Chapter 41

A Team Approach to Health Care

Unit Summary

After students complete this chapter and the related course work, they will understand the significance and characteristics of a team approach to health care and the impact of this approach on positive patient outcomes. Students will also be able to list and describe the steps an EMT should follow to assist with ALS skills, including placement of advanced airways and vascular access.

National EMS Education Standard Competencies

There are no National EMS Education Standard Competencies for this chapter.

Knowledge Objectives

1. Define continuum of care. (p 1489)
2. List the five essential elements of a group. (p 1491)
3. Explain the advantages of a team over a group; include the advantages of regularly training and practicing together. (pp 1490–1491)
4. List the five essential elements of a team. (pp 1491–1493)
5. Explain how crew resource management (CRM) can be useful in the prehospital environment. (pp 1493–1494)
6. List the five critical elements necessary to ensure effective transfer of patient care from one provider to another. (pp 1494–1495)
7. List the five steps a receiving health care provider should perform when taking a patient care report (PCR). (p 1495)
8. Describe the four-step process of assisting with advanced life support (ALS) skills. (p 1495)
9. Discuss the importance of preoxygenation when performing endotracheal (ET) intubation. (p 1496)
10. Describe the six steps of the BE MAGIC intubation procedure. (pp 1497–1499)
11. Describe the signs that indicate a complication with an intubated patient. (p 1500)
12. Explain the importance of ensuring patient comfort during a vascular access procedure. (pp 1500, 1502)
13. Describe the steps EMTs can take to troubleshoot interpersonal conflicts. (pp 1503–1504)

Skills Objectives

There are no skills objectives for this chapter.

Readings and Preparation

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured,* Eleventh Edition**, Chapter 41, and all related presentation support materials.

Support Materials

• Lecture PowerPoint presentation

• Case Study PowerPoint presentation

Enhancements

• Direct students to visit Navigate 2.

• **Content connections:** Chapter 4, “Communication and Documentation,” will discuss in detail the patient care report and how to provide the report to other health care providers. Emphasize the importance of effective communication skills. Chapter 10, “Airway Management,” will provide a detailed discussion on the process of oxygenation and the techniques for managing a patient’s airway. It is important for the students to understand the importance of working as a team member to provide quality patient care.

• **Cultural considerations:** EMTs will be dealing with patients and colleagues who come from different cultural backgrounds. Remind the students that it is important to respect cultural differences to provide quality care and avoid conflict.

Teaching Tips

• Interactive student activities such as role playing can bring the key concepts into focus.

• Create a Jeopardy game using major topics as categories. There are templates online.

• The process of endotracheal intubation is covered in Chapter 10, “Airway Management.”

Unit Activities

**Writing assignments:** Assign students to complete a research paper on the topic of team dynamics as it applies to EMS.

**Student presentations:** Ask students to give a presentation to the class discussing how to troubleshoot team conflicts. Have the students enact scenarios portraying different situations where conflict could arise while performing patient care.

**Group activities:** Form four groups and have them create a scenario where the EMT would assist the AEMT or paramedic with endotracheal intubation or vascular access. Ask two groups to focus on the procedure and two groups to focus on continuing care. When the scenarios are completed, have each group present their scenario to the class.

**Visual thinking:** Present the students with equipment for endotracheal intubation and vascular access. Ask them to describe how each piece is used in the process.

Pre-Lecture

### You are the Provider

“You are the Provider” is a progressive case study that encourages critical thinking skills.

### Instructor Directions

**1.** Direct students to read the “You are the Provider” scenario found throughout Chapter 41.

**2.** You may wish to assign students to a partner or a group. Direct them to review the discussion questions at the end of the scenario and prepare a response to each question. Facilitate a class dialogue centered on the discussion questions and the Patient Care Report.

**3.** You may also use this as an individual activity and ask students to turn in their comments on a separate piece of paper.

Lecture

I. Introduction

A. As an EMT, you are a critical member of the emergency health care team that includes not only first responders, paramedics, and other EMTs, but also physicians, nurses, and other personnel who will help care for your patient throughout the duration of his or her injury or illness.

