Medical terminology is the language used among health care professionals. As part of a medical team, you’ll need to know the most commonly used medical words to communicate within the health care setting. Throughout this study guide, various hypothetical scenarios will be presented to illustrate important points related to medical terminology.

For example, let’s assume you’re retrieving a medical record from the files located in the front office of a physician’s small practice. You overhear a patient complaining to the receptionist about a bill. The patient tells the receptionist that she had seen the physician four weeks ago for a high fever and sore throat. When the patient received a bill for the visit, she became upset and called her insurance company. The patient also stated that the insurance company didn’t pay for the office visit because her diagnosis was myocardial infarction, which is a diagnosis that didn’t correspond with her symptoms of fever and sore throat. The patient wanted to know what a myocardial infarction is and why her insurance company didn’t cover the bill.

As an allied health professional with knowledge of medical terminology, you realize that a serious error has been made. The term *myocardial infarction* means heart attack. A heart attack, or myocardial infarction, isn’t the same as a fever and sore throat. Because the receptionist didn’t have a background in medical terminology and wasn’t in a position to discuss billing information, she referred the patient to the billing manager. By understanding medical terminology, key professionals in this small physician’s office will be able to determine how such a billing mistake occurred and then correct it.
ASSIGNMENT 1: MEDICAL TERMINOLOGY FUNDAMENTALS

Read Assignment 1 in this study guide. Then, in your textbook Medical Terminology: A Living Language, read pages 1–14.

As you read pages 1–14 in your textbook, you’ll review the components of medical words. To analyze a word (Table 1), you should understand that it’s composed of four elements: the root, combining form, prefix, and suffix. The root is the main part of a word. The combining form is a root plus a vowel. You’ll notice that in many medical terms the vowel is “o.” However, it’s not the only vowel—just the most common. Let’s look at a few examples of roots and combining forms.

<table>
<thead>
<tr>
<th>Root</th>
<th>Combining Vowel</th>
<th>Combining Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>cardi</td>
<td>+ o</td>
<td>cardi/o</td>
<td>heart</td>
</tr>
<tr>
<td>acr</td>
<td>+ o</td>
<td>acr/o</td>
<td>extremity</td>
</tr>
<tr>
<td>gastr</td>
<td>+ o</td>
<td>gastr/o</td>
<td>stomach</td>
</tr>
</tbody>
</table>

As you’re learning word elements, you should become more familiar with the combining form acr/o. It’s much easier to pronounce acr/o or gastr/o and connect them with other word elements, whereas acr and gastr are more difficult to pronounce and connect with other word elements.

A prefix is found at the beginning of the word, and a suffix is found at the end of the word. In addition to knowing the four elements, the following three-step process will help you more easily define a word element.

1. Define the last part of the word, the suffix.
2. Define the first part of the word, the prefix.
3. Define the middle of the word.

Let’s apply these rules to an example, osteochondritis.
The suffix is -itis. Look up this suffix in a medical dictionary. You’ll find that it means inflammation. The prefix is osteo-. Look up the prefix osteo-. You should find bone. The middle of the word is (chondr). Look up chondr, and you should find cartilage. Now, putting the definitions together, you’ll come up with inflammation of the bone and cartilage.

This exercise shows how essential the medical dictionary is to the study of medical terminology. A medical dictionary is one reference source every health care professional should have access to. Usually, you can quickly locate medical words in a medical dictionary. However, some medical words have beginnings that sound like other word beginnings but are spelled differently—for example, pneumonia. When you pronounce pneumonia, it sounds as if pneumonia begins with an “n.” As you can see, pneumonia begins with “p.” The “p” is silent in this word’s pronunciation. On page 5 of your textbook, you’ll find commonly used word beginnings. Note how many of these may sound alike.

Throughout your medical terminology course, you’ll work on various exercises focused on using a dictionary. Using a medical dictionary repeatedly will help you become familiar with its layout so that you can locate medical words effectively.

After you’ve carefully read pages 1–14 in your textbook, take some time to become familiar with online medical dictionaries. Make a list of five terms from the book that are unfamiliar. Explore the meaning of these terms by visiting respected online medical dictionaries:

- http://www.medilexicon.com/

These are all free and reliable options. Look up the five terms in these dictionaries. Do the definitions differ slightly? You may find that a term can be defined in subtly different ways. Also look at the word parts. Are there links to related words? For example, the word cardiology may contain links to cardiac arrest, carditis, and myocardium. Exploring these terms will help establish the meaning of the combining form cardi/o firmly in your mind. It should take you about one
hour to fully explore the five terms on these three websites, and as you learn more about the words you’ll also be familiarizing yourself with the three dictionaries.

After you’ve carefully read pages 1–14 in your textbook and completed the homework assignment above, complete Self-Check 1. When you completely understand the materials from Assignment 1, move on to Assignment 2.

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**Self-Check 1**

At the end of each assignment in Medical Terminology, you’ll be asked to pause and check your understanding of what you’ve just read by completing a “Self-Check.” Writing the answers to these questions will help you review what you’ve studied so far. Please complete Self-Check 1 now.

Complete Practice Exercises A–J on pages 15–20 of your textbook.

Check your answers with those on page CR-1 of your textbook.