

# Management of Emergency Medical Services

MEMS-Student Manual

*3rd Edition, 5th Printing-November 2013*



**FEMA**

FEMA/USFANFA  
MEMS-SM  
November 2013  
3rd Edition, 5th Printing

***Management of Emergency Medical Services***



**FEMIA**

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**U.S. DEPARTMENT OF HOMELAND SECURITY**

**UNITED STATES FIRE ADMINISTRATION**

**NATIONAL FIRE ACADEMY**

**FOREWORD**

The U.S. Fire Administration (USFA), an important component of the Department of Homeland Security (DHS), serves the leadership of this Nation as the DHS's fire protection and emergency response expert. The USFA is located at the National Emergency Training Center (NETC) in Emmitsburg, Maryland, and includes the National Fire Academy (NFA), National Fire Data Center (NFDC), and the National Fire Programs (NFP). The USFA also provides oversight and management of the Noble Training Center in Anniston, Alabama. The mission of the USFA is to save lives and reduce economic losses due to fire and related emergencies through training, research, data collection and analysis, public education, and coordination with other Federal agencies and fire protection and emergency service personnel.

The USFA's National Fire Academy offers a diverse course delivery system, combining resident courses, off-campus deliveries in cooperation with State training organizations, weekend instruction, and online courses. The USFA maintains a blended learning approach to its course selections and course development. Resident courses are delivered at both the Emmitsburg campus and the Noble facility. Off-campus courses are delivered in cooperation with State and local fire training organizations to ensure this Nation's firefighters are prepared for the hazards they face.

*Management of Emergency Medical Services* (MEMS) is one of several NFA courses that address specific management training needs identified in the development of Public Law 93-498. MEMS is designed to provide training in leadership, management, communications, and other management skills for those individuals involved in the management of EMS programs for both fire service and allied public service agencies.

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Glossary

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SCHEDULE--WEEK ONE

	Monday	Tuesday	Wednesday	Thursday	Friday
<b>AM</b>	Module 0: Welcome/ Introductions/Course Overview Activity 0.1: Get Acquainted	Reinforcing Activity #1 Module 2: Planning and Time Management Activity 2.1: Planning and Time Management In-Basket--Part A	Turn in Activity 3.1 Module 4: Communication Activity 4.1: Communication--Parts A and B Reinforcing Activity #2	Turn in Activity 6.1 Reinforcing Activity #3 (Student developed) Class discussion of Activity 6.1 Assign Activity 6.2: Current Issues Presentation	Activity 6.3 (cont'd) Applied Midterm Exam
<b>PM</b>	Activity 0.2: Course Introduction Module 1: Leadership Activity 1.1: Giving Orders Review reading assignments <b>Reading Assignment:</b> Module 1--SM pp. 1-1 to 1-19 Module 2--SM pp. 2-1 to 2-18 Module 3--SM pp. 3-1 to 3-24 "Your First 100 Days," Ludwig. "What's in Your Inbox?" Papinchak. "Moving Up: Five Leadership Skills to Master," Mills. "Strategic Planning for EMS Agencies," Barishansky. "Supporting EMS Research," Brown and Audet.	Activity 2.1: Planning and Time Management In-Basket--Part B Module 3: Collecting and Analyzing Data Activity 3.1: Research Review <b>Reading Assignment:</b> Module 4--SM pp. 4-1 to 4-11 Module 5--SM pp. 5-1 to 5-11 Module 6--SM pp. 6-1 to 6-14 "Stress Under Fire," Smith.	Return/Discuss Activity 3.1 Module 5: Issues Impacting EMS Practices Module 6: Management of Human Resources Activity 6.1: Designing a Training Program <b>Reading Assignment:</b> Module 6--SM pp. 6-15 to 6-18 "360-Degree Feedback Systems," Saucier.	Module 6 (cont'd) Activity 6.3: Motivation Assign Activity 8.2: Presentation to the Chief Prep for Applied Midterm Exam	Applied Midterm Exam (cont'd) Written Midterm Exam Review Midterm Exam <b>Reading Assignment:</b> Module 6--SM pp. 6-18 to 6-35

SCHEDULE--WEEK TWO

	Monday	Tuesday	Wednesday	Thursday	Friday
<b>AM</b>	Module 6 (cont'd) Activity 6.4: Performance Appraisal	Reinforcing Activity #4 Module 7: Management of System Resources Activity 7.1: Justifying Capital Equipment Purchase	Reinforcing Activity #5 Module 8: External Partnerships, Interfaces, and Influences Activity 8.1: Interaction with External Organizations	Activity 8.2: Presentations to the Chief	NFA Graduation
<b>PM</b>	Activity 6.5: Counseling Role Play <b>Reading Assignment:</b> Module 7--SM pp. 7-1 to 7-16 "How to Influence Purchasing Decisions," Zavadsky.	Activity 7.1 (cont'd) Activity 6.2: Presentation <b>Reading Assignment:</b> Module 8--SM pp. 8-1 to 8-21	Activity 8.1 (cont'd) Prep for Final Exam	Final Written Examination Reinforcing Activity #6 Class Issues	

## HOW TO USE THIS MANUAL

This Student Manual (SM) is yours to keep. You are encouraged to take notes in it, underline key text, and generally use it in any way that enhances your learning.

We believe you will find the teaching approach used in the MEMS course to be very innovative. The course presupposes your knowledge of the technical and clinical aspects of EMS. Therefore, the course will concentrate on your application of technical information and the skills and knowledge taught in the eight course modules. In addition to being able to apply knowledge, you will be required to demonstrate skills based on your acquired knowledge. Because of the proactive nature of the course, very little classroom time is allocated for lectures and conventional learning activities in relation to the simulations and exercises. Your instructors will review topical material briefly for each learning module. During those sessions, you are encouraged to maximize your personal development opportunities through active participation in class discussions. In addition, you are encouraged to take notes that will facilitate your recall of the material and use of your SM after you return to your job.

You will be accountable for the assigned readings at the beginning of each day. At the end of each module, a list of suggested readings appears, if applicable. Suggested reading material may be found at the NFA Learning Resource Center (LRC). You will be provided an opportunity to visit and learn more about the LRC on Day Two of the course. You should take advantage of the LRC by using the various EMS texts, journals, and other reference material to expand your knowledge of EMS. The SM text material and material covered by reading assignments will be the EMS basis for the in-class exercises and simulations. Each of the exercises and simulations will place you into real-world scenarios requiring you to apply your EMS knowledge and demonstrate such skills as leadership, analysis, decisionmaking, problem-solving, and interpersonal communications. All of the geographic locations and personalities you will encounter during the simulations are fictional. Any similarity to actual locations or personalities is purely coincidental, and should not be considered relevant to the simulations. Following each exercise or simulation, your performance will be assessed and feedback will be provided.

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## COURSE GOAL AND COURSE INTRODUCTION

### Course Goal

To provide training on the knowledge, skills, and abilities required for effective first-line management of an EMS organization, including day-to-day operations, time management, human resources, financial budgeting, and equipment/fleet management. In addition, to provide a forum for students to exchange ideas and individual viewpoints regarding current and future issues relating to the management of EMS.

### Course Introduction

The original MEMS course in the 1970s was designed to assist students in planning, developing, and implementing an EMS program. Course content addressed those subject areas pertinent to any agency starting up an EMS program. As a greater number of EMS programs came on line around the country, the MEMS course began to attract greater numbers from those organizations, with new and different management issues. Accordingly, the MEMS course began to change to meet the needs of the changing student population. By 1984, most of the original MEMS course content had been changed completely or dropped from the course.

