center Medical Northglenn
 - The Medical Center of Northglenn
19. **You have two files—one for Martin’s Denver, Colorado, and another file for Martin’s Hudson, Florida. You should file them ____.**
- by address, starting with the zip code
 - by address, starting with the city or town
 - chronologically
 - in the order you received them
20. **Quinness needs to file a record for Bill Benton College. She should file it as ____.**
- Bill Benton College
 - College Bill Benton
 - Bill College Benton
 - Benton Bill College
21. **Dr. Morrison needed to review Mrs. Donaldson’s medical chart. Later, Susan, a CNA at the same facility needs to pull that record. The ____ will determine how those records will be transferred to her department.**
- sign in sheet
 - filing system
 - charge out system
 - file audit system

22. One way to manage _____ is to make sure there is only one person who handles everything.
- charge out systems
 - loose filing
 - circulation filing
 - alphabetic filing
23. You work as a healthcare office manager for a small clinic. One day, while at lunch with a friend, your friend says, “I heard Susan McCaffrey came into your clinic for a serious infection.” You should _____
- politely say, “I’m sorry, I can’t discuss any patient information.”
 - shake your head yes and say, “Yes. It was serious, but I can’t discuss it any further.”
 - go into details about Susan, but ask your friend not to repeat anything you tell her.
 - invite Susan to lunch and insist she share the details of her recent appointment.
24. One advantage of an EHR is _____.
- it is always filed chronologically
 - some can automatically create progress notes
 - the system can diagnose the patient
 - only one person can access the information at a time
25. Bitsy is in charge of bringing charts from one end of the hospital to the other. She does this several times a day. This demonstrates a(n) _____.
- circulation system
 - division of labor
 - point of contact
 - archive

Endnotes

- ¹ Green, Michelle A and Mary Jo Bowie. *Essentials of Health Information Management*. New York: Thomas Delmar Learning, 2005. Print.
- ² Green, Michelle A and Mary Jo Bowie. *Essentials of Health Information Management*. New York: Thomas Delmar Learning, 2005. Print.
- ³ LaTour, Kathleen M. and Shirley Eichenwald Maki. *Health Information Management: Concepts, Principles and Practice*. Chicago: American Health Information Management Association, 2006. Print.
- ⁴ Green, Michelle A and Mary Jo Bowie. *Essentials of Health Information Management*. New York: Thomas Delmar Learning, 2005. Print.
- ⁵ Abdelhak, Mervat, et al . *Health Information: Management of a Strategic Resource*. Philadelphia: W.B. Saunders Company, 2001. Print

Congratulations
You've completed Lesson 7.



Don't wait for your quiz results to continue with Lesson 8.

Lesson 8

First-rate First-aid Procedures

Step 1 Learning Objectives for Lesson 8

- ❑ When you complete the instruction in this lesson, you will be trained to do the following:
 - Define a medical emergency.
 - Explain the purpose of triage in today's medical office.
 - Describe how to properly wash and glove.
 - Explain the purpose of the universal emergency medical identification tag.
 - Determine the provisions that a medical office should have in its emergency kit.
 - Explain how to document an emergency procedure.
 - Explain the importance of an office emergency policy manual.
 - Explain how to distinguish the severity of a medical emergency.
 - Describe the symptoms and course of action to treat the ten most common emergencies in the medical office.

Step 2 Lesson Preview

- ❑ Tina works as a healthcare office manager at her small town's community hospital. On her way to work one morning, she bumps into her neighbor, Mrs. Geary. Normally an energetic person, today Mrs. Geary seems confused and is sweating heavily. While Tina talks to Mrs. Geary, she tries to figure out if something is wrong. Without warning Mrs. Geary drops her bag of groceries and collapses to the ground. Quickly Tina checks her breathing—she is, and pulse—there is one—and then looks for a medical I.D. tag. There's one on Mrs. Geary's wrist, and it identifies her as a diabetic. Tina hastily looks through Mrs. Geary's groceries and finds a can of frozen punch. She places a small amount under Mrs. Geary's tongue, and she soon revives.

How did Tina know what to do when her neighbor collapsed? Could you have responded this speedily? Well, by the time you finish this lesson and take a CPR course at your local hospital or other community center, you will have the knowledge and skills to react as promptly and effectively in an emergency situation as Tina did.



This lesson teaches you to properly respond in an emergency.

Individuals working in health care expect to encounter these types of emergencies. Like Tina, you may witness an incident in your community or in the medical office. Oftentimes, you will assist a walk-in patient experiencing a medical crisis, and almost certainly you will respond to phone calls concerning an injury or sudden illness. When anything happens within your family or immediate neighborhood, your relatives and neighbors may consider you the “resident authority” because you work in the healthcare field. It is important for you to acquire first-aid skills and have a working knowledge of appropriate actions to take in common accident or illness situations. It is your responsibility to maintain current certification to provide *Basic Life Support* measures involving an obstructed airway, commonly known as *CPR*.

When you work in a physician’s office, you must always be ready to react to an emergency situation. This can involve a patient already in the office or one who is brought in experiencing problems. A patient receiving a medication or injection may have a severe reaction and quickly present an emergency. Someone may be injured just outside the office and brought in for treatment. Patients may bring in very ill or injured family members. Knowing how to respond and how to assist the physician in treating the individual is very important. Swift and appropriate action can affect the outcome of the situation.



Step 3 First Things First

- ❑ Before we dive into the subject of medical emergencies, let’s go over your first clinical procedures—Proper Hand Washing and Proper Gloving.

Proper Hand Washing

Hand washing is considered the single most important means of preventing the spread of infection. There are many germs on your hands, and they can cause diseases if infection controls are not in place. Proper hand washing is an easy and effective way to reduce the transmission of disease.

Follow these steps to properly wash your hands.

1. Remove any jewelry other than a plain wedding band.
2. Prepare paper towel supply so it is readily available without touching any other surfaces.
3. Don’t allow your clothing to touch the sink. Never touch the inside of the sink with your hands.
4. Turn on faucet with dry paper towel, adjust temperature, then discard towel. Luke-warm water is best for your skin.
5. Wet hands and apply soap using a circular motion and friction.



Hand washing is the most effective way to prevent the transmission of disease.

6. Interlace fingers to clean between them. Also scrub up to and including the wrists. Scrub for 2 minutes at beginning of day, then for 30 seconds following each patient contact throughout the day.
7. Use brush on your nails at the beginning of each day.
8. Hold hands pointed downward under the water to rinse them.
9. Repeat hand washing for the first hand washing of the day.
10. Blot hands and wrists dry with disposable paper towel; do not touch towel dispenser following hand washing.
11. Turn faucet off with clean paper towel.
12. Apply antibacterial lotion to prevent chapped skin.

Proper Gloving

Wearing gloves offers additional protection from germs for both you and the patient. Wear gloves whenever you expect to be in contact with any body fluids, a contaminated surface, open wounds or whenever performing any kind of procedure involving blood or any other body fluids. The latex glove is the norm in the healthcare field; however, you can also use vinyl gloves if you find that you are allergic to latex.

Follow these steps to properly put on your gloves.

1. Wash hands.
2. Grasp gloves by cuff and slip on without any special technique.

TIP If you encounter an emergency, you may not have access to a sink, water or antibacterial soap. You may have to rely on a hand sanitizing lotion or some other method. Do the best you can using what you have to try to maintain a sterile environment for the victim. *Remember to always wash your hands in the most appropriate manner for your situation, and wear gloves, if possible.*



Step 4 What Is a Medical Emergency?

- ❑ An **emergency** is considered any instance in which someone becomes ill suddenly and requires immediate attention. When you encounter a situation like Tina's, you, the healthcare office manager, will be able to respond. In this lesson, you will learn how skilled medical personnel provide **emergency medical care**, which is the immediate care given to a sick or injured person. When properly applied, it can mean the difference between life and death, or a quick recovery instead of a long hospital stay. If an emergency occurs in your medical office, it will be the responsibility of your team of healthcare professionals to help the patient recover or to care for the patient until an ambulance or rescue squad arrives.

This is a lot of responsibility, but don't worry! When you have completed this course and your CPR certification, you will be ready to assist with a medical emergency. So let's get started on this exciting journey by taking a look at the steps emergency personnel follow to respond to an emergency.



Understanding the nature of an emergency situation is the first step toward solving the problem.

What Is the Emergency?

Before making any decisions about how to respond to an emergency, medical staff will assess the nature of the situation. Does it include respiratory or circulatory failure, severe bleeding, burns, poisoning or severe allergic reaction? For example, if you are dealing with a car accident with multiple injuries, your response will be quite different than if several family members enter the clinic with symptoms of food poisoning. In either situation, you will use the concept of *triage*.

Step 5 Patient Triage

□ **Triage** is a decision-making system used by medical and emergency personnel to give medical care when there are more injured people needing care than there are resources available. The goal of triage is to care for as many patients as possible, and this works by giving medical care to the most seriously injured patients first. First, you need to divide patients into three categories as follows:

- Patients with minor injuries who can wait for treatment
- Patients with such severe injuries that they require prompt treatment to survive
- Patients whose injuries are so severe that they probably will not survive

For example, if two patients arrive at the same time—one with a cut that needs stitches and the other for a cold, the patient who needs stitches will be seen and treated first.

Two common triage systems in use today are *simple triage* and *advanced triage*.



Triage is probably most important in the hospital emergency room.

Triage Systems

You may hear the acronym *START* when someone talks about triage systems. **START** stands for **simple triage and rapid treatment**. Usually emergency personnel use this triage system in emergencies before medical staff members see the patient.

Simple triage separates the injured into four groups: **deceased**, victims who are beyond help; **immediate**, victims who are injured but can be helped by transportation; **delayed**, patients whose injuries won't be worsened by delayed transport and those with **minor** injuries—the walking wounded who need help less urgently.

If medical staff is applying *START*, this is how they'd approach patients:

- **Deceased**—They're left where they are found and covered if necessary. In the *START* system, a person is not triaged "DECEASED" unless she is not breathing and an effort to reposition her airway has been unsuccessful.
- **Immediate**—Patients are taken by ambulance for medical care immediately.
- **Delayed**—Patients are transported after the immediate patients have been transported.
- **Minor**—After the immediate and delayed patients are transported, the minor patients are transported for care. Usually patients with minor injuries don't need advanced medical care for at least several hours.

Like simple triage, advanced triage is used in emergencies but has different classifications. **Advanced triage** is a decision-making system that ranks patients into five categories rather than four. Advanced triage is usually used by emergency medical personnel or by medical staff in emergency rooms during a disaster. Let's look at the five categories.

- **Blue/Expectant**—The patient is so severely injured that he will soon die of his injuries. Examples of injuries include large second or third degree burns, severe trauma, cardiac arrest or lethal poisoning.
- **Red/Immediate**—The patient requires immediate surgery or other life-saving intervention. This patient is given first priority for surgical teams or transport to advanced facilities. This patient is likely to survive with immediate treatment.
- **Yellow/Observation**—The patient's condition is stable for the moment, but requires medical staff to watch for any deterioration of his condition. The patient will need hospital care and would receive immediate priority care under normal circumstances.
- **Green/Wait**—The patient requires a doctor's care in several hours or days, but not immediately. Patients may wait for a number of hours or be told to go home and come back the next day if the facility is involved in a disaster with many higher priority patients. Examples of injuries include broken bones without compound fractures or soft tissue injuries.
- **White/Dismiss**—The patient has minor injuries. Usually first aid and home care are sufficient and a doctor's care is not required.

This triage system is complex, and only emergency personnel or a physician should determine which group a patient is in. No matter which type of triage system is used, it is a continuous process and categories should be checked regularly. Patients' conditions can change, which alters their priority classification.

Triage techniques are used in emergency and non-emergency cases. In non-emergency cases, triage techniques determine if the patient needs to see a physician. In addition, triage techniques determine if a patient should be seen immediately, wait for the next available appointment or head to the emergency room.

If a patient has an emergency, remember to assess the patient's ABCs, or Airway, Breathing and Circulation. You'll learn about this later in the lesson, but for now just remember that if the patient is conscious, or you're speaking with the patient over the phone, ask him questions to determine his condition. If the patient is unresponsive, you'll have to check the patient's ABCs yourself.



Don't forget your ABCs during an emergency.

Telephone Triage

Patients may call your office with an immediate medical problem. In this case, a medical professional will perform *telephone triage*. **Telephone triage** assesses the severity of the patient's medical condition over the telephone. Keep in mind that you won't be able to telephone triage patients as a healthcare office manager. Nurses and physicians might be the only staff authorized to do this, but it's helpful to be aware of the steps involved.

The telephone triage has six basic steps:

1. **Introduce yourself to the patient.** This opens communication lines between the nurse and the patient. The trust gained during the initial communication encourages the caller to reveal information, thus allowing the nurse to make informed decisions about the patient's health.
2. **Interview and assess the patient.** The interview with the patient should gather the patient's demographic information and symptoms. The assessment relies on the nurse's ability to listen and interpret the caller. She will listen to what the caller is saying, what the caller is not saying and be alert for verbal cues such as pauses in sentences and breathing. She may have to ask the caller to bring the phone to the patient and listen carefully for signs and symptoms such as coughing, wheezing, congestion, a muffled voice, shortness of breath, pain, fear and other signs of a problem. Take a look at the following box for some sample questions.

