

1

Lesson Plans for

Building Medical Terms Starting with Medical Specialties

CHAPTER LESSON PLANS & OBJECTIVES

Lesson 1.1: Word Parts

1. Identify the roles of word roots, prefixes, suffixes, and combining forms.
2. Identify examples of combining forms, prefixes, suffixes, and word roots, and recognize them in medical terms.
3. Demonstrate correct usage of the combining vowel by correctly joining word parts to write medical terms.

Lesson 1.2: Plurals and Pronunciation

4. Use the rules in this chapter to write singular and plural forms and to identify eponyms, acronyms, and abbreviations.
5. Use the rules in this chapter to pronounce medical terms correctly.

Lesson 1.3: Recognize Medical Words, Specialists, and Specialties

6. Write the meanings of selected word parts and use them to build and analyze terms.
7. Match the terms for medical specialists with the areas in which they specialize, or write the medical specialties when given the area of expertise.
8. Identify the specialty associated with various medical conditions.

Lesson 1.4: Medical Records, Categories, Abbreviations, and Review

9. List five categories for classifying medical terms that are used in this book.
10. Spell medical terms accurately.
11. Write the meanings of the abbreviations, including those in a health report presented in this chapter.
12. Identify terms as a medical specialty, a specialist, another type of noun, or an adjective.

CHAPTER TEACHING FOCUS

- The teaching focus for Chapter 1 is to learn how to learn via the programmed method, what the various word parts are, how to combine them, how to pronounce medical terms, how to form plural medical terms, and how these combining forms and other word parts pertain to medical specialties and health professions.
- The lesson concentrates on demonstrations of the content through explanations and examples.
- Students are encouraged to practice their understanding of the content with classroom activities and assignments.

CHAPTER PRETEST

Have the students answer these questions prior to covering this chapter to understand where they stand in relation to the content.

Match the combining forms and suffixes in the left column with their meanings in the right column.

- | | |
|--------------------|------------------|
| _____ 1. -ac | A. skin |
| _____ 2. crin(o) | B. pertaining to |
| _____ 3. dent(o) | C. to secrete |
| _____ 4. dermat(o) | D. aged |
| _____ 5. endo- | E. one who |
| _____ 6. geront(o) | F. medicine |
| _____ 7. -iatrics | G. pertaining to |
| _____ 8. -ic | H. tooth |
| _____ 9. -ist | I. inside |
| _____ 10. odont(o) | J. tooth |

CHAPTER PRETEST ANSWERS

- | | |
|------------------|------------------|
| 1) pertaining to | 6) aged |
| 2) to secrete | 7) medicine |
| 3) tooth | 8) pertaining to |
| 4) skin | 9) one who |
| 5) inside | 10) tooth |

CHAPTER BACKGROUND ASSESSMENT

Discuss these questions with your students prior to covering this chapter to understand where they stand in relation to the content.

- 1) **Question:** What is the difference between a prefix and a suffix, and why are these word parts important to your understanding of health care terminology?

Answer: A prefix is a word part that appears at the beginning of some health care terms. A suffix is a word part that appears at the end of many health care terms. The majority of health care terms are built from word parts. Learning the parts (like prefixes and suffixes) and how to use them will help you understand terminology much more easily than memorizing whole terms.

- 2) **Question:** Can you think of any medical specialties, along with the name of the associated specialist?

Answer: Possible answers include cardiology/cardiologist, gynecology/gynecologist, etc. Ask students to note the suffixes and the similarities and differences between them.

- 3) **Question:** Can you think of a medical specialty for a body system?

Answer: Some examples are urology/urinary system, gastroenterology/gastrointestinal system, neurology/nervous system, cardiology/cardiovascular, immunology/immune system.

LESSON 1.1

Word Parts

Instructor Preparation

Textbook Objectives Covered

1. Identify the roles of word roots, prefixes, suffixes, and combining forms.
2. Identify examples of combining forms, prefixes, suffixes, and word roots, and recognize them in medical terms.
3. Demonstrate correct usage of the combining vowel by correctly joining word parts to write medical terms.

Lesson Preparation Checklist

- Prepare lecture from [TEACH lecture slides](#) available on Evolve.
- Assemble materials and supplies needed for each lesson as indicated below.

Materials and Supplies

- computer
- copies of TEACH Handouts A-C
- projector

Key Terms

Vocabulary (pp. 3-4)

- combining form
- combining vowel
- prefix
- suffix
- word root

Student Preparation

Assignments

2 hours**1 READ – Textbook (pp. 1-6)****& ANSWER – Textbook**

- 2
 - Exercises 1-4 (pp. 4-6)
 - Programmed Learning Sections (pp. 2-5)

ANSWER – Evolve Student Resources

- Quick Quizzes, #2

REVIEW – Evolve Student Resources

- Study Tips

APPLY – Medical Terminology Online

- Module 1,
 - Section I, Lesson 2

3 READ – Textbook (pp. 6-8)**ANSWER – Textbook**

- Exercises 5-8 (pp. 6-8)
- Programmed Learning Sections (pp. 6-8)

ANSWER – Evolve Student Resources

- TEACH Handouts A-C
- Quick Quizzes, #3 and #9

APPLY – Medical Terminology Online

- Module 1
 - Section I, Lessons 3 and 4
 - Section II
 - Section III

LESSON 1.1**Word Parts****50-Minute Lesson Plan****Lecture Outline****20 minutes****Slide 1****Chapter 1 (p. 1)**

- Building Medical Terms Starting with Medical Specialties

TALKING POINTS:

Congratulations on taking the first step to BUILDING A MEDICAL VOCABULARY!

- This chapter teaches you the tools you will need to succeed in this “building” project, and introduces you to medical specialties.
- Have you decided in what specialty you wish to work?
 - Do you know the professional title you want to earn?

Slide 2**Lesson 1.1: Word Parts (p. 1)**

- Objectives
 - 1) Identify the roles of word roots, prefixes, suffixes, and combining forms.
 - 2) Identify examples of combining forms, prefixes, suffixes, and word roots, and recognize them in medical terms.
 - 3) Demonstrate correct usage of the combining vowel by correctly joining word parts to write medical terms.

TALKING POINTS:

- In Chapter 1’s first lesson, you will learn how to use the programmed method, how to tell word roots from prefixes and suffixes, and how to combine them into medical terms.
- You will also learn how to analyze a term into its component parts to promote understanding.
- Instead of memorizing thousands of individual terms, you will be learning word parts that will provide you with the information to understand the meanings of terms without having to memorize the whole term.

1 & 2**Slide 3****Types of Chapters (p. 1)**

- Chapters 1 to 4 are the foundation chapters.
 - Study Chapters 1 to 4 in order.
- Chapters 5 to 14 are body systems chapters.
 - The order in which you study Chapters 5 through 14 can vary.
- Chapter 15 is a review of Chapters 1 to 14.

TALKING POINTS:

- Be sure you study Chapters 1 to 4 in order. They build on each other and provide you with the foundation to understand medical terms. The body systems Chapters (5-14) (such as digestive, urinary, or respiratory, for example) require that you have mastered Chapters 1 to 4 before beginning them.
- Chapter 15 reviews Chapters 1 to 14.

LESSON 1.1

Word Parts

Slide 4

Programmed Learning (p. 2)



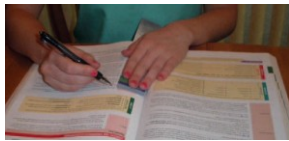
TALKING POINTS:

- A frame is a block of information preceded by a number. Most frames contain at least one blank in which you will write an answer.
- Answers to the blanks are shown in the side of each page in the answer column. Cover this column with a bookmark as you read the frames and write in the blanks.
- THEN check your answers right away, so you know whether you understand.

Slide 5

Learning Plan (p. 2)

- Write answers in the blanks.
- Work the exercises.
- Use the self-test at the end of each chapter.
- Always check your answers.
- Use online resources.



