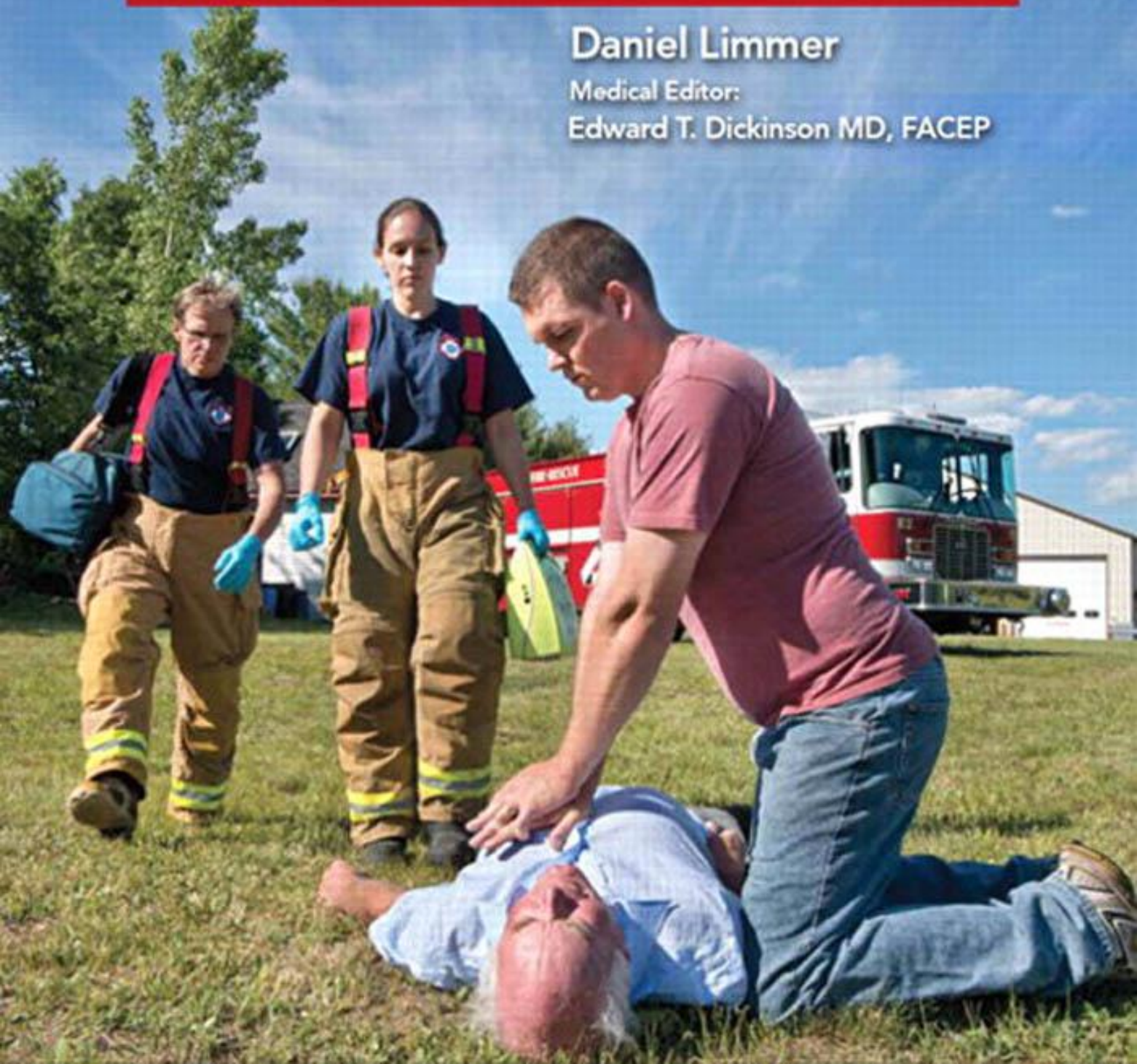
Second Edition

EMR Complete

A Worktext

Daniel Limmer

Medical Editor:
Edward T. Dickinson MD, FACEP



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DEDICATION

To those who arrive first. To those who see the scene and patients at their worst while consistently striving to do their best. To you, the Emergency Medical Responder.

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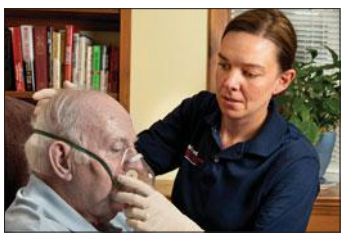

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PHOTO SCANS

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PREFACE

The Vision for *EMR Complete*

EMR Complete is designed to be a worktext—a book and workbook combined with a feature called *Stop, Review, Remember*. We believe that the ability to read a book in short segments followed by immediate review in which you can write and then check your answers helps you learn. To further assist you in your studies this second edition of *EMR Complete* also offers all of the following:

- The book is written in a friendly instructional tone. You will note that the book presents material in the way an instructor or mentor might teach you. Relating EMS concepts and skills to everyday life is one of the ways we present material in this understandable fashion.
- NEW! The newest updates from AHA on airway and resuscitation, plus the most recent updates in science and technology have been included throughout the text.
- The next step in visual learning, *The Big Picture* starts you off with an example of a scene or patient and then shows some of the steps or decisions you must make superimposed around the photo. We wanted to start the learning right away by showing you both the steps *and* the context you will be performing them in.
- NEW! Section openers have been added to highlight critical concepts and help you develop an eye for critical vs. non-critical patients.
- NEW! Nearly 100 new photos have been included, and all reflect the newest standards and guidelines.
- The *Self Check* feature in the margins ties back in all cases to one of the chapter objectives. At the end of that reading, check to see if you can now answer that question or questions. If not, you'll know to review the information again.
- Because you will make important decisions in the field, two features will help you practice this decision making: *Emergency Medical Responder Practice* and *Critical Thinking*.