How long has the patient had his symptoms?

Does the patient have a fever?

What happened?

Is the patient breathing? Having difficulty breathing?

What is the patient's temperature?

3. **Make a triage decision using an established protocol or guideline.** Once the nurse assesses the caller, she makes a decision based on a computer system, reference books or a manual. Then she advises the caller on what to do next. Although she's giving advice to the caller, the decision regarding care rests with the caller.
4. **Tell the advice to the patient or caller.** When the nurse advises the patient or caller, she will make sure he understands by having him repeat the information back to her.



Active listening skills are key to successful phone triage.

5. **Conclude the call and follow up as needed.** The nurse tells the patient or caller to call back if he needs further assistance. In addition, she will call the patient to follow up later.
6. **Document the call.** Your medical office will have forms to fill out in order to document telephone triage calls.¹⁴ This form will be filed in the patient's medical record.

When you talk to a patient on the telephone, remember to keep his information private and protect his identity. If possible, go to another room in the medical office where your conversation can't be overheard.

Face-to-face Triage

The same steps used in telephone triage can be used in face-to-face triage. However, assessing the patient face to face will be easier because you don't have to rely on cues over the phone.

You or another staff member begin with an introduction to the patient and then move into some questions that helps assess the patient's ailment. If the patient is conscious, ask for personal identification and the name of a close relative or friend. Try to obtain as much information as possible about the symptoms that the patient is experiencing so you can identify the problem. If the patient is unconscious, a good place to start, after you respond to obvious physical signs of distress, is to look for a *medical identification tag*.

The Universal Emergency Medical Identification Tag



A universal emergency medical ID symbol

A **universal medical identification tag** is a small tag worn on a bracelet, neck chain, or on the clothing. The tag has the *universal emergency medical identification symbol* printed on it to make it immediately recognizable and it identifies the wearer's medical condition. The tag alerts anyone of the person's medical condition even if the wearer is unconscious or is not old enough to explain. Some people prefer to carry a wallet card with the same information. In addition to mention of a condition, the tag may have a telephone number that medical personnel can call for more information, such as the patient's physician.

When explaining an emergency to other medical staff, use the following terms so your description will be as accurate as possible.

Table 8-1: Levels of Emergency Severity		
Term	Definition	Examples
Chronic	Long and drawn out, not acute. Some diseases have a slow chronic phase but can quickly change into an acute episode.	Chronic obstructive pulmonary disease (COPD), leukemia, Arthritis
Insidious	Hidden and not apparent, treacherous. Often disease conditions have a slow, hidden beginning, and then quickly develop symptoms.	Kidney failure, liver disease
Urgent	A situation requiring intervention as soon as it can be arranged.	A ureter blocked by a kidney stone, a gallstone, an ulcer
Sudden	Occurs quickly and without any warning.	Headache, allergy
Severe	Very extensive and advanced. Requires immediate medical attention.	Head injury, burn, frostbite, broken bone
Life threatening	Could cause death.	Head injury, shock, heart attack, stroke, internal bleeding

Most injuries or illnesses could be **manifested**, or show symptoms, in one of the above classifications. After staff determines the severity of the emergency, they can respond appropriately. Remember that these terms apply only to an emergency in this discussion, but you won't respond only to emergencies. A child's scraped knee still requires some medical attention, but it is not considered an emergency.



How severe is the emergency?

What Should I Do When an Emergency Occurs in the Office?



Learn to respond quickly to emergencies.

More than likely, you already know the drill to get yourself and your family out of your house safely if it is on fire. You crawl through the house to avoid breathing the fumes, you know your alternate exits and you call 911 from a neighbor's house—not your own. You could probably think through the steps while the house is burning, but by then your house may be gone! The knowledge must already exist so you can react quickly and appropriately. You don't have time to think about the procedure, you just do it. The same is true for an emergency in the medical office. There's no time to debate who should assess the patient, when to perform CPR and who should call 911.

Every medical office has a procedure for handling emergencies that occasionally arise. From the doctor to the healthcare office manager, many staff members have a role in assisting the patient during such a crisis, and it is critical that each person knows what her job is. First you'll learn about the equipment used in an emergency and then you'll practice the steps you, as a healthcare office manager, will perform in an emergency!

The Emergency Cart or Kit

Your doctor's office will have an **emergency kit** or **emergency crash cart** with all the supplies and equipment necessary to handle any emergency that might come your way. The crash cart should be kept in a prominent location where all office employees can easily access it. All medical staff should be very familiar with the contents and their use.

Equipment, supplies and medications on the emergency crash cart include at least the following:¹

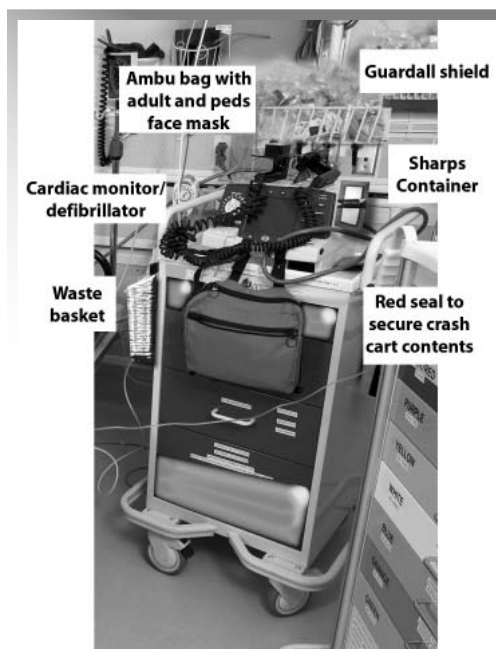
General Supplies:

- Adhesive and hypoallergenic tape
- Alcohol wipes
- Bandage material
- Gloves
- Hot and cold packs
- Intravenous extension tubing and T-connectors
- Needles, both intraosseous and intravenous
- Paper and pen
- Personal protective equipment (PPE)—mask, gloves, protective eyewear, long sleeved protective gown
- Resuscitation tape
- Sterile dressings
- Sterile water

Equipment:

- Ambu bag
- Bandage scissors
- Blood pressure cuff (three sizes: standard, pediatric and large)
- Bulb syringe
- Defibrillator
- Glucose meter

—Continued



A typical crash cart



The Ambu bag assists with a patient's breathing.

- Nasal airways
- Nasogastric tubes
- Nebulizer or metered dose inhaler spacer and facemasks
- Non-rebreather (three sizes)
- Obstetric delivery supplies—clamp, scissors
- Oxygen tank, flow meter, mask
- Penlight with extra batteries
- Pulse oximeter, both adult and pediatric
- Stethoscope
- Tourniquet

Emergency Medications:

- Acetaminophen (rectal suppositories)
- Activated charcoal
- Albuterol
- Aspirin
- Atropine
- Ceftriaxone (Rocephin)
- Corticosteroids, parenteral
- Dextrose 25%
- Diazepam, parenteral (Valium)
- Diphenhydramine, oral and parenteral (Benadryl)
- Dopamine
- Epinephrine (1:1,000, 1:10,000)
- Flumazenil (Romazicon)
- Glucagon
- Insulin
- Lidocaine
- Lorazepam, sublingual (Ativan)
- Morphine (MS Contin)
- Naloxone (Narcan)
- Nitroglycerin tablets, patches and spray
- Phenobarbital
- Saline solution
- Verapamil
- Xylocaine and Marcaine

The Office Emergency Policy Manual

The **office emergency policy manual** is a useful reference when your office experiences an emergency. Those manuals contain an emergency plan with assigned responsibilities for all employees. So when an emergency occurs, everyone will know immediately just what to do. You and the other staff members should know and be able to perform first-aid and CPR. Many clinics offer an annual renewal course of CPR/ First-Aid as a benefit and even hire an instructor to come to the office to provide the recertification.



The office manual doesn't need to be large to be complete.

See Table 8-2 for an example of the assigned roles that will be outlined in your office's emergency policy manual:

Table 8-2: Roles of Medical Staff During an Office Emergency²	
Staff Member	Role
Office Staff	Identify patients in need of emergency assistance as they arrive
	Regularly observe waiting room for distressed patients
	Advise waiting patients when a delay might occur
	When necessary, dial 911 and give location and description of emergency
	Keep the flow of patients moving out of the office
Medical Assistant	Transfer ill patient to designated treatment room
	Alert doctors and nurses of the emergency and the patient's location
	Bring emergency crash cart to the designated treatment room
	Measure patient's vital signs
	Start oxygen by face mask if oxygen saturation is less than 93 percent
	Assist with treatment as directed by doctors and nurses
Nurse	Assist doctor with medications and treatment
Doctors	Respond to emergency call
	First physician acts as code team leader
	Second physician controls airway
	Third physician assists in resuscitation, treatment

Another thing that you may find in your emergency manual are the *ABCs*—of the initial survey of the patient, that is.

The ABCs of an Emergency

The ABCs of an emergency are:



- AIRWAY
- BREATHING
- CIRCULATION

Consider these things first when you assess an unresponsive patient. You will learn more about the ABCs and the steps to perform the ABC evaluation later in this lesson.

When to Call Emergency Services

Most communities have a 911 system for telephone access to report emergencies. The communications operator at a local emergency medical services (EMS) provider will answer the call, take the information and alert the EMS, fire or police departments as needed. In localities without the 911 system, emergency calls are usually directed to the local ambulance, fire or police department. The information is then routed to the appropriate agency. You should know which emergency system your community uses. The telephone numbers should be prominently displayed by all telephones in the medical office.

Some communities have what is called an *enhanced 911 system*. The **enhanced 911** automatically identifies the caller's telephone number and location. If the telephone disconnects or the patient loses consciousness, the communications operator can still send emergency personnel to the scene.



If you are responsible for making the 911 call, make sure that you describe the emergency situation to the communications operator when you make the initial call. The operator will then know what level of emergency personnel and rescue equipment to send.

How to Document an Emergency Procedure

After the emergency has been handled, you'll then need to record the detailed information regarding the emergency situation and its handling. The emergency manual outlines who is in charge of the documentation. This report is called either an **accident** or an **incident report**. This becomes part of a patient's record, and all patient records can be used in court, so the form must be complete and accurate. This is just as important for an employee accident as it is for a patient.

The information necessary on an incident report is:

- Full name of injured or ill party
- Date and time of accident or emergency
- Address and phone number of injured party
- Notation as to whether the individual is a patient, visitor or office staff member
- Location of where incident occurred
- Name, address and signature of any witnesses to the accident
- Detailed description of the incident and conditions surrounding it
- Description of action taken, medications given, physician who examined the injured person and the statement of the patient
- Signature of person preparing report, with date and time of day

A printed form should be available with the previous information, which both the physician and her liability insurance company have approved. After the incident report is completed, follow the guidelines in the office emergency policy manual to route it to the appropriate personnel.

Are you getting an idea of the amazing variety of situations that you can be a part of as a healthcare office manager? There will be some quiet days in the office helping patients during their visits, while other days may present emergency situations and the need to think on your toes. Some days will be a combination of both. But you can be assured that no two days will be the same! And regardless of the type of day you encounter, as a successful healthcare office manager, you will be prepared to respond effectively and with confidence.

Let's pause here to review what you've learned so far with the following Practice Exercise.

Step 6 Practice Exercise 8-1

For questions 1 through 12, select the best answer from the choices provided.

1. **A(n) _____ is considered any instance in which someone becomes suddenly ill and requires immediate attention.**
 - a. emergency
 - b. emergency medical care
 - c. injury
 - d. life-threatening
2. **The goal of triage is to _____.**
 - a. treat as many people as possible
 - b. treat only those patients who need immediate attention
 - c. move emergency patients to the hospital as quickly as possible
 - d. divide patients into three categories

3. **When you hear a medical team member say “START” you know that means _____**
 - a. “Turn on the computers.”
 - b. “Run and get the crash cart!”
 - c. “simple triage and rapid treatment.”
 - d. “Stay there and restrain the patient.”

4. **One disadvantage of the advanced triage system is that _____.**
 - a. it is so complex that physicians and EMTs must attend special trainings to learn how to use it
 - b. it is so complex that only physicians and EMTs can determine which group a patient is in
 - c. only physicians are allowed to use it
 - d. it doesn't tell you what to do when the patient has minor injuries

5. **A(n) _____ is a small tag worn on a bracelet, neck chain or on the clothing bearing a message that the wearer has an important medical condition that might require immediate attention.**
 - a. universal medical identification tag
 - b. medical tag
 - c. id tag
 - d. bracelet

6. **All of the supplies, equipment and medications your office needs for an emergency are kept on the _____.**
 - a. front desk
 - b. counter in the designated treatment room
 - c. table in the waiting room
 - d. emergency crash cart

7. **The office's emergency policy manual may have all of the following in it EXCEPT _____.**
 - a. a list of all staff members and their roles in an emergency
 - b. procedures to follow to document an emergency
 - c. the steps to perform an emergency tracheotomy
 - d. how to assess the patient's airway, breathing and circulation

8. **It's important to accurately and completely document emergencies because ____.**
- a. more than likely, your office will be sued by the patient
 - b. it becomes part of the patient's medical record
 - c. all incident reports are reviewed by the local board of physicians
 - d. the doctor will lose her liability insurance if the documentation is wrong
9. **In communities without a 911 system, call ____ when you need emergency services.**
- a. the police department
 - b. your doctor's pager
 - c. the ambulance
 - d. the appropriate emergency service for the situation you're handling
10. **Every office must record the detailed information regarding an emergency situation and its handling. This report is called the ____.**
- a. demographics
 - b. incident report
 - c. documentation
 - d. emergency policy form
11. **When assessing an unresponsive patient, evaluate the airway, breathing and circulation. This is known as ____.**
- a. the ABCs
 - b. first-aid
 - c. triage
 - d. CPR
12. **An enhanced 911 system will ____.**
- a. assist you in determining a diagnosis for the patient
 - b. automatically send an ambulance
 - c. automatically identify the caller's phone number and location
 - d. automatically identify your location and send an ambulance, even if you can't explain the emergency

 **Step 7 Review Practice Exercise 8-1**

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



Step 8 Rescue Breathing and CPR

- Before you begin your study of specific emergencies, we should first cover the basics of emergency first-aid. The first two things you need to learn are *rescue breathing* and *CPR*. These techniques are used in many types of emergencies.