In 1986, the MEMS course underwent a major review and update. The resulting course keyed on students representing established EMS programs and the management issues likely to be encountered in those programs. Because a significant percentage of the new EMS organizations were under a fire service umbrella, the revised MEMS course fit nicely into the NFA curriculum structure.

Like the original course, the 1986 version of MEMS continued to change and reflect new issues and trends in EMS management. The course review process also benefited from student input and critiques. In October 1992, a Curriculum Advisory Committee (CAC) was convened at NFA to conduct an indepth review of the Academy's EMS curriculum offerings with the objective of projecting course requirements into the 21st century. EMS experts from around the country, who represented diversity in geography, system configurations, system designs, and areas of responsibility, comprised the CAC. The committee identified EMS content areas that would support future course development. One of the areas, Introduction to EMS Management, closely corresponded to the existing MEMS course structure and was assigned the highest priority for development.

The current MEMS course structure was designed during the fall of 1993 and piloted in April 1994 to meet that need. Content and format were developed from recommendations provided in the report of the 1992 CAC, an extensive review and extrapolation of material and issues from current EMS literature, input from EMS subject matter experts, and design guidance from the U.S. Fire Administration (USFA) and NFA.

It was one of the first "hands-on" management courses at NFA, and stood as a model for numerous NFA course development and revision efforts. MEMS has been updated twice since then to meet the changing needs and issues of the EMS community. The first update came in the fall of 1998 and piloted in February 1999, and the second update came in the fall of 2007 and piloted in June of 2008. The successful format remained unchanged.

The goal of the current MEMS course is to provide the student with an inventory of management skills that can be taken back to the work environment and demonstrated on the job. MEMS uses an innovative teaching method that requires students to **demonstrate** effective management skills rather than just indicating a knowledge of management skills through rote testing.

Because many adults learn by observing someone else and then practicing that behavior themselves, a significant feature of the instructional process in this course is the use of models, both paper and peer. In many of the exercises, students will be given the opportunity to observe classmates to see how they handle an issue. In several of the exercises, students will be given the opportunity to "observe" someone else manage the exercise by reviewing a paper model of how that "person" completed the exercise. The model is not meant to represent the only right or correct answers; it is just one effective way to handle the exercise, as judged by your peers and supervisors.

Teaching management skills is not effective unless there is ample opportunity for you to practice the appropriate behaviors in a job-relevant context, followed by feedback on your ability to demonstrate the appropriate behaviors effectively. Only if you actively practice these skills will you leave the course with improved management skills.

MEMS consists of eight modules of instruction that, taken together, progress through EMS activities that might confront a first-line EMS manager in a hypothetical community. Day One of the course provides coverage of NFA administrative material, student/instructor introductions, a discussion of basic leadership and management concepts, and an introduction to the exercise scenario that will unfold during the course. The course will provide you with realistic simulations that can be related back to your job. The remainder of the 2-week course expands upon basic leadership and management issues, effective management of human resources, EMS system resources, interactions with external organizations, and discussions of current and future management issues in EMS. Most of the requisite technical data (knowledge) is presented through outside reading requirements. You are evaluated through reinforcing activities, exercises or simulations, and written examinations.

As a resident program course at NFA, MEMS puts you into a unique campus environment that enhances the learning experience. Although you and your fellow students are from an EMS background and face many of the same types of problems, you will discover quickly that there are many different approaches and solutions to those same problems. The resident environment encourages student sharing of issues, ideas, problems, and solutions both in and out of the classroom. Research indicates that students often benefit as much from professional out-of-class learning opportunities as they do from the course itself. Classroom activities are designed to promote maximum student interaction, group participation, and shared study. At the same time, the requirement for independent research affords you an opportunity to leave your own mark on the class. What you take home from the MEMS course is related directly to your willingness to participate and learn from the experience.

We have covered to some extent the scope of the MEMS course. However, it is important to point out the areas that MEMS does not cover. MEMS does not deal with any clinical problems, protocols, or specific patient-care procedures. Neither does it cover startup procedures for a new EMS service, or initial EMT/paramedic training requirements or qualifications. The course also avoids putting you, the EMS first-line manager, on the street. Throughout the course, you will be placed "in the middle," with pressure being applied from the EMS street provider for advice, counsel, and support, and from the EMS system manager/medical director for system accountability and operation. Occasionally, you will experience additional pressure from external agencies and organizations.

Finally, MEMS stresses the application of effective leadership and management principles by a first-line EMS manager in the unique environment of prehospital EMS. However, while dealing with the unique challenges of providing responsive EMS, EMS managers must view their system concurrently as an operational business entity. This theme is addressed in many of the courses taught at the NFA in an effort to break down older, more traditional concepts. These more rigid concepts keep many departments from moving forward in a competitive business sense with other agencies. In areas such as personnel management, financial management, quality management, and executive development, EMS agencies face problems similar to other businesses. Therefore, it is imperative that EMS managers use current, effective business practices when managing their service agencies. Although you are given the special problems and emergency situations of "the street," your management role places you in the position of running a business for your community. Community leaders and the general public expect you to be an effective manager, and they hold you accountable for your performance. The staff and faculty at NFA trust that your participation in the MEMS course will be rewarding and beneficial to you personally and, after you leave NFA, will benefit the agency and community you represent.

# FIREFIGHTER CODE OF ETHICS

## Background

The Fire Service is a noble calling, one which is founded on mutual respect and trust between firefighters and the citizens they serve. To ensure the continuing integrity of the Fire Service, the highest standards of ethical conduct must be maintained at all times.

Developed in response to the publication of the Fire Service Reputation Management White Paper, the purpose of this National Firefighter Code of Ethics is to establish criteria that encourages fire service personnel to promote a culture of ethical integrity and high standards of professionalism in our field. The broad scope of this recommended Code of Ethics is intended to mitigate and negate situations that may result in embarrassment and waning of public support for what has historically been a highly respected profession.

Ethics comes from the Greek word *ethos*, meaning character. Character is not necessarily defined by how a person behaves when conditions are optimal and life is good. It is easy to take the high road when the path is paved and obstacles are few or non-existent. Character is also defined by decisions made under pressure, when no one is looking, when the road contains land mines, and the way is obscured. As members of the Fire Service, we share a responsibility to project an ethical character of professionalism, integrity, compassion, loyalty and honesty in all that we do, all of the time.

We need to accept this ethics challenge and be truly willing to maintain a culture that is consistent with the expectations outlined in this document. By doing so, we can create a legacy that validates and sustains the distinguished Fire Service institution, and at the same time ensure that we leave the Fire Service in better condition than when we arrived.