TALKING POINTS:

- BE SURE TO WRITE THE ANSWERS in the blanks! Engaging your writing skills will help your brain “lock in” new terms.
- At the end of each section is an exercise to practice what you have learned. Be sure to complete the exercises before starting the next section.
- When you finish the entire chapter, chapter review exercises will again confirm what you have learned, or what you need to review.
- You have three opportunities to check your understanding in each chapter: the programmed learning sections, the exercises, and the chapter reviews.
- It is very difficult NOT to learn the material if you complete these three sections.
- Make use of online resources (electronic flashcards, games, activities, and more!) at the student Evolve site.

Slide 6

Greek or Latin (p. 3)

- Most medical term word roots are of Greek or Latin origin.
- Two different word roots can have the same meanings:
 - *nephr* (Gk.) and *ren* (L.) both mean “kidney”
 - *derma* (Gk.) and *cutis* (L.) both mean “skin”

TALKING POINTS:

- What does bicycle mean? (Two wheels). Dioxide? (Contains two oxygen molecules).
- *bi-* (L.) and *di-* (Gk.) are another example of a pair of word parts that look different because one is from Latin and the other is from Greek, but they have the same meaning, which is “two.”

LESSON 1.1

Word Parts

Slide 7 Greek or Latin (Cont.) (p. 5)



TALKING POINT:

- *Dermal* (from *derma*) and *cutaneous* (from *cutis*) both mean “pertaining to the skin.”

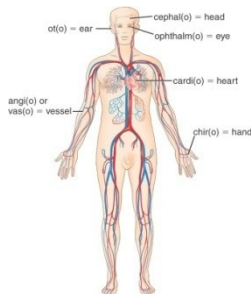
Slide 8 Word Roots and Combining Forms (pp. 3-4)

- Word Root = Main Body of Word
 - In *dermal*, word root is *derm*
- Combining Forms =
 - Word Root + Combining Vowel
 - For *dermal*, combining form is *derm(o)*
- Compound Words =
 - 2 Word Roots + Combining Vowel
 - One example is *gastr(o) + enter(o) + -logy = gastroenterology*

TALKING POINTS:

- In the word *dermal*, *derm* is the word root. The combining form would be *derm(o)* with *o* as the combining vowel. The suffix *-al* means “pertaining to.”
- Words can also be formed from two word roots plus a combining vowel. For instance, *speedometer* comes from *speed(o)* plus *meter*.
- As a medical terms example, *gastr(o) + enter(o) + -logy* becomes *gastroenterology*.

Slide 9 Word Roots and Combining Forms (Cont.) (pp. 3-4)



TALKING POINTS:

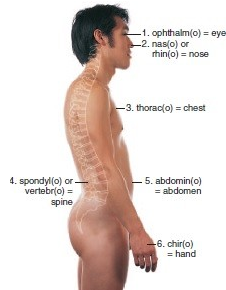
- Notice combining forms you probably already know!
 - *Cardi(o)* is the combining form for heart. What terms do you know that contain *cardi(o)*? Cardiac, electrocardiogram, etc.
- What terms do you know that contain the other combining forms shown here? [Discuss *otoscope*, *encephalitis*, *ophthalmologist*, *chiropractor*, *angiography*, *vasospasm*, as examples.]

LESSON 1.1

Word Parts

Slide 10

Combining Forms (p. 4)



TALKING POINTS:

- What combining form means eye?
- What two combining forms mean nose?
- What two combining forms mean spine?
- What combining form means abdomen?
- What combining form means hand?

Slide 11

Prefixes and Suffixes (p. 5)

- Prefix is attached before a word or word root to modify its meaning.
 - Example: sub- attached to normal = subnormal
- Suffix is attached to the end of a word or word part to modify its meaning
 - Example: ot + -itis = otitis
- “Alligator terms”



TALKING POINTS:

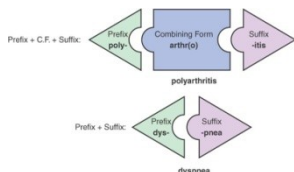
- Pretest means a test before the material is presented. Prefix is a word part added before a word or word root to modify its meaning.
 - For example, prenuptial means before a wedding.
- -logy means study of; cardiology means the study of the heart. Suffixes are word parts added to the end of a word or word root to modify its meaning.
- Not all words can be broken into component parts. For example, “el ligarto” mistakenly became “alligator.”

LESSON 1.1

Word Parts

Slide 12

Prefixes and Suffixes (Cont.) (p. 6)



TALKING POINTS:

- See how the word parts fit together? Prefixes at the beginning, word roots in the middle, suffixes at the end. *Poly-* (meaning “many”) plus *arthr(o)* (meaning “joint”) plus *-itis* (meaning “inflammation”) forms *polyarthritis* (“inflammation of many joints”).
 - When interpreting terms, start with the suffix, then go back to the beginning of the word and work across it. *Cardiology* is “the study of the heart.” “The study of” comes from *-logy*, and “the heart” comes from *cardi(o)*.
- Words can also be formed from prefixes and suffixes connected directly without a word root in the middle, such as *dyspnea*.

Slide 13

Quick Quiz!

- Which describes a combining form?
 - A. word part attached before a word root
 - B. word part attached to the end of a word
 - C. word root by itself
 - D. word root plus combining vowel

TALKING POINT:

- The answer is D. A word root plus a combining vowel makes up a combining form.

Slide 14

Joining Combining Forms With Each Other (p. 7)

- The combining vowel is used before another word root.
 - Example: *gastr(o)* + *enterology* = *gastroenterology*

TALKING POINTS:

- Keep the combining vowel when combining word roots together.
 - For example, *gastroenterology* keeps the *o* after *gastr*.
 - *Orthopedics* keeps the *o* after *orth*.

Slide 15

Joining Combining Forms With Suffixes (p. 6)

- The combining vowel is used before suffixes that begin with a consonant.
 - Example: *enter(o)* + *-logy* = *enterology*
- The combining vowel is dropped if the suffix also begins with a vowel (a, e, i, o, u)
 - Example: *enter(o)* + *-ic* = *enteric*

TALKING POINTS:

- Keep the combining vowel when joining a word root with a suffix that begins with a consonant: *cardi(o)* + *-logy* = *cardiology*.
- Drop the combining vowel when the suffix also begins with a vowel.
- That’s why the combining vowel is shown in parentheses—sometimes it’s kept and sometimes it’s dropped.

LESSON 1.1

Word Parts

Slide 16 Joining Combining Forms With Suffixes (Cont.) (p. 6)



TALKING POINTS:

- Remember that *-al* means “pertaining to.”
- *Carpal* means “pertaining to the wrist” because it comes from *carp(o)*, meaning “wrist” + *-al*.

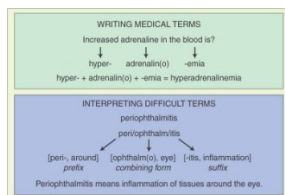
Slide 17 Joining Other Word Parts to Prefixes (p. 7)

- Most prefixes end with a vowel and may be added to other word parts without change.
- Examples:
 - peri- + appendicitis = periappendicitis
 - dys- + -pnea = dyspnea
- *There are exceptions, however.*

TALKING POINTS:

- Prefixes are the easiest word part to combine with other word parts because they usually can be added without change.
 - For example, *hyper-* means “above normal,” so *hypertension* means “above normal blood pressure.”
 - *Anti-* means “against,” so antihypertensive medications work against hypertension to lower blood pressure.
 - *Anti-* and *hyper-* were added without changing themselves, tension or hypertensive.

Slide 18 Joining Other Word Parts to Prefixes (Cont.) (p. 7)



TALKING POINTS:

- Here's another term that uses the prefix *hyper-*. What other terms do you know that use that prefix? (hyperactivity, hypersensitive, hypercritical)
 - Do you know any other terms that end in *-emia*? (anemia)
- See how the meaning of periorphthalmitis can be broken down by first stating the meaning of the suffix?