Respiratory (breathing) and **c**irculatory (blood flow) **e**mergencies occur for a variety of reasons, including choking, shock, allergies, drowning or electrical shock. When someone stops breathing, you will learn to give *artificial breathing* quickly. Without a constant supply of oxygen, brain damage or death

will occur in a matter of minutes. **A**rtificial breathing is literally breathing for another person. You provide the victim with enough oxygen to maintain life until he resumes breathing or until help arrives. You can perform artificial breathing in several ways. In the medical office, you will have a respirator or oxygen tank and mask, but elsewhere you will probably rely on *mouth-to-mouth resuscitation*.

When circulatory, or blood circulation, problems such as cardiac arrest, accompany the breathing problem, artificial, or **r**escue breathing, must be accompanied by chest compressions. This procedure is known as **c**ardiopulmonary resuscitation (**CPR**). We will cover the steps to perform CPR; however, you must take a certified basic life support class and maintain your certification. *It is important that you have current certification in CPR from a certified provider such as the American Red Cross or American Heart Association.*

You learned previously about the ABCs, the first procedure to perform when you reach the victim. These are also known as the *primary survey*, which will identify and correct any life-threatening problems. The **p**rimar**y** **s**urve**y** is a rapid evaluation, in less than 45 seconds, to determine the patient's status in the following areas:

A = Airway

B = Breathing

C = Circulation

To begin the primary survey, determine if the patient is responsive. Ask, "Are you OK?" If the patient does not respond, check to see if he is breathing. Place your head close to his face and listen for breath sounds. Do you feel any air coming from the nose or mouth? Is his chest rising up and down? If the answer to these questions is "No," then your next step is to clear a blocked airway.

Normal respiratory rates, by age:

Newborns: Average 44 breaths per minute

Infants: 20-40 breaths per minute

Preschool children: 20-30 breaths per minute

Older children: 16-25 breaths per minute

Adults: 14 to 18 breaths per minute

Older Adults: 19-26 breaths per minute

A = Blocked Airway

Common problems with the airway involve blockage by the tongue, vomit or a foreign body. The first procedure to perform is to carefully tilt the head back with one hand on the forehead while lifting the jaw with the other hand. If you are concerned that the victim may have a spinal, neck or head injury, do not move his head. Instead, use the **jaw-thrust maneuver**: kneel near the top of the victim's head, grasping the angles of the patient's lower jaw, and lift with both hands, one on each side, to displace the **mandible** (lower jaw) forward while tilting the head backward. This will move the tongue to clear the airway. If the lips close, retract the lower lip with your thumb. If mouth-to-mouth breathing is necessary, close the nostrils by placing your cheek tightly against them.

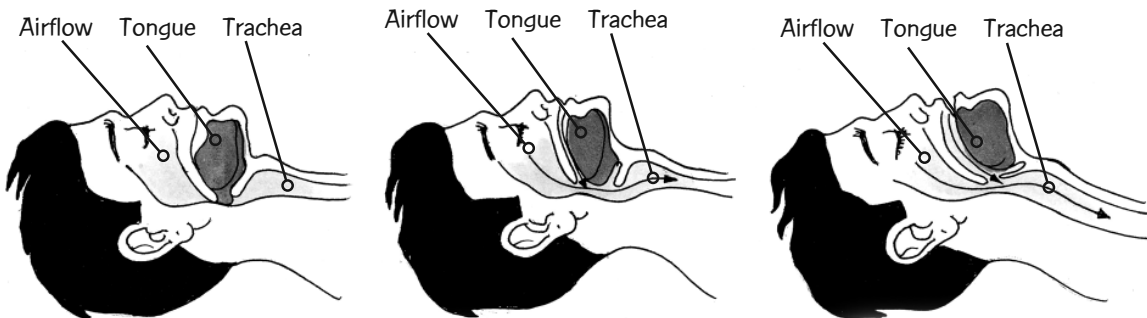


Swipe inside the mouth to find the blockage. If the patient is still not breathing and you cannot see the blockage, perform the following procedure.

Clear a Blocked Airway

What to Do:

1. Place the victim in a supine position.
2. Use the jaw-thrust maneuver to move the tongue from back of throat. Listen for air exchange at mouth and nose, and sense for exhaled air on rescuer's cheek.
3. Check for mouth obstruction. NOTE: Visible foreign matter and vomitus should be removed quickly. Liquids should be wiped out with covered middle and index fingers; solid material is swept out with a hooked index finger.
4. Check for air exchange. If none, then sit astride the victim's thighs. With fingers pointed towards the head, place the heel of one hand flat on the victim's abdomen, slightly above the navel.
5. Place your other hand in a like position over the first.
6. With your elbows straight, press inward and upward with quick thrusts to dislodge the block.



Another common cause of a blocked airway in adults is choking, or food in an air pocket while eating. This occurs when someone sucks partially chewed food into the windpipe when talking, laughing or coughing while eating. Children, on the other hand, can get toys, toy parts, buttons or candy and a variety of other objects caught in their throats that obstruct the airway. Pieces of food are also a problem for children, especially raw carrots and hot dogs. Most everyone is familiar with the dangers of filmy plastic sacks and bags because of all the warning labels, but one of the most common airway obstructers is the latex balloon. Safety authorities believe no young children should have a balloon unless it is made of mylar. Children ages four to eight require supervision if playing with or trying to inflate latex balloons.



Symptoms:

- Clutching the throat
- Inability to speak, cough or breathe

You will use the **abdominal thrust** to relieve a blocked airway due to a foreign body in a conscious person. You may know it as the **Heimlich maneuver**. Follow these steps to properly perform the Heimlich maneuver.

Heimlich Maneuver

What to Do:

1. While standing behind the victim, reach around the waist.
2. Clench one hand to make a fist and grasp your fist with the other hand.
3. Place the thumb side of the fist against the midline of the victim's abdomen between the waist and the rib cage.
4. Thrust fist inward and upward in quick, firm movements to move air out of the lungs with enough force to dislodge the block.
5. A choking victim who is by herself may use the abdominal thrust with the fist or may bend over a chair back or any hard object of appropriate height in order to simulate an abdominal thrust on herself.



If a patient is in an advanced stage of pregnancy or is very obese, abdominal thrusting will not be possible. Use a **chest thrust** to dislodge the material.

Chest Thrust

What to Do:

1. Stand behind the victim and place arms around the victim directly under the underarms.
2. Use the abdominal clenched fist technique, place the thumb over the sternum, place your hand over the fist and give firm thrusts, pulling straight back toward yourself.

B = Breathing

After ensuring that the victim's airways are clear, check his breathing. If the victim is still not breathing, the next step to take is mouth-to-mouth resuscitation. Follow these steps to perform rescue breathing.



Rescue Breathing

What to Do:

1. Determine whether unresponsive victim is breathing.
2. Position victim in supine position on firm surface.
3. Rescuer is positioned at victim's side near head and shoulders.
4. Check airway. Swipe the mouth to clear any blockage.
5. Use jaw-thrust maneuver to move the tongue from back of throat.
6. Assuming you do not have a respirator, position victim to open airway. Pinch nostrils together with fingers while placing heel of hand on forehead to maintain head tilt.
7. Take a normal breath, seal your mouth over victim's and breathe into victim's mouth for one second.
 - If the victim is an infant, place your mouth over the infant's mouth and nose and breathe gently for one second.
 - If the victim is a child, pinch the nostrils and place your mouth over the child's mouth and breathe gently for one second.
8. Turn your head to one side, listen and feel for return of air. Watch chest for movement. If breathing has not begun, adjust the victim's head tilt and chin lift, and try once more. Take a breath between each rescue breath. If patient is still not breathing normally, check the pulse.
9. Prepare to begin chest compressions.

C = Circulation

After the patient resumes breathing, the next focus is on circulation. Check for a carotid pulse by placing your index and middle fingers into the natural groove at the side of the victim's neck and below the ear. Check carefully because pulse will probably be weak. The pulse check should be done in conjunction with assessment for signs of circulation, which includes evaluation of the victim for breathing, coughing and movement. This assessment should take no more than 10 seconds. If the patient doesn't have a pulse, then CPR must be performed.

The following CPR procedure assumes the lone rescuer is a person without the benefit of devices to observe standard precautions. If you were in a situation where this procedure is performed occasionally, such as in a physician's office, additional equipment would be available. For example, gloves should be put on prior to Step 5, which involves placing a finger or fingers in the victim's mouth. A ventilation barrier device of some form should also be accessible to prevent transmission of pathogens to or from the victim. This device would be inserted or applied prior to Step 6.

If a second rescuer arrives, then the responsibility can be shared with one person continuously giving the chest compressions while the second gives two breaths immediately following each 30th compression. The procedure may be presented in a slightly different form when you take your CPR certification class. In that case, follow the procedure recommended by your certified instructor.

Standard guidelines previously indicated that CPR should continue until the rescuer is exhausted and can no longer continue. This has been modified for some situations. In a remote location, for example, where no help is or will be available, standard guidelines recommend that if no signs of life occur after 15 minutes, the chance that CPR alone can restore heartbeat is very slim, the victim has for all purposes died and there is no possibility of meaningful survival. The key to this evaluation is "no signs of life," which means no pulse, no gasping respiration, no maintenance of body temperature with progressive coloring of the skin and persistently fixed and dilated pupils. As hard as it may be to accept, continuation of CPR will not change the outcome. After following the blocked airway and breathing steps to take that you learned in the previous sections, and the patient has started breathing, but has no pulse, perform the following steps.

CPR for Adults

What to Do:

1. Victim must always be in a recumbent position on firm surface (floor or ground).
2. Rescuer is positioned at victim's side near head and shoulders.
3. Remove clothing covering the chest so you can see chest movement.
4. Locate the lower margin of the victim's rib cage and follow it to the notch where the ribs meet the sternum in center of chest.
5. Place index finger of your hand on lower end of sternum.
6. Place the heel of the other hand on lower sternum just above your index finger.
7. Place heel of both hands, one on top of the other, on sternum and lace fingers. Hold fingers high, away from the body.

8. Rise on your knees so your shoulders are directly over hands on victim's sternum. Lock your elbows and keep arms straight.
9. Use a smooth, even motion to push straight down on chest and compress about one and one-half to two inches for a count of 30 compressions. A count of one and, two and, three and, etc. will help you obtain correct time. (The rate of compressions is approximately 100 times per minute.)
10. Allow time for the chest to re-expand between compressions.
11. After administering 30 compressions, give victim two rescue breaths. Key Point: Do this without moving from your position beside body.
12. Repeat four cycles of compressions and respirations before pausing to check for breathing, signs of circulation and presence of carotid pulse. Key Point: If no pulse is felt, resume compressions and respirations. Check every few minutes.
13. You must not discontinue CPR unless victim recovers, someone takes over for you or a physician pronounces the victim dead. If you are in a remote location, consider the guidelines discussed previously.

Note: In March 2008, the American Heart Association added Hands-only CPR for bystanders who aid adult cardiac arrest victims outside the hospital setting. Hands-only CPR has two steps:

1. Call 911.
2. Push hard and fast in the center of the chest.



The CPR procedure has some variations when used for a child or infant. Infants are generally considered to be less than one year of age and children ages one to eight. Adult procedures are used for anyone over eight. As some steps vary slightly from those outlined above, the entire procedure beginning with checking for responsiveness is given.

CPR for Infants and Children

What to Do:

1. Gently shake and call to a child, or flick the bottom of an infant's foot to check for consciousness.
2. Tell another person to call 911.
3. Place infant or child on back on firm surface.
4. Use appropriate method to open the airway.
5. Perform rescue breathing.
6. Remove clothing from chest so you can watch movement.
7. Check pulse
 - **For infant:** Check pulse over brachial artery by putting your middle fingertips on inside of upper arm halfway between elbow and shoulder. At the same time keep airway open.
 - **For child:** Check carotid pulse on lower neck as for an adult. Check pulse in conjunction with assessment for signs of circulation, which includes evaluating victim for breathing, coughing or movement. This assessment should take no more than 10 seconds.
8. If pulse is present,
 - **For infant:** Continue rescue breathing until normal breathing occurs or help arrives.
 - **For child:** Continue rescue breathing until normal breathing occurs or help arrives.



