Student Learning Objectives. Instruction in this lesson should result in students achieving the following objectives:

1. Explain the benefit of case studies as learning tools.
2. Demonstrate how to use case studies to solve problems.

Resources. The following resources may be useful in teaching this lesson:

- E-unit(s) corresponding to this lesson plan. CAERT, Inc. [http://www.mycaert.com](http://www.mycaert.com).
Equipment, Tools, Supplies, and Facilities

- Overhead or PowerPoint projector
- Visual(s) from accompanying master(s)
- Copies of sample test, lab sheet(s), and/or other items designed for duplication
- Materials listed on duplicated items
- Computers with printers and Internet access
- Classroom resource and reference materials

Key Terms. The following terms are presented in this lesson (shown in bold italics):

- brainstorm
- case studies
- critical thinking
- evaluate
- learning objective
- prioritize
- problem-solving skills

Interest Approach. Use an interest approach that will prepare the students for the lesson. Teachers often develop approaches for their unique class and student situations. A possible approach is included here.

Use the following case study to introduce the subject to your class. Give only the basic information at first, and continue to add details as you progress through the lesson. Allow students to ask questions, and lead a discussion about Amanda’s options for prioritizing her duties. Refer back to this case study throughout the lesson to point out how students can apply the knowledge they gain about Amanda’s case to their life situations.

Case study:

Amanda is a medical assistant in a busy doctor’s office. She is responsible for several duties that must be performed on a daily, weekly, or monthly basis. In addition, she has responsibilities related to patient care as well as duties as assigned by the doctor. Some days, Amanda has trouble deciding which jobs need her attention first.

Amanda’s timesheet is due each Friday before she leaves at 5 p.m.

An inventory of supplies must be conducted by the last day of the month.

Exam Room 2 must be sanitized before another patient may be called.
The doctor asks Amanda to print out the schedule for his meetings the following Wednesday.

The patient in Exam Room 1 is waiting for samples of the medication prescribed by the doctor.

Instruct students to consider the urgency of each job. Which should be done right away? What other information is needed to make a good decision? Encourage students to ask questions. For example, they may need to know what the day and date are before they can prioritize the jobs of taking inventory, completing a time sheet, and printing the doctor’s schedule. After you point out the missing information, fill in the following blanks:

It is Friday afternoon on the 25th of the month.

Explain that in most cases, any job related to immediate patient care takes top priority. If Amanda leaves the patient in the exam room waiting for samples while she inventories supplies, the doctor will not be able to see the next patient. This could negatively affect the patient schedule for the rest of the day. Therefore, Amanda should deliver the medication samples right away. The next priority would be to prepare rooms for the next patients by sanitizing the table, instruments, and other surfaces. That allows the nurses and doctors to continue seeing patients on schedule.

As the day wears on, Amanda’s time sheet becomes a higher priority because it must be done before she leaves. She could print the doctor’s schedule at the same time because she will be at the computer anyway. The inventory is the lowest priority on the list because it does not have to be done until the following week. However, it may have been a higher priority at 11 a.m. on a day when supply orders must be placed by noon. Explain how those details should impact the students’ decisions when prioritizing.

SUMMARY OF CONTENT AND TEACHING STRATEGIES

Objective 1: Explain the benefit of case studies as learning tools.

Anticipated Problem: How can case studies be used as learning tools?

1. Problem solving with case studies—detailed examples of a situation or patient presented as a learning tool for students or healthcare professionals
A. **Problem-solving skills** are the ability to work through a problem to come to a solution.

1. They involve the following steps:
   a. Identify the problem and consider the cause.
   b. **Brainstorm** or think of multiple possible solutions.
   c. **Evaluate** (make a judgment based on the likely outcomes) the options and weigh the risks versus the benefits.
   d. Make a plan.
   e. Implement the plan.
2. Problem-solving skills may require the use of **critical thinking**—using knowledge as well as past experience to approach a problem.