# FIREFIGHTER CODE OF ETHICS

**I understand that I have the responsibility to conduct myself in a manner that reflects proper ethical behavior and integrity. In so doing, I will help foster a continuing positive public perception of the fire service. Therefore, I pledge the following...**

- Always conduct myself, on and off duty, in a manner that reflects positively on myself, my department and the fire service in general.
- Accept responsibility for my actions and for the consequences of my actions.
- Support the concept of fairness and the value of diverse thoughts and opinions.
- Avoid situations that would adversely affect the credibility or public perception of the fire service profession.
- Be truthful and honest at all times and report instances of cheating or other dishonest acts that compromise the integrity of the fire service.
- Conduct my personal affairs in a manner that does not improperly influence the performance of my duties, or bring discredit to my organization.
- Be respectful and conscious of each member's safety and welfare.
- Recognize that I serve in a position of public trust that requires stewardship in the honest and efficient use of publicly owned resources, including uniforms, facilities, vehicles and equipment and that these are protected from misuse and theft.
- Exercise professionalism, competence, respect and loyalty in the performance of my duties and use information, confidential or otherwise, gained by virtue of my position, only to benefit those I am entrusted to serve.
- Avoid financial investments, outside employment, outside business interests or activities that conflict with or are enhanced by my official position or have the potential to create the perception of impropriety.
- Never propose or accept personal rewards, special privileges, benefits, advancement, honors or gifts that may create a conflict of interest, or the appearance thereof.
- Never engage in activities involving alcohol or other substance use or abuse that can impair my mental state or the performance of my duties and compromise safety.
- Never discriminate on the basis of race, religion, color, creed, age, marital status, national origin, ancestry, gender, sexual preference, medical condition or handicap.
- Never harass, intimidate or threaten fellow members of the service or the public and stop or report the actions of other firefighters who engage in such behaviors.
- Responsibly use social networking, electronic communications, or other media technology opportunities in a manner that does not discredit, dishonor or embarrass my organization, the fire service and the public. I also understand that failure to resolve or report inappropriate use of this media equates to condoning this behavior.

**Developed by the National Society of Executive Fire Officers**

## A Student Guide to End-of-course Evaluations

**Say What You Mean ...**

### Ten Things You Can Do to Improve the National Fire Academy

The National Fire Academy takes its course evaluations very seriously. Your comments and suggestions enable us to improve your learning experience.

Unfortunately, we often get end-of-course comments like these that are vague and, therefore, not actionable. We know you are trying to keep your answers short, but the more specific you can be, the better we can respond.



Actual quotes from student evaluations:	Examples of specific, actionable comments that would help us improve the course:
1 "Update the materials."	<ul style="list-style-type: none"> <li>The (ABC) fire video is out-of-date because of the dangerous tactics it demonstrates. The available (XYZ) video shows current practices.</li> <li>The student manual references building codes that are 12 years old.</li> </ul>
2 "We want an advanced class in (fill in the blank)."	<ul style="list-style-type: none"> <li>We would like a class that enables us to calculate energy transfer rates resulting from exposure fires.</li> <li>We would like a class that provides one-on-one workplace harassment counseling practice exercises.</li> </ul>
3 "More activities."	<ul style="list-style-type: none"> <li>An activity where students can physically measure the area of sprinkler coverage would improve understanding of the concept.</li> <li>Not all students were able to fill all ICS positions in the exercises. Add more exercises so all students can participate.</li> </ul>
4 "A longer course."	<ul style="list-style-type: none"> <li>The class should be increased by one hour per day to enable all students to participate in exercises.</li> <li>The class should be increased by two days so that all group presentations can be peer evaluated and have written abstracts.</li> </ul>
5 "Readable plans."	<ul style="list-style-type: none"> <li>The plans should be enlarged to 11 by 17 and provided with an accurate scale.</li> <li>My plan set was blurry, which caused the dotted lines to be interpreted as solid lines.</li> </ul>
6 "Better student guide organization," "manual did not coincide with slides."	<ul style="list-style-type: none"> <li>The slide sequence in Unit 4 did not align with the content in the student manual from slides 4-16 through 4-21.</li> <li>The instructor added slides in Unit 4 that were not in my student manual.</li> </ul>
7 "Dry in spots."	<ul style="list-style-type: none"> <li>The instructor/activity should have used student group activities rather than lecture to explain Maslow's Hierarchy.</li> <li>Create a pre-course reading on symbiotic personal relationships rather than trying to lecture on them in class.</li> </ul>
8 "More visual aids."	<ul style="list-style-type: none"> <li>The text description of V-patterns did not provide three-dimensional views. More photographs or drawings would help me imagine the pattern.</li> <li>There was a video clip on NBC News (date) that summarized the topic very well.</li> </ul>
9 "Re-evaluate pre-course assignments."	<ul style="list-style-type: none"> <li>The pre-course assignments were not discussed or referenced in class. Either connect them to the course content or delete them.</li> <li>The pre-course assignments on ICS could be reduced to a one-page job aid rather than a 25-page reading.</li> </ul>
10 "A better understanding of NIMS."	<ul style="list-style-type: none"> <li>The instructor did not explain the connection between NIMS and ICS.</li> <li>The student manual needs an illustrated guide to NIMS.</li> </ul>

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# **MODULE 1: LEADERSHIP**

## **TERMINAL OBJECTIVE**

*The students will be able to apply the leadership skills necessary for an EMS manager.*

## **ENABLING OBJECTIVES**

*The students will:*

- 1. List key factors that affect the EMS workforce.*
  - 2. Describe the importance of identifying and adapting to the changing needs of the EMS workforce.*
  - 3. Compare and contrast characteristics of a leader versus a manager.*
  - 4. Compare and contrast leadership styles.*
  - 5. Apply appropriate management styles to three given scenarios.*
  - 6. Begin teambuilding through small-group review of individual responses and develop a joint response to each scenario.*
-

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## LEADERSHIP

The EMS workforce is changing constantly. Several factors account for this change; a significant one is the rising demand for health-care workers in all fields. Many providers are leaving the field of EMS for higher paying, less physically demanding positions in the health professions such as nursing or physicians' assistants. Other key factors affecting the EMS workforce include

- **Decline in entry-level workers**--The birth rate has declined significantly since the end of World War II. The workforce in America is aging steadily as the "Baby Boomers" reach their 50s.
- **Lack of training program graduates**--The number of paramedic graduates remains constant, while the demand for medical transportation services and personnel is increasing. In addition, funding for training programs is diminishing.
- **Women and minorities**--Women and minorities will be the key to meeting the demands for the growing EMS workforce. Minorities currently are severely underrepresented in EMS. More career opportunities are opening up for women in a variety of fields. EMS needs to develop strategies for employing more women and minorities to meet the increasing demand for an EMS workforce.
- **Education barriers**--This includes a postsecondary educational requirement and strict certification/licensing laws as well as significant financial investment to receive the training.
- **Risk to workers**--The risk of contagious diseases such as HIV and Hepatitis B and the growing threat of workplace violence may be discouraging workers from entering the EMS field.

### Needs of the Current Workforce

Some EMS workers "slip out the back door" before ever becoming part of the EMS team. Others may "burn out" and leave EMS after only a few years, or "rust out" as they continue to function at a mediocre level until they retire. The "family" atmosphere of many EMS departments may be intimidating to new employees. They often do not know or understand the unwritten rules and feel excluded. This feeling may extend to the seasoned veteran when EMS and fire departments consolidate.

Services often tend to concentrate the management and leadership roles in a few key people. This may cause the leadership group to feel overworked, while the members feel discouraged because no one asks them to be part of anything significant.

The U.S. workforce is aging, and the EMS workforce is no exception. Workers who have suffered a heart attack or disabling injury or illness and face retirement present new challenges for many systems.

Workers' expectations have increased. Post-depression-era workers found opportunities their parents could not imagine. The Baby Boomers had even higher expectations. Their children are entering the workforce now and often feel they are entitled to regular promotions and pay raises regardless of their performance. In some instances, the work ethic of the postwar Boomers has become a thing of the past.

Family and lifestyle priorities often are more important to the new generation of workers. This may be reflected in their desire for more flexible schedules. Secondary part-time jobs are common among EMS workers as the cost of living continues to escalate.