LESSON 1.1

Word Parts

Slide 19

Quick Quiz!

- Which term results from the combination of ot(o) + laryng(o) + -logy?
 - A. otlaryngology
 - B. laryngologyoto
 - C. orolaryngolgy
 - D. otolaryngology

TALKING POINT:

- The answer is D: otolaryngology.

Activities

Classroom <small>Choose from below to make 30 minutes</small>		Online
1 & 2	ASSESS BASELINE <ul style="list-style-type: none"> • Have the class complete the Pretest. Collect their work, and use the results to guide how you teach the class. DISCUSS <ul style="list-style-type: none"> • As a class, discuss the Background Assessment (#1) and Critical Thinking Question below. • The Greek and Latin roots used in medical terminology are also used in English. Ask students to think of English words that use the prefixes, suffixes, or combining forms mentioned in class. Use the prefixes <i>pre-</i> (before), as in <i>prenatal</i> (pertaining to before birth), and <i>anti-</i> (against), as in <i>antibacterial</i> (pertaining to against bacteria). 	ASSESS BASELINE <ul style="list-style-type: none"> • Post the Pretest online and have your class complete it. Use the results to guide how you teach the class. POST & COMMENT <ul style="list-style-type: none"> • Post the Background Assessment (#1) and the Critical Thinking Question below and have students post their responses and comment on each other's posts. ANSWER – Evolve Student Resources <ul style="list-style-type: none"> • Quick Quizzes, #2 REVIEW – Evolve Student Resources <ul style="list-style-type: none"> • Study Tips APPLY – Medical Terminology Online <ul style="list-style-type: none"> • Module 1 <ul style="list-style-type: none"> • Section I, Lesson 2
	3 DISCUSS <ul style="list-style-type: none"> • Ask if students are beginning to recognize terms they have heard or seen as being built from word parts. For example: appendicitis, appendectomy, biology. 	ANSWER – Evolve Student Resources <ul style="list-style-type: none"> • TEACH Handouts A-C • Quick Quizzes, #3 and #9 APPLY – Medical Terminology Online <ul style="list-style-type: none"> • Module 1 <ul style="list-style-type: none"> • Section I, Lessons 3 and 4 • Section II • Section III

Critical Thinking Question

What are the advantages of building health care terms from word parts?

Discussion Guidelines: Health care terms that are built from word parts are easier to understand because prefixes, suffixes, and word roots have standard meanings—once you learn them, they do not change. Using word parts to build health care terms provides a way to name diseases, procedures, and instruments that have not yet been discovered or invented.

LESSON 1.1

Word Parts

Instructor Notes/Student Feedback

Before lecture: Review expectations of students, syllabus, and course outline.

After class: Check the Pretests to see how students scored. Make notes immediately for what worked well and what could be changed on the Pretest and on the PowerPoint commentary.

LESSON 1.2

Plurals and Pronunciation

Instructor Preparation

Textbook Objectives Covered

4. Use the rules in this chapter to write singular and plural forms and to identify eponyms, acronyms, and abbreviations.
5. Use the rules in this chapter to pronounce medical terms correctly.

Lesson Preparation Checklist

- Prepare lecture from [TEACH lecture slides](#) available on Evolve.
- Assemble materials and supplies needed for each lesson as indicated below.

Materials and Supplies

- computer
- copies of TEACH Handouts D and E
- projector

Key Terms

Vocabulary (pp. 9-10)

- abbreviation
- acronym
- plural
- eponym
- singular

Student Preparation

Assignments

2 hours

4 READ – Textbook (pp. 9-11)

& ANSWER – Textbook

- 5
 - Exercises 9-13 (pp. 9-11)
 - Programmed Learning Sections (pp. 9-11)

ANSWER – Evolve Student Resources

- TEACH Handouts D and E
- Quick Quizzes, #1, #4, #5, #8, #10, and #11

APPLY – Medical Terminology Online

- Module 1
 - Section I, Lessons 1 and 5

LESSON 1.2**Plurals and Pronunciation****50-Minute Lesson Plan****Lecture Outline****20 minutes**

Slide 20

Lesson 1.2: Plurals and Pronunciation (p. 1)

- Objectives
 - 4) Use the rules in this chapter to write singular and plural forms and to identify eponyms, acronyms, and abbreviations.
 - 5) Use the rules in this chapter to pronounce medical terms correctly.

TALKING POINTS:

- In Chapter 1's second lesson, you will learn how to pronounce medical terms and how to make medical terms plural.
- Does everyone know what plural means? (Discuss.)

Slide 21

Other Word Origins (p. 9)

- Eponyms—names derived from a person's name
- Abbreviations:
 - Letters
 - Shortened words
 - Acronyms—names derived from the first letter of a series of words

TALKING POINTS:

- Eponym examples: cesarean section, Parkinson disease, Alzheimer disease, Down syndrome.
- Abbreviation examples: complete blood count = CBC; AIDS = acquired immunodeficiency syndrome.
- Shortened word example: diff for differential.
- Acronym example: laser (light amplification by stimulated emission of radiation)

**4
&
5**

Slide 22

Forming Plurals (p. 10)

- Rules you know already:
 - Add s
 - Change y to i and add es
 - Add es to words ending in s, ch or sh

TALKING POINTS:

- What is the plural of assistant?
- What is the plural of therapist?
- What is the plural of party?
- What is the plural of sandwich?
- What is the plural of brush?

Slide 23

Forming Plurals of Nouns with Special Endings (p. 10)

- is becomes es
- um becomes a
- us becomes i
- a becomes ae
- ix becomes ices

TALKING POINTS:

- There are 10 ways plurals are formed for nouns with special endings. Here are the first five. How would you write each of these in the plural form?
 1. diagnosis becomes diagnoses
 2. bacterium becomes bacteria
 3. bronchus becomes bronchi
 4. patella (kneecap) becomes patellae
 5. appendix becomes appendices (appendixes is also acceptable)

LESSON 1.2

Plurals and Pronunciation

Slide 24 Forming Plurals of Nouns with Special Endings (Cont.) (p. 10)

- ex becomes ices
- ax becomes aces
- ma becomes s or mata
- on becomes a
- nx becomes nges

TALKING POINTS:

- Here are examples of the last five:
 6. cortex becomes cortices
 7. thorax becomes thoraces (thoraxes is also acceptable)
 8. carcinoma becomes carcinomata or carcinomas
 9. spermatozoon becomes spermatozoa
 10. pharynx (throat) becomes pharynges

Slide 25 Pronunciation: Accents (p. 11)

- The syllable that gets the greatest stress is boldfaced
- Single syllable words (monosyllables) have no stress mark.
- Pronunciation of chapter terms is located in an alphabetical list at the end of each chapter.

TALKING POINTS:

- *Check that students understand the meaning of syllables. Ask them to count the syllables in sample words such as: immune (2), biology (3), cytogenics (4), cardiology (5), etc.*
- Single syllable words have no stress mark.
- More specifics on pronunciations are next.

Slide 26 Pronunciation (front cover)

- Two Rules of Vowels
 - 1) Short vowels are unmarked:
 - a, e, i, o, u
 - 2) Long vowels are marked with a straight line above them:
 - ā, ē, ī, ō, ū

TALKING POINTS:

- To get used to the vowel rules for pronunciation, practice looking up terms in the index/glossary in the back of the book that you already know how to pronounce.
- For instance, in the word *rabies*, does the first syllable end in a vowel or a consonant? Is the *a* long or short? Would the *a* have a mark over it?
- Practice breaking longer words into syllables. What are the syllables in *radioactive*. Which syllables have long vowels? Which have short vowels?