You will notice that this book is written with acute awareness of the importance of the first few minutes of the call—and for those who perform care in that challenging time. The author and each contributor have worked diligently to ensure the knowledge and skills presented in this text maintain the perspective of perhaps the most important person in the EMS system—the one who arrives *first*.

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ACKNOWLEDGMENTS

Books are a huge undertaking. A new book created to accompany new education standards raised the bar even further. Fortunately a tremendous team of people were assembled to put the book you see before you together.

I would like to thank the contributors to this book, especially Dan Batsie, who gave invaluable assistance in the development of this second editon. I also would like to offer my sincere thanks to Tony Crystal, Andy Stern, Richard Belle, Daren Potter, Melissa Alexander, Marc Minkler, and Eric Mayhew.

Ed Dickinson, MD, FACEP, is a personal friend and medical editor for this and many other books. I consider myself so incredibly fortunate to know Ed and to be able to work with him on projects such as this. Ed brings the true nexus of medical brilliance and street practicality into his work which results in the streetwise, medically accurate text you have before you now.

Brady has a wonderful group of people I have had the good fortune to work with over the years. The team assembled for this edition maintains the tradition. Acquisitions Editor Sladjana Repic is wonderful to work with and an advocate for making the book you see before you great. It is great to work with you. Lois Berlowitz is one of the few people at Brady who has been there longer than I have been writing. She is the backbone of the editorial process. I am grateful for everything Lois does. Long ago she said, "Dan, that is an interesting idea … but it doesn't make good book sense." I *always* listen to Lois's book sense. Thanks also go to Kelly Clark, Editorial Assistant.

Julie Alexander is the publisher at Brady. Even though she has responsibilities throughout a large company, Julie is always there, involved, and passionate about projects such as this one.

The production department puts the book together and does a wonderful job. Julie Boddorf and Cindy Zonneveld are truly dedicated and professional.

Michal Heron is responsible for the photo program you see in the book. When you notice a photo that really draws you in, this is because of Michal's tireless efforts and attention to even the most minute detail—as any EMS provider/model who has spent a day on the set can attest to! Michal's influence is on every page of this book. Michal's mentoring an aspiring photographer is also greatly appreciated.

The developmental editor for this book is Jo Cepeda. Jo and I go back a long way and have worked on many books together. I was thrilled she was available to do this—and she stepped up to the plate for this project and its breakneck pace. I told her more than once during this process that her attention to detail is nothing short of amazing. It is directly responsible for the quality you will find within these pages. Thank you, Jo.

Our sales force does more than sell books. They are the way your instructor is most likely to hear from Brady. Our reps are talented and dedicated but most importantly they are passionate about their products and the people they serve. Tom Kennally, their fearless leader, is always at the helm. To this wonderful group of people, my thanks.

Finally, I would like to offer my most sincere thanks to you, the future Emergency Medical Responder, for the adventure you are embarking on and to your instructor for

choosing my book for your education. Creating this book is a responsibility I take with the utmost seriousness. Be safe. Care for people. And have fun while you're doing it. It is an amazing journey.

Dan Limmer
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Nathan Eldridge, Jacob Pitcher, Isaac Turner, and Frank Menair

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Dan has also been involved in law enforcement, serving both as a dispatcher and police officer in Colonie, New York. Dan received several awards and honors in law enforcement including the distinguished service award (officer of the year), life saving award, and three command recognition awards. He served in the communications, patrol, juvenile, narcotics, and training units in the police department. Dan retired from police work in New York but remains active as a police officer on a part-time basis in Maine.

In addition to authoring numerous EMS journal articles, Dan has co-authored numerous EMS texts including *Emergency Care*, *First Responder—A Skills Approach, EMPACT: Emergency Medical Patient Assessment Care and Transport,* and the *Topics in Transition series* of texts for the EMT, AEMT, and Paramedic.

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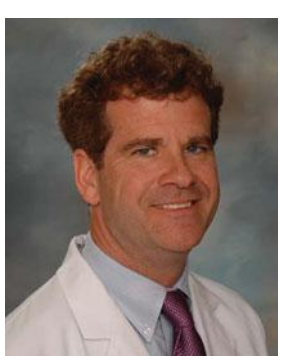