Today's EMS workers also want to be more involved in the system through decisionmaking and evidence they are contributing to the system. The pursuit of higher education by EMS workers is more common today than it was just a few years ago. Systems are more sophisticated and need more than the "9 to 5" philosophy to keep them satisfied. Increased education also makes the worker more marketable, thus increasing his/her ability to seek a higher paying, more satisfying job elsewhere.

### **Workforce Motivation**

Retaining experienced and enthusiastic workers requires commitment on the part of leaders. Following are nine ways that EMS managers and leaders can provide an environment that encourages motivation in workers.

1. Match employee's personal goals with system goals whenever possible.
2. Encourage members to assume increasing responsibility for goal-directed behavior.
3. Recognize and reward behaviors that lead to accomplishment of system goals.
4. Foster healthy rather than destructive competition.
5. Show personal enthusiasm.
6. Share the big picture.
7. Demonstrate belief in superior customer service.
8. Build strong relationships between management and subordinates.
9. Give employees a choice whenever possible.

## EMS Leadership

Leadership is a process of inspiring emergency response members to a common vision. Leadership involves mobilizing others to accomplish and achieve shared aspirations. In most cases, these shared aspirations comprise the organizational mission.

## Leaders versus Managers

Management can be viewed as the process of accomplishing tasks in an organized and timely manner, while leadership focuses on a vision of what needs to be accomplished to move the organization forward. Certainly a part of good leadership is concern for task accomplishment. However, the leader focuses on determining what the important tasks are, the most appropriate way to accomplish the task, and the most appropriate person(s) to complete the task.

A simplified way of viewing the differences in the focus of the personnel involved in EMS is to think about the system. Providers respond to calls and deliver the best possible patient care. They are problem-solvers at the street level. Managers focus on writing policy, reviewing run reports, counseling employees, deciphering billing issues, and investigating new technologies so that providers can continue to deliver the best possible patient care. They are the problem-solvers at an organizational level. Leaders focus on the issues that will affect the system in the future. Today's leaders must be aware of the trend that is shifting the focus of health care from treatment to prevention, and redefine the mission of EMS to be compatible with this shift. That includes defining the goals and objectives of the part that their organization will play in the overall delivery of health care. They are involved with problem-solving at a community level as well as at an organizational level.

Leaders understand that the attitudes of the organization's personnel can be attributed to the work environment. Often the organization functions in the top-down mode. That is, orders come from the top and must be followed. There is minimal input from the line personnel. If a leader is to guide the organization successfully toward the future, his/her efforts must be directed toward changing this philosophy by encouraging and empowering personnel to be involved actively in the process.

The following table highlights some key differences between the skills of managers and leaders.

### MANAGEMENT SKILLS

Providing Direction  
Making Decisions  
Thinking Creatively  
Listening  
Solving Problems  
Implementing Technology  
Avoiding/Controlling Risks

### LEADERSHIP SKILLS

Supporting Personnel  
Empowering Personnel  
Inspiring Creativity  
Ensuring Understanding  
Anticipating Problems  
Humanizing Technology  
Inspiring Risk-Taking

There are a variety of leadership styles. This course concentrates on situational leadership. This style of leadership involves coaching, directing, supporting, and delegation:

- Coaching--Leader gives the individual or group specific directions to achieve the desired results.
- Directing--Leader tells the individual or group the what, when, where, and how to of the task that needs to be completed.
- Supporting--Leader offers encouragement and provides the tools needed to get the job completed; solicits feedback and shares responsibility.
- Delegation--Leader gives ownership to the individual or group that includes decisionmaking and responsibility for the outcome.

Effective leadership has several basic elements:

- **Ensure that members know what is expected of them.** Members should have copies of the department's mission statement and their job description. They should be aware of the department's goals and objectives. They also should know how they are to be evaluated: performance standards, measurement criteria, and accountability expectations.
- **Establish/Maintain high performance expectations.** If the manager sets high but achievable standards, members will strive for better performance.
- **Let members know where they stand.** This is accomplished through specific performance standards and regular job performance feedback and recognition.
- **Increase supervisor/subordinate communication.** This communication should go beyond basic job information in order to encourage greater job commitment and involvement. It also promotes cooperation and team cohesion.
- **Foster a supportive work environment.** Support rather than direct. Encourage personal growth and goal achievement. Attempt to **remove** obstacles that obstruct performance effectiveness and goal attainment. Encourage team problem-solving. Respect cultural diversity.
- **Empower members whenever possible.** Distribute responsibility, authority, and accountability. This encourages growth and development of members and enables supervisors to manage more effectively. Members should be involved in mission statement development and performance standards. Members are more likely to strive for better performance when they have ownership in those standards.

- **Institute sound performance appraisal and coaching programs.** Performance appraisals should be based on job requirements. Members must know the criteria on which they will be evaluated prior to receiving the evaluation. This encourages performance improvement and motivation. Coaching should be done continuously, not just at the time of a performance review (evaluation).

## PERFORMANCE TIPS FOR EFFECTIVE EMS MANAGEMENT

By following these tips and practicing the behaviors described in the learning objectives for each simulation exercise, you will become more effective in completing the In-Basket and role-playing simulations presented throughout the course. However, the usefulness of these tips and the exercise learning objectives do not end with this course. Because the simulations in this course are very similar to situations you encounter (or will encounter) as an EMS manager on a daily basis, the continued use and practice of these tips/skills/behaviors will enable you to handle these situations effectively on the job.

### Planning and Time Management Tips

- As you begin a simulation exercise or review material in your In-Basket back on the job, note the amount of time you have available and monitor your time closely. Pace yourself!
- Read instructions carefully and mark or highlight all important information. In a simulation exercise, for example, be sure to mark or highlight such information as:
  - Your name and position.
  - Your shift.
  - Today's date.
  - Other important dates.
  - Your immediate supervisor.
  - Your subordinates.
- **Scan the material first!** Go back and read for detail after you have an idea of the issues involved and are familiar with the available resources.
- Prioritize. Make a list of the issues, indicating the priority of each. Address the most critical/pressing issues first. If an issue can wait, note that.
- Take notes about anything of importance.
- Look for and mark the details on each item by underlining, circling, or highlighting. Search for the who, what, when, where, how, and why of each item.
- Look for relationships between issues, memos, dates, resource materials, etc., and apply the information you are given.

- Pay close attention to dates, and note important dates on your calendar. Look for scheduling conflicts.
- Group and clip together related materials.
- Deal with all information on related issues before going on to other issues.
- Determine logical courses of action based on available information, taking into account priorities and alternatives.

### Leadership Tips

- Take action wherever appropriate. (In simulation exercises, do not be affected by "newness" to the job, i.e., do not let that prevent you from taking action and making decisions.)
- By nature, management positions require you to delegate work. Time is too short and valuable to do everything yourself; however, you need to use good judgment when delegating work. Handle critical or sensitive issues yourself, doing as much as you can in the time allowed. When delegating less critical issues, include recommendations and suggestions and make your instructions as **clear and specific** as possible.
- Acknowledge positive performance.
- Note and act on poor performance, focusing on ways to improve it.
- Initiate discussions with members when necessary and make specific recommendations.
- Respond promptly and in a thorough manner to inquiries, letters, memos, etc.
- Examine all sides of an issue with thorough factfinding before making any decisions.
- Consider the availability of resources and the consequences of decisions.
- When communicating decisions to others, present sound reasons for conclusions/actions.
- Express opinions and/or ideas to superiors as appropriate.
- Deal effectively with problems by following up on complaints; focusing on facts, not personalities; maintaining positive relationships with those involved; and taking steps to resolve problems.