LESSON 1.2

Plurals and Pronunciation

Slide 27

Vowel Pronunciation Guide: Long and Short (front cover)

ā	mate
a	bat
ē	beam
e	met
ī	bīte
i	bīt
ō	home
o	got
ū	fuel
u	but

TALKING POINTS:

- Each vowel is pronounced as long or short. Practice writing pronunciations of these terms:
 - mate = māt
 - bat = bat
 - beam = bēm
 - met = met
 - bite = bīt
 - bit = bit
 - home = hōm
 - got = got
 - fuel = fūl
 - but = but

Slide 28

Vowel Pronunciation Guide: Special Sounds (front cover)

aw	all
oi	boil
oo	boom
ōō	book
ou	fowl
uh	sofa

TALKING POINTS:

- Other combination vowels are shown here. *For each combination vowel, what are some words that contain it?*

Slide 29

Pronounce These Terms

- pyrogenic: pī-rō-jen-ik
- ophthalmorrhaxis: of-thal-mō-rek-sis
- microtome: mī-krō-tōm

TALKING POINTS:

- In the pronunciation of *pyrogenic*, how do you know the *i* in *pi* and the *o* in *ro* are long?
 - How do you know the *e* in *jen* and the *i* in *ik* are short?
- Which vowels in *ophthalmorrhaxis* are short? Which one is long? Why?
- Which vowels in *microtome* are long? How do you know?
- Why are none of the vowels in *microtome* short?

LESSON 1.2

Plurals and Pronunciation

Slide 30

Pronunciation of Consonants (front cover)

- Standard: b, d, f, h, k, l, m, n, p, r, s, t, w
 - Different pronunciations each of g, c:
 - g in *get* vs. j in *gem* (or jewel)
 - c as k in *cart* or s in *ice*
 - Different pronunciations of s:
 - s as in *sigh*, or as a z in *phase*, or zh in *measure*

TALKING POINTS:

- Consonants are fairly dependable in medical terminology; they sound how you'd expect them to sound: b, d, f, h, k, l, m, n, p, r, s, t, w.
- Consonants g and c can have two different pronunciations.
- S can have three different pronunciations.

Slide 31

Pronunciation of Consonant Combinations (front cover)

- ch for *chin*
- ng for *sing*
- sh for *should*
- th in *thin* or *than*
- ks for *six*
- kw for *quote*
- zh for *measure*

TALKING POINT:

- Practice recognizing the combinations of consonants (ch, ng, sh, th) and these other sounds (ks, kw).

Slide 32

Quick Quiz!

- Which syllables in otolaryngology (ō-tō-lar-ing-gol-uh-jē) contain long vowels?
 - A. o, to, je
 - B. o, to, gol, je
 - C. o, je
 - D. o, gol, je

TALKING POINTS:

- The answer is A: o, to, je.
- The syllable *lar* has a short *a*, *ing* has a short *i*, and *gol* has a short *o*. The syllable *uh* contains an unstressed short u sound.
- A great way to practice the pronunciation of terms is to use the audio list available on the student Evolve website.

LESSON 1.2

Plurals and Pronunciation

Activities

Classroom

Choose from below to make **30 minutes**

Online

**4
&
5**

DISCUSS

- As a class, discuss the Critical Thinking Question below.

ANALYZE

Divide students into three teams (an abbreviation team, a terms made from word parts team, an acronym team); then ask each team to come up with at least five terms in their assigned category. Allowing them to use the text and medical dictionaries will begin to teach them to search for their own answers.

POST & COMMENT

- Post the Critical Thinking Question below and have students post their responses and comment on each other's posts.

ANSWER – Evolve Student Resources

- TEACH Handouts D and E
- Quick Quizzes, #1, #4, #5, #8, #10, and #11

APPLY – Medical Terminology Online

- Module 1
- Section I, Lessons 1 and 5

Critical Thinking Question

Why is it important to learn to correctly pronounce and spell the health care terms that are in the course?

Discussion Guidelines: Medical professionals need to communicate with each other. If terms are not pronounced correctly, they may be misunderstood, which could cause harm to a patient. If terms are misspelled, medical errors can occur, again causing harm. Spelling and pronunciation could be matters of life and death!

Instructor Notes/Student Feedback

Before lecture: Review expectations of students, syllabus, and course outline.

After class: Check the Pretests to see how students scored. Make notes immediately for what worked well and what could be changed on the Pretest and on the PowerPoint commentary.

LESSON 1.3

Recognize Medical Words, Specialists, and Specialties

Instructor Preparation

Textbook Objectives Covered

6. Write the meanings of selected word parts and use them to build and analyze terms.
7. Match the terms for medical specialists with the areas in which they specialize, or write the medical specialties when given the area of expertise.
8. Identify the specialty associated with various medical conditions.

Lesson Preparation Checklist

- Prepare lecture from [TEACH lecture slides](#) available on Evolve.
- Assemble materials and supplies needed for each lesson as indicated below.

Materials and Supplies

- computer
- copies of TEACH Handouts F and G
- projector
- 3x5 note cards

Key Terms

Terminology (pp. 12-20)

• Vocabulary

- | | | |
|-------------------------|-----------------------|--------------------------------|
| • anatomic pathologist | • geriatric | • ophthalmology |
| • anatomic pathology | • geriatrician | • orthopedic |
| • anesthesiologist | • geriatrics | • orthopedic surgeon |
| • anesthesiology | • gerontology | • orthopedics |
| • anesthetic | • gynecologist | • orthopedist |
| • anesthetist | • gynecology | • otic |
| • cardiac | • holistic health | • otolaryngologist |
| • cardiologic | • immunologic | • otolaryngology |
| • cardiologist | • immunologist | • otologist |
| • cardiology | • immunology | • otology |
| • clinical pathologist | • internal medicine | • pathologic |
| • clinical pathology | • internist | • pathological |
| • clinical psychologist | • larynx | • pathologist |
| • clinical psychology | • neonatologist | • pathology |
| • dermatologic | • neonatology | • pediatric |
| • dermatological | • neurologic | • pediatrician |
| • dermatologist | • neurological | • pediatrics |
| • dermatology | • neurologist | • plastic surgery |
| • emergency medicine | • neurology | • preventive medicine |
| • emergency physicians | • neuron | • primary health care provider |
| • endocrine | • neurosurgeon | • psychiatrist |
| • endocrinologist | • neurosurgery | • psychiatry |
| • endocrinology | • nonsurgical therapy | • radiologic |
| • epidemic | • obstetric | • radiological |
| • epidemiologist | • obstetrical | • radiologist |
| • epidemiology | • obstetrician | • radiology |
| • family practice | • obstetrics | • rheumatism |
| • forensic medicine | • oncologist | • rheumatologist |
| • gastric | • oncology | • rheumatology |
| • gastroenterologist | • ophthalmic | • rhinologist |
| • gastroenterology | • ophthalmologic | • rhinology |
| | • ophthalmological | • roentgenology |
| | • ophthalmologist | |

LESSON 1.3

Recognize Medical Words, Specialists, and Specialties

Key Terms (Cont.)

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> • Vocabulary (Cont.) • surgery • triage • urinary • urologic • urological • urologist • urology • Combining Forms • cardi(o) • crin(o) • dermat(o) • enter(o) • esthesi(o) • gastr(o) • ger(a) • ger(o) | <ul style="list-style-type: none"> • geront(o) • gynec(o) • immun(o) • laryng(o) • nat(o) • ne(o) • neur(o) • obstetr(o) • onc(o) • ophthalm(o) • orth(o) • ot(o) • path(o) • ped(o) • psych(o) • radi(o) • rheumat(o) | <ul style="list-style-type: none"> • rhin(o) • ur(o) • Suffixes • -ac • -al • -ar • -er • -iatrician • -iatics • -iatry • -ic • -ical • -ist • -logic • -logical • -logist • -logy |
|---|---|--|

Student Preparation

Assignments

2 hours

- 6, READ – Textbook (pp. 12-20)**
- 7 ANSWER – Textbook**
- &**
 - Exercises 14-22 (12-21)
 - Programmed Learning Sections (pp. 12-20)
- 8 ANSWER – Evolve Student Resources**
- TEACH Handouts F and G
- Quick Quizzes, #6, #12 and #13
- APPLY – Medical Terminology Online**
- Module 1
 - Section IV
 - Section V

LESSON 1.3**Recognize Medical Words, Specialists, and Specialties****50-Minute Lesson Plan****Lecture Outline****20 minutes****Slide 33****Lesson 1.3: Recognize Medical Words, Specialists, and Specialties (p. 1)**

- 6) Write the meanings of selected word parts and use them to build and analyze terms.
- 7) Match the terms for medical specialists with the areas in which they specialize, or write the medical specialties when given the area of expertise.
- 8) Identify the specialty associated with various medical conditions.