B. The benefits of case studies as learning tools

1. Case studies offer opportunities for discussion (when used in a classroom or clinical setting).
   a. Instructors can provide guidance.
   b. Instructors can control the amount of information, give more information as needed, and prompt students to determine what is needed.
   c. Students have the opportunity to ask questions.
2. Case studies allow students to apply knowledge immediately.
   a. They put knowledge in the context of real-life situations.
   b. They enhance student understanding.
3. Case studies allow students to learn why certain decisions were made.
   a. True learning
   b. Not just memorization (Example: “X” is always the solution for problem “Y.”)
4. Case studies give students a framework for making good decisions in the future.

**Teaching Strategy:** *Many techniques can be used to help students master this objective. Use VM–A.*

**Objective 2:** Demonstrate how to use case studies to solve problems.

**Anticipated Problem:** How are case studies used to boost problem-solving skills?

II. Case studies in the classroom

A. Presenting a case

1. It is best to involve real-life or fictitious situations or patients. (Cases in this unit are fictitious and are for illustration and learning purposes only.)
2. It is important to provide details so students learn what type of information is needed to make decisions. It enables students to know what questions to ask in the future.

3. It is necessary to include a learning objective (specific information, skills, or ideas for the student to learn).
   a. Action verbs should be used. Examples are explain, demonstrate, evaluate, identify, or prioritize—to rank tasks in order of importance or urgency.
   b. Vague objectives should be avoided, such as those that begin with the word “understand.”
   c. The objective(s) should require higher-level thinking. Therefore, people should have to apply knowledge, not just repeat memorized information.

4. It should have the goal of helping students apply knowledge in the future.

B. Encouraging discussion
   1. It presents options for students to analyze.
   2. It enables students to brainstorm ideas.
   3. It forces students to list other information that would be helpful in the decision-making process.

C. Evaluating a case
   1. It is important to compare two or more cases.
   2. It is essential to evaluate the outcome.
   3. It is best to discuss how different approaches could have been better or worse.
   4. It is important to identify other information or details that could have impacted the decision.

Teaching Strategy: Many techniques can be used to help students master this objective. Use VM–B and VM–C. Assign LS–A.

Review/Summary. Use the student learning objectives to summarize the lesson. Have students explain the content associated with each objective. Student responses can be used in determining which objectives need to be reviewed or taught from a different angle. Questions at the ends of chapters in the textbook may be used in the Review/Summary.

Application. Use the included visual master(s) and lab sheet(s) to apply the information presented in the lesson.

Evaluation. Evaluation should focus on student achievement of the objectives for the lesson. Various techniques can be used, such as student performance on the application activities. A sample written test is provided.
Answers to Sample Test:

Part One: Matching

1. b
2. g
3. e
4. d
5. c
6. f
7. a

Part Two: Completion

1. fictitious
2. identify
3. objective
4. confidence
5. vague

Part Three: Short Answer

1. Answers will vary but may include at least four of the following: prioritize, evaluate, explain, demonstrate, and identify.
2. Answers should include two of the following reasons: Case studies offer the opportunity for discussion in a classroom or clinical learning situation. Case studies allow students to apply knowledge immediately, putting knowledge in the context of real-life situations. This type of study is true learning, not just memorization. It gives students the framework for making good decisions in the future. Reading and discussing case studies helps boost a student’s confidence in problem-solving abilities.
Problem-Solving Skills: Case Studies

Part One: Matching

**Instructions:** Match the term with the correct definition.

- a. brainstorm
- b. case studies
- c. critical thinking
- d. evaluate
- e. learning objective
- f. prioritize
- g. problem-solving skills

1. Detailed examples of a situation or patient presented as a learning tool for students or healthcare professionals
2. The ability to work through a problem to come to a solution
3. Specific information, skills, or an idea for the student to learn
4. Make a judgment based on the likely outcomes
5. Using knowledge as well as past experience to approach a problem
6. To rank tasks in order of importance or urgency
7. Think of multiple possible solutions

Part Two: Completion

**Instructions:** Provide the word or words to complete the following statements.

1. Case studies involve real-life or _________________________ situations or patients.
2. The first step in the problem-solving process is to _________________________ the problem.
3. Case studies should include a clear learning _________________________.
4. Reading and discussing case studies helps boost a student’s ________________ in his or her own problem-solving abilities.