### **Communication Tips**

- Express messages clearly and in an organized manner.
- Use polite amenities (e.g., please, thank you, etc.) when communicating.
- Express disagreement by couching it in positive terms.
- Identify positive aspects of others' performance and offer reinforcements such as compliments and encouragement.
- Actively elicit others' ideas, feelings, perceptions, and concerns, communicating to them that you consider their comments important and valuable.
- Display openness to and accept challenging views.

### **Motivating, Coaching, and Counseling Tips**

- Establish goals and objectives for yourself and others.
- Establish expectations for performance. When necessary, outline (in order) steps to be taken, especially when correcting behavior.
- Establish and use a system for tracking your members' progress on tasks. For example, ask for periodic reports of progress.
- Provide members with specific, frequent, and timely feedback on their job performance.
- When critiquing others' work, discuss performance problems, not personal characteristics, and offer suggestions and/or plans for improvement.
- Develop members by consistently increasing their responsibilities and providing them with difficult but obtainable goals.

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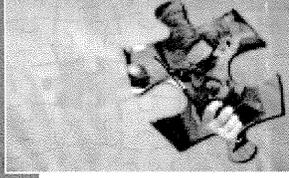
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# APPENDIX

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## LEADERSHIP SECTOR

PRESENTED BY THE IAFC EMS SECTION



By Gary Ludwig, MS, EMT-P

# Your First 100 Days

When a U.S. president is elected, their first 100 days is a measure by which they're practically and symbolically judged. Your first 100 days as an EMS manager is no different. In that time, you'll set the tone for how you'll administrate your new department, assert your expectations and establish long-term relationships.

Think back (if you can) to your first day of kindergarten, your first day of high school, your first full-time job. Remember how you examined your new surroundings and met lots of new people.

If you've just accepted a new job as an EMS manager in another department, you can probably recall these memories with ease and relate them to your new position. Your new department might be right next door or clear across the country. It doesn't matter. You're the new guy/gal, and you'll no doubt have a range of emotions as you make that first morning drive into work. You'll be excited by the host of opportunities, but you'll probably also feel apprehensive and uncertain about what struggles may lie ahead.

These first 100 days are a unique time that you should take full advantage of, and here's how.

*Meet with your staff and as many employees as possible:* It's vital to meet with your staff as soon as possible. Just like when you meet someone for the first time and immediately begin forming an impression of them, your staff will be doing the same. The sooner your staff gets to know you, the sooner they'll understand your vision for the department. These initial meetings will establish trust and support.

You also need to meet with as many employees as possible—and listen to

them. You can't sit in an ivory tower and dictate policy without knowing the impact your words have on the street.

Ask them about their backgrounds, education and job responsibilities. Ask them what they like about the organization, what works well and what they would change if they could. Some of their suggestions will be easy to accept; others will be difficult. If you can't do it, be honest and let them know. Your candor will help continue building trust and support.

*Be respectful of previous managers:* During the one-on-one meetings with your staff, you'll inevitably hear some ugly things about the previous manager. Regardless of your opinion, be careful to not "cheerlead" or join in the bashing. Finger-pointing and placing blame on a previous manager is unprofessional and shows a lack of character. Remember, you'll also be the "old boss" one day, and you wouldn't appreciate a new manager speaking ill of you.

*Don't jump to conclusions:* You'll hear lots of judgments, thoughts and comments in your first 100 days, but remember that everyone has their own take on any issue. You should gather all the facts before deciding how to act. Unlike an emergency scene where you may need to make a split-second decision, the office environment often gives you the luxury of discretionary time, and sudden decisions are rarely necessary.

*Avoid saying, "When I was at ...":* Before I came to Memphis, I worked in St. Louis and Jefferson County, Mo., for 25 years, so I'm guilty of this one myself sometimes. When faced with the same situation as already experienced, it's human nature to refer back to our past for possible answers. Although replicating what you did in a previous department may prove useful, the bottom line is that each EMS agency is unique, and your new staff likely won't want to hear how you did XYZ at your old department. Draw on your experiences, but be thoughtful about how you present them.

*Listen:* It's tough to hear others when you're talking. Each EMS agency has its own history, stories and culture. In your first 100 days, remember that the organization is not trying to assimilate to you, but rather that you're trying to assimilate into the organization. Observe your new department's traditions, making note of the important facts—the good, the bad and even the nasty—for future reference.

One hundred days is only slightly more than three months, but this period will predict the measure of your success at your new EMS agency. Your approach and what you do during your first 100 days will be the benchmark by which your staff decides to follow your policies—enthusiastically or begrudgingly. EMMS



Gary Ludwig, MS, EMT-P, is a deputy fire chief with the Memphis (Tenn.) Fire Department. He has 29 years' experience and previously served 25 years with the city of St. Louis, retiring as the chief paramedic from the St. Louis Fire Department. He is vice chair of the EMS Section for the International Association of Fire Chiefs and can be reached online at [www.garyludwig.com](http://www.garyludwig.com).

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hands on  
HOW-TO ADVICE FOR PRACTITIONERS

&gt;time management

## What's in your inbox?: Maximizing efficiency in an overloaded world

By Kelly Papinchak

Though everyone is busier than ever, communications professionals have an inherent obligation to communicate. Sounds simple, right? If it was, then we wouldn't hear the complaint, "Well, so-and-so works in the communications department, but I never seem to get a response." However, it is possible to avoid this embarrassment and maintain the credibility of our profession.

First, we must make it a priority to acknowledge the requests of others and be responsive. Yes, life is busy and work demands seem never-ending, but our professional obligation is to communicate. If you are staring at an inbox of thousands of e-mails and can't see your door because of the enormous stack of papers on your desk, then it's understandable that you might not know where to start.

Up until a few years ago, this was me. I had no sense of organization and struggled with prioritizing. Staring at an inbox of 600-plus e-mails caused me great anxiety. As hard as I would try, I just couldn't get through them all, and, as soon as I replied to one, that reply prompted

another reply and so on.

While e-mail should never replace face-to-face interaction, we must accept that it has become the primary form of communication in today's world. With the 24/7 environment the BlackBerry and other devices have created, it seems there is no excuse not to respond. We even receive an e-mail alert when someone posts a comment to our blog or MySpace page. The e-mail is sent to spark some type of action — click the link to read the comment and then either respond or delete it. When thousands of e-mails translate into thousands of actions, however, we become stressed and seem to fall even further behind.

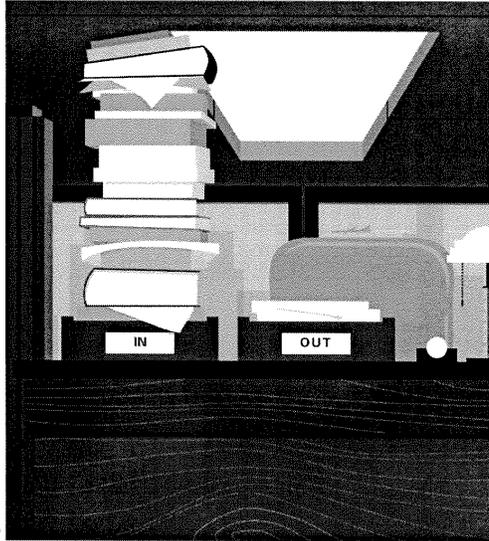
In "Getting Things Done: The Art of Stress-Free Productivity," David Allen, veteran coach and management consultant, introduces readers to his theory that productivity is directly proportional to our ability to relax. He argues that we do our best work when we are relaxed.