TALKING POINTS:

- This chapter will help you solidify your understanding of word parts while learning the names of medical professions and professionals.
- Learning the word parts used in the naming of professions will allow you to associate conditions with the professionals who treat them.

6, 7 & 8**Slide 34****Holistic Health (p. 13)****TALKING POINTS:**

- **Holistic** health looks at a person as an integrated physical, emotional, intellectual, social, and spiritual being.
- Even though medical specialties may focus on one body system (such as the heart or lungs), a holistic viewpoint takes the perspective that every individual is an integrated system in which the separate parts interact and influence each other.

Slide 35**Suffixes: Specialists or Specialties (p. 12)**

- -logist one who studies; specialist
- -logy study or science of
- Both contain log(o)

TALKING POINTS:

- Suffixes are attached to combining forms to modify their meaning. Remember *cardi(o)*?
- When interpreting a medical term, look first to the suffix: *-logist* means “specialist,” or “one who studies,” so **cardiologist** means: “a specialist of the heart.”
- *Log(o)* is actually a combining form that means “word” or “speech.” One who studies words (reading) gives the suffix *-logist*.
- What is the study of the heart called? **cardiology**.

LESSON 1.3

Recognize Medical Words, Specialists, and Specialties

Slide 36

Suffixes: Specialists or Specialties (Cont.) (p. 12)

- -er, -ist one who
- -iatrician practitioner
- -iatrics, -iatry medical profession or treatment

TALKING POINTS:

- What specialist names can you think of that end simply in -er or -ist? practitioner (brick layer, owner), internist
- What medical practitioner can you think of whose name uses -iatrician? **pediatrician** (pediatrics)
- **Psychologist** uses psych(o), log(o) and -ist; **psychiatrist** uses psych(o),iatr(o) (relates to physician or medicine) and -ist.
- **Clinical psychology** covers the diagnosis, treatment, and prevention of a range of personality and behavioral disorders, but is a branch of psychology rather than a branch of medicine. One who is trained in this area is a **clinical psychologist**. **Psychiatrics** or **psychiatry** is the medical specialty concerned with disorders of the mind.
- A doctor of medicine, called an “MD,” can also be a specialist, such as a pediatrician or psychiatrist.

Slide 37

Suffixes: “Pertaining To” (p. 12)

- -ac, -al, -ic, -ical pertaining to
- -logic, -logical pertaining to the study of
 - Note that log(o) is within -logic and -logical

TALKING POINTS:

- Knowing that *cardi(o)* is the combining form meaning “heart,” write a word that means “pertaining to the heart”: **cardiac**.
- Knowing that *neur(o)* is the combining form meaning “nerve,” write a term that means “pertaining to nerves”: **neural**.
- Knowing that *gastr(o)* is the combining form meaning “stomach,” write a term that means “pertaining to the stomach”: **gastric**.
- *Obstetr(o)* is the combining form meaning “midwife,” so what term means “pertaining to midwife”? **obstetric**, sometimes **obstetrical**.
- Write a term using *dermat(o)* (skin) meaning “pertaining to the study of the skin”: **dermatologic** or **dermatological**.

Slide 38

Combining Forms: Selected Medical Specialties (p. 14)

- cardi(o) heart
- crin(o) to secrete; endo- means inside
- -crine to secrete
- dermat(o) skin
- gastr(o) stomach
- enter(o) intestines

TALKING POINTS:

- Form the medical specialties and specialists with these combining forms using -logy and -logist as suffixes: cardi(o) becomes [pause] **cardiology** and **cardiologist**.
- **Endocrine** glands secrete chemical messengers called hormones. *Endo-* means “inside,” so crin(o) is used in [pause] **endocrinology** and **endocrinologist**. The suffix *-crine* also means “to secrete.”
- Dermat(o) becomes [pause] **dermatology** and **dermatologist**. **Dermal** means “pertaining to the skin.”
- The specialty that studies the stomach and intestines [gastr(o) plus enter(o)] is [pause] **gastroenterology**, and those specialists are called [pause] **gastroenterologists**.

LESSON 1.3

Recognize Medical Words, Specialists, and Specialties

Slide 39

Combining Forms: Selected Medical Specialties (Cont.) (p. 14)

- esthesi(o) sensation; an- means not
- gynec(o) female
- obstetr(o) midwife
- immun(o) immune
- neur(o) nerve
- ger(a), ger(o), and geront(o) elderly

TALKING POINTS:

- Form the medical specialties and specialists with these combining forms using -logy, -logist, or other suffixes: *An-* means “not,” so *esthesi(o)* plus *an-* is used in [pause] **anesthesiology** and **anesthesiologist**. An **anesthetic** is a drug or agent capable of producing a total loss of feeling. An **anesthetist** is a nurse or other person trained in administering anesthetics.
- Gynec(o) becomes [pause] **gynecology** and **gynecologist**. Gynecology is often abbreviated Gyn.
- Obstetr(o) becomes [pause] **obstetrics** and **obstetrician** (note the use of -ics and -ician as variations of -ic and -iatrician). What is the abbreviation for obstetrics? OB
- **Immunology** is one of the most rapidly expanding areas of science. Immun(o) is the combining form for immune. The medical specialist in immunology is an [pause] **immunologist**.
- Neur(o) gives **neurology** and **neurologist** (it’s getting easier, isn’t it!).
- Here’s another variation: ger(a) gives [pause] **geriatrics** and **geriatrician**, but **gerontology** is also the study of the elderly.

Slide 40

Neonatology (pp. 15-16)

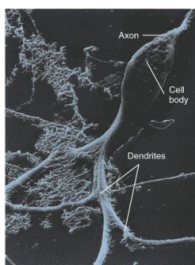


TALKING POINT:

- Neonatology is the specialty, so a newborn is called a neonate. [Ne(o) = new; nat(o) = birth]

Slide 41

Neuron (p. 18)



TALKING POINT:

- One type of nerve cell is called a **neuron** [neur(o) = nerve] and some of its projections are called nerve fibers.

LESSON 1.3

Recognize Medical Words, Specialists, and Specialties

Slide 42

Quick Quiz!

- What is the difference between a psychologist and a psychiatrist?
 - A. A psychologist is a medical doctor.
 - B. A psychiatrist is a medical doctor.
 - C. A psychologist prescribes medicine.
 - D. They are the same.

TALKING POINT:

- The answer is B. A psychiatrist is a medical doctor, but a psychologist is not.