B. You must learn to be an effective team member.

C. By working as a team, emergency health care providers can improve patient and provider safety and deliver better emergency care.

II. An Era of Team Health Care

1. Previous models of emergency care often consisted of providers who worked separately, passing the patient from one individual or group to the next.

1. In time, emergency health care providers recognized that by working as a unified team from first patient contact to patient discharge, it was possible to improve individual and team performance, patient and provider safety, and patient outcome.

2. This concept is the continuum of care.

B. Community paramedicine and mobile integrated healthcare (MIH) teams may be the best example of the team concept of continuum of care.

C. The structure and effectiveness of emergency health care teams differ from system to system.

III. Types of Teams

A. Regular teams

1. EMTs consistently interact with the same partner or team.

2. Team members who frequently train and work together are more likely to move smoothly from one step in the procedure to the next.

B. Temporary teams

1. EMTs work with providers with whom they do not regularly interact or may not even know.

a. Providers must work within an environment that supports and promotes collaboration rather than competition.

b. It is crucial to have a clear understanding of the roles, responsibilities, and capabilities of each team member.

i. The best way to accomplish this is to train together.

C. Special teams

1. Fire Team

2. Rescue Team

3. Hazardous materials (HazMat) Team

4. Tactical EMS Team

5. Special event EMS Team

6. EMS bike Team

7. In-hospital patient care technicians

8. MIH technicians

IV. Groups Versus Teams

A. The National Incident Management System (NIMS) defines a group as “[t]he organization level that divides the incident according to functional levels of operation. Groups perform special functions, often across geographic boundaries.”

1. EMS providers may often work as a group in this sense.

2. You must be able to distinguish between a group of providers gathered together on an emergency call and a true team.

3. A group consists of individual health care providers working independently to help the patient.

a. Triage

b. Treatment

c. Transport

4. A team consists of a group of health care providers who are assigned specific roles and are working interdependently in a coordinated manner under a designated leader.

5. The five essential elements of a group include:

a. A common goal

b. An image of themselves as a “group”

c. A sense of continuity of the group

d. A set of shared values

e. Different roles within the group

V. Dependent, Independent, and Interdependent Groups

A. In dependent groups, each individual is told what to do, and often how to do it, by his or her supervisor or group leader.

B. In independent groups, each individual is responsible for his or her own area (either a physical space or set of tasks).

1. May receive support and guidance from a supervisor or group leader but do not have to wait for an assignment before taking action

C. EMTs and other health care providers who work interdependently are functioning as a true team.

1. Each provider may be assigned to a particular area or task, but everyone works together with shared responsibilities, accountability, and a common goal, as opposed to focusing on the goals of their own individual areas.

VI. Effective Team Performance

A. A shared goal

1. Every health care provider on the team must be committed to a common goal— typically, the best possible patient outcome.

**B. Clear roles and responsibilities**

1. Each provider must know what needs to be done and what is expected of him or her.

**C. Diverse and competent skill sets**

1. Practice with one another and become familiar with each other’s tools, techniques, capabilities, and preferences so that each team member is competent before the call comes in.

**D. Effective collaboration and communication**

1. Four important elements of team communication include:

a. A clear message: Speak calmly, confidently, and concisely.

b. Closed loop communication: Repeat the message back to the speaker.

c. Courtesy: Speak politely.

d. Constructive intervention: If it is necessary, respectfully question or correct team members or the team leader if a mistake has been or is about to be made.

**E. Supportive and coordinated leadership**

1. The team leader provides role assignments, coordination, oversight, centralized decision making, and support for the team to accomplish their goals and achieve desired results.

a. Often defined by policy, procedure, or statute

b. May be the most senior provider in the group

c. May be the person with the highest-level certification

2. Team leaders foster communication and team dynamics using concepts such as crew resource management and team situational awareness.

a. Situational awareness is the knowledge and understanding of one’s surroundings and the ability to recognize potential threats to safety.