Allen's principles can be applied not only to your e-mail inbox, but also to the papers and tasks that clutter your workspace and your mind. Allen, however, is the first to admit that there isn't a single, once-and-for-all solution to personal and organizational productivity.

I was required to read Allen's book while serving as communications director for Schipul — a Web marketing company. Ed Schipul watched me leave work each day with a bag full of papers and folders and return each morning with the same bag and usually a stack of papers and magazines. What was I carrying? Articles I printed out because they were too lengthy and time-consuming to read during the day or e-mails I needed to read again because I wasn't sure how to respond. I never read the articles, never applied the great ideas within them and never responded to those e-mails.

### The four Ds

One morning as I was walking into the building with my arms full of papers and my bag falling off of my shoulder from the weight of magazines and paper



if we don't write things down, they circle in our minds (his "open loop" concept) and cause more clutter and stress.

Each time you begin a project, identify the next actions associated with it. For example, "finalize newsletter" is not a good list item if you first must call the chief diversity officer for a quote for the newsletter's feature story. The item on your list should be "call Susan about quote for feature story."

While becoming organized certainly didn't happen overnight, I was eventually able to apply these same principles at home and organize my way to one filing cabinet and a clean desk. My desire for knowledge is now more manageable, as I read my e-

mail newsletters during a set aside 30 minutes at the beginning or end of each day. I rely heavily on my Outlook calendar to prompt me about upcoming tasks because I can't stare at the same e-mail each day, especially when the due date is more than a month away. Even though my inbox is at zero, and my desk is clear of paper when I leave the office each day, it does not mean that I have no work to do. It just means that I've read each e-mail and taken the appropriate action to ensure that I hold myself (and others) accountable for the completion of the task or project.

Clearly, not everyone uses e-mail the same way, and busy executives and managers must rely on their assistants and team members to respond for them. Allen's system will also help those communicators who are on the receiving end of forwarded e-mails.

If you're someone who believes your inbox will never be empty, it's OK. Here are a few tips to help you become more efficient:

- Know when to cut off an e-mail conversation by picking up the phone or walking down the hall. Eliminate unnecessary replies such as a "you're welcome" or "thank you."

- If you can't complete a request within the workday, acknowledge you have received the request and give an estimated time of completion.

As soon as you receive an e-mail (or a piece of paper), make a decision, right then. Is it something that you can answer or find an answer to in less than two minutes? If so, do it.

If it's not something you can address, delegate it to the appropriate person — a co-worker or teammate, and hold this person accountable to complete the task.

If it is something that is not going to be completed today, or even this week or month, defer it to your task list (better known as your "next actions" list) or add it to your calendar with an appropriate reminder.

If it is something you know can't be done, at least not this year, drop it. Allen suggests everyone create a "someday-maybe" list for those things we'd like to do in this lifetime, but can't do within a year's time frame. Workplace examples of items for this list include redesigning the intranet or hiring three additional staffers. Write them down so you know they won't be forgotten then move on. Allen points out

### Capture your time effectively

How do you go about using your time as effectively as possible? Simplify. Here are four ways to do just that, courtesy of the Zen Habits blog (<http://zenhabits.net>):

- Do it once, and get on with things. Why? If you procrastinate, your mind will enjoy making you think about it over and over until you get it done. This wastes considerable time and brainpower.
- Whatever you do, do it smart. Most likely you're not the first one to attempt the task you're undertaking. Search the Internet and other sources to glean the experiences of those who have gone before you.
- Automate what you can. Use software to rid yourself of repetitive tasks. Try automating your everyday habits as well to maximize your efficiency.
- Outsource what you hate to do. Then you can spend your time on what you love and are motivated to work on. You'll likely find you end up with better results when you let go of something you truly don't like doing. ☐

**Inbox**

*Continued from Page 16*

- Always notify your contacts of timeline changes. If their requests require multiple steps, provide them with a status report. Updates can go a long way and help prevent an angry e-mail to you — with a copy to your supervisor — asking for a completion date.
- Review and print your calendar every morning and each evening before you leave work so you are prepared for key events and activities.
- If you have to drive to a meeting or an event, map out your route ahead of time. This way, if you get caught in a meeting before leaving, you already have a map, room number and all the materials you need to take.
- As soon as you leave a meeting, type up your notes and send them to attendees, noting who is responsible for what and by when. If that isn't necessary, place all the tasks you are responsible for on your calendar so you don't miss a deadline.
- Don't hold unnecessary meetings. If you can handle something by phone or e-mail, do so. This avoids rounds of e-mails to determine a date and time that works for everyone.

**When organization isn't enough**

Sometimes it's not enough to just clean up a stack of papers or empty your inbox. The late Thomas Leonard, life-coaching pioneer and founder of Coach U, encouraged people to become less tolerant of clutter. In his book, "The Portable Coach: 28 Surefire Strategies for Business and Personal Success," Leonard explains that curbing tolerations is really about learning how to identify and weed out things that bug us, sap our energy and could be eliminated.

Jason Kolber, a Phoenix-based life coach who studied under Leonard, says that tolerations can range from a button missing on a shirt to an unfulfilling job to a chronic pain. "So many people are putting up with the feeling they don't have space for themselves," says Kolber. "They're living without adequate margins. Their lives feel very compressed and very rushed."

Examine your tolerations and see what you can change, eliminate or improve in your life. That alone may help move your projects along faster, and give you the energy to read one more e-mail and send one more response.

**Finding the right balance**

On the other end of the spectrum are those who advocate for disorder and messiness, who believe that organization is a waste of time and stifles creativity. I disagree with this theory, as I do my best and most creative work when I know all of my projects are under control, and that everyone who is waiting for me has heard from me and knows where we are with a project.

In their book, "A Perfect Mess: The Hidden Benefits of Disorder — How Crammed Closets, Cluttered Offices and On-the-Fly Planning Make the World a Better Place," Eric Abrahamson and David H. Freedman write that "mess has resonance, which means it can vibrate beyond its own confines and connect to the larger world." They point out that mess is natural, and it tells a story. I argue the pictures, awards and books on my desk tell a much more interesting story than a stack of papers.

Although Abrahamson and Freedman are quick to remind readers that it was Alexander Fleming's messiness that led to his discovery of penicillin, they are not making the case that messier is always better or advocating one should choose being a slob over being neat.

Ultimately, it is up to you to find the right balance that works for you, your supervisor and others with whom you interact. ①



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spotlight on

&gt;career development

## Moving up: Five leadership skills to master

By D. Quinn Mills

A question I often field when the topic of effective leadership arises is: "How does a manager become a leader?"

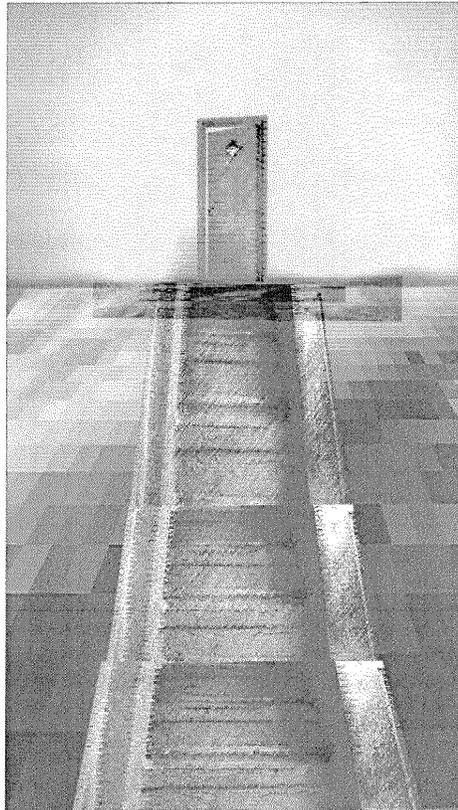
That question addresses a frustration I hear expressed by many managers — including those in public relations — who are exhorted to act as leaders by their organizations. Yet, acting like a leader can mean different things to different people, and the very vagueness of the prescription is bound to cause trouble.