Slide 43

Combining Forms: Selected Medical Specialties (Cont.) (p. 14)

- onc(o) tumor
- ophthalm(o) eye
- orth(o) straight
- ped(o) child or foot
- ot(o) ear
- laryng(o) larynx (voice box)
- path(o) disease

TALKING POINTS:

- Form the medical specialties and specialists with these combining forms using -logy, -logist, or other suffixes: onc(o) gives **oncology** and **oncologist**. Oncology is concerned with the study of malignancy. **Malignant** means “tending to become worse, to spread, and cause death.”
- ophthalm(o) forms the basis of [pause] **ophthalmology** and **ophthalmologist**. **Ophthalmic** and **ophthalmologic**, and **ophthalmological** all mean “pertaining to the eye.”
- orth(o) plus ped(o) creates what specialty and specialists? **orthopedics** and **orthopedists**.
- ot(o) is used in **otologist** and **otology**, the study of the ear. ot(o) plus laryng(o) creates [pause] **otolaryngology** and **otolaryngologist**. The **larynx** is the voice box.
- ped(o) is used in the specialty that studies children [pause] **pediatrics** and those physicians are called [pause] **pediatricians**. **Pediatric** means “pertaining to children.”
- path(o) gives [pause] **pathology** and **pathologist**. A pathologist is certified in **clinical** or **anatomic pathology**. A **clinical pathologist** is a physician who is certified in the laboratory study of disease. An **anatomic pathologist** is certified in the study of the effects of disease.

Slide 44

Orthopedist Examination (pp. 19-20)



TALKING POINT:

- The term **orthopedics** comes from when such physicians tried to straighten [*orth(o)*] means “straight”] children’s [ped(o)] spines, limbs, or bones.

LESSON 1.3

Recognize Medical Words, Specialists, and Specialties

Slide 45

Combining Forms: Selected Medical Specialties (Cont.) (p. 14)

- ne(o) new
- nat(o) birth
- psych(o) mind
- radi(o) radiation
- rheumat(o) rheumatism
- rhin(o) nose
- ur(o) urinary tract (sometimes urine)

TALKING POINTS:

- Form the medical specialties and specialists with these combining forms using -logy, -logist, or other suffixes: (Just a few more—you're getting the hang of it!)
- The study of newborns and its specialists use ne(o) + nat(o) to give [pause] **neonatology** and **neonatologist**.
- psych(o) forms [pause] **psychiatry** and **psychiatrist**.
- radi(o) forms [pause] **radiology** and **radiologist**. Adjective forms include **radiologic** and **radiological**.
 - **Radiotherapy** is treatment using radiation to destroy cancer cells. It is also called **radiation oncology**.
 - Radiologic technologists operate diagnostic imaging equipment and assist radiologists.
- Rheumat(o) forms [pause] **rheumatology** and **rheumatologist**. **Rheumatism** is a variety of disorders marked by inflammation, degeneration, or other problems of connective tissues of the body, especially the joints.
- Rhin(o) forms **rhinology** and **rhinologist**. Rhin(o) is sometimes used in combination with ot(o) and laryng(o) to form **otorhinolaryngology** and **otorhinolaryngologist**. You may have heard of this specialty as "ENT" for ear, nose, and throat.
- Ur(o) forms **urology** and **urologist**. Three terms mean pertaining to urine or the urinary system: **urologic**, **urological**, and **urinary**.

Slide 46

Selected Medical Specialties (p. 19)

- Surgery
 - plastic surgery
 - neurosurgery, neurosurgeon
 - orthopedic surgeon



TALKING POINTS:

- **Surgery** includes several branches of medicine that treat disease, injuries, and deformities by operative procedures. The term surgery also refers to the work performed by a surgeon or the place where surgery is performed.
- What is the name of the room where surgery is performed? What is the abbreviation for that room? OR.
- There are many types of surgical specialists. **Neurosurgery** focuses on the brain, spinal cord, or peripheral nerves. It is performed by **neurosurgeons**.
- **Plastic surgery** [*plast(o)* means "repair"] is the repair or reconstruction of tissue or organs via surgery.
- **Orthopedic surgeons** deal with the preservation and restoration of the bones and associated structures.
- The figure shows a surgeon using robotics to perform minimally invasive surgery. Robotic surgery is not always possible.

LESSON 1.3

Recognize Medical Words, Specialists, and Specialties

Slide 47

Selected Medical Specialties (Cont.) (p. 13)

- Family practice (general practitioner)
- Primary health care provider
- Internal medicine, internist

TALKING POINTS:

- **Family practice** physicians care for all members of a family and are often primary health care providers, serving as portals of entry to the health care field.
- A family practice physician often acts as a **primary health care provider**, referring complex disorders to other specialists. The family practice physician has largely replaced the concept of a general practitioner (GP).
- **Internal medicine** is a nonsurgical specialty that deals with diagnosis and treatment of diseases of the internal structures of the body. Those practitioners are called **internists**.

Slide 48

Selected Medical Specialties (Cont.) (p. 20)

- Emergency medicine, triage
- Epidemiologist (epidemic)
- Forensic medicine
- Preventive medicine

TALKING POINTS:

- **Emergency medicine** is its own specialty. You may have heard of the abbreviation ER for emergency room, but the correct designation is actually ED for emergency department, although ER is still in use. Specialists in emergency medicine are called emergency physicians.
- **Triage** is the process of prioritizing patients based on their need for care. It can take place outside a medical environment, as in an accident or war, or in the emergency department.
- **Epidemiologists** study the factors that determine the frequency and distribution of diseases. An **epidemic** attacks several people in a region at the same time.
- **Forensic medicine** deals with the legal aspects of medical care.
- **Preventive medicine** is concerned with preventing the occurrence of both mental and physical illnesses.
- Other specialties include aerospace medicine, concerned with the effects of living and working outside the Earth's atmosphere and gravity, and sports medicine, which includes prevention, diagnosis, and treatment of sports injuries.

LESSON 1.3

Recognize Medical Words, Specialists, and Specialties

Activities

Classroom

Choose from below to make **30 minutes**

Online

**6,
7
&
8**

DISCUSS

- As a class, discuss the Background Assessment (#2 and #3) and Critical Thinking Question below.
- Take an example of one patient with one condition and note all the professionals who touch that case: office assistant who makes the appointment, medical records professional who compiles information for the file, physician assistant or nurse who takes the history, family physician who examines and orders tests, laboratory personnel who collect samples and analyze them, radiographer who performs exam, radiologist who records the report, transcriptionist who types the report, specialist who sees the patient next, etc.

CREATE

- Tell the students to use the word parts boxes in the text to make their own flash cards on 3X5 note cards, with word parts on one side and meanings on the other. This is a very good learning tool for all chapters! Students can keep the cards handy to review while waiting between classes or any time they have a few moments.

PRESENT

Have students share why they are taking a course on medical terminology, and if there is a health profession or professional who has influenced their decision.

POST & COMMENT

- Post the Background Assessment (#2 and #3) and the Critical Thinking Question below and have students post their responses and comment on each other's posts.

ANSWER – Evolve Student Resources

- TEACH Handouts F and G
- Quick Quizzes, #6, #12, and #13

APPLY – Medical Terminology Online

- Module 1
 - Section IV
- Section V

Critical Thinking Question

What are the advantages and disadvantages of dividing medical practice into specialties?

Discussion Guidelines: Pros might include that specialization allows more in-depth knowledge on a particular subject or system, quicker diagnosis, translation into better health care, etc. Cons could include the difficulty of integrating all body systems into treatment, the patient feeling apportioned and not considered as a whole, holdups in transmission of information between physicians and departments, etc.

LESSON 1.3

Recognize Medical Words, Specialists, and Specialties

Instructor Notes/Student Feedback

Before lecture: Review assignments from previous class.

After class: Check the Pretests to see how students scored. Make notes immediately for what worked well and what could be changed on the Pretest and on the PowerPoint commentary.

LESSON 1.4

Medical Records, Categories, Abbreviations, and Review

Instructor Preparation

Textbook Objectives Covered

9. List five categories for classifying medical terms that are used in this book.
10. Spell medical terms accurately.
11. Write the meanings of the abbreviations, including those in a health report presented in this chapter.
12. Identify terms as a medical specialty, a specialist, another type of noun, or an adjective.

Lesson Preparation Checklist

- Prepare lecture from [TEACH lecture slides](#) available on Evolve.
- Assemble materials and supplies needed for each lesson as indicated below.