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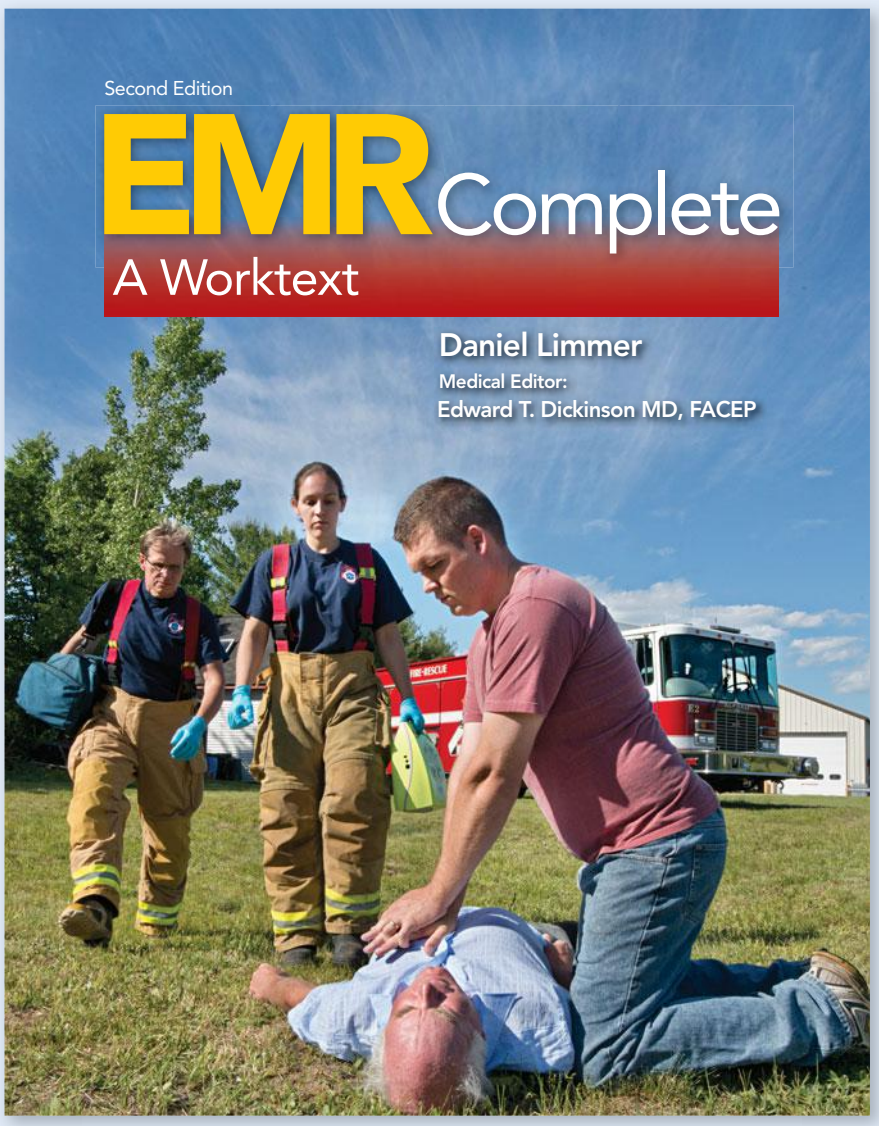
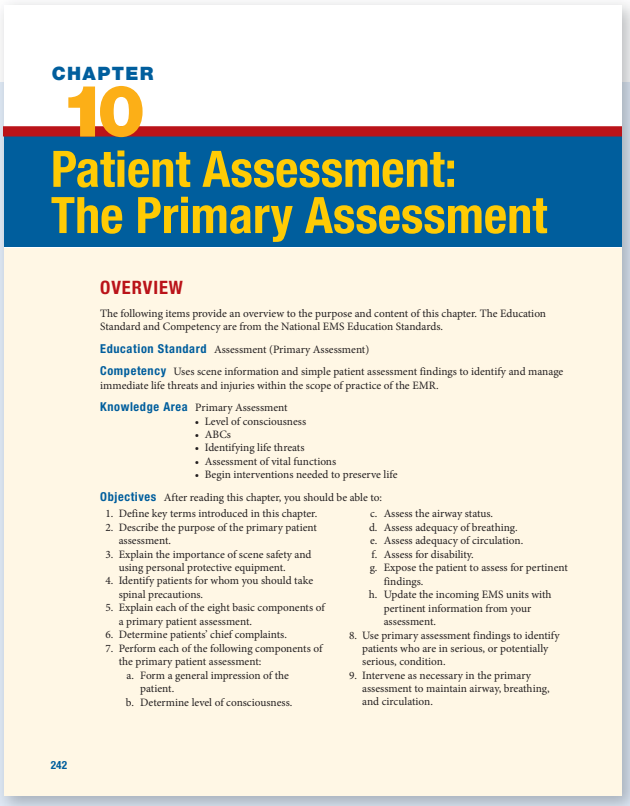
Welcome to EMR Complete A Worktext Second Edition





CHAPTER
10
Patient Assessment: The Primary Assessment

OVERVIEW

The following items provide an overview to the purpose and content of this chapter. The Education Standard and Competency are from the National EMS Education Standards.

Education Standard Assessment (Primary Assessment)

Competency Uses scene information and simple patient assessment findings to identify and manage immediate life threats and injuries within the scope of practice of the EMR.

Knowledge Area Primary Assessment
- Level of consciousness
- ABCs
- Identifying life threats
- Assessment of vital functions
- Begin interventions needed to preserve life

Objectives After reading this chapter, you should be able to:

1. Define key terms introduced in this chapter.
2. Describe the purpose of the primary patient assessment.
3. Explain the importance of scene safety and using personal protective equipment.
4. Identify patients for whom you should take spinal precautions.
5. Explain each of the eight basic components of a primary patient assessment.
6. Determine patients' chief complaints.
7. Perform each of the following components of the primary patient assessment:
   a. Form a general impression of the patient.
   b. Determine level of consciousness.
   c. Assess the airway status.
   d. Assess adequacy of breathing.
   e. Assess adequacy of circulation.
   f. Assess for disability.
   g. Expose the patient to assess for pertinent findings.
   h. Update the incoming EMS units with pertinent information from your assessment.
8. Use primary assessment findings to identify patients who are in serious, or potentially serious, condition.
9. Intervene as necessary in the primary assessment to maintain airway, breathing, and circulation.

