

MODULE 1 Communication and Terminology for the
Workplace

TOPIC 3 Describing Symptoms and Treatments 1

LEARNING OUTCOMES:

By the end of this lesson, participants will be able to:

- ◆ give information from a medical report in lay person's language

TOPIC	SKILLS	CLB COMPETENCE AREA	COMPETENCIES	PRE-TASKS	TASK	POST TASK
<ul style="list-style-type: none"> ◆ Describing Symptoms and Treatments I 	<ul style="list-style-type: none"> ◆ Reading ◆ Listening/ Speaking 	<ul style="list-style-type: none"> ◆ unformatted/ informational text analysis and evaluation ◆ exchanging information 	<ul style="list-style-type: none"> ◆ scan text for specific information ◆ determine meaning from context ◆ analyze medical terminology by suffixes, prefixes and roots to determine meaning ◆ translate medical terms into ordinary English ◆ become familiar with some medical abbreviations 	<ul style="list-style-type: none"> ◆ read informational text ◆ true or false comprehension check ◆ match word parts with meanings ◆ identify the parts of medical terminology ◆ translate medical terms into lay person's language (and vice versa) ◆ categorize terminology according to function 	<ul style="list-style-type: none"> ◆ give information from a medical report in lay person's language 	<ul style="list-style-type: none"> ◆ analysis of task

Facilitator's Notes for Module 1

Topic 3 : Describing Symptoms and Treatments I

FACILITATOR PREPARATION

Content

Facilitator should review Topic 1 and Topic 2 from this module.

This lesson contains medical terminology that may be difficult to pronounce. The facilitator could incorporate focused pronunciation practise in this lesson and omit some of the optional activities (or assign them as homework). This lesson includes a long reading text. If there are strict time limits the text could be assigned as homework the day before the delivery of this lesson.

Delivery

As many copies as required of the following handouts should be made:

- ◆ Handout 1 Reading: Common Diseases and Conditions (adapted from Tiersky, E.M. (1992) The Language of Medicine in English, Englewood Cliffs: Prentice Hall, pp. 39-44 (5 pages)
- ◆ Handout 2 Comprehension Check
- ◆ Handout 3 Vocabulary Practice
- ◆ Handout 4 Structure
- ◆ Handout 5 Categorization and Abbreviations
- ◆ Handout 6 Translating Medical Terminology into “Ordinary” English
- ◆ Handout 7 Task

Materials needed: chart paper, markers, access to an overhead projector or board.

Methodology

Introduction

- (10 minutes)** 1. Write the following questions on the board. Have participants discuss the questions in small groups.
1. What was the last illness you had? What were its symptoms? What was the treatment?
 2. What prescription and non-prescription drugs are you familiar with? What are their side effects?

Pre-Tasks

- (45 minutes)** 1. Distribute Handout 1. Explain to the class that the text is about common diseases and ailments. It deals with serious diseases as well as more common conditions. Tell the class that they are reading first for general information and later they will scan for specific information to complete a true/false exercise.
- (15 minutes)** 2. Have the participants do the true/false exercise in Handout 2 and then compare answers with a partner. Take up the questions as a whole class.
- (25 minutes)** 3. Handout 3 is a review of word parts (roots, suffixes, and prefixes). Participants should work in pairs to match the word parts with their correct meanings and to think of an example of a medical term containing each word part or to find an example in the text. Take up as a whole class activity or prepare answers on OHT or chart paper.
- (15 minutes)** 4. Distribute Handout 4 to the class and have them work with a partner to identify the components of each medical term and its meaning. Take up as a class or prepare an answer sheet on chart paper or OHT.
- (optional)*

(20 minutes) 5. Explain to the class that categorizing terminology is one effective way of learning new words. In the activity in Handout 5, participants will categorize medical terms as follows:

- ◆ Abnormal Conditions
- ◆ Diagnostic Procedures
- ◆ Treatments
- ◆ Medications

Break the class into four groups and distribute Handout 5 to each participant. Give each group several sheets of chart paper and a marker. Each group should decide which terms belong to which category and write the words on chart paper. Have the whole class compare charts to determine if each group categorized their words correctly.