Materials and Supplies

- computer
- copies of TEACH Handout H
- projector

Key Terms

Terminology

• Vocabulary (p. 23)

- anatomy
- diagnosis
- diagnostic
- pathology
- surgery
- nonsurgical therapy

• Abbreviations (p. 24)

- ADL
- AHCA
- CC
- CPT

- DOB
- DRG
- Dx
- ED
- ENT
- FH
- GP
- H&P
- HIPAA
- HPI
- HHx
- ICD-10

- IP
- MD
- OB
- OP
- OR
- PE
- PMH
- Pt
- ROS
- SSN
- Tx
- VS

LESSON 1.4**Medical Records, Categories, Abbreviations, and Review****Student Preparation****Assignments****2 hours**

- 9, 10, 11 & 12**
- READ – Textbook (pp. 21-25)**
- BMV List (p. 30)
 - Enhancing Spanish Communication (pp. 31-32)
- ANSWER – Textbook**
- Exercises 23-25 (pp. 22-23)
 - Programmed Learning Sections (pp. 21-23)
 - Chapter 2 Self-Test
 - Basic Understanding (pp. 26-28)
 - Greater Comprehension (pp. 28-29)
- ANSWER – Evolve Student Resources**
- TEACH Handout H
 - Quick Quizzes, #7 and #14
 - Practice Exercises
 - Multiple Choice
 - Fill-in-the-Blank
 - Spanish Exercises
- PLAY GAMES – Evolve Student Resources**
- Bees in the Building
 - Millionaire Builder
 - Building Additions
 - Building Squares
 - Beat the Deadline
 - Put Out the Fire
- REVIEW – Evolve Student Resources**
- Electronic Flashcards
 - Pronounce It/Glossaries
- APPLY – Medical Terminology Online**
- Module 1
 - Section VI

50-Minute Lesson Plan**Lecture Outline****20 minutes**

- Slide 49**
- Lesson 1.4: Medical Records, Categories, Abbreviations, and Review (p. 1)**
- 9) List five categories for classifying medical terms that are used in this book.
 - 10) Spell medical terms accurately.
 - 11) Write the meanings of the abbreviations, including those in a health report presented in this chapter.
 - 12) Identify terms as a medical specialty, a specialist, another type of noun, or an adjective.
- TALKING POINTS:**
- In this lesson, you will learn categories for medical terms, based on the process of diagnosis and choices of therapy.
 - Remember that it is important to spell medical terms accurately, as the difference of one letter can mean an entirely different body part. For example: i-l-i-u-m is part of the bony pelvis, but i-l-e-u-m with an e is part of the small intestines.
 - We will also review the abbreviations for this chapter.

LESSON 1.4

Medical Records, Categories, Abbreviations, and Review

Slide 50

Categories of Medical Terms (p. 23)

- Anatomy
- Diagnostic
- Pathology
- Surgery
- Therapy

TALKING POINTS:

- Anatomy is the science of the structure of the body and the relation of its parts. Terms in the anatomy category are the names of structures and the adjective forms of those structures (for example, cranium and cranial).
- Diagnostic terms include terms used to describe disease (fever, headache) as well as the clinical studies, laboratory tests, and radiologic studies to establish a diagnosis.
- Pathology includes the names of the diseases and disorders.
- Surgery includes the names of operative procedures.
- Therapy includes treatments such as medications and physical treatments.

9,
10,
11
&
12

Slide 51

Medical Records (p. 21)

- Diagnosis-related groups (DRGs)
- Current procedural terminology (CPT)
- International Classification of Diseases, 10th revision (ICD-10)
- Health Insurance Portability and Accountability Act (HIPAA)
- Affordable Health Care Act (AHCA)

TALKING POINTS:

- Medical coding translates diagnosis and procedures into codes for statistically capturing medical data.
- DRGs are used in tracking illness, research, and for insurance purposes.
- CPT codes are the standardized terminology and coding for medical services and procedures.
- The ICD-10 codes are used in research, to track disorders, and to facilitate insurance claims.
- The Health Insurance Portability and Accountability Act (HIPAA) is a federal privacy act that went into effect in 2003. It gives the patient certain rights, including the rights to request restrictions of protected health information and to receive confidential communications concerning one's own medical condition and treatment.
- The Affordable Health Care Act is designed to provide affordable health care insurance options.

Slide 52

Medical Records (pp. 21-22)

- Patient (Pt)
- Inpatient (IP), outpatient (OP)
- Date of birth (DOB)
- Social security number (SSN)

TALKING POINTS:

- How many of these abbreviations from medical records did you already know? Many abbreviations are used in the patient information section of records.
- Follow the guidelines of the Joint Commission's "Do Not Use" list of abbreviations.
[Discuss.]

LESSON 1.4

Medical Records, Categories, Abbreviations, and Review

Slide 53

Additional Abbreviations (pp. 21-22)

- Health history (HHx), chief complaint (CC)
- History of present illness (HPI)
- Family history (FH), past medical history (PMH)
- Review of systems (ROS)

TALKING POINTS:

- This set of abbreviations relates to the history taken from the patient.
- Chief complaint is what the patient says is the reason for a health care visit.
- Past medical history is the patient's medical history before the present illness.
- Review of systems refers to the various body systems, such as the cardiovascular, respiratory, and nervous systems. It can also be a designation for information gathered during a physical examination.

Slide 54

Medical Records (Cont.) (pp. 21-22)

- History and physical (H&P)
- Physical examination (PE)
- Vital signs (VS)
- Diagnosis (Dx)
- Treatment (Tx)

TALKING POINTS:

- After taking a history, a patient's condition may require a physical examination.
- Vital signs, including temperature, pulse, and respiration rate, are often taken as part of the physical examination.
- A diagnosis is the determination of the causes of a disease.
- Treatment is abbreviated similarly to history and diagnosis, with a small x after a capital letter.

Slide 55

Pharmacology (p. 23)

- Pharmac(o) means drugs
 - Pharmacology
 - Pharmacist
 - Pharmacy
- Institute for Safe Medication Practices: www.ismp.org
- More pharmacology information is on the Evolve website

TALKING POINTS:

- Pharmacology is the study of drugs, their origin, nature, properties, and effects.
- A pharmacist is licensed to prepare and sell or dispense drugs or compounds and to make up prescriptions.
- Pharmacy is the branch of health sciences dealing with the preparation, dispensing, and proper utilization of drugs.
- The Institute for Safe Medication Practices is a good source of information on abbreviations.
- Remember that the Evolve website contains additional pharmacology information, organized by chapter.

LESSON 1.4

Medical Records, Categories, Abbreviations, and Review

Slide 56

Abbreviations (p. 24)

- MD
- ED
- ENT
- GP
- OB
- OR

TALKING POINTS:

- What do these abbreviations mean?
 - MD doctor of medicine
 - ED emergency department
 - ENT ear, nose, and throat
 - GP general practitioner
 - OB obstetrics
 - OR operating room

Slide 57

Abbreviations (Cont.) (p. 24)

- CPT
- ICD-10
- DRG
- AHCA
- HIPAA

TALKING POINTS:

- What do these abbreviations mean?
 - CPT = current procedural terminology
 - ICD-10 = International Classification of Diseases, 10th revision
 - AHCA = Affordable Health Care Act
 - HIPAA = Health Insurance Portability and Accountability Act

Slide 58

Forming Adjectives (p. 24)

- 1) cardiologic
- 2) dermal
- 3) endocrine
- 4) gastric
- 5) larynx
- 6) neural
- 7) otic

TALKING POINTS:

- To what terms do these adjectives refer?
 - 1) Heart
 - 2) Skin
 - 3) Glands/endocrine system
 - 4) Stomach
 - 5) Larynx
 - 6) Nerve
 - 7) Ear

LESSON 1.4

Medical Records, Categories, Abbreviations, and Review

Slide 59

Quick Quiz!