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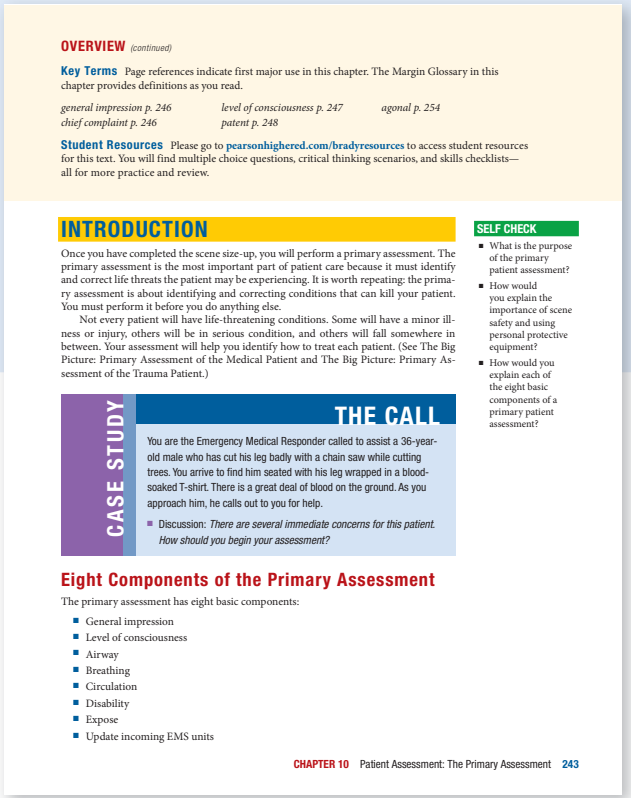
Overview

Placed at the beginning of each chapter, the Overview refers readers to the Education Standards, Competencies, Knowledge Areas, Objectives, Key Terms, and Media Resources. These elements provide a foundation for learning chapter content.



OVERVIEW *(continued)*

Key Terms Page references indicate first major use in this chapter. The Margin Glossary in this chapter provides definitions as you read.

general impression p. 246 *level of consciousness p. 247* *agonal p. 254*
chief complaint p. 246 *patent p. 248*

Student Resources Please go to pearsonhighered.com/bradyresources to access student resources for this text. You will find multiple choice questions, critical thinking scenarios, and skills checklists—all for more practice and review.

INTRODUCTION

Once you have completed the scene size-up, you will perform a primary assessment. The primary assessment is the most important part of patient care because it must identify and correct life threats the patient may be experiencing. It is worth repeating: the primary assessment is about identifying and correcting conditions that can kill your patient. You must perform it before you do anything else.

Not every patient will have life-threatening conditions. Some will have a minor illness or injury, others will be in serious condition, and others will fall somewhere in between. Your assessment will help you identify how to treat each patient. (See The Big Picture: Primary Assessment of the Medical Patient and The Big Picture: Primary Assessment of the Trauma Patient.)

SELF CHECK
- What is the purpose of the primary patient assessment?
- How would you explain the importance of scene safety and using personal protective equipment?
- How would you explain each of the eight basic components of a primary patient assessment?

CASE STUDY

THE CALL

You are the Emergency Medical Responder called to assist a 36-year-old male who has cut his leg badly with a chain saw while cutting trees. You arrive to find him seated with his leg wrapped in a blood-soaked T-shirt. There is a great deal of blood on the ground. As you approach him, he calls out to you for help.

- Discussion: *There are several immediate concerns for this patient. How should you begin your assessment?*

Eight Components of the Primary Assessment

The primary assessment has eight basic components:

- General impression
- Level of consciousness
- Airway
- Breathing
- Circulation
- Disability
- Expose
- Update incoming EMS units

CHAPTER 10 Patient Assessment: The Primary Assessment 243

Objectives

Objectives form the basis of each chapter and were developed around the Education Standards and Instructional Guidelines.

Objectives After reading this chapter, you should be able to:

1. Define key terms introduced in this chapter.
2. Describe the purpose of the primary patient assessment.
3. Explain the importance of scene safety and using personal protective equipment.
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   h. Update the incoming EMS units with pertinent information from your assessment.
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Key Terms

Page numbers are included to identify the term's first major use in the chapter.

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general impression p. 246
chief complaint p. 246
level of consciousness p. 247
patent p. 248
agonal p. 254

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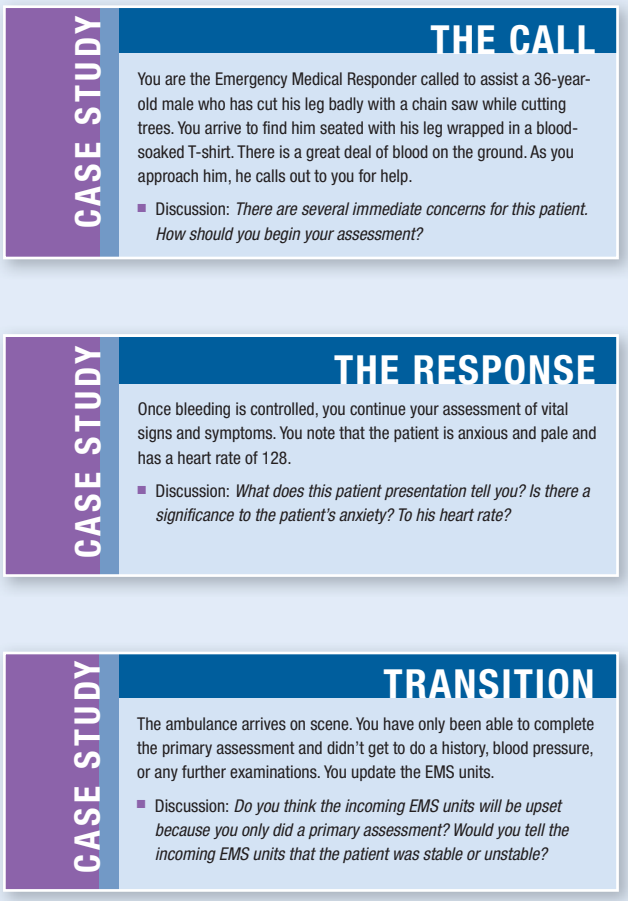


Case Study

Case material opens with The Call, followed by The Response, and concluding with Transition. Each case segment ends with a question that promotes critical thinking.