(25-35 minutes) 6. Explain to the participants that medical terminology is used primarily when health care professionals communicate among themselves, but shouldn't be used with patients. In order to be able to communicate effectively with patients, health care professionals need to use layperson's language or non-medical language. Explain that Handout 6 will give participants the opportunity to practice "translating" terminology into "ordinary" English. They will also translate layperson's terms into medical terms. Take up the exercise with the whole class.

Task

(30 minutes) 1. Pair the participants and distribute Handout 7. Explain that they have a medical report that they must first understand themselves. Participants should negotiate the meaning of the medical terminology used in the report. Their task is to re-phrase the report into layperson's language. Participants could re-write the text or work through it orally.

Post-Task

(15 minutes)

Have two or three pairs read their translation of the medical report into lay person's language in front of the class.

Handout 1 (page 1 of 5)

Common Diseases and Conditions

1. There is no end in sight in the battle between human beings and the diseases that can destroy them. However, in the 20th century, the nature of the enemy has changed dramatically. In countries where modern medical facilities are available, infectious diseases that were once widespread killers can now be prevented or diagnosed early and cured. Thanks to vaccines, **antibiotics**, and improved sanitation, most of the dreaded epidemics of the past are not likely to recur.
2. Today's major killers are non-infectious diseases – especially the various forms of cardiovascular disease and cancer. As life expectancy increases, people are more likely to succumb to degenerative conditions that the aging body is susceptible to. In addition, many factors of modern life – such as environmental pollution, occupational hazards, stress, a sedentary lifestyle, an unhealthy diet, the use of cigarettes, drug and alcohol abuse – contribute to the development of disease.
3. One of the most common serious afflictions in modern society is heart disease. This general label encompasses many different abnormal conditions, including congenital heart defects (many of which can be repaired surgically), diseases of the pericardium (the tissue surrounding the heart muscle), and diseases affecting the heart muscle itself (the myocardium). Physicians can often detect or predict heart problems by measuring the rate of the heartbeat (called the **pulse**) and by taking the patient's blood pressure. Another important diagnostic tool is the electrocardiogram (EKG), a record of the electrical activity of the heart, which can reveal abnormal cardiac rhythm and myocardial damage. When heart disease is suspected and more detailed information is needed, an **angiogram** is ordered. This series of X-ray films (taken after the injection of a radiopaque substance) defines the size and shape of various veins and arteries.
4. The most common cardiovascular disease is **atherosclerosis** (hardening of the arteries). **Atherosclerosis** of the coronary arteries may cause the development of a coronary **thrombus** (blood clot), which blocks the flow of blood to the heart muscle. If, as a result, part of the heart muscle dies, the condition is called *myocardial infarction* (a heart attack). Some symptoms and signs of a heart attack are pain in the chest (and sometimes also in the jaws and arms), shortness of breath, irregular pulse, nausea, and perspiration. Prompt cardiopulmonary resuscitation can save victims from sudden death. Among the emergency procedures used in the treatment of atherosclerosis is a technique known as *percutaneous transluminal angioplasty* (PTA). This technique widens coronary arteries that have become dangerously narrow due to deposits (called *plaque*) on their interior walls. The procedure involves manipulating a catheter (flexible tube) into the constricted vessel, then inflating a small balloon at its tip, thereby compressing the plaque and widening the passage. This procedure can sometimes substitute for a much more traumatic one – bypass surgery.