- What does the abbreviation IP mean?
 - A. illness preceding
 - B. history of present illness
 - C. inpatient
 - D. intravenous patient

TALKING POINT:

- The answer is C: inpatient. Remember that OP stands for outpatient. History of present illness is abbreviated HPI. IV is an abbreviation meaning intravenous.

Slide 60

Complementary and Alternative Therapies

- National Center for Complementary and Alternative Medicine (NCCAM)
- Four main categories
 - Mind-body therapies
 - Biologically based therapies
 - Manipulative therapies
 - Energy therapies
- For more info, visit nccam.nih.gov

TALKING POINTS:

- In 1992, congress established the Office of Alternative Medicine within the National Institutes of Health (NIH). In 1998, the office expanded to become NCCAM.
- Alternative therapies are used in place of traditional medical (allopathic) therapies.
- Complementary therapies are used in conjunction with traditional therapies.
 - Mind-body therapies include meditation and hypnosis, for example.
 - Biologically based therapies include herbal products and special diets.
 - Manipulative therapies include chiropractic and massage.
 - Energy therapies include therapeutic touch and reiki, for example.
- Openness between health care providers is key in providing optimal care. The term integrative therapies suggests a collaborative approach.

LESSON 1.4

Medical Records, Categories, Abbreviations, and Review

Activities

Classroom		Choose from below to make 30 minutes	Online
9, 10, 11 & 12	DISCUSS	<ul style="list-style-type: none"> As a class, discuss the Critical Thinking Question below. 	POST & COMMENT
	PRACTICE		<ul style="list-style-type: none"> Post the Critical Thinking Question below and have students post their responses and comment on each other's posts.
	<ul style="list-style-type: none"> Using the BMV List on p. 30, have the class take turns pronouncing all the terms. Divide the class into groups of 3 or 4 and complete TEACH Handout C. 		ANSWER – Evolve Student Resources <ul style="list-style-type: none"> TEACH Handout H Quick Quizzes, #7 and #14 Practice Exercises <ul style="list-style-type: none"> Multiple Choice Fill-in-the-Blank Spanish Exercises
			PLAY GAMES – Evolve Student Resources <ul style="list-style-type: none"> Bees in the Building Millionaire Builder Building Additions Building Squares Beat the Deadline Put Out the Fire
			REVIEW – Evolve Student Resources <ul style="list-style-type: none"> Electronic Flashcards Pronounce It/Glossaries
			APPLY – Medical Terminology Online <ul style="list-style-type: none"> Module 1 <ul style="list-style-type: none"> Section V Section VI

Critical Thinking Question

Why are medical records legal as well as medical documents?

Discussion Guidelines: Medical records document the patient's health care experience. Legally, they protect the practitioner, as well as the patient, with a thorough documentation of patient care.

Instructor Notes/Student Feedback

Before lecture: Review assignments from previous class.

During class: Announce the exam date and suggest review techniques and assignments for the exam.

After class: Check the gathered assignments to see how students scored. Make notes immediately for what worked well and what could be changed.

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Assessments for Building Medical Terms Starting with Medical Specialties

CHAPTER OBJECTIVES

Lesson 1.1: Word Parts

1. Identify the roles of word roots, prefixes, suffixes, and combining forms.
2. Identify examples of combining forms, prefixes, suffixes, and word roots, and recognize them in medical terms.
3. Demonstrate correct usage of the combining vowel by correctly joining word parts to write medical terms.

Lesson 1.2: Plurals and Pronunciation

4. Use the rules in this chapter to write singular and plural forms and to identify eponyms, acronyms, and abbreviations.
5. Use the rules in this chapter to pronounce medical terms correctly.

Lesson 1.3: Recognize Medical Words, Specialists, and Specialties

6. Write the meanings of selected word parts and use them to build and analyze terms.
7. Match the terms for medical specialists with the areas in which they specialize, or write the medical specialties when given the area of expertise.
8. Identify the specialty associated with various medical conditions.

Lesson 1.4: Medical Records, Categories, Abbreviations, and Review

9. List five categories for classifying medical terms that are used in this book.
10. Spell medical terms accurately.
11. Write the meanings of the abbreviations, including those in a health report presented in this chapter.
12. Identify terms as a medical specialty, a specialist, another type of noun, or an adjective.

Assessments by Lesson & Objective

Lesson 1.1	1	Test Bank
	&	<ul style="list-style-type: none"> • In ExamView, under Select From a List, choose questions relating to Objectives 1-2.
Lesson 1.1	2	Evolve Student Resources
		<ul style="list-style-type: none"> • TEACH Handouts A-C • Quick Quizzes, #2
	3	Test Bank
		<ul style="list-style-type: none"> • In ExamView, under Select From a List, choose questions relating to Objective 3.
		Evolve Student Resources
		<ul style="list-style-type: none"> • TEACH Handouts A-C • Quick Quizzes, #3 and #9
Lesson 1.2	4	Test Bank
	&	<ul style="list-style-type: none"> • In ExamView, under Select From a List, choose questions relating to Objectives 4-5.
	5	Evolve Student Resources
		<ul style="list-style-type: none"> • TEACH Handouts D and E • Quick Quizzes, #1, #4, #5, #8, #10, and #11
		Medical Terminology Online
		<ul style="list-style-type: none"> • Module I, Section I Quiz

Assessments by Lesson & Objective

Lesson 1.3	6,	Test Bank
	7	<ul style="list-style-type: none"> • In ExamView, under Select From a List, choose questions relating to Objectives 6-8.
	& 8	Evolve Student Resources <ul style="list-style-type: none"> • Quick Quizzes, #6, #12, and #13 Medical Terminology Online <ul style="list-style-type: none"> • Module I, Section IV Quiz
Lesson 1.4	9,	Test Bank
	10,	<ul style="list-style-type: none"> • Create a 50-question final test covering all aspects of Chapter 1 using ExamView.
	11	Evolve Student Resources <ul style="list-style-type: none"> • Quick Quizzes, #7 and #14
	& 12	Medical Terminology Online <ul style="list-style-type: none"> • Module 1, Exam

Instructor's Notes/Student Feedback

1

Instructor Resource Material for Building Medical Terms Starting with Medical Specialties

CLASSROOM ACTIVITIES ANSWER KEY

A.

1. true
2. true
3. true
4. false (Acronyms)

B.

1. A, D, G, H
2. C, E, I
3. B, F

C.

- | | |
|----------------|---------------------|
| 1. acromegaly | 6. glossopathy |
| 2. arthralgia | 7. hemostasis |
| 3. carpopedal | 8. hyperglycemia |
| 4. dysuria | 9. jejunioileostomy |
| 5. endogastric | 10. osteochondritis |

D.

- | | |
|----------------|--------------------------|
| 1. abductors | 9. ileum |
| 2. capillaries | 10. bursae |
| 3. prognoses | 11. appendix |
| 4. ovaries | 12. petechia |
| 5. alveolus | 13. carcinoma |
| 6. diagnosis | 14. thoraces or thoraxes |
| 7. bacterium | 15. spermatozoon |
| 8. bronchi | 16. pharynx |

E.

1. (correct)
2. ophthalmic
3. anesthetic
4. pediatrician
5. (correct)

F.

- | | |
|----------------------------|-------------------------|
| 1. pertaining to | 8. pertaining to |
| 2. to secrete | 9. one who |
| 3. tumor | 10. study or science of |
| 4. skin | 11. new, birth |
| 5. child | 12. straight |
| 6. aged | 13. mind |
| 7. bad, painful, difficult | 14. nose |

G.

- | | |
|----------------|--------------|
| 1. ot(o) | 6. immune(o) |
| 2. ophthalm(o) | 7. laryng(o) |
| 3. esthesi(o) | 8. neur(o) |
| 4. gynec(o) | 9. sub- |
| 5. cardi(o) | 10. -itis |

H.