9. If no pulse is present, start chest compressions.

For infant:

- Use the index and middle fingers to compress just below the nipples in center of chest.
- Press the chest down $\frac{1}{3}$ to $\frac{1}{2}$ of the chest depth.
- Give 30 compressions at a rate of 100 per minute.
- Count as one, two, three, four, five.
- Give two rescue breaths after each set of 30 compressions.

For child:

- Place the heel of only one hand between the child's nipples, at the tip of the breastbone.
- Press the chest down $\frac{1}{3}$ to $\frac{1}{2}$ of the chest depth.
- Give 30 compressions at a rate of 100 times per minute.
- Count as one and two and three and four and five.
- Give two rescue breaths after each set of 30 compressions.

10. Do 10 cycles of compressions and breaths, and then check for signs of circulation and pulse. NOTE: Do not take more than five seconds for this check.
11. Continue cycle of 30 compressions and two breaths until the victim resumes breathing and pulse returns, or until help arrives.

If a physician or an employee within a medical facility performs CPR, you must record the incident on a chart. If the victim is not a patient, create a new chart, and record the incident. As soon as care is provided, a doctor-patient relationship is established, and there are legal responsibilities.

Take a moment to review the material you've just learned with the following Practice Exercise.

 **Step 9 Practice Exercise 8-2**

- For questions 1 through 12, read the scenario, then complete the sentences to describe the procedure to administer rescue breathing and CPR.

My neighbor's 8-year-old child Sharona was floating face-down in a shallow pool when I found her. I quickly pulled her out and laid her on her back. I documented the emergency for the EMTs as follows:

1. First, I called to some neighbors to dial _____.
2. Then I asked Sharona, “_____ okay?” She didn't respond.
3. The first thing I performed was the _____ survey, or ABCs. I couldn't find a pulse.
4. I placed my head close to her face and listened for _____ sounds. I also watched her chest for any movement. She wasn't breathing, so I checked for a(n) _____ airway.
5. I performed the _____ maneuver and swiped inside her mouth. There was no blockage, so I began rescue breathing.
6. I _____ her nostrils, placed my mouth over her _____ and gently breathed into her mouth for _____ second(s). There was no breath, so I repeated the rescue breath once more.
7. Still no breath. I was in a panic now, but I kept my head and readied myself to begin chest _____.
8. I moved Sharona's swimsuit aside so I could see her chest, and knelt beside her head. I found the tip of her _____ and placed the heel of _____ hand(s) just below it, between the nipples.
9. I began compressions, gently pushing her chest down about _____ to _____ of the chest depth. I counted: one, two, three, four to keep the pace at _____ compressions per minute.
10. After _____ compressions, I did _____ rescue breaths. Sharona began coughing and sputtering—the most beautiful sounds I'd ever heard!
11. I checked her pulse, which had returned, and wrapped her in a large towel. By this time the _____ had arrived with an ambulance, and they took over.
12. It was a terrifying experience, but I'm so glad I had certification in the Red Cross's _____ training!

Step 10 Review Practice Exercise 8-2

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

Step 11 The Top Ten List

Before you begin your emergency training, let's review the top ten emergencies you'll encounter in the medical office. Drum roll, please! The top ten emergencies are:³

1. Anaphylaxis
2. Asthma Complications
3. Cardiac Arrest
4. Diabetic Emergencies
5. Drug Overdose
6. Impaired Consciousness
7. Poisoning
8. Psychiatric Disorder
9. Seizure
10. Shock

We'll cover all ten of these emergencies—what they are, how to recognize them, and what you can do when they occur.

1. Anaphylaxis

Anaphylaxis is a rapid, severe immune reaction to an *allergen* that can quickly lead to death. An **allergen** is any substance that enters the body and causes a sensitive reaction by the immune system. The immune system considers the allergen to be a foreign body and reacts by attacking it. The attack is what causes the symptoms of an allergic reaction. An allergen can be a food, insect venom, medications or pollen. An allergen can also enter the body in any manner—by ingestion, inhalation, injection or absorption through the skin or mucous membranes. A normal allergic response to many of these irritants is very common.

However, when the immune system overreacts to the allergen, anaphylaxis occurs and the attack is especially severe. Anaphylaxis can lead to airway obstruction, *anaphylactic shock*, cardiovascular collapse and death. Immediate attention is important as soon as symptoms appear.

Anaphylactic shock is the most dangerous form of anaphylaxis. This is an acute generalized allergic reaction that occurs within minutes to hours after the body has been exposed to a foreign substance to which it is oversensitive.

Symptoms:

Allergic reaction:

- Itching
- Rash
- Redness
- Tightness in chest or throat
- Unexplained warmth

Anaphylaxis:

All of the above, plus:

- Anxiety
- Choking
- Congestion
- Coughing
- **Diaphoresis** (profuse sweating commonly associated with shock and other medical emergency conditions)
- Dizziness, fainting or loss of consciousness
- Dry, pale or blue skin
- Headache
- Hives
- Hypotension (low blood pressure)
- Itchy, red or watery eyes
- Low pulse rate
- Nausea, vomiting or diarrhea
- Shortness of breath
- Swelling
- Tachycardia (rapid heart beat)

What to Do:

1. Call 911 immediately.
2. If a physician is present, she may treat the patient with epinephrine to facilitate breathing and circulation, an antihistamine to reduce swelling or a steroid to minimize the immune system's reaction.

2. Asthma Complications

Asthma is a chronic inflammation of the airways in the lungs. Asthma can become severe in reaction to allergens or other irritants, or when combined with other respiratory or gastrointestinal conditions. Complications can also occur in response to stresses like exercise, old age or pregnancy.

Symptoms:

- Coughing
- Shortness of breath
- Tightness in chest
- Wheezing
- Labored breathing
- Blue skin
- Peak flow meter reading of 50 percent or less of personal best

Assist with Asthma Complications

What to do:

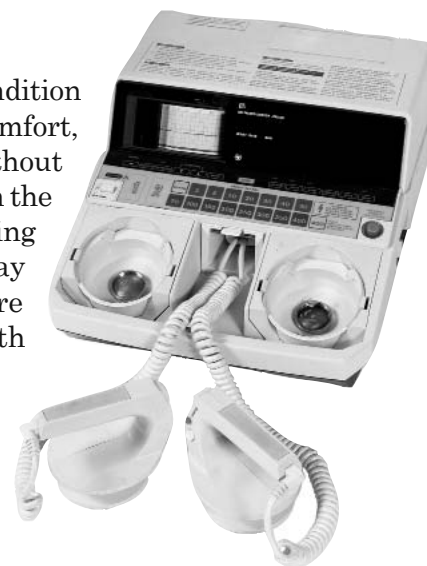
1. Ask the patient if she has an inhaler, and if she has not used it, do so now.
2. A healthcare professional should take a peak flow reading—if peak flow is 50 percent or less, continue with emergency treatment.
3. If there is no doctor present, call 911.
4. A healthcare professional should administer oxygen.
5. Help to calm the patient.
6. An MA will monitor vital signs.
7. If a doctor is present, she may wish to administer epinephrine, prednisone, leukotriene inhibitors or other medications.
8. A mechanical ventilator may be required to keep the patient alive.

3. Cardiac Arrest

Cardiac arrest, or heart attack, is a serious, sudden heart condition usually characterized by varying degrees of chest pain or discomfort, weakness, sweating, nausea, vomiting and **arrhythmia** (without rhythm), sometimes causing loss of consciousness. It occurs when the blood supply to a part of the heart is interrupted, causing scarring and death of the local heart tissue. Since the area affected may be large or small, the severity of heart attacks vary, but they are often a life-threatening medical emergency which demand both immediate attention and a call to EMS.

Symptoms:

- Tightness of the chest
- Pain radiating down one or both arms
- Pain radiating into the left shoulder and jaw
- Rapid and weak pulse
- Diaphoresis
- Agitation



In the case of a severe heart attack, a defibrillator might be needed to get the heart beating again.

Time is critical, so prompt, appropriate treatment within the first hour of an attack can save the patient's life and reduce damage. Normally an MA, nurse or physician will assist with this emergency. If a physician or other medical staff is not present, follow these steps.

Assist with Cardiac Arrest

What to Do:

1. Call 911. You are NEVER wrong to call emergency services. Do not hesitate. Ask another staff member to call the physician.
2. If the patient has medication such as nitroglycerine, it should be given immediately, even in the reception room if necessary.
3. Administer oxygen while waiting for EMS. Provide reassurance.
4. Loosen patient's clothing, position him sitting up as high as possible. A cool cloth to the forehead or around the neck is soothing while you wait for assistance. Cover the patient with a blanket to treat shock.
5. Monitor vital signs until paramedics arrive. Write these down to report to the paramedics and for your own documentation.
6. Do not waste time transferring the patient to an exam room. Keep him still.

4. Diabetic Emergencies

Diabetes is a disease in which blood glucose levels are above normal. Most of the food we eat is turned into glucose, or sugar, for our bodies to use for energy. The pancreas, an organ that lies near the stomach, makes a hormone called insulin to help glucose get into the cells of our bodies. When you have diabetes, your body either doesn't make enough insulin or can't use its own insulin as well as it should. This causes sugar to build up in your blood.

Diabetes can cause serious health complications including heart disease, blindness, kidney failure and lower-extremity amputations. Diabetes is the sixth leading cause of death in the United States.

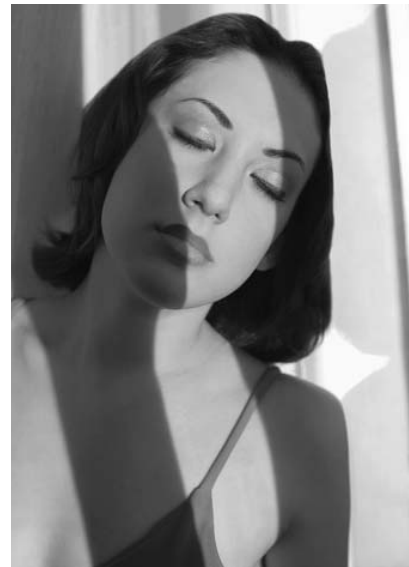
Symptoms:

People who think they might have diabetes must visit a physician for diagnosis. They might have **SOME** or **NONE** of the following symptoms:

- Frequent urination
- Excessive thirst
- Unexplained weight loss
- Extreme hunger
- Sudden vision changes
- Tingling or numbness in hands or feet
- Frequent fatigue
- Very dry skin
- Sores that are slow to heal
- More infections than usual

Nausea, vomiting or stomach pains may accompany some of these symptoms in the abrupt onset of insulin-dependent diabetes, now called **Type I diabetes**.

Diabetic patients may present emergency situations by becoming *hyperglycemic* or *hypoglycemic*. You will need to know how to respond to both situations.



Frequent fatigue may indicate the presence of diabetes.

Hyperglycemia

Hyperglycemia is caused by an increased amount of sugar in the blood. Eating too many carbohydrates, infection, fever, emotional stress or failing to take adequate insulin may trigger this response. If the condition remains untreated, the patient will fall into a **diabetic coma**. Before falling into a coma, the patient might experience the following symptoms:

Symptoms

- Confusion
- Excessive hunger or thirst
- Dizziness
- Frequent urination
- Weakness
- Nausea or vomiting
- Rapid pulse
- Deep, rapid breathing
- Dry, warm skin
- Very strong sweet, fruity breath odor
- Gradual onset of symptoms

Alerts of Hyperglycemia or Hypoglycemia

What to Do:

1. Ask the patient questions. Can he talk? He may know his condition.
2. Ask the patient if insulin or food has been taken, and when.
3. Is the breath fruity or sweet-smelling?
4. Are respirations deep or shallow?
5. Fruity, sweet-smelling breath indicates hyperglycemia.
6. Deep breathing indicates hyperglycemia; shallow breathing indicates hypoglycemia.

If you cannot determine the condition:

1. Give the patient a little sugar regardless—hypoglycemia can cause irreversible brain damage.

If the patient lapses into unconsciousness, he may die if not treated quickly. Follow the steps outlined in the next procedure.

Hyperglycemia

What to Do:

If the patient is conscious:

1. Have the patient check his insulin/glucose level.
2. Give the patient a little sugar and see if his condition improves.
3. The patient should self-administer insulin if his personal readings indicate that his blood sugar levels are too high.

If the patient is unconscious:

1. Call 911 immediately.
2. If a physician is present, she may administer insulin.
3. The patient should be transported to the nearest hospital.
4. The patient will be checked for positive diagnosis and reduction of blood sugar.

Hypoglycemia

Hypoglycemia may occur from an excess amount of insulin in the body. This can happen if the patient has not eaten in regularly measured amounts, if he vomits after taking insulin, if he is engaging in excessive exercise or if he takes too much insulin. Left untreated, the patient will eventually experience **insulin shock**, which is characterized by fainting, seizure or coma.

Symptoms:

- Muscle weakness
- Headache
- Anxiety
- Dizziness
- Mental confusion
- Pounding heartbeat
- Shallow, rapid breathing
- Excessive hunger
- Diaphoresis
- Cold, pale and moist skin
- Unconsciousness, with or without seizures
- Rapid onset of symptoms

Hypoglycemia

What to Do:

If the patient is conscious:

1. Give the patient a sugar, such as candy, and a fat such as peanut butter, to stabilize glucose levels.

If the patient lapses into unconsciousness:

1. A healthcare professional should give the patient an intravenous form of glucose, either as an IV fluid or injectable.
2. Stay with the patient until he becomes conscious.