Handout 1 (page 2 of 5)

5. When atherosclerosis affects the carotid and vertebral arteries (which supply blood to the brain), a stroke may result, causing paralysis (**paralytic stroke**) and sometimes affecting speech and brain function. Atherosclerosis can also weaken the aorta wall, causing it to develop a balloonlike structure called an **aneurysm**. Large aneurysms can rupture, causing fatal hemorrhage. Patients can decrease the likelihood of developing atherosclerosis by cutting down on their consumption of fats, cutting out cigarettes, and getting adequate exercise.
6. Less serious but still frightening is the condition called **angina pectoris**, chest pains that occur when the heart muscle does not get enough oxygen (often because of a temporary spasm of a vessel). An attack is usually caused by overexertion and can be relieved by rest and nitroglycerin tablets.
7. Patients with various kinds of heart conditions may be treated medically with many different drugs including **anticoagulants** to reduce the chance of blood clotting, beta blockers to reduce high blood pressure, or **digitalis** to increase the force of the heart's contractions. Surgical treatments include repair or replacement of valves or arteries, insertion of a pacemaker to regulate heartbeat, or even the substitution of an artificial or a transplanted human heart for the patient's diseased one.
8. The relationship between cardiovascular disease and **hypertension** (high blood pressure) is well known, so patients with high blood pressure are generally placed on a regimen including a low-salt diet, regular exercise, and sometimes medication that will bring the blood pressure down to within normal limits.
9. Another major killer is **cancer**. Cancer is characterized by an unrestrained growth of abnormal cells. There are three main types of cancer: a **carcinoma** originates from the surface cells of the skin or the linings of the internal organs; a **sarcoma** attacks the muscles, bones, tendons, cartilage, fat, blood vessels, lymph system, or connective tissue; **leukemias** afflict the blood-forming cells. Some cancers grow slowly; others spread rapidly, doubling in bulk in days. Cancer can appear anywhere in the body, but some common sites are the lungs, breasts, uterus, skin, colon, prostate, and blood. Symptoms vary greatly depending upon the location, but some of the most common symptoms are unusual bleeding or discharge, a thickening in any area, a sore that doesn't heal, hoarseness or difficulty swallowing, indigestion, a change in bowel or bladder habits, or unexplained weight loss.

Handout 1 (page 3 of 5)

10. Today, many types of cancer can be cured, especially if detected early. For this reason, many diagnostic procedures – such as a **biopsy**, **mammogram**, or **colonoscopy** (examination of the large intestine) or other internal examinations – are employed when cancer is suspected. A localized malignancy is sometimes treated and cured by surgery alone, but sometimes radiation or chemotherapy (drug or chemical treatment) is used in combination with surgery. A malignancy that has **metastasized** (spread from its place of origin to another organ or site) requires higher doses of chemotherapy and/or radiation and is more difficult to cure.

11. The **etiology** of many types of cancer remains an enigma to scientists. Some of the causes are known, however, including cigarette smoking, overexposure to X-rays or sunlight, and contact with certain chemicals. Some forms of cancer seem to run in families; others may be caused by a virus.

12. The neuromuscular systems in the body can be affected by a number of diseases. These diseases all cause a loss of muscular control by disturbing the nerves that control the muscles. In muscular dystrophy, a chronic and inherited disease, the muscles gradually **atrophy** (waste away). A patient with Parkinson's disease often exhibits uncontrollable shaking caused by basal ganglion dysfunctions. Multiple sclerosis victims suffer from a loss of muscular coordination in various parts of their bodies because of damage to nerve fibers. Unfortunately, none of these diseases is curable at present. All that can be done for a victim is to lessen the undesirable symptoms.

13. A disease that attacks the kidneys is **nephritis**. There are many different types and many causes of nephritis, including bacteria and toxins. The kidneys regulate the elimination of urine from the body. If the disease becomes severe enough to destroy the kidneys, the victim can be saved through the transplantation of a donor's kidneys, or by regular use of a renal **hemodialysis** machine. This machine substitutes for the kidneys, cleansing the body of its liquid wastes.