Self Check

This appears in the margin after a chapter objective has been first covered. These questions are used to reinforce chapter objectives.

SELF CHECK

- What is the purpose of the primary patient assessment?
- How would you explain the importance of scene safety and using personal protective equipment?
- How would you explain each of the eight basic components of a primary patient assessment?

general impression how the patient looks to you as you approach.

chief complaint the patient's response to your question about how he is feeling or what is wrong.

Running Glossary

Definitions for key terms are provided in the margins, next to the text in which they're introduced.

EMR Note

This feature highlights important need-to-know information.

EMR NOTE

You will learn the patient assessment skills in a step-by-step manner. This will help ensure a structured and thorough approach to your patient assessment. When you encounter a serious patient in a stressful situation, your knowledge of these steps will help you provide lifesaving care. You will also find unusual situations and patients with varied problems. The same steps will apply, but you will have to adapt them to each situation you encounter.

YOUR GUIDE TO KEY FEATURES

Stop, Review, Remember

Multiple Choice

Place a check next to the correct answer.

1. The mnemonic for remembering the levels of consciousness is:
   ____ a. SAMPLE.
   ____ b. ABC.
   ____ c. 4-CONS.
   ____ d. AVPU.
2. The patient who responds only to a pinch of the muscles near the neck is responsive to:
   ____ a. voice.
   ____ b. pain.
   ____ c. carotid stimulation.
   ____ d. pressure.
3. Which of the following steps is NOT part of the "A" or airway portion of the primary assessment?
   ____ a. Inserting an oral airway
   ____ b. Suctioning
   ____ c. Checking a pulse
   ____ d. Jaw-thrust maneuver
4. The general impression is best described as:
   ____ a. how the patient looks as you approach.
   ____ b. the patient's status after the primary assessment.
   ____ c. key information you will call or radio to the incoming EMS units.
   ____ d. a check of the patient's mental status.
5. Which of the following would indicate a potentially serious patient? Each of these patients is alert and oriented.
   ____ a. A patient who is complaining of a broken arm
   ____ b. A patient who was punched in the nose with moderate bleeding
   ____ c. A patient who was involved in a minor car crash and complains of neck pain
   ____ d. A patient who complains of abdominal pain and has cool, moist skin

Stop, Review, Remember

The "work" part of the Worktext, these are integrated throughout chapters at several key places, enabling readers to instantly assess their learning before going on. Multiple-choice, fill-in-the-blank, matching, and critical-thinking questions provide readers with immediate feedback.

Scans

Procedures are performed step by step with explanations and photographs.

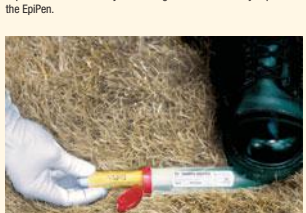
SCAN 16-1 Anaphylactic Reaction

16-1a Recognize the anaphylactic shock patient and perform primary assessment. Administer oxygen by nonrebreather mask.

16-1b Administer oxygen. Assist with ventilations if necessary.

16-1c If permitted by medical direction, check the EpiPen epinephrine auto-injector to ensure it is prescribed for the patient. Check the expiration date and clarity of the drug. Remove the safety cap from the EpiPen.

16-1d Place the tip of the auto-injector on the lateral aspect of the thigh, midway between the hip and knee. Push the injector firmly against the thigh until it activates. Hold it in place until the medication is injected.



16-1e Properly dispose of the auto-injector. Record the time of the epinephrine injection.

16-1f Check vital signs upon reassessment.