It helps to start with some simple definitions. Leadership is primarily about vision and the process by which one person influences the thoughts, attitudes and behaviors of others. Management is focused on results and aligning the activities of many people; it's based on problem-solving and decision-making.

Acting as a leader should mean an emphasis on defining or creating a vision and helping an organization grow, evolve and adapt to changing circumstances. As Admiral Grace Murray Hopper, a remarkable leader in her own right, once said: "You manage things, you lead people."

So, if leadership centers on vision, how can you — a manager — put it into practice? One common misunderstanding is that leadership requires formal authority or a senior job title. It doesn't. Another misperception is that it only pertains to grand strategic issues. That also isn't so.

No matter where you find yourself in an organization, you can contribute to the vision and to the success of the collective enterprise. For example, a PR professional might demon-



strate leadership by encouraging a client to consider the long-term impact of a planned marketing campaign — even if that's a message the client isn't happy to hear. In another context, leadership might be championing your firm's move into blogging or new media. It might mean advocating flextime working arrangements to attract more working mothers, or challenging your company to move into emerging market segments. It could even mean raising awkward, but neces-

sary, questions about the ethics or morality of a given course of action.

The five leadership skills — defining a vision, setting an example, inspiring others, recognizing capabilities in others and establishing a supportive culture — can be practiced at all levels of the organization, and in settings in which there is no organization (such as when running for political office or leading a group of people in a community project). These are vital skills for large corporations or small-group settings, for those in formal leadership positions or those consulting or advising.

Leadership is not limited to the naturally charismatic, the extroverted and gregarious and those selected for top management positions. In fact, many elements can be taught or developed. There are several ways leadership can emerge, which includes training

and learning. Role-playing is a significant part of leadership.

A word on authenticity is called for here: Leaders must be genuinely dedicated to the mission of their enterprise. They may be called upon to make sacrifices. They will be held to high standards. An authentic commitment is even more valuable in today's often transitory leadership environment. Employees are wary of management rhetoric and quick to spot hypocrisy or self-aggrandizement. People in an organization watch those in leadership carefully: When they see a deep involvement and a consistency in purpose, their own commitment is validated and encouraged. (The higher expectations leaders face is one reason why it's not uncommon for managers to shy away from leadership roles.)

As a manager, the next time the question of leadership in your organization surfaces, you may find it valuable to consider basic questions, such as: How can I contribute to creating the vision for my organization or client? How can I set an example or inspire others? Can I identify new capabilities in others to move us toward our goals? And what can I do to help establish a supportive culture?

Answering these questions represents an important part of the transition from manager to leader. **1**



**D. Quinn Mills** is the Alfred J. Weatherhead Jr. Professor of Business Administration at Harvard Business School. Mills recently led a PRSA leadership seminar based on his book "Leadership: How to Lead, How to Live" (MindEdge Press, 2005).

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# **MODULE 2: PLANNING AND TIME MANAGEMENT**

## **TERMINAL OBJECTIVE**

*The students will be able to apply the organizational and time management skills necessary for an EMS manager.*

## **ENABLING OBJECTIVES**

*The students will:*

- 1. Prioritize issues and manage time effectively.*
  - 2. Develop short- and long-term project goals.*
  - 3. Develop specific, measurable, achievable, relevant, and timeframed (SMART) objectives.*
  - 4. Apply six rules for planning and accomplishing a project successfully.*
-

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## **PLANNING AND TIME MANAGEMENT**

### **Time Management**

Time is one of our most valuable resources, yet most managers take a haphazard approach to managing it. Effective time management facilitates achievement of goals through ordering priorities. However, you must remember the unpredictable nature of EMS and plan for unplanned events. Too much rigidity in scheduling can lead to frustration and stress.

One way to help control unplanned events is to develop the capacity and capabilities of personnel at all levels of the organization (including yourself). If personnel are knowledgeable on the procedures for managing crises, you can delegate the problem to someone, and many crises may be avoided entirely.

Time management must be linked to personal and organizational goals--both short and long term. These goals should be based on the role and responsibilities of the current position and long-term personal and professional objectives. It is critical to keep in mind that time management also involves managing time for your other roles in life: husband/wife, mother/father, son/daughter, Little League coach, Scout leader, etc. These roles are as important as the role you assume on the job. If you allow the job to overshadow the other roles in your life, you run the risk of increased stress, illness, or burnout. Ask yourself whether you live to work, or work to live?

### **Time Management Tools**

Use of tools such as a calendar, scheduler, or time management system aids greatly in time management functions. These tools provide a systematic approach to documenting intended actions, actual actions, and time expended to complete actions.

The telephone is the most frequent interruption in a manager's day. One way of managing this interruption is to schedule telephone calls. This may involve two distinct parts: one period for returning calls and one period in which incoming calls are accepted directly.

The participative management style usually results in a greater number of meetings. It is important that meetings are well organized, carefully planned, and have a specific, planned agenda.

### **Program Management**

Program management is the process of managing multiple ongoing and independent projects at the same time. An example of this would be managing a training program for your department. By managing the training program you also will manage several different training classes given within your training program. Program management also emphasizes the coordination and prioritization of resources across many different projects.

Program management is one step above project management. In this course, most first-line managers will be given project management roles within their department.

### Project Management

Project management offers a number of challenges, especially for the novice. The project management approach is the accepted method in today's world. As organizations are forced to become increasingly efficient, members are being asked to take on added responsibility. A positive byproduct of this trend is that members who accept the challenge perform a richer, more varied job and have an added sense of accomplishment and contribution.

Successful project management involves using a process. This process may be viewed as cyclic and is represented in Figure 2-1.