14. **Diabetes mellitus** is a disease in which the body no longer uses sugar properly. In a healthy body, special cells in the pancreas secrete the hormones **insulin** and glycogen, which help to store sugar. In the body of a diabetic, these hormones are inadequately produced or utilized. The disease is usually diagnosed by the discovery of sugar in the urine and abnormally high levels of sugar in the blood. If the disease is not controlled, serious complications can develop affecting the eyes, kidneys, and circulatory system. Treatment is usually a combination of a carefully regulated diet, regular exercise, and sometimes insulin injections.

Handout 1 (page 4 of 5)

15. **Arthritis** and **rheumatism** are general names for approximately 100 diseases that produce inflammation or degeneration of connective tissue. Some of these diseases are infectious and primarily affect younger people. Rheumatic fever, for example, is a bacterial infection that occurs mostly in children or teenagers. Rheumatoid arthritis predominantly strikes women between 20 and 60. However, the most common rheumatic disease is a non-infectious, noninflammatory degenerative joint disease – **osteoarthritis**. To some degree, it affects nearly all older adults, causing swelling, pain, and stiffness in joints. Treatment may include heat, exercises, and drugs that reduce pain and inflammation.

16. Besides osteoarthritis, many other non-infectious diseases can limit the activities of the elderly. **Osteoporosis** (a condition in which bone loss exceeds bone replacement so that the bones become less dense, more porous, and more brittle) often leads to fractures, especially of the hipbone. Many conditions conspire to decrease the sensory perception of the elderly. **Cataracts** are created when the lens of the eye – or a portion of it – becomes opaque and sometimes swells or shrinks and interferes with vision. Deterioration of nerves in the inner ear causes the characteristic old-age hearing loss, most severe in the high-pitched tones. The senses of taste and smell also deteriorate in old age.

17. But what many elderly people fear most is the loss of mental abilities. Confusion, memory loss, and inability to distinguish between reality and fantasy (**dementia**) are all symptoms that can be caused by damage to the brain. They may result from external injury, a stroke, or deterioration of brain cells due to inadequate blood and oxygen supply. One common cause of severe mental deterioration is **Alzheimer's disease**, a neurological brain disorder in which there are a variety of abnormal chemical changes in the brain and characteristic nerve cell “tangles.”

18. People of all ages suffer from a variety of allergic conditions. An allergy is an altered reaction of body tissue to a substance that produces no effect upon a non-sensitive person. The substance causing the allergic reaction is called an **antigen**. The antibody reaction (often the release of **histamine**) generally makes the person feel sick or uncomfortable. Some people have food allergies (commonly to eggs, strawberries, chocolate, or nuts), and these are likely to cause skin rashes. Others are allergic to airborne particles (inhalants such as dust or pollen). These affect the respiratory tract and cause conditions such as asthma, hay fever, or allergic rhinitis. Another source of allergies is contactants (for example, wool or chemicals that come in contact with the skin). Allergies to specific drugs (penicillin, for example) are also common. Sometimes allergic reactions can be severe and lead to medical emergencies, especially if they interfere with breathing. However, most can be controlled with medication (often **antihistamines**). Of course, the best way to control an allergic condition is to avoid contact with the antigen, if possible.

Handout 1 (page 5 of 5)

19. Many diseases are transmitted by sexual contact. Once called venereal diseases, today they are commonly called **sexually transmitted diseases (STD)**. These include gonorrhea, syphilis, genital herpes, candidiasis (a yeast infection), trichomoniasis, and others. Some of these can be very destructive to the body if not treated, but all can be either cured or controlled by medication. By far the most frightening of the sexually transmitted diseases is **Acquired Immune Deficiency Syndrome (AIDS)**. This fatal disease is spread by direct sexual contact or exchange of blood (for example, by use of a contaminated hypodermic needle). AIDS destroys its victim's immune system, leaving the patient unprotected against infections that healthy people could fight off. The various "opportunistic infections" common among AIDS patients include a rare type of pneumonia and an unusual form of cancer called **Kaposi's sarcoma**. "An ounce of prevention is worth a pound of cure" is an expression that especially applies to AIDS, not only because the use of condoms and sterile needles can protect people from the disease, but also because at present there is no cure. Since a person can be a carrier of the **HIV** (human immunodeficiency) virus long before symptoms appear, people at risk are urged to take a blood test for diagnosis.