The Big Picture

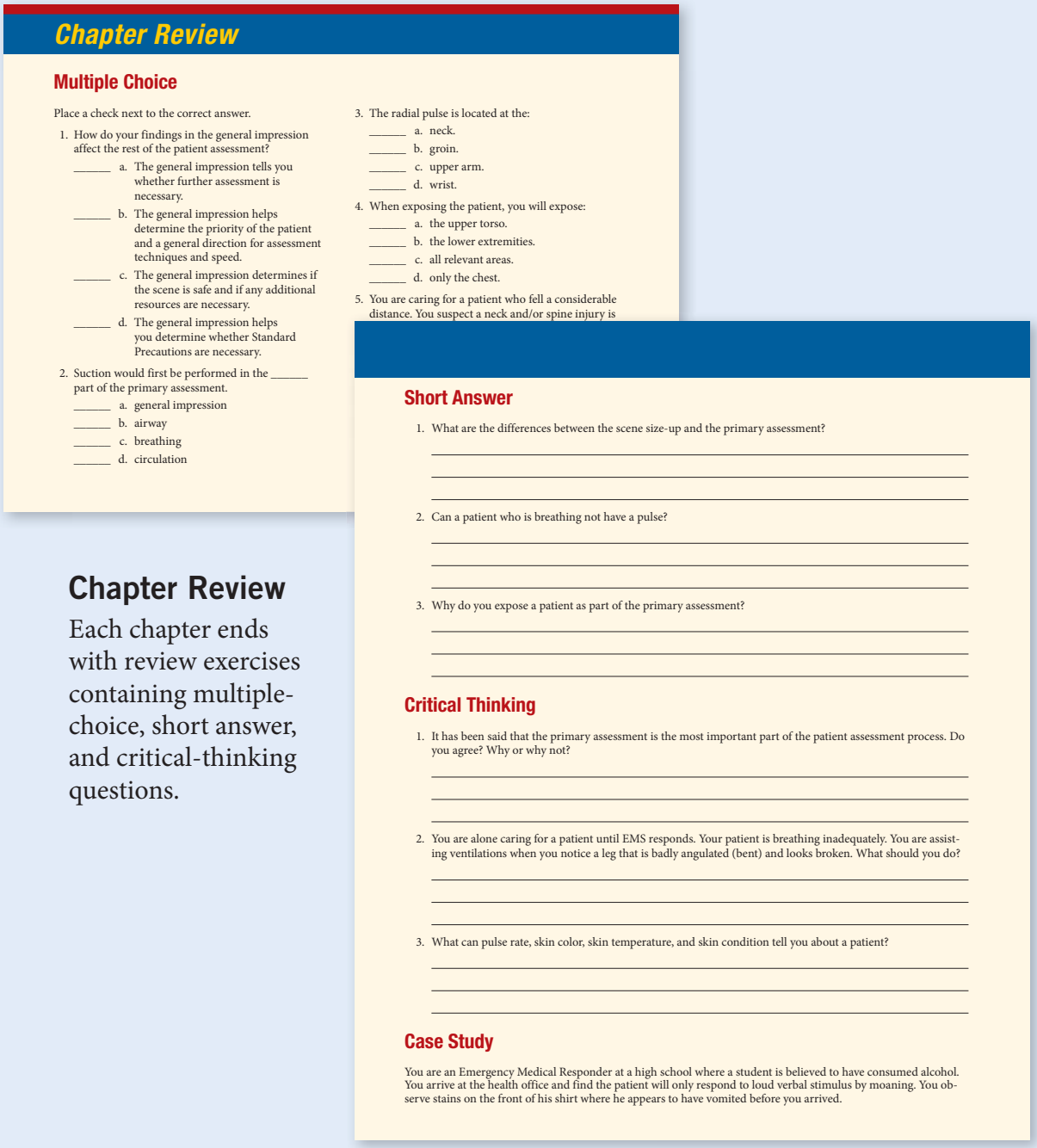
This feature is an innovative way to present the "big picture" of an EMS scene superimposed with the critical steps Emergency Medical Responders will perform at that scene. It is a visual element designed to practically present what instructors have been telling students for decades: You will respond to a call and be faced with a challenging situation in which you must perform what you have been taught in class. The Big Picture helps convey that message.

THE LAST WORD

You should now have enough information to determine if your patient is potentially seriously ill or injured or if he seems more stable. Seriously ill or injured patients will require additional assessment and care, usually at a rapid pace. More stable patients require further care, which can be done at a more relaxed pace.

The Last Word

This is a summary of important points learned in each chapter.



Chapter Review

Multiple Choice

Place a check next to the correct answer.

1. How do your findings in the general impression affect the rest of the patient assessment?
   _____ a. The general impression tells you whether further assessment is necessary.
   _____ b. The general impression helps determine the priority of the patient and a general direction for assessment techniques and speed.
   _____ c. The general impression determines if the scene is safe and if any additional resources are necessary.
   _____ d. The general impression helps you determine whether Standard Precautions are necessary.
2. Suction would first be performed in the _____ part of the primary assessment.
   _____ a. general impression
   _____ b. airway
   _____ c. breathing
   _____ d. circulation
3. The radial pulse is located at the:
   _____ a. neck.
   _____ b. groin.
   _____ c. upper arm.
   _____ d. wrist.
4. When exposing the patient, you will expose:
   _____ a. the upper torso.
   _____ b. the lower extremities.
   _____ c. all relevant areas.
   _____ d. only the chest.
5. You are caring for a patient who fell a considerable distance. You suspect a neck and/or spine injury is

Short Answer

1. What are the differences between the scene size-up and the primary assessment?
2. Can a patient who is breathing not have a pulse?
3. Why do you expose a patient as part of the primary assessment?

Critical Thinking

1. It has been said that the primary assessment is the most important part of the patient assessment process. Do you agree? Why or why not?
2. You are alone caring for a patient until EMS responds. Your patient is breathing inadequately. You are assisting ventilations when you notice a leg that is badly angulated (bent) and looks broken. What should you do?
3. What can pulse rate, skin color, skin temperature, and skin condition tell you about a patient?

Case Study

You are an Emergency Medical Responder at a high school where a student is believed to have consumed alcohol. You arrive at the health office and find the patient will only respond to loud verbal stimulus by moaning. You observe stains on the front of his shirt where he appears to have vomited before you arrived.

Chapter Review

Each chapter ends with review exercises containing multiple-choice, short answer, and critical-thinking questions.

Section Review

After each section, a test is provided to ensure that learning is cumulative throughout the text.

SECTION 4

Review and Practice Examination

Assess what you have learned in this section by checking the best answer for each multiple-choice question. When you are done, check your answers against the key provided in Appendix B.

1. Oxygenated blood leaving the lungs returns to the _____ of the heart.
   a. _____ right atrium
   b. _____ left atrium
   c. _____ right ventricle
   d. _____ left ventricle

2. The exchange of oxygen and carbon dioxide between the blood and the cells of the body occurs at the level of the:
   a. _____ aorta.
   b. _____ arteries.
   c. _____ capillaries.
   d. _____ venules.

3. The heart muscle receives oxygenated blood from the _____ arteries.
   a. _____ coronary
   b. _____ cerebral
   c. _____ pulmonary
   d. _____ systemic

4. Wheezing in asthma is caused by:
   a. _____ fluid in the alveoli.
   b. _____ infection of the larynx.
   c. _____ constriction of the small airways.
   d. _____ inflammation of the oropharynx.

5. Chest pain, heaviness, or discomfort due to a myocardial infarction is due to:
   a. _____ inflammation of the lung tissue.
   b. _____ lack of oxygen to the heart muscle.
   c. _____ a spasm of the heart muscle.
   d. _____ fluid in the alveoli.