3. Crew resource management (CRM) is a way for team members to work together with the team leader to develop and maintain a shared understanding of the emergency situation.

a. CRM recommends use of the PACE mnemonic:

i. Probe: Look or ask to confirm the problem.

ii. Alert: Communicate the problem to the team leader.

iii. Challenge: If the issue is not corrected, then clearly challenge the team’s present course of action that is leading to the problem.

iv. Emergency: If the problem is clear and critical, then immediately communicate the emergency to the entire team.

VII. Transfer of Patient Care

A. At several points along the continuum, the patient’s care will be transferred, or “handed off,” from one unit of providers on the team to another.

1. These transfers introduce the possibility of critical patient care errors, especially when they occur several times and in different settings along the continuum of care.

2. Effective teams minimize the number of transfers during patient care and adhere to strict and careful guidelines when such transfers are unavoidable.

3. Whenever the verbal transfer of care occurs, all team members should do their best to ensure the following:

a. Uninterrupted critical care: Whenever possible, the team member giving the report and the team member taking the report should hand off lifesaving care to another team member, allowing them to focus on the transfer of care.

b. Minimal interference: The transfer of patient care should occur in a location with the least interference possible.

c. Respectful interaction: Each team member involved in the transfer must be respectful of members’ different roles and recognize the importance of each role.

d. Common priorities: Both the team member giving the report and the team member taking the report must focus on their common priorities (critical assessment findings and patient care) vital for the best possible patient outcome.

e. Common language or system: Whenever possible, a mutually agreed-upon and standardized patient handoff format should be used.

B. See Chapter 4, “Communications and Documentation,”for information on PCRs.

VIII. BLS and ALS Providers Working Together

A. BLS and ALS care cannot exist without each other.

B. BLS efforts must continue throughout the continuum of care.

1. You must carefully coordinate your efforts with the advanced tools and techniques used by ALS providers.

C. What may be a “paramedic-only” skill in your EMS system may be common for an EMT to perform in another.

1. It is your responsibility to understand what is allowed by the scope of practice, standard of care, and local protocols where you work.

a. If you work outside these bounds, then you risk legal liability.

2. There are many ways in which you can assist paramedics and other ALS providers with advanced procedures.

IX. Assisting with ALS Skills

A. Assisting follows a four-step process:

1. Patient preparation

2. Equipment setup

3. Performing the procedure

4. Continuing care

B. Assisting with placement of advanced airways

1. Endotracheal (ET) intubationis the insertion of a tube into the trachea to maintain and protect the airway.

a. The ET tube can be inserted through the mouth or through the nose.

2. Patient preparation

a. The more oxygen that is available in the alveoli, the longer the patient can maintain adequate gas exchange in the lungs while the intubation procedure is being performed.

i. Preoxygenation

b. Maintain a high-flow nasal cannula on the patient during the preoxygenation phase and leave the nasal cannula in place during the intubation attempt.

i. Apneic oxygenation

3. Equipment Setup

a. Typically includes:

i. Personal protective equipment (PPE)

ii. Suction unit with rigid, tonsil-tip and nonrigid, whistle-tip (French) catheters

iii. Laryngoscope handle and blade (sized for the patient)

iv. Magill forceps

v. ET tube (sized for the patient)

vi. Stylette or tube introducer (gum elastic bougie)

vii. Water-soluble lubricant

viii. 10-mL syringe

ix. Confirmation device(s), including waveform end-tidal CO2 monitors and/or colorimetric device

x. Commercial ET tube securing device

xi. Alternate airway management devices, such as a supraglottic airway and/or cricothyrotomy kit

4. Performing the procedure

a. BE MAGIC

i. B—Perform **B**VM preoxygenation.

ii. E—**E**valuate for airway difficulties

iii. M—**M**anipulate the patient

iv. A—**A**ttempt first-pass intubation

v. GI—Use a supra**G**lottic or **I**ntermediate airway if unable to intubate

vi. C—**C**onfirm successful intubation

b. BVM preoxygenation

i. It is crucial that you adequately preoxygenate the patient before the intubation procedure.

ii. Do not hyperventilate the patient.

iii. Focus on maintaining a good seal, achieving chest rise and fall, and delivering breaths at a rate appropriate for the patient’s age.

c. Evaluate for airway difficulties.

i. Assist the ALS provider with evaluating the patient to identify any factors that will present difficulties during the procedure.