If the patient doesn't regain consciousness:

1. Call 911.
2. The patient must be transported at once to a hospital.

5. Drug Overdose

A drug overdose can be intentional or accidental. Taking too much of a prescribed medication or taking the wrong medication can cause a **drug overdose**. Overuse of recreational drugs or attempts of suicide are considered intentional overdose. No matter the cause, a drug overdose is potentially life-threatening, so your quick actions can make all the difference! Symptoms will vary according to the type of drug taken, but there are some general signs you can watch for:

Symptoms:

- Unusual or absent vital signs
- Chest or abdominal pain
- Diarrhea, nausea or vomiting
- Unusual skin condition—either too cold or too hot, moist or dry
- Shortness of breath
- Confusion or sleepiness

Assist with Drug Overdose

What to do:

1. Call 911.
2. If possible, find out what the patient took, how much and when. If the patient has the bottle, keep it and give to EMTs when they arrive.
3. Treatment varies according to type of drug ingested. Possible treatments include stomach pumping, administration of activated charcoal or if one is available, an **antidote**—another medication that can offset the effects of the overdosed drug. These treatments should be given by trained emergency doctors.
4. If you suspect that the patient may hurt himself or others he may need to be physically restrained. Get help from other staff members.
5. If a physician is present, he may administer a sedative to calm the patient until help arrives.

6. Impaired Consciousness

Consciousness, or being aware of your surroundings, can be **impaired**, or harmed, by several different conditions. The three most common causes of impaired consciousness are fainting, diabetic coma and shock.

When you assess an unconscious patient, it helps to have some guidelines to go by. You can remember the acronym, **AVPU**, to help you remember how to assess the patient's level of consciousness:

- A = Awake and alert
- V = responds to voice
- P = responds only to pain
- U = unconscious; no response

You're probably familiar with unconsciousness in the form of *fainting*.

Fainting

Fainting, or **syncope**, occurs when the patient loses consciousness and there isn't enough blood supply to the brain. If a patient in the office or clinic "feels faint," she probably feels lightheaded and weak. Fainting in itself is not a dangerous condition, but it may indicate that there is something more serious going on.

Symptoms:

- Pale, perspiring, cold or clammy skin
- Nausea
- Lack of balance

Assist a Person Who Fainted

What to Do:

1. Gradually lower patient to a flat surface.
2. Loosen any tight clothing.
3. Check breathing.
4. Check for any symptoms of a life-threatening emergency.
5. Elevate the legs if there is no back or head injury.
6. If vomiting occurs, place the patient on her side.
7. Apply a cold compress to the forehead.
8. A healthcare professional should monitor vital signs to determine if she is stabilized before allowing her to leave.

Fainting is not serious, but 911 or EMS may need to be called if vital signs are abnormal—the fainting could be a symptom of a more complex medical condition.

You're already familiar with the symptoms and treatment for diabetic coma. We'll look at impaired consciousness as a result of shock in Emergency number 10.

7. Poisoning

Poison is a substance that causes injury, illness or death, especially by chemical means. It can be eaten, drunk, inhaled, injected or absorbed through the skin. The table below outlines the various causes and symptoms of poisoning.

Common Types of Poisoning		
Cause	Possible Substances	Symptoms
Food poisoning	Spoiled food, such as meat, eggs, seafood, prepared dishes	Vomiting, diarrhea
Carbon monoxide	Cigarette smoke, gas heaters, exhaust pipes from car	Headaches, dizziness, vomiting, chest pain, blurred vision, loss of consciousness
Bee sting	Wasp, bee or yellow jacket bee sting	Difficulty breathing, swelling, high blood pressure

General First Aid for Poisoning

What to Do:

1. Ask the patient what was taken, how much and when.
2. If the poison is an inhalant, take the patient to an area with fresh air. Call 911. The patient may require pulmonary resuscitation until help arrives and then will need 100% oxygen and immediate care in a hospital.
3. If the poison is affecting the skin, remove the clothing and wash the skin thoroughly unless you suspect that a dry powder is the cause of the poisoning.
4. If the poison is in the eye, flush the eye thoroughly for at least 15 minutes.
5. If the poisoning was ingested, dilute the poison with large amounts of warm water or milk.
6. A healthcare professional should induce vomiting if the poison is:
 - A strong alkali, acid or petroleum product
 - Plants or mushrooms
 - Bacterial poisoning from contaminated shellfish
 - Give the patient syrup of ipecac or activated charcoal or press the back of the patient's tongue to induce vomiting.
7. A healthcare professional should not induce vomiting if the poison is:
 - A corrosive substance such as a household cleaner
8. After you have performed this initial treatment, call the poison control center (1-800-222-1222) for further advice.
9. Keep the patient as quiet as possible.

8. Psychiatric Disorder

A **psychiatric disorder** involves a recurring thought process or behavior that causes harm to the individual and is not considered normal. Psychiatric disorders can include many different conditions, including depression, bipolar disorder and schizophrenia. Often these conditions don't develop until a person reaches his late teens to early twenties. Researchers don't know why these disorders develop, but they can be triggered by a **stressor**, a life-changing event such as losing your job, parents' divorce or even a positive change such as going to college. Alcohol and drugs can also trigger a mental disorder.⁴

Psychiatric conditions can develop over time or can occur suddenly, creating a *psychiatric emergency* in your office. A **psychiatric emergency** is any behavior by a patient or other visitor that has the potential to cause harm to himself or others. A patient who suddenly begins throwing equipment and instruments in the treatment room because a nurse advised him to get a flu shot would be considered a psychiatric emergency. Another example might be a patient who begins mumbling incoherently and doesn't respond to your voice. It can be a scary situation for you, but there are signs you can watch for in patients to find out if a psychiatric emergency is happening in your office.

Symptoms:

- Confusion
- Difficulty concentrating
- Sudden change in mood
- Violent behavior
- Inability to function
- Hallucinations
- Paranoia
- Unreasonable anger or sadness
- Recurrent thoughts of death or suicide
- Increase in risky behavior
- Hearing voices

Assist in a Psychiatric Emergency

What to Do:

1. Notify the physician and staff immediately.
2. Call 911 as directed.
3. Try to calm the patient and any family members present.
4. A healthcare professional should take the patient's vital signs if possible.
5. Document the patient's behavior.

9. Seizure

A **seizure** is an episode of **spasms** (involuntary muscle contractions), fainting and loss of motor control due to abnormal activity in the brain. Seizures may occur when the patient has high body temperature, head injuries, brain disease or a brain disorder, such as epilepsy. A **Grand Mal seizure** is a severe involuntary contraction of muscles that first causes the patient to become rigid and then to have uncontrollable movements. The patient becomes unconscious and may be injured during the seizure.

Symptoms:

- Skin of the face and lips appears bluish due to lack of oxygen
- No breathing
- Loss of bladder and bowel control
- Tongue biting

When the seizure has stopped:

- Confusion
- Complaint of headache and exhaustion

A **Petit Mal seizure** is less dramatic but still a significant event.

Symptoms:

- Inability to respond (but not loss of consciousness)
- Staring
- Tremors or somewhat less obvious rigidity and movements

Assist During a Seizure

What to Do:

During the Convulsive Phase:

1. Do not restrain movement.
2. Move objects out of the way that might cause injury.
3. Do not force any object between the patient's teeth or it could cause vomiting, aspiration or spasm of the larynx.

Following the Convulsion:

1. Turn the head to the side to prevent choking from profuse salivation.
2. Allow the patient to rest or sleep after the seizure is over.
3. Artificial respiration should be given if necessary.
4. Provide emotional support as the patient regains composure.
5. Try to alleviate any feelings of embarrassment.

10. Shock

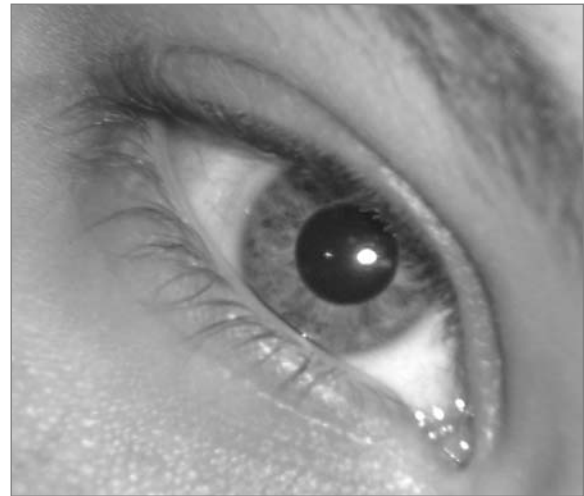
A lack of oxygen to the individual cells of the body causes **shock**, which is an immediate response by the body tissues when they aren't receiving oxygen.

The body initially adjusts for shock by increasing the strength of contractions of the heart, increasing the heart rate and constricting the blood vessels. As shock progresses, the body has difficulty trying to adjust and eventually tissues and body organs will sustain such severe damage that the shock becomes irreversible.

Types of Shock

Shock is one of the leading causes of death in a critically ill person. There are several types of shock, and can be caused by various factors.

- The loss of blood or other body fluids causes **hypovolemic shock**. If hypovolemic shock occurs due to blood loss, it can also be called **hemorrhagic shock**. Dehydration caused by diarrhea, vomiting or heavy sweating can also lead to hypovolemic shock.
- **Cardiogenic shock** is the most extreme form of heart failure, occurring when the function of the left ventricle is so compromised that the heart can no longer adequately pump blood to body tissues.
- **Neurogenic shock** is caused by a dysfunction of the nervous system. The diameter of the blood vessels in the body can no longer be controlled, which leads to dilation. Once the blood vessels are dilated, there is not enough blood in the circulation to supply the body with oxygen, thus causing shock.
- **Anaphylactic shock** is an acute generalized allergic reaction that occurs within minutes to hours after the body has been exposed to a foreign substance to which it is oversensitive.
- **Septic shock** is caused by a generalized infection of the bloodstream in which the patient appears seriously ill. It may be associated with an infection such as pneumonia or meningitis, or it may occur without an apparent source of infection, especially in infants and children. The patient may have become ill suddenly, or the illness may have developed over several days.



Observe the patient's pupils to check for shock.

Symptoms:

- Sudden drop in blood pressure
- Pale or discolored, cold, clammy skin
- Weak or rapid pulse
- Irregular, shallow or rapid breathing
- General weakness
- Dilated pupils
- Anxiety or confusion
- Reduced urination
- Loss of consciousness

Manage a Patient in Shock**What to Do:**

Remember: Shock can be the result of many types of medical emergencies. The following should serve as a general guideline for managing a patient in shock.

1. Call 911.
2. Check your ABC's and make sure the patient is breathing and has a pulse.
3. A healthcare professional should control any bleeding.
4. A healthcare professional should administer oxygen.
5. A healthcare professional should immobilize the person due to possible spinal injuries.
6. A healthcare professional should splint any fractures.
7. Prevent loss of body heat by covering the victim with a blanket.
8. Ensure patient is transported to the closest hospital as soon as possible.

Before we wrap up this lesson, let's review the material you've learned about the "Top Ten Emergencies" you'll encounter in the medical office with the following Practice Exercise.



 **Step 12 Practice Exercise 8-3**

□ For questions 1 through 10, match the emergency on the left with its description on the right.

- | | |
|---------------------------------------|--|
| 1. ____ Anaphylaxis | a. sudden arrhythmia caused by blockage of blood supply to the heart |
| 2. ____ Asthma Complications | b. ingesting a substance that causes injury, illness or death |
| 3. ____ Cardiac Arrest | c. a severe case of chronic inflammation of the airways in the lungs |
| 4. ____ Drug Overdose | d. a lack of oxygen to the body's cells |
| 5. ____ Diabetic Emergencies | e. having too much sugar or insulin in the blood |
| 6. ____ Impaired Consciousness | f. a rapid, severe immune reaction to an allergen that can quickly lead to death |
| 7. ____ Poisoning | g. an episode of spasms, syncope and loss of motor control due to abnormal activity in the brain |
| 8. ____ Psychiatric Disorder | h. loss of awareness of your surroundings as with syncope |
| 9. ____ Seizure | i. a recurring thought process or behavior that causes harm to the individual and is not considered normal |
| 10. ____ Shock | j. taking too much of a prescribed medication or recreational drug |

For questions 11 through 19, select the best answer from the choices provided.