6. A reduction in blood flow to the heart muscle, causing pain but not death of heart muscle, is known as:
   a. _____ angina pectoris.
   b. _____ congestive heart failure.
   c. _____ myocardial infarction.
   d. _____ ventricular fibrillation.

7. A patient experiences pain in the chest while doing yard work, but the pain goes away after a few minutes of rest. This pattern is most typical with:
   a. _____ myocardial infarction.
   b. _____ heart attack.
   c. _____ congestive heart failure.
   d. _____ angina pectoris.

8. Which of the following is most likely to be experienced by the patient in ventricular fibrillation?
   a. _____ Palpitations
   b. _____ Cardiac arrest
   c. _____ Shortness of breath
   d. _____ Nausea

9. A patient states that he has pain in his chest that feels like it "goes through to my back." Which of the following is the most accurate description of the patient's complaint?
   a. _____ Onset of pain is in the chest.
   b. _____ Chest pain radiates to the back.
   c. _____ Provocation of chest pain is to the back.
   d. _____ Pain is radiating in quality.

10. A 50-year-old female is complaining of difficulty breathing and pain in her left shoulder, along with some "heartburn." She is alert and seems anxious. Which of the following should you do first?
    a. _____ Administer oxygen.
    b. _____ Have the patient lie down.
    c. _____ Apply the AED pads.
    d. _____ Obtain a SAMPLE history.

11. A 60-year-old male is lying on the kitchen floor. His wife reports he collapsed while sitting at the table and fell to the floor. He does not respond to painful stimuli, his skin is cool and dry, he is breathing shallowly 8 times per minute, and he has a carotid pulse of 44 per minute. Of the following, which should you do first?
    a. _____ Obtain a blood pressure.
    b. _____ Apply the AED pads.
    c. _____ Perform a head-to-toe exam.
    d. _____ Assist breathing with a bag-valve mask.

12. A 55-year-old male complains of a sudden onset of severe, "crushing" chest pain while working in his home office. He is pale and cool, and has diaphoretic skin. His radial pulse is 74 per minute, and respirations are 20. Which of the following will benefit the patient the most at this time?
    a. _____ Asking if he has a family history of heart disease
    b. _____ Administering oxygen by nonrebreather mask
    c. _____ Determining the OPQRST of the pain
    d. _____ Locating the patient's nitroglycerin.

13. A 7
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    d.

16. You
    has
    inhaler with him. He began wheezing and having difficulty breathing during gym class at school. You have applied a nonrebreather mask with 15 liters per minute of oxygen. The patient's wheezing has decreased, and the chest wall is moving much less than when you first arrived. Initially, the patient was "fighting" you as you tried to assess him and provide oxygen. He now seems very tired and sleepy. Of the following, which should you do first?
    a. _____ Ensure an open airway and assist ventilations with a bag-valve mask.
    b. _____ Switch to a nasal cannula now that the patient is calmer.
    c. _____ Advise the incoming EMS crew that the patient's condition has improved.
    d. _____ Call the parents for permission to perform further assessment and treatment.

SECTION 1

Preparatory

IN THIS SECTION

You probably have lots of questions as you begin your training: What kind of patients will I encounter? What will be wrong with them? How will I know what to do?

To help you answer those questions, the chapters in this section of the book offer preparatory information that will form a foundation for the care you provide as an Emergency Medical Responder (EMR). But first, we would like to introduce you to two types of patients you may see on a call—the patient who is awake and alert and the patient who is not.

The Emergency Medical Responder arrives on scene first, and as such has a vital role as part of the Emergency Medical Services (EMS) system. Whether providing life-saving emergency care or simply comforting a patient with less serious injuries, your role is a great one. Your arrival on scene—by itself—provides hope to the sick and injured.

Patient #1 ▸ Alert, complains of pain

Some patients you encounter will be awake and alert. They may have a broken arm, be a diabetic, or in this case have pain in the abdomen. The fact that they are awake means you will be able to talk to them and ask what is wrong. This is called gathering a patient "history." They may be in stable condition or be seriously ill or injured. You will learn how to tell the difference.

Patient #2 ▸ Unresponsive on the floor

This patient is on the floor, apparently unresponsive. Because of this, we believe he is in more serious condition than the patient who is able to sit up. The unresponsive patient requires a more rapid series of actions to make sure he is breathing and has a pulse. You will learn those skills in the course of your training.

One skill described in the following chapters is how to lift and move this patient. While on scene, you may be asked to help the EMTs lift him onto a stretcher or you might have to move him to provide emergency care. You will learn that both lifting and moving must be done carefully to avoid injuring yourself and worsening the patient's condition.

CHAPTER 1

Introduction to EMS Systems

OVERVIEW

The following items provide an overview to the purpose and content of this chapter. The Education Standards and Competencies are from the National EMS Education Standards.

Education Standards Preparatory (EMS Systems, Research); Public Health

Competencies Uses simple knowledge of the EMS system, safety/well-being of the Emergency Medical Responder (EMR), medical/legal issues at the scene of an emergency while awaiting a higher level of care.

Has an awareness of local public health resources and the role EMS personnel play in public health emergencies.

Knowledge Area EMS Systems

- Roles/responsibilities/professionalism of EMS personnel
- Quality improvement

Research

- Impact of research on EMR care
- Data collection

Objectives After reading this chapter, you should be able to:

1. Define key terms introduced in this chapter.
2. Describe the importance of public safety answering points (PSAPs) and specially trained emergency medical dispatchers (EMDs) in EMS systems.
3. Compare and contrast the training and responsibilities of EMRs, EMTs, AEMTs, and Paramedics.
4. Provide examples of different EMS systems.
5. Give examples of how the resources of specialty hospitals, such as trauma centers, can benefit patients.
6. Explain the importance of each of the ten classic EMS system components listed in the text.
7. Relate each of the following factors to the practice of EMRs:
   a. Your state's legislation
   b. Your state's EMS organization or agency
   c. Regional/local EMS oversight agencies
   d. Medical oversight
   e. The agency with which you will volunteer or be employed
8. Explain the roles and responsibilities of Emergency Medical Responders (EMRs).