(a) For example, trauma or anatomic deformities to the airway

d. Manipulate the patient

i. Position the patient so that the ALS provider can visualize the vocal cords.

e. Attempt intubation

i. Remove the oral airway and disconnect the mask from the bag in preparation for connecting the bag to the ET tube.

ii. Keep suction equipment at hand.

iii. The ALS provider may ask you for assistance in manipulating the patient’s larynx or otherwise positioning the patient for a better view.

f. Should the intubation attempts fail, it may be your responsibility to prepare and hand over the supraglottic or intermediate airway device.

g. Confirm intubation/correct issues

i. You may attach the end-tidal waveform CO2 detector in line between the ET tube and the bag.

ii. You may also either ventilate the patient while another provider checks for positive breath sounds in the absence of gastric sounds, or you may listen while another team member ventilates.

iii. If intubation is confirmed, you may assist in securing the ET tube.

iv. If intubation cannot be confirmed, you may assist other team members in correcting issues.

h. Continuing care

i. You must continue to observe all of the patient’s monitor readings, as well as monitor for signs of potential complications, including:

(a) Absence of an end-tidal CO2 level

(b) Decreasing SpO2 level

(c) Increasing resistance when ventilating

(d) Other physical signs of poor ventilation and perfusion

(e) Improper positioning or dislodgement of the ET tube

C. Vascular access

1. A procedure that gains access to a patient’s circulatory system in order to inject or remove fluids, medicines, or blood products.

2. Patient preparation

a. May involve positioning the patient and equipment

b. May involve explaining the procedure and the reason for it

c. Ensuring the patient is comfortable and calm

3. Equipment setup

a. While vascular access may involve either IV or intraosseous (IO) access, the procedure and equipment list will be generally the same:

i. PPE, including properly-sized gloves

ii. A properly-sized bag or syringe of the IV solution (selected by the ALS provider)

iii. IV tubing and drip set (selected by the ALS provider)

iv. Skin preparation pads, typically alcohol prep pads and/or betadine solution

v. Adhesive tape, torn into several pieces about 1 inch (2.5 cm) in length

vi. Gauze, 2 x 2 inches (50 x 50 mm) or 4 x 4 inches (101 x 101 mm)

vii. Commercial IV securing system

viii. IV “pigtail” catheter

ix. If IV access:

(a) Venous constricting band (sometimes referred to as a venous tourniquet)

(b) IV catheter (selected by the ALS provider)

x. If IO access:

(a) IO needle (size selected by the ALS provider)

(b) Mechanical IO driver or insertion device (depending on IO system)

4. Spiking the bag

a. Remove the rubber pigtail found on the end of the IV bag by pulling on it.

i. Remove the protective cover from the sterile piercing spike.

b. Slide the spike into the IV bag port until you see fluid enter the drip chamber. Invert the bag.

c. Squeeze and release the drip chamber until about half full.

d. Unclamp the tubing.

e. Let the fluid flow until air bubbles are removed from the line before turning the roller clamp wheel to stop the flow.

f. Check the drip chamber; it should be only half filled.

i. If the fluid level is too low, then squeeze the IV bag until it fills.

ii. If the chamber is too full, then invert the IV bag and squeeze the chamber to empty the fluid back into the bag.

g. Hang the bag in the appropriate location with the end of the IV tubing easily accessible.

h. Choose the drip set indicated by the ALS provider, and attach it to the fluid bag indicated by the ALS provider.

i. Fill the drip chamber halfway by squeezing it.

j. Flush or “bleed” the tubing to remove any air bubbles by opening the roller clamp.

i. Make sure no bubbles are floating in the tubing.

k. Saline locks (buff caps)

i. Access devices used to maintain an active IV site without running the fluids through the vein

ii. Used primarily for patients who do not need additional fluids but may need rapid medication delivery

iii. Procedures will vary based on local protocol.