11. **The body's immune system considers a(n) ____ to be a foreign body and reacts by attacking it.**
- a. anaphylaxis
 - b. allergen
 - c. vaccine
 - d. white blood cell
12. **Complications such as exercise, old age or pregnancy can lead to a(n) ____.**
- a. occurrence of hypoglycemia
 - b. episode of anaphylactic shock
 - c. seizure
 - d. asthma emergency

13. **Signs of drug overdose include all of the following, EXCEPT ____.**
- unusual or absent vital signs
 - diarrhea, nausea or vomiting
 - seizures
 - an unusual skin condition—either too cold or too hot, moist or dry
14. **____, if left untreated, can lead to diabetic coma.**
- Hyperglycemia
 - Hypoglycemia
 - Insulin shock
 - Diaphoresis
15. **When there isn't enough blood supply to the brain, ____ can occur.**
- hyperglycemia
 - insulin shock
 - syncope
 - cardiac arrest
16. **If a patient has been poisoned by ____, the symptoms may include headaches, dizziness and vomiting.**
- food
 - carbon monoxide
 - carbon dioxide
 - insect venom
17. **Often, psychiatric disorders such as depression, bipolar disorder and schizophrenia don't develop until ____.**
- puberty
 - a stressor causes it
 - a person reaches his late teens to early twenties
 - middle age
18. **Mr. Clark arrived today for his biopsy results. After Dr. Patterson informed him that the brain tumor was malignant and can't be removed, Mr. Clark began crying and asked you to call his wife. Is this a psychiatric emergency? ____**
- Yes, Mr. Clark has depression and should be medicated.
 - No, this is a normal reaction to hearing devastating news.
 - Yes, crying in the doctor's office isn't normal, and Mr. Clark should be sent to the hospital.
 - No, Mr. Clark has severe depression, which isn't considered a psychiatric disorder.

19. When the body increases heart rate and constricts blood vessels in response to a lack of oxygen, this condition is called ____.
- a. a Grand Mal seizure
 - b. spasms
 - c. cardiac arrest
 - d. shock

For question 20, fill in the blanks to define the acronym AVPU, which helps you remember how to assess a patient's level of consciousness:

20.

A = _____ and _____
V = _____ to _____
P = _____ only to _____
U = _____ or _____

 **Step 13 Review Practice Exercise 8-3**

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

 **Step 14 Lesson Summary**

- Wow! We've covered a lot in this lesson—your first taste of the life-saving procedures you may be a part of as a healthcare office manager. These basic techniques will provide a solid foundation for you to work from in upcoming lessons and in your career! From a fainting spell to a heart attack, you now have the knowledge to act with confidence, speed and accuracy until emergency help arrives. Be sure to study your supplement, “First Aid Manual” that contains many more first-aid techniques for a variety of emergencies. This is a handy guide to keep with you at all times.

Take a moment now to call your local Red Cross chapter or hospital to find out where to enroll in an American Heart Association first-aid and CPR program. This is the next step in your training to become a healthcare office manager. And remember, you should recertify at least every two years to keep your skills up to date.

Congratulations! You're almost finished with the first instruction pack in your Healthcare Office Manager course. When you've reviewed your lesson and you feel comfortable with the material, test your knowledge with the following quiz.

 **Step 15 Mail-in Quiz 8**

- ❑ Follow the steps to complete the quiz.
 - a. Be sure you've mastered the instruction and the Practice Exercises that this quiz covers.
 - b. Mark your answers on your quiz. Remember to check your answers with the lesson content.
 - c. When you've finished, transfer your answers to the Scanner Answer Sheet included. Use only blue or black ink on your Scanner Answer Sheet.
 - d. **Important!** Please fill in all information requested on your Scanner Answer Sheet or when submitting your quiz online.
 - e. Submit your answers to the school via e-mail, mail, fax or, to receive your grade immediately, submit your answers online at www.uscareerinstitute.edu.

Mail-in Quiz 8

For questions 1 through 7, select the best answer from the choices provided. Each question is worth 2.5 points.

1. **While fainting is typically not serious in itself, _____ should be monitored since the problem may be indicative of a more complex medical condition.**
 - a. seizures
 - b. vital signs
 - c. sleep symptoms
 - d. circulation

2. **_____ can be ingested, absorbed, inhaled, injected or acquired from bites and stings.**
 - a. Pathogens
 - b. Drugs
 - c. Poison
 - d. Insulin

3. **When a breathing problem occurs with cardiac arrest, artificial breathing must be accompanied by _____.**
 - a. intravenous feeding
 - b. circulation
 - c. chest compressions
 - d. nothing else

4. Which of the following shows the key steps to assist a patient in shock? _____
- Call 911; check the ABCs; control any bleeding.
 - Let the patient sleep; call 911 only if conditions worsen.
 - Let the patient sleep; check the ABCs every 24 hours.
 - Move the patient quickly to a seated position; control any bleeding.
5. Considering the proper steps to perform CPR, which of the following is correct? _____
- The rescuer should pause after every cycle of compressions and check for breathing.
 - The rescuer's middle finger should be placed farthest from the head on the lower end of the sternum.
 - The rescuer should be positioned at the victim's side, near the head and shoulders.
 - The rescuer should give two mouth-to-mouth resuscitations after every 15 compressions.
6. _____ is considered the single most important way you can prevent the spread of infection.
- Using sterile gloves
 - Using gloves
 - Hand washing
 - Using a disinfectant
7. When you wash your hands, be sure to _____.
- wet hands and apply soap using a circular motion and friction
 - remove all jewelry, including your wedding band
 - use a nail brush on your nails every time you wash
 - hold hands pointed upward under the water to rinse them

Demonstrate your knowledge of the START triage system. For questions 8 through 14, select each victim's START level based on his or her injury. Each question is worth 2.5 points.

8. ____ Patient A lost a finger, but it is on ice and may be saved with immediate surgery. a. Deceased
b. Immediate
9. ____ Patient B has a pulse, but is not breathing. c. Delayed
d. Minor
10. ____ Patient C suffered a superficial head wound and the bleeding has stopped.
11. ____ Patient D has a history of heart disease. She is experiencing chest pain, weakness and nausea.
12. ____ Patient E has no pulse. Rescue breathing and CPR at the job site were unsuccessful. Patient's lips are blue and the body is cool to the touch.
13. ____ Patient F is clutching his throat. He can't speak, cough or breathe.
14. ____ Patient G carried in Patient F. He has been trying the Heimlich maneuver on his friend with no success. He is visibly upset, weakened and his pulse is rapid. Blood pressure is high.
15. In questions 8 through 14, the level ____ patients will need less help than the others. (2.5 points)
16. In questions 8 through 14, the level ____ patients will be transported to the hospital immediately. (2.5 points)
17. In questions 8 through 14, the level ____ patients will be left where they are. (2.5 points)
18. In questions 8 through 14, the level ____ patients will be transported to the hospital after the other victims. (2.5 points)

For questions 19 through 40, select the best answer from the choices provided. Each question is worth 2.5 points.

- 19. The advanced triage system is used only by physicians and emergency personnel because ____.**
- a. it is so complex
 - b. patients' conditions can change rapidly
 - c. it is cumbersome and confusing
 - d. it is not used very often
- 20. This morning you were answering the phones while the receptionist was taking a break. You answered a call to discover a distraught patient on the line. Her speech was slurred and she seemed confused. You immediately ____.**
- a. introduced yourself
 - b. asked her if this was an emergency
 - c. gave the phone to the nearest nurse or physician
 - d. dialed 911 on the other line
- 21. Your physician always counsels his patients who are diabetic, asthmatic or who have a heart condition to wear a(n) ____.**
- a. cell phone
 - b. Bluetooth headset for their cell phone
 - c. insurance card pinned to their shirt
 - d. universal medical identification tag
- 22. Chronic, insidious, urgent, sudden, severe and life threatening are ways to describe ____.**
- a. the severity of a poisoning
 - b. levels of emergency severity
 - c. levels of triage assessment
 - d. the severity of a cardiac arrest
- 23. In the event of an emergency, a ____ will likely transfer the ill patient to the treatment room.**
- a. healthcare office manager
 - b. medical assistant
 - c. nurse
 - d. physician

24. A _____ will likely dial 911 and give the location and description of the emergency.
- a. healthcare office manager
 - b. medical assistant
 - c. nurse
 - d. physician
25. A(n) _____ will bring the emergency crash cart to the treatment room.
- a. EMT
 - b. medical assistant
 - c. nurse
 - d. physician
26. A _____ will assist the doctor with medications and treatment.
- a. healthcare office manager
 - b. medical assistant
 - c. nurse
 - d. physician
27. A _____ will act as code team leader in an emergency.
- a. healthcare office manager
 - b. medical assistant
 - c. nurse
 - d. physician
28. A _____ will measure patient's vital signs.
- a. healthcare office manager
 - b. medical assistant
 - c. nurse
 - d. physician
29. When you perform the Heimlich maneuver, place the thumb side of the fist against the midline of the victim's abdomen _____.
- a. at the waist
 - b. over the ribcage
 - c. between the waist and the ribcage
 - d. over the chest

30. To perform the jaw-thrust maneuver, you will ____.
- lift the patient's upper jaw while tilting the head forward
 - lift the patient's lower jaw while tilting the head forward
 - lower the patient's upper jaw while tilting the head back
 - lift the patient's lower jaw while tilting the head back
31. Following a seizure, you should ____.
- restrain the patient's movement
 - turn the head to the side to prevent choking
 - do not force any object between the patient's teeth
 - always give artificial respiration
32. Hallucinations, paranoia and unreasonable anger or sadness are all possible symptoms of ____.
- depression
 - epilepsy
 - a psychiatric disorder
 - a terminal illness
33. An ambulance brings four men who were in a serious car accident to the emergency room. They suffer from head injuries, shock, hemorrhaging and broken bones. Following that, a father and his two children arrive with severe food poisoning. Next, a man with a fractured femur arrives at the ER. Using the concept of triage, the hospital should treat ____.
- all patients in the order of their arrival
 - the least serious injuries first, since they will take less time
 - the men in the car crash, then the man with the fractured femur, then the food poisoning victims
 - the food poisoning victims, then the men in the car crash, then the man with the fractured femur
34. Megan suffers from an ulcer. Her condition would be classified as ____.
- chronic
 - urgent
 - severe
 - life-threatening

- 35. Megan's doctor discovers her ulcer is bleeding internally. Megan's condition would now be classified as ____.**
- chronic
 - urgent
 - severe
 - life-threatening
- 36. Alcohol wipes, gloves, defibrillators and dopamine are all ____.**
- used to treat sudden injury
 - defined in the emergency policy manual
 - found in the emergency kit
 - part of the ABCs of an emergency
- 37. Seven-year-old Marta ate a handful of mushrooms from her backyard. You should ____.**
- induce vomiting
 - not induce vomiting
 - give her large amounts of warm milk
 - ask Marta questions and encourage her to talk so she stays conscious
- 38. You're enjoying dinner with your friend, when a woman at the table next to you clutches her throat. Her face turns bright red. She is choking on her pasta. You should ____.**
- give her the Heimlich maneuver
 - lay her on the ground and swipe your finger in her mouth
 - perform the chest thrust
 - give her CPR immediately
- 39. While walking his dog in a busy park, Darren finds a man lying unconscious near the playground. Darren immediately begins CPR on the victim. He performs CPR for over 15 minutes, and the man shows no signs of life. Darren should ____.**
- discontinue CPR and being administering the Heimlich maneuver or chest thrust
 - call 911 and ask the operator to declare the man dead
 - discontinue CPR after 15 minutes, since that alone will not save the man
 - continue CPR until the man recovers, someone takes over or a physician pronounces the man dead

40. Sally has suffered from diarrhea for the past four days, and as a result, she's extremely dehydrated. Sally is at risk for ____.
- a. anaphylactic shock
 - b. hypoglycemia
 - c. hypovolemic shock
 - d. syncope

Endnotes

- ¹ Toback, Seth L., MD. *Medical Emergency Preparedness in Office Practice*. American Family Physician. June 2007. Web.
- ² Toback, Seth L., MD. *Medical Emergency Preparedness in Office Practice*. American Family Physician. June 2007. Web.
- ³ Toback, Seth L., MD. *Medical Emergency Preparedness in Office Practice*. American Family Physician. June 2007. Web.
- ⁴ Tarugu, Vikram. *The Real World: Recognizing Mental Illness in Young Adults*. NBC Universal, Inc. 12 July 2009. Web. 22 Jun 2010.

Congratulations

You've completed Lesson 8 and Pack 1!



Continue on to Pack 2.

Answer Key

Healthcare Office Manager, Pack 1, Lessons 1-8

Answer Key Lesson 1

Practice Exercise 1-1

1. Healthcare office managers typically complete the following tasks: **c. schedule appointments and maintain records.**
2. Sandra works at a facility that treats people with sudden injuries or illnesses. She works in the maternity ward at this healthcare facility. Sandra likely works in a **a. hospital.**
3. Mark works as a healthcare office manager. A new patient arrives at the office. Mark asks him to **d. fill out a new patient questionnaire.**
4. Andrew comes to your office with a broken finger. He tells the doctor about his injury. His broken finger is the **b. chief complaint.**
5. Brenda works as a healthcare professional. She records patients' symptoms and helps with surgeries. Brenda likely works as a **a. nurse.**
6. During Roger's typical work day, he completes insurance forms using medical codes. He then uses these codes to collect payment from insurance companies. Roger likely works as a **b. medical billing specialist.**
7. Manuel transports patients to the hospital, stabilizes patients and administers medication if necessary. Manuel likely works as a(n) **b. paramedic.**

Practice Exercise 1-2

1. Ann works as a healthcare office manager. She greets patients with a smile and always is eager to help. She exhibits **b. a positive attitude.**
2. As a healthcare office manager, you strive to complete your work on time. Which personal quality are you exhibiting? **a. Dependability**
3. To multitask means to **c. handle several different jobs at a time.**
4. What is the first question you should ask when you prioritize your work?
a. Who gave this project to me?