OVERVIEW *(continued)*

9. Give examples of professionalism in EMR practice.
10. Discuss the purpose of quality improvement in EMS.
11. Give examples of ways you can reduce the likelihood of errors in your practice as an EMR.
12. List ways in which research may influence EMR practice.

Key Terms Page references indicate first major use in this chapter. The Margin Glossary in this chapter provides definitions as you read.

Emergency Medical Responder (EMR), p. 5
Emergency Medical Services (EMS) System, p. 5
public safety answering point, p. 8
emergency medical dispatcher, p. 8
Emergency Medical Technician (EMT), p. 9
Advanced EMT (AEMT), p. 9
Paramedic, p. 9
community paramedic, p. 9
tiered response, p. 10
trauma center, p. 10
pediatric center, p. 10
burn center, p. 10
cardiovascular care center, p. 10
stroke center, p. 10
professionalism, p. 14
quality improvement (QI), p. 15

Student Resources Please go to **pearsonhighered.com/bradyresources** to access student resources for this text. You will find multiple choice questions, critical thinking scenarios, and skills checklists—all for more practice and review.

INTRODUCTION

The **Emergency Medical Responder (EMR)** is a vital part of the **emergency medical services (EMS) system**. The EMR is trained to get there first—the point when a difference can be made between life and death (Figures 1-1a and 1-1b ■). (See The Big Picture: The EMS System).

The training you are about to undergo is focused on just that—the knowledge and skills to save a life, to comfort a patient at the height of crisis, and to provide care that flows seamlessly into the care given by emergency personnel on the ambulance.

Emergency Medical Responder (EMR)
training level to be a first responder to most calls.

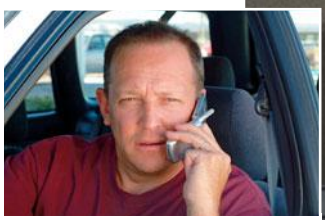
emergency medical services (EMS) system
grouping of medical providers from 911 to the emergency department.

Figure 1-1a Early 1900s ambulance at the scene of an accident. *(© Underwood & Underwood/Corbis)*

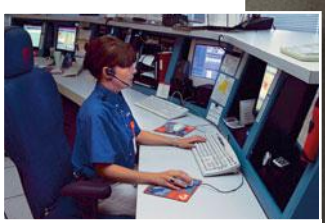
Figure 1-1b Ambulance at the scene of the Kent State University shooting in 1970. *(© Bettman/Corbis)*

The Big Picture

The EMS System



1 A citizen calls 9-1-1.



2 EMS dispatch sends an Emergency Medical Responder to the scene.

3 An EMR assesses the patients.

4 An EMR transfers care to an EMT.

5 An EMT transports the patient to the emergency department.

As an EMR, you are the first part of the EMS system who will respond to the patient's side. Your training will prepare you to respond first and provide lifesaving care. Your training will focus on knowledge and skills that will have the most impact on the patient in those first minutes, including preventing further injury; ensuring airway, breathing, and circulation; controlling bleeding; assessing the patient; monitoring vital signs; and providing other elements of patient care.

Emergency Medical Responders come from many backgrounds. Some are firefighters or police officers who respond on emergency vehicles with medical equipment. Others work as part of industrial response teams, in correctional facilities, or as community members wanting to make a difference (Figures 1-2a to 1-2d ■).

Regardless of the reason you are reading this book, you will be given the training to truly make a difference.

SELF CHECK

- Can you define key terms introduced in this chapter?

Figure 1-2a EMR police officer.

Figure 1-2b EMR firefighter.

Figure 1-2c EMR community volunteer.

Figure 1-2d EMR industrial worker.

CASE STUDY

THE CALL

You are volunteering as an Emergency Medical Responder at the county fair. You are an EMR at work, so you help the community for these 10 days a year.

Your radio crackles for a "man down" near the grandstand. No further information is available and you don't know whether he fell from the stands, got into a fight, or maybe simply got sick. Since you are only a few hundred yards away, you pick up the pace.

- Discussion: *What do you think you need to do if you are the first responder to the scene?*

SELF CHECK

- How would you describe the importance of public safety answering points (PSAPs) and specially trained emergency medical dispatchers (EMDs) in EMS systems?

public safety answering point location where emergency calls are answered.

emergency medical dispatcher person who is trained to answer and prioritize emergency calls.

The EMS System

Since you will be a part of the EMS system, it is important to know all of its components and how it works. The depth of the system and the varied personnel involved may surprise you.

911

The system begins with the call for EMS. The patient may call EMS. Other times a family member, friend, or bystander calls 911. These calls are answered at a **public safety answering point** (PSAP). These centers receive calls for police, fire, and EMS.

Many of the dispatchers at these centers are trained as **emergency medical dispatchers** (EMDs). When an emergency call comes into a PSAP, these specially trained dispatchers obtain valuable information to give to responding EMS units; they also provide lifesaving medical instructions over the phone until help arrives (Figure 1-3 ■).

An overwhelming majority of the United States has a 911 system in place. A call from any phone using this number will put you in contact with professionals at a communications center. In most systems, calling 911 will also allow the dispatcher to identify the number from which you are calling. This is called enhanced-911 and is valuable in the event a patient becomes unresponsive before he can give his location.

Figure 1-3 Communication center.