20. At the other end of the disease spectrum are the many conditions that may make people feel temporarily "under the weather" but are not serious enough to require a physician's care – especially if they are only occasional and short-lived. Common infectious conditions such as a cold, the flu, or diarrhea (loose bowel movements) are often self-limiting and can be treated symptomatically with over-the-counter drugs. The same is true of occasional tension headaches and the monthly cramps and lower back pain that are now called **premenstrual syndrome (PMS)**. People often endure the acne of adolescence and the hemorrhoids of pregnancy without consulting a physician, especially when the conditions are not severe. Minor traumas are often self-treated with routine first aid. Most people know that superficial lacerations (cuts) should be thoroughly cleaned and bandaged and that immediate immersion in cold water will relieve the pain of a slightly burned finger or a sprained ankle.

21. The study of diseases should not make students feel fragile and vulnerable. It is important to remember that the human body has a remarkable ability to protect itself against disease and to cure itself when illness or injury does occur. Moreover, when serious illness strikes, modern medicine has extremely sophisticated tools for fighting back.

Source: Tiersky, E. and M.. Tiersky (1992). The Language of Medicine in English. Englewood Cliffs: Prentice Hall, pp. 39-44.

Handout 2

Comprehension Check

Read the text. Then mark the following statements T (true) or F (false).

1. _____ Fewer people die of infectious diseases now than in the past.
2. _____ There are many forms of heart disease.
3. _____ Patients with heart conditions need to undergo surgery to treat these conditions.
4. _____ Anticoagulants are used to treat people with heart conditions.
5. _____ The chances of someone recovering from cancer are good if it is detected early.
6. _____ In a diabetic person, insufficient sugar is produced by the body.
7. _____ In osteoarthritis, the bones become porous and brittle.
8. _____ AIDS patients die from either pneumonia or Karposi's sarcoma.

FACILITATOR'S NOTES FOR HANDOUT 2

Comprehension Check

Read the text. Then mark the following statements T (true) or F (false).

1. T Fewer people die of infectious diseases now than in the past.
2. T There are many forms of heart disease.
3. F Patients with heart conditions need to undergo surgery to treat these conditions.
4. T Anticoagulants are used to treat people with heart conditions.
5. T The chances of someone recovering from cancer are good if it is detected early.
6. F In a diabetic person, insufficient sugar is produced by the body.
7. F In osteoarthritis, the bones become porous and brittle.
8. F AIDS patients die from either pneumonia or *Karposi's sarcoma*.

Handout 3

Vocabulary Practice

Match the word parts below with their correct meanings. Then find an example from the text or dictionary in which the word part is used. Note: some meanings may be attributed to more than one word part.

Word Part	Meaning	Example
1. angio _____	a. blood vessel	_____
2. athero _____	b. heart	_____
3. carcin/o _____	c. clot	_____
4. dia _____	d. across; through	_____
5. hyper _____	e. cancerous	_____
6. hypo _____	f. deficient; under	_____
7. scler _____	g. above; excessive	_____
8. thrombo _____	h. hard	_____
9. cardi/o _____	i. inflammation	_____
10. coron/o _____	j. discharge	_____
11. –gram _____	k. condition; increase	_____
12. – graph _____	l. process of recording	_____
13. – graphy _____	m. nourishment; development	_____
14. – itis _____	n. surgical repair	_____
15. –osis _____	o. machine that records	_____
16. – plasty _____	p. a written record	_____
17. rrhea _____	q. bone	_____
18. –trophy _____	r. joint	_____
19. –oma _____	s. white blood cells	_____
20. nephr/o _____	t. kidney	_____
21. arthr/o _____	u. tumour	_____
22. oste/o _____	v. meal (plaque)	_____
23. leuk/o _____		_____

FACILITATOR'S NOTES FOR HANDOUT 3

Vocabulary Practice

I. Match the word parts below with their correct meanings. Then find an example from the text or dictionary in which the word part is used.