5. You have the following projects on your “Things to Do” list. Which one would you do first? **b. Help one of your supervising medical office managers who is behind in preparing a presentation for tomorrow morning.**
6. What is the difference between office protocol and office hierarchy? **a. Office protocol is a workplace’s code of conduct. Hierarchy is the medical office’s organization of authority.**
7. An office’s **c. procedure** may dictate that all vacation requests be written on a calendar for everyone to consult.
8. If you had a question about office safety, you might consult the **d. employee handbook.**

Answer Key Lesson 2

Practice Exercise 2-1

1. Marta needs to add up the total cost of office supplies for next month. To do this, she should use a **d. calculator.**
2. Dan uses the copy machine to **a. make photocopies of insurance cards.**
3. A **a. dictation machine** allows a person to listen to a recording of the doctor’s notes and type them into a computer.
4. Often, medical offices have specific procedures written in **c. a policy and procedure manual** along with other policies. This way, the medical office staff can refer to it for specific instructions on how to open the office or handle visitors.
5. When you open the office, make sure you **c. pull health records for the day’s patients.**
6. When you close the office for the day, **d. count payments for the day, and prepare a bank deposit.**
7. When you greet patients, welcome them, make them feel comfortable and **b. answer any questions they may have.**
8. If you encounter a patient who doesn’t speak English very well, speak **d. slowly and clearly,** and watch for nonverbal cues.
9. The **a. open office hours** appointment system allows a patient to walk into an office without an appointment.
10. Your medical office makes appointments every five minutes on the computer. What type of appointment system does your office use? **d. Scheduled appointment system**

11. A medical office might do all of the following to remind a patient of an appointment except **c. e-mail a list of the day’s patients, highlighting the patient’s scheduled appointment time.**
12. The **a. wave-scheduling** system bases appointments on the average length of a routine visit.

Practice Exercise 2-2

1. Examples of **a. preference** mail include express mail, certified or registered mail and letters marked “Personal” or “Confidential.”
2. An average, everyday letter with a stamp travels by **b. first-class** mail.
3. You should sort memos and directives as **c. interoffice** mail.
4. **b. Date-stamping** records the day and time you receive an item in the mail.
5. You receive a piece of mail that was sent to the wrong address. You should **d. forward it.**
6. To prevent lost or damaged mail, you should **b. address it correctly.**
7. Dan’s ZIP code is 12345. The “1” stands for a **d. group of states.**
8. Maggie’s ZIP code is 45140. The “40” in the ZIP code represents a **b. specific post office.**
9. Yancey needs next-day delivery to mail a contract to someone in Montana. He should use **a. express** mail.
10. Methods used to earn discounts from the USPS include presorting, **d. barcoding** and arranging large mailings.
11. Meghan places a package on a **a. postal scale** in her office and finds that it weighs 2 pounds and 4 ounces. The machine calculates the postage to be \$8.85.
12. Bert has a stack of 500 postcards that advertise the dental practice he works at. He runs each postcard through a **b. postage meter**, and the machine imprints an accurate amount of postage on each one.
13. Bernadette arrives at work, Columbia Clinic, and turns on her computer. She opens her e-mail and sees that she has 15 new, incoming messages from patients in her **a. inbox.**

14. **d. Provides thorough security and insurance, as well as a mailing receipt and online tracking.** Registered mail
15. **a. Protects against loss or damage of an item while it's being mailed.**
Insured mail
16. **c. Tells the mailer to only give the item to the addressee.** Restricted delivery
17. **b. Gives delicate items preferential treatment.** Special handling
18. Carol needs to complete two large projects in the next two hours. She knows she won't have time to complete both. Carol should **d. delegate work to a co-worker.**
19. Daniel decides he wants to learn to transcribe medical dictations. To do this, he enrolls in a medical transcription course. Daniel's decision to learn about medical transcription describes a **a. long-range goal.**
20. Daniel's action of enrolling in a medical transcription course describes a **b. short-range goal.**

Answer Key Lesson 3

Practice Exercise 3-1

1. The foundation word part of a medical term is called a **root word.**
2. The word part that is attached to the end of a term is a **suffix.**
3. In a medical term, a prefix is found at the **beginning.**
4. The word part that joins a root word and another word part is a **combining vowel.**
5. The word part that is attached to the beginning of a term is a **prefix.**
6. In a medical term, a suffix is found at the **end.**
7. A suffix is attached to the word part called the **root word.**
8. A prefix is attached to the word part called the **root word.**
9. A combining vowel combines a word part and a **root word.**
10. In the term *dermat/o/ology*, the word part */o/* is called a **combining vowel.**

Practice Exercise 3-2**Part I**

<i>Root Word</i>	<i>Meaning</i>
1. append/o, appendic/o	appendix
2. arthr/o	joint
3. derm/o	skin
4. muc/o	mucus
5. hydr/o	water, fluid
6. norm/o	proper, rule
7. neur/o	nerve
8. lith/o	stone
9. therm/o	heat
10. path/o	disease

Part II

<i>Meaning</i>	<i>Root Word</i>
11. lung	pulmon/o
12. small intestine	enter/o
13. life.....	bi/o
14. liver	hepat/o
15. giving rise to	gen/o
16. muscle	my/o
17. pressure	tens/o
18. cut into	secti/o
19. kidney.....	ren/o
20. blood	hem/o, hemat/o

Practice Exercise 3-3

Part I

<i>Prefix</i>	<i>Meaning</i>
1. a/.....	without, absent
2. ec/, ecto/.....	outside, outer
3. infra/.....	inferior to, below
4. peri/.....	around, surrounding
5. hypo/.....	decreased, below
6. micro/.....	small, tiny
7. dia/.....	through
8. epi/.....	upon, in addition
9. hyper/.....	increased, above
10. intra/.....	within

Part II

<i>Meaning</i>	<i>Prefix</i>
11. under, inferior to.....	sub/ or infra/
12. half.....	hemi/
13. against, opposed.....	anti/
14. all, every.....	pan/
15. away from.....	ab/
16. between.....	inter/
17. slower than usual.....	brady/
18. gross, large.....	macro/
19. again, back.....	re/
20. behind, back.....	retro/

Practice Exercise 3-4**Part I**

<i>Suffix</i>	<i>Meaning</i>
1. /ectomy	removal
2. /gram	picture, record, tracing
3. /logy	study of
4. /ist.....	one who does
5. /megaly	enlargement
6. /stasis	control, hold in
7. /ac	relating to
8. /meter	distance measure, instrument to measure
9. /ism.....	situation, process, condition
10. /oid.....	like

Part II

<i>Meaning</i>	<i>Suffix</i>
11. condition.....	/ia
12. inflammation	/itis, /itic
13. pathologic condition	/osis
14. disease process.....	/pathy
15. pain	/algia
16. look at.....	/opsy
17. withdrawing fluid.....	/centesis
18. go.....	/grade
19. instrument to see with	/scope
20. throughout the blood.....	/emia, /hemia

Answer Key Lesson 4

Practice Exercise 4-1

<i>Divide</i>	<i>Meaning</i>
1. cardi/o/megaly.....	enlargement of the heart
2. acr/o/megaly.....	enlargement of the extremities (tips)
3. macro/gloss/ia	large (gross) tongue
4. hist/o/logy	study of tissue
5. arthr/itis.....	inflammation of the joint
6. splen/o/megaly	enlargement of the spleen
7. a/leuk/o/cyt/osis.....	condition of the absence of white cells
8. thorac/o/centesis	withdrawing fluid from the chest
9. gastr/ectomy.....	removal of the stomach
10. pulmon/ary.....	relating to the lung

Practice Exercise 4-2

Part I

<i>Word Part</i>	<i>Meaning</i>
1. carcin/o.....	cancer
2. ox/o	oxygen
3. laryng/o	voicebox, larynx
4. cerebr/o.....	brain
5. /genesis.....	creating
6. axill/o.....	armpit
7. /penia.....	lack of, decrease, poor

8. /tome.....cutting instrument
 9. /tomy..... cut into or slice
 10. /oma.....tumor, mass

Part II

<i>Meaning</i>	<i>Word Part</i>
11. self.....	auto/
12. run.....	/drome
13. chemical, drug	chem/o
14. with	con/
15. change, beyond	meta/
16. rib	cost/o
17. female.....	gynec/o
18. lower jaw	mandibul/o
19. brain	cerebr/o
20. many.....	poly/

Practice Exercise 4-3

<i>Divide</i>	<i>Meaning</i>
1. oste/o/malacia	softening of bone
2. sarc/oma	tumor or mass of nongland tissue
3. carcin/oma.....	cancer tumor or mass of gland tissue
4. con/nect	bind with
5. maxill/ary	relating to the upper jaw
6. laryng/itis.....	inflammation of the voicebox
7. vit/al	relating to living, alive
8. cost/al	relating to the rib(s)

- 9. crani/o/tome **cutting instrument for the skull**
- 10. chem/o/therapy **treatment with chemicals**

Practice Exercise 4-4

<i>Word Parts</i>	<i>Medical Term</i>	<i>Meaning</i>
1. gastr/o/enter/o/logy	gastroenterology	study of the stomach and small intestine or bowels
2. oste/o/malacia	osteomalacia	softening of the bone
3. laryng/o/scope	laryngoscope	instrument used to see the voicebox
4. carcin/o/oma	carcinoma	cancer tumor or mass of gland tissue
5. sarc/o/oid	sarcoid	like nongland tissue
6. muc/o/ous	mucous	relating to mucus
7. thromb/o/osis	thrombosis	condition of having a clot
8. hepat/o/ic	hepatic	relating to the liver
9. peri/col/o/itis	pericolitis	inflammation of the tissue surrounding the colon
10. pulmon/o/ic	pulmonic	relating to the lung

Practice Exercise 4-5

<i>Divide</i>	<i>Meaning</i>
1. chem/ist	one who specializes in chemicals
2. crani/o/tomy	cut into the skull
3. laryng/ectomy	removal of the voicebox
4. endo/derm	within the skin or inside tissue
5. peri/hepat/ic	relating to around the liver
6. poly/gastr/ia	condition of many stomachs
7. thromb/itis	inflammation of a clot

8. sub/hepat/ic..... relating to under the liver
9. retro/gastr/icrelating to behind the stomach
10. myel/oid..... like the marrow or spinal cord
11. my/o/pathymuscle disease
12. ven/ous relating to a vein or the veins
13. nat/al relating to birth
14. klept/o/maniaobsession with stealing
15. neur/osis condition of the nerves
16. electr/ic.....relating to electrical activity
17. arteri/al relating to an artery
18. cyst/ic..... relating to a sac of fluid or bladder

Practice Exercise 4-6

Part I

<i>Word Part</i>	<i>Meaning</i>
1. lapar/o	abdomen
2. pneum/o.....	air, gas, lung air sacs
3. ana/.....	positive, up
4. /physis	grow
5. /pnea.....	breathing
6. bronch/o.....	airway tubes in lung
7. cutane/o.....	skin surface
8. mort/o	death
9. psych/o.....	mind
10. phob/o	fear

Part II

<i>Meaning</i>	<i>Word Part</i>
11. break down, dissolve	/lysis, lytic
12. bad, labored	dys/
13. nose	rhin/o
14. bear	/phoria
15. secrete	/crine, crin/o
16. ear	ot/o
17. eye	ophthalm/o
18. kidney.....	nephro
19. tonsils.....	tonsill/o
20. flow	/rrhea

Answer Key Lesson 5

Practice Exercise 5-1

<i>Abbreviation</i>	<i>Meaning</i>
1. CO ₂	carbon dioxide
2. mg.....	milligram
3. O ₂	oxygen (gas)
4. n.p.o.....	nothing by mouth
5. NBS	normal bowel sounds
6. EBV	Epstein-Barr virus
7. kg.....	kilogram
8. TPR	temperature, pulse and respiration

-
9. IM intramuscular
 10. q.n.s. quantity not sufficient
 11. b.i.d. two times a day
 12. DOB..... date of birth
 13. Dxdiagnosis
 14. IV.....intravenous
 15. stat at once
 16. q.a.m..... every morning
 17. GBgallbladder
 18. Sx..... symptoms
 19. Rx treatment, prescribe
 20. FUO..... fever of unknown origin

Practice Exercise 5-2

1. sibs **d. siblings, brothers and sisters**
2. prep **h. prepare, preparation**
3. meds **a. medications**
4. ab **e. abortion**
5. exam **j. examination**
6. path **c. pathology**
7. appy **i. appendectomy, appendicitis**
8. primip **f. primipara, woman with one previous birth**
9. nullip **b. nullipara, woman with no deliveries**
10. temp **g. temperature**

Practice Exercise 5-3

1. ° temperature (Celsius or Fahrenheit)
2. # number
3. - suture size
4. / over (blood pressure)
5. & and (between capitals)
6. – minus
7. / vision
8. : ratio

Practice Exercise 5-4

<i>Medical Phrase</i>	<i>Acronym</i>
1. blood urea nitrogen	BUN
2. white blood count.....	WBC
3. Venereal Disease Research Laboratory	VDRL
4. rheumatoid arthritis	RA
5. human immunodeficiency virus	HIV
6. Physician’s Desk Reference	PDR
7. (The) pupils (are) equal, round (and)	PERRLA
reactive (to) light (and) accommodation	
8. electr/o/encephal/o/gram	EEG
9. eye, ear, nose (and) throat	EENT
10. intra/muscular	IM