5. Case studies should avoid ________________ objectives, such as those that begin with the word “understand.”

▶ Part Three: Short Answer

Instructions: Answer the following.

1. List four examples of action verbs that could be used in a learning objective.

2. Describe two examples of the benefits of using case studies as a learning tool.
BENEFITS OF CASE STUDIES

Case Study Benefits

- They offer opportunities for discussion.
- Instructors offer guidance and control the information presented.
- Students have the opportunity to ask questions.
- Case studies let students apply knowledge immediately in real-life situations.
- They enhance students’ understanding.
- They help students learn why a certain decision was made (true learning).
PRESENTING A CASE

When presenting a case, instructors should:

◊ Involve real-life or fictitious situations or patients

◊ Provide details

◊ Include a learning objective

◊ Encourage discussion

◊ Evaluate the case
LEARNING OBJECTIVES

Learning objectives should use action verbs, such as:

♦ Explain
♦ Demonstrate
♦ Evaluate
♦ Prioritize
♦ Identify
Case Studies and Knowledge

Purpose

The purpose of this activity is to use case studies to increase knowledge and improve problem-solving skills.

Objective

Utilize case studies as a learning tool.

Materials

♦ writing utensil
♦ computer with Internet access

Procedure

1. Read the following case studies and learning objectives.
2. Discuss the cases with a classmate. You may conduct research online to help form your answers.
3. Write down what the medical assistant should do or say in each case in a way that meets the learning objective. Note what additional information would be helpful in solving the problem.

Case Studies:

Case 1: (Learning Objective) Identify the procedure for scheduling patient appointments.

Tina is a medical assistant who primarily performs clerical duties. She is responsible for scheduling patients’ appointments, as well as for making appointments for lab work or additional testing (e.g., echocardiograms or sonograms). The doctor tells Tina that a patient named Mr. Miller needs an echocardiogram as soon as possible.
When Tina calls the lab, the scheduling assistant informs her that there are no appointments available that day. Tina insists that the patient should be seen immediately and threatens to report the scheduler to her supervisor for not doing her job properly. The scheduler becomes defensive and tells Tina to have the doctor call to make the appointment.

**What should Tina have done differently? How should she have responded when her need for an immediate appointment was not accommodated?**

**Case 2:** (Learning objective) Demonstrate how to maintain patient confidentiality when talking to others.

Max was standing at the nurses’ station writing a note on a chart. A patient peeked out of an exam room and called to him. He asked the patient, an elderly woman, if she needed help. She told him that she had been waiting for 15 minutes and wanted to know what was taking the doctor so long. Max knows the doctor is in with a patient who was just diagnosed with cancer. The appointment is running longer than scheduled because the doctor is answering the patient’s questions and referring him to the proper specialists.

**What should Max say to answer the woman’s inquiries without compromising the second patient’s confidentiality?**

**Case 3:** (Learning objective) Identify ways to improve communication with patients.

Mrs. Alvarez is a young mother who brought her newborn baby in for his first appointment with the pediatrician. Her English is somewhat limited, but she seemed to understand what the doctor was telling her during the exam. The doctor left the room and instructed Mary, the medical assistant, to return to the room to give the baby an immunization.

When Mary entered the room with the syringe, Mrs. Alvarez seemed to become agitated. She said, “No. No shot.” At that point, Mary knows the mother did not understand what the doctor told her. Mary tried to explain the purpose of the vaccination, but she does not speak Spanish.

**What steps should Mary take to improve the communication with Mrs. Alvarez and to ensure the baby receives the recommended vaccination?**

**Case 4:** (Learning objective) Identify the questions a medical assistant should ask a patient before presenting information to the doctor.

Noah introduced himself to a patient named Anna—a woman in her mid-30s. He asked her to explain the symptoms she has been experiencing. Anna showed Noah the rash on her arms and said it began two days before. She said it is itchy and has continued to spread, despite the creams she applied. In addition, Anna informed Noah that she has had a headache and a fever that goes away with Tylenol.

**What questions should Noah ask to gather all the pertinent information for the doctor? Are there tests Noah should perform before the doctor examines Anna?**