5. Performing the procedure

a. While the ALS provider is establishing IV or IO access, you may help to stabilize the patient’s limbs or provide him or her comfort.

6. Continuing care

a. Once vascular access is established, continue patient care by observing the access site for swelling, bleeding, discoloration, or leaking.

b. Observe the IV tubing to see if it is improperly blocked, clamped, or kinked, or if the bag of IV solution is empty.

X. Troubleshooting Team Conflicts

A. When conflict occurs, keep in the mind the following five techniques:

1. The patient comes first.

a. Regardless of interpersonal conflicts that may arise, the patient’s needs must always come first.

2. Do not engage.

a. If the problem causing the conflict does not directly and immediately impact patient care, then do not engage. Have the discussion after the call, when more positive communication may be possible.

3. Keep your cool.

a. Maintain your composure. If you feel that the conflict is over a critical component of patient care, then follow the PACE mnemonic discussed previously. If it is not, then begin by taking a deep breath and slowly counting to 10.

4. Separate the person from the issue.

a. If the conflict arises from the behavior of another team member and the conflict cannot be delayed or avoided, then focus on the behavior itself rather than the individual.

5. Choose your battles.

a. Remember, there is strength in the diversity of team members. Not everyone will work in exactly the same way, and that is a good thing. Avoid engaging in conflict over minor issues in patient care that center around one provider “style” over another.

Post-Lecture

This section contains various student-centered end-of-chapter activities designed as enhancements to the instructor’s presentation. As time permits, these activities may be presented in class. They are also designed to be used as homework activities.

## Assessment in Action

This activity is designed to assist the student in gaining a further understanding of issues surrounding the provision of prehospital care. The activity incorporates both critical thinking and application of basic EMT knowledge.

### Instructor Directions

**1.** Direct students to read the “Assessment in Action” scenario located in the Prep Kit at the end of Chapter 41.

**2.** Direct students to read and individually answer the quiz questions at the end of the scenario. Allow approximately 10 minutes for this part of the activity. Facilitate a class review and dialogue of the answers, allowing students to correct responses as may be needed. Use the quiz question answers noted below to assist in building this review. Allow approximately 10 minutes for this part of the activity.

**3.** You may wish to ask students to complete the activity on their own and turn in their answers on a separate piece of paper.

### Answers to Assessment in Action Questions

1. **Answer:** B Face to face, inside the house

**2.** **Answer:** C The paramedic, because she is the highest-level provider on scene.

**3.** **Answer:** D Whichever role the team leader needs when you ask

**4.** **Answer:** A prepare the patient by continuing to ventilate.

**5.** **Answer:** C Help pad under the patient’s shoulders.

**6.** **Answer:** D The BVM is offering more resistance.

**7.** **Answer:** C not engage; calmly speak to the AEMT about the situation after the call.

**8.** **Answer:** A The team leader

**9.** **Answer:** While this chapter has provided you with a number of tools to help build better EMS teams, the exact procedure to follow will depend on the situation as well as your own skills and abilities and your working relationship with the other team members involved. However, there is no question that when a disagreement or breakdown in the team dynamic disrupts critical patient care, immediate intervention is needed.

In this case, you must do what is necessary to ensure that artificial ventilation continues at the appropriate rate, whether this is to draw the attention of the paramedic to the fact that ventilation is inadequate, or to offer to take over ventilation yourself so that the other team members can resolve the issue and proceed with the call.

**10.** **Answer:** Preparation and training are always the key to great performance in the field. The more frequently and realistically providers of all levels can train and practice together, the better they will be able to perform as a true team to produce the best possible patient outcome, rather than working as independent providers or a loosely connected group.

## Assignments

A. Review all materials from this lesson and be prepared for a lesson quiz to be administered (date to be determined by instructor).