Practice Exercise 5-5

1. micro/..... **small, tiny**
macro/..... **gross, large**
2. ante/ **before**
retro/..... **behind, back**
3. pre/ **before**
post/..... **after, past**
4. hypo/..... **decreased, below**
hyper/ **increased, above**
5. eu/..... **normal, even, good**
dys/ **bad, labored**
6. inter/..... **between**
intra/..... **within**
7. con/ **with**
contra/ **opposite, against**
8. tachy/..... **faster than usual**
brady/ **slower than usual**
9. ana/..... **positive, up**
cata/ **negative, down**
10. ab/..... **away from**
ad/..... **toward, near**
11. infra/..... **inferior to, below**
supra/ **above, superior to**
12. /malacia..... **softening**
/sclerosis..... **hardening**
13. a/..... **without, absent**
(not using this prefix is the antonym)
14. endo/ **within**
ecto/ **outside, outer**
15. Describe homophones, and provide two examples. **Homophones are words that sound the same but have different meanings and spellings. Examples may vary but include sail and sale, meet and meat and flew and flu.**

Practice Exercise 5-6

Singular Medical

Plural

1. synthesis **syntheses**
2. centrum **centra**
3. vena **venae**
4. nervus **nervi**
5. ganglion **ganglia**

Answer Key Lesson 6

Practice Exercise 6-1

1. The healthcare record is also called a(n) **d. health record**.
2. An accurate medical record can do all of the following EXCEPT **c. list the amount the patient owes**.
3. Who owns the medical record? **b. The doctor's office**
4. A patient's **b. demographic** data can include her full name, date of birth and gender.
5. **a. Personal** history includes a patient's social habits and family history.
6. Under **d. Past Medical History**, the doctor will list all prior diseases, accidents, surgeries or conditions.
7. **c. Family History** includes the ages, state of health, diseases and death of family members.
8. The **c. Medical History** includes the patient's past medical history including family health, hospitalizations, surgeries, injuries, medical problems and illnesses.
9. A radiologist's report on the patient's x-ray will appear on a(n) **d. diagnostic report**.
10. If you need to go to the hospital, your doctor submits a **b. diagnostic order**.
11. A form used in the hospital to document how the patient is responding to treatment is called a **c. progress note**.

12. Your boss, a surgeon, had a nightmare that he left a scalpel in Mrs. White's abdomen. He asks you to pull the medical record to check the instrument count. Where will you find this information? **b. In the operative report**
13. The doctor suspects her patient may have malaria. She wants to find out if the patient has travelled to an area where the disease is common. Which report should you give her? **c. Personal/Sociocultural History**
14. Choose one person who uses the health record, and discuss how he or she might use it. **Answers will vary. You can discuss patients, doctors, nurses, administrative staff, third-party payers or government epidemiologists. You should also discuss the way a person might use information from a medical record. For instance, as a healthcare office manager, you might use the health record to confirm the last time a patient requested a prescription refill.**

Practice Exercise 6-2

1. Fairview Medical created a patient file for Mr. Ruiz. The nurse recorded notes in the nursing section. The radiologist then recorded her x-ray reports in the Radiology section. After the physician determines Mr. Ruiz suffers from a fractured wrist, he records the diagnosis in the Medical section. Fairview Medical used a **b. source-oriented record**.
2. Sarah Engle's information is organized in a problem-oriented record. The doctor diagnoses her condition as strep throat. He records this information in the **b. problem list**.
3. To treat Sarah's strep throat, the doctor prescribes antibiotics. He records this information in the **c. initial plan**.
4. Markus visits his doctor and complains of severe abdominal pain. He's experienced this pain for three days. When the doctor completes a SOAP report, she documents this information under **a. S—Subjective complaint**.
5. Carla visits her doctor. During the visit, the nurse takes her blood pressure. She records this information under **b. O—Objective findings**.
6. Daniella receives an MRI which scans her for blood vessel blockages. This is a(n) **c. primary source** of information.
7. The Conditions of Participation require hospitals to **d. keep nursing care plans for each hospital patient**.
8. HIPAA helped Jonah keep healthcare coverage after he got laid off from his mechanic job. This describes **a. portability**.

9. Electronic health records aim to **c. improve accessibility of patient records.**
10. **b. Primary sources** of information about a patient documents the care provided to the patient.
11. Summarize the different information included in a medical record. **Your answer should include the following:**
 - **Patient name**
 - **Date of birth**
 - **A unique identifier**
 - **Driver's license number**
 - **Gender**
 - **Race and ethnicity**
 - **Address or residence**
 - **Marital status**
 - **Spouse's name and work information**
 - **Living arrangements**
 - **Emergency contact**
 - **Years of schooling**
 - **Insurance information**
 - **Third-party insurance information**
 - **Occupation and employer information**

Answer Key Lesson 7

Practice Exercise 7-1

1. In a(n) **b. unit** numbering system, a patient gets the same number each time she receives treatment at the facility.
2. Facilities that use unit numbering rely on **b. computer software** to find a patient in the system and retrieve the patient's existing number.
3. In **a. serial-unit** numbering, a patient gets a new number each time she is admitted to a healthcare facility—however, all the patient's previous records get this new number and physically appear in the new file, and a cross-reference note in the old file shows where the records currently exist.
4. The **d. alphabetic** filing system uses the patient's last name, first name and middle name or initial to file records.
5. In **d. straight** numeric filing, record filing is by patient number, from lowest to highest.
6. The advantages of the straight numeric system include all of the following except **c. it's hard to use and requires a lot of training**.
7. Multiple-digit numbers are difficult to remember during the filing process, so it can be easy for users to transpose numbers and misfile records. This is a disadvantage of the **a. straight** numeric system.
8. In **c. middle-digit** filing, the record number is divided into sets of digits, and the middle set of digits is the one that you use first, and the left set is second.

- | | Unit 1 | Unit 2 | Unit 3 |
|-----|--------------------------|---------------|---------------|
| 9. | Dickinson | Candy | |
| 10. | Dickins | H | Albert |
| 11. | Fuller | Harold | |
| 12. | Fuller | Harold | M |
| 13. | Dickins, Albert H | | |
| 14. | Dickinson, Candy | | |
| 15. | Fuller, Harold | | |
| 16. | Fuller, Harold, M | | |

- | | Unit 1 | Unit 2 | Unit 3 |
|-----|--------------------|--------|--------------|
| 17. | Luis | Father | |
| 18. | Fuller | Harold | (See rule 7) |
| 19. | Dantz | Carl | Mrs |
| 20. | DeCant | Jill | |
| 21. | Dantz, Carl, Mrs | | |
| 22. | DeCant, Jill | | |
| 23. | Fuller, Harold, Sr | | |
| 24. | Luis, Father | | |

Practice Exercise 7-2

- | | Unit 1 | Unit 2 | Unit 3 |
|-----|--------------------------|---------------|----------|
| 1. | Lauras | Laundry | Company |
| 2. | Mr | Clean | Carpets |
| 3. | North West | Medicine | |
| 4. | Fourth | Street | Patrol |
| 5. | Fourth, Street, Patrol | | |
| 6. | Lauras, Laundry, Company | | |
| 7. | Mr, Clean, Carpets | | |
| 8. | North West, Medicine | | |
| 9. | Colorado | State | College |
| 10. | Newtown | Bank (of) | |
| 11. | Ireland | Republic (of) | |
| 12. | Fort | Smith | Hospital |
| 13. | Colorado, State, College | | |
| 14. | Fort, Smith, Hospital | | |
| 15. | Ireland, Republic (of) | | |
| 16. | Newtown, Bank (of) | | |

Practice Exercise 7-3

1. One advantage of EHRs is **b. more than one person can access the record at one time.**
2. Elmhurst Medical only allows healthcare professionals to keep a patient record for 48 hours. This rule applies to **d. a charge-out system.**
3. Healthcare facilities often perform formal checks called **a. file audits** to make sure their chart-tracking system works properly.
4. Mandy handles all of the mail and patient records at her clinic. Her clinic uses **b. one point of contact** to handle loose filing.
5. As a healthcare office manager, remember to **c. keep patient information confidential.**
6. Vineyard Clinic decides to store all patient information older than ten years on computer disks. They then store these disks in a warehouse. This is known as **d. purging.**
7. A campus clinic decides to get rid of old patient data. They simply erase old information by covering it up with new patient information. This is called **d. overwriting.**

Answer Key Lesson 8**Practice Exercise 8-1**

1. A(n) **a. emergency** is considered any instance in which someone becomes suddenly ill and requires immediate attention.
2. The goal of triage is to **a. treat as many people as possible.**
3. When you hear a medical team member say “START” you know that means **c. “simple triage and rapid treatment.”**
4. One disadvantage of the advanced triage system is that **b. it is so complex that only physicians and EMTs can determine which group a patient is in.**
5. A(n) **a. universal medical identification tag** is a small tag worn on a bracelet, neck chain, or on the clothing bearing a message that the wearer has an important medical condition that might require immediate attention.

6. All of the supplies, equipment and medications your office needs for an emergency are kept on the **d. emergency crash cart**.
7. The office's emergency policy manual may have all of the following in it EXCEPT **c. the steps to perform an emergency tracheotomy**.
8. It's important to accurately and completely document emergencies because **b. it becomes part of the patient's medical record**.
9. In communities without a 911 system, call **d. the appropriate emergency service for the situation you're handling** when you need emergency services.
10. Every office must record the detailed information regarding an emergency situation and its handling. This report is called the **b. incident report**.
11. When assessing an unresponsive patient, evaluate the airway, breathing and circulation. This is known as **a. the ABCs**.
12. An enhanced 911 system will **c. automatically identify the caller's phone number and location**.

Practice Exercise 8-2

1. First, I called to some neighbors to dial **911**.
2. Then I asked Sharona, "**Are you** okay?" She didn't respond.
3. The first thing I performed was the **primary** survey, or ABCs. I couldn't find a pulse.
4. I placed my head close to her face and listened for **breath** sounds. I also watched her chest for any movement. She wasn't breathing, so I checked for a **blocked** airway.
5. I performed the **jaw-thrust** maneuver and swiped inside her mouth. There was no blockage, so I began rescue breathing.
6. I **pinched** her nostrils, placed my mouth over her **mouth** and gently breathed into her mouth for **one** second(s). There was no breath, so I repeated the rescue breath once more.
7. Still no breath. I was in a panic now, but I kept my head and readied myself to begin chest **compressions**.
8. I moved Sharona's swimsuit aside so I could see her chest, and knelt beside her head. I found the tip of her **breastbone** and placed the heel of **one** hand(s) just below it, between the nipples.

9. I began compressions, gently pushing her chest down about **1/3** to **1/2** of the chest depth. I counted: one, two, three, four to keep the pace at **100** compressions per minute.
10. After **30** compressions, I did **two** rescue breaths. Sharona began coughing and sputtering—the most beautiful sounds I'd ever heard!
11. I checked her pulse, which had returned and wrapped her in a large towel. By this time the **EMTs** had arrived with an ambulance, and they took over.
12. It was a terrifying experience, but I'm so glad I had certification in the Red Cross's **CPR** training!

Practice Exercise 8-3

1. **f. a rapid, severe immune reaction to an allergen that can quickly lead to death** Anaphylaxis
2. **c. a severe case of chronic inflammation of the airways in the lungs** Asthma Complications
3. **a. sudden arrhythmia caused by blockage of blood supply to the heart** Cardiac Arrest
4. **j. taking too much of a prescribed medication or recreational drug** Drug Overdose
5. **e. having too much sugar or insulin in the blood** Diabetic Emergencies
6. **h. loss of awareness of your surroundings as with syncope** Impaired Consciousness
7. **b. ingesting a substance that causes injury, illness or death** Poisoning
8. **i. a recurring thought process or behavior that causes harm to the individual and is not considered normal** Psychiatric Disorder
9. **g. an episode of spasms, syncope and loss of motor control due to abnormal activity in the brain** Seizure
10. **d. a lack of oxygen to the body's cells** Shock
11. The body's immune system considers a(n) **b. allergen** to be a foreign body and reacts by attacking it.
12. Complications such as exercise, old age or pregnancy can lead to a(n) **d. asthma emergency**.

13. Signs of drug overdose include all of the following, EXCEPT **c. seizures**.
14. **a. Hyperglycemia**, if left untreated, can lead to diabetic coma.
15. When there isn't enough blood supply to the brain, **c. syncope** can occur.
16. If a patient has been poisoned by **b. carbon monoxide**, the symptoms may include headaches, dizziness and vomiting.
17. Often, psychiatric disorders such as depression, bipolar disorder and schizophrenia don't develop until **c. a person reaches his late teens to early twenties**.
18. Mr. Clark arrived today for his biopsy results. After Dr. Patterson informed him that the brain tumor was malignant and can't be removed, Mr. Clark began crying and asked you to call his wife. Is this a psychiatric emergency? **b. No, this is a normal reaction to hearing devastating news**.
19. When the body increases heart rate and constricts blood vessels in response to a lack of oxygen, this condition is called **d. shock**.
20. A = **Awake and alert**
V = **Responds to voice**
P = **Responds only to pain**
U = **Unconscious or no response**