Word Part		Meaning	Example
1. angio	a	blood vessel	<u>angioplasty</u>
2. athero	v	meal (plaque)	<u>atherosclerosis</u>
3. carcin/ o	e	cancerous	<u>carcinoma</u>
4. dia	d	across; through	hemod <u>ia</u> lysis
5. hyper	g	above; excessive	<u>hypertension</u>
6. hypo	f	deficient; under	<u>hypodermic</u>
7. –scler	h	hard	atheros <u>cler</u> osis
8. thrombo	c	clot	<u>thrombosis</u>
9. cardi/o	b	heart	electro <u>cardi</u> ogram
10. coron/o	b	heart	<u>coronary</u>
11. –gram	o	machine that records	electrocardio <u>gram</u>
12. – graph	p	a written record process of	sono <u>graph</u>
13. – graphy	l	recording	sono <u>graphy</u>
14. – itis	i	inflammation	<u>nephritis</u> ; <u>arthritis</u>
15. –osis	k	condition; increase	atheros <u>cler</u> osis
16. – plasty	n	surgical repair	angioplasty
17. –rrhea	j	discharge	diarr <u>hea</u> ; gonorr <u>hea</u>
18. –trophy	m	nourishment, development	atro <u>phy</u>
19. –oma	u	tumour	sar <u>coma</u>
20. nephr/o	t	kidney	<u>nephritis</u>
21. arthr/o	r	joint	<u>arthritis</u>
22. oste/o	q	bone	<u>osteoporosis</u>
23. leuk/o	s	white blood cells	<u>leukemia</u>

Handout 4

Structure

Draw a line or lines to separate the prefixes, combining forms, and suffixes in the following medical terms. Then define the term.

1. cardiopulmonary _____
2. myocardium _____
3. angioplasty _____
4. angiogram _____
5. hemodialysis _____
6. atherosclerosis _____
7. hypertension _____
8. carcinoma _____
9. leukemia _____
10. electrocardiogram _____

FACILITATOR'S NOTES FOR HANDOUT 4**Structure**

Draw a line or lines to separate the prefixes, combining forms, and suffixes in the following medical terms. Then define the term.

1. cardiopulmonary - cardi/o/pulm/o/nary (of or relating to the heart and lungs)
2. myocardium - my/o/cardi/um (heart muscle)
3. angioplasty - angi/o/plasty (surgical repair of the blood vessel)
4. angiogram - angi/o/gram (an x-ray film of a blood vessel)
5. hemodialysis - hem/o/dia/lysis (removing toxic chemicals from blood by pushing it through an artificial kidney machine)
6. atherosclerosis - ather/o/sclerosis (a type of arteriosclerosis with fatty degeneration; hardening of "meal")
7. hypertension - hyper/tension (abnormally high blood pressure)
8. carcinoma - carcin/o/ma (cancer)
9. leukemia - leuk/emia (cancer afflicting the blood-forming cells)
10. electrocardiogram - electr/o/cardi/o/gram (electrical record of the heart)

Handout 5

Categorization and Abbreviations

Group the words or phrases below under the appropriate headings.

Abnormal Conditions	Diagnostic Procedures	Treatments	Medications

chest x-ray
 biopsy
 mammogram
 hemodialysis
 antihistamine
 hypertension

hemorrhage
 angioplasty
 beta blockers
 aneurysm
 chemotherapy
 antibiotic

allergy
 infarction
 paralysis
 insulin
 nitroglycerin
 atrophy

digitalis
 anticoagulant
 angina pectoris
 colonoscopy
 pacemaker

Give the meanings for the following abbreviations.

1. PTA _____
2. PMS _____
3. AIDS _____
4. STD _____
5. EKG _____

FACILITATOR’S NOTES FOR HANDOUT 5

Group the words or phrases below under the appropriate headings.

Abnormal Conditions	Diagnostic Procedures	Treatments	Medications
hypertension hemorrhage aneurysm allergy infarction paralysis atrophy angina pectoris	chest x-ray biopsy mammogram colonoscopy	hemodialysis angioplasty chemotherapy pacemaker	antihistamine beta blockers antibiotic insulin nitroglycerin digitalis anticoagulant

chest x-ray
biopsy
mammogram
hemodialysis
antihistamine
hypertension

hemorrhage
angioplasty
beta blockers
aneurysm
chemotherapy
antibiotic

allergy
infarction
paralysis
insulin
nitroglycerin
atrophy

digitalis
anticoagulant
angina pectoris
colonoscopy
pacemaker

Give the meanings for the following abbreviations.

1. PTA percutaneous transluminal angioplasty
2. PMS premenstrual syndrome
3. AIDS Acquired Immune Deficiency Syndrome
4. STD sexually transmitted diseases
5. EKG electrocardiogram

Handout 6

Translating Medical Terminology into “Ordinary” English

1. Translate the following medical terms into ordinary English. The first one has been done for you.

1. arteriosclerosis
 - Which part of the body is being referred to?
arterio=artery
 - What’s wrong with it?
sclero=hard
-sis=condition

Therefore, in ordinary, lay person’s language, *arteriosclerosis means that you have a condition in which your arteries are hardening.*

2. nephritis
3. arthritis
4. poliomyelitis
5. osteoarthritis
6. allergic rhinitis

2. Write the medical word or phrase for each of the common words or phrases below.

1. heart attack _____
2. high blood pressure _____
3. blood clot _____
4. blood thinner _____
5. flexible tube _____
6. cause or causes of a disease _____
7. cut _____
8. stoppage _____
9. chest pains _____
10. wasting away _____
11. rate of the heartbeat _____
12. spread from place of origin to another organ _____

Handout 7

Task

Below is a medical report using terms you have studied in this and previous lessons. Explanations of unfamiliar terms are added in brackets. Discuss with a partner how you would give the information in ordinary, layperson's language.

A 55-year-old woman had a myocardial infarction in September of last year. On January 3rd of this year, she was readmitted to the hospital with acute inferior myocardial infarction, documented by electrocardiograms and blood enzyme elevations. On February 8, the patient developed a loud systolic (relating to the contraction phase of the heartbeat) murmur and her blood pressure fell sharply. A diagnosis of a rupture of the ventricular septum (muscular wall between the two lower chambers of the heart) was made, and she was transferred to the surgical service. Right cardiac catheterization confirmed the presence of a left-to-right shunt [of blood] at the ventricular level. Emergency surgery was attempted, but the patient died suddenly. Autopsy diagnosis: ruptured ventricular septum secondary to myocardial infarction.

FACILITATOR'S NOTES FOR HANDOUT 7**Task**

Example of information given in layperson's language:

A 55-year-old woman had a heart attack in September of last year. She was readmitted to the hospital on January 3rd of this year with a severe heart attack. Electrocardiograms and a blood test confirmed the diagnosis. On February 8, she developed a loud heart murmur and her blood pressure dropped sharply. An examination revealed a tear in the muscular wall between the two lower chambers of the heart. Surgery was performed. A catheter inserted into the right side of the heart confirmed bleeding at the muscular wall between the two lower chambers of the heart. The patient did not survive the emergency operation. An autopsy established the cause of death to be the tearing of this muscular wall following a heart attack.