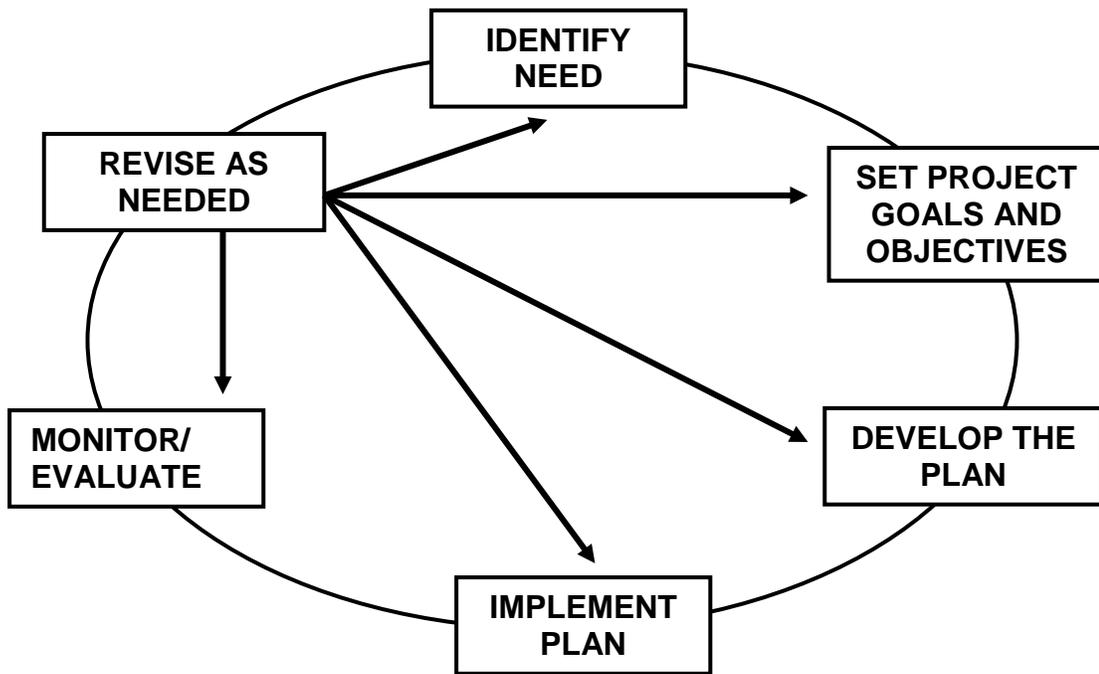


Figure 2-1  
Project Management Process

## Develop Project Goals and Objectives

Often the need for an improvement or change is identified for the EMS manager by upper management so the process begins with the identification of project goals and objectives. This step typically is not as easy as it may seem, but it is well worth the effort. Perhaps the best way to start is to think in terms of the "user." Everyone has a user or customer, whether it is the patient, providers, or upper management. State your goal in terms of your user. In other words, begin with the end in mind. What do(es) he/she/they want? The user is most concerned with the simple end product, and does not care about how you arrived at it. This statement typically applies to upper management. Who has not heard "I don't care how you do it, just do it"?

Don't let this attitude lead you to opt out when it comes to finding out **exactly** what it is that the user wants. Goal clarification is an absolutely critical element of effective project planning. This may be a sensitive issue with upper management, but it is nonetheless critical. Typical copouts include "They know what they **don't** want, but not what they **do** want," and "They won't know it until they see it." Such statements are sure setups for trouble ahead. Confirm your goal. Meet to discuss it if you can, but don't stop there. Write it down as you understand it and get your user to sign off. This may require successive trials and revisions, but do not give up. The expression "Better now than later!" might have originated in such a situation.

In addition to being developed for your user, good goals have a number of other important characteristics. Goals should be

- **Specific.** Anyone familiar with your functional area should be able to read it, and, in your absence, know exactly what you mean to accomplish. Make yourself dispensable--at least for developing goals!
- **Measurable.** How else will you know if you have reached your goal? Often this is a challenge, but seldom is it impossible. In reality, your measure of success often will be assumed or indirect, but this requires caution. For example, let's say you want your providers to be friendly and helpful toward your patients' relatives or friends. You decide simply to have providers record the amount of time spent talking with the family, with the goal of high totals. Be careful--is this really what you want? Do you want your providers having 45-minute discussions with families at the hospital following turnover? Probably not. Three or four minutes updating the family, yes. Extended periods of time holding the family's hand, no.
- **Agreed upon.** Share the ideas with as many members as you can. Not only is this a time to gather information from a variety of sources, but it is a time for developing a common vision. The more people who "buy off" now, the more help and support you are likely to receive later.
- **Realistic.** Ideally, all goals (project or not) should be difficult but attainable. Goals that are attained too easily offer no challenge or interest to those involved and are a waste of time. Worse, unrealistic goals will tend to breed resentment and frustration, and often lead to division between groups (e.g., between management and providers). Gaining the agreement of the involved groups typically ensures that the goals can be achieved.

- **Given a timeframe.** Goals must be supported by resources, particularly time, budget, and personnel. If not, they effectively become unrealistic, or at best a source of contention between groups (e.g., they want us to follow up with every patient and family, but they also want us to reduce our turnaround times at the hospital to the lowest level possible).

### Develop the Plan

**Assemble the team.** Who will work on the project? Once the members are identified, provide them with the goal of the project and guidance while allowing them to determine how to achieve it through developing the objectives.

**Set group or individual objectives.** Objectives are similar to goals, but focus on what a group or individual will accomplish. Objectives should be specific, measurable, achievable, relevant, and given a timeframe (SMART). In addition, this is the time to build the project team. Find team members able and willing to accomplish the various tasks before you. Then encourage ownership and support your team as you let them work.

Exercise caution as you break the goals down into smaller objectives. Some common pitfalls to avoid include

- Allowing people to focus too narrowly. Everyone involved must understand how their area contributes to the overall success of the project. As people come to understand the big picture they tend to develop a feeling of ownership toward the project. Commitment, coordination, and cooperation typically follow. Members who do not understand the big picture may lose sight of the forest for the trees. Further, if members do not identify how they and others fit into the plan, they may impede the efforts of others (intentionally or not). Keep your overall goal at the forefront of your efforts.
- Rewarding systems that discourage team effort. A common approach to encourage efforts toward achieving objectives is to create a competition between groups and to reward those efforts. Although this approach often is successful at fostering commitment toward individual objectives, it can backfire with respect to the overall goal. An extreme example of this is the Navy air station that had four squadrons, each responsible for its own aircraft maintenance. When a goal of 95-percent flight readiness was not achieved, the station commander introduced a competition: the squadron with the highest percentage of its airplanes ready to fly would be rewarded. Each squadron embarked on a mission to improve its supply of spare parts while reducing that of the other squadrons--by stealing from the other squadrons! Obviously, successful achievement of the objective was rewarded at the expense of overall goal accomplishment and team cooperation.

- Assigning responsibility without sufficient authority. The senior manager must give the project manager authority at the beginning of the project or the project manager must ask for it. If this is not established, the project faces the possibility of failure because of lack of authority. The project manager/team leader must give team members the power to accomplish their goals. If your organization does not have a formalized program of accountability for project success, network to develop the contacts necessary to accomplish your goals informally.

**Establish checkpoints.** Checkpoints are markers along the route to task accomplishment. They help map your way and provide direction to your efforts. Milestones are long-term checkpoints that allow you to monitor adherence to schedule. Events are short-term checkpoints that occur more frequently than milestones and are more focused. Events allow frequent, ongoing feedback.

Both milestones and events also provide a chance to monitor progress and identify accomplishments. They are useful for both self-feedback and outside feedback. Praise and recognize the completion of steps along the way. Plan recognitions/celebrations at key points of the project. The longer and more difficult the project, the more successes should be recognized.

At this point, take time to make sure you know how you will evaluate your success. This step may be accomplished most efficiently as you develop your goal and objectives and ensure that they are measurable. Know how to identify successes and reward them.

**Estimate time and other resources.** You must decide such issues as who will work on the project, how much money you will require, and how long it will take. These decisions are truly estimates since typically they are made with limited information. Arm yourself as best you can--get estimates from people in the know and other sources. Remember, every project is going to be different. Unless you are uncommonly adept and confident at estimating needs, build in slack time. In general, you have little to lose and much to gain by doing so.

**Develop a project schedule.** Most of us would not identify scheduling as our favorite task, but studies show that successful people take the time to organize their time and effort. Scheduling really is just another tool to help you accomplish goals. Developing a schedule will help ensure that your estimates are realistic.

To enhance the impact and usefulness of your schedule, make it visual. Often, presenting your schedule as a flowchart or bar chart is helpful. Computer programs also are available to assist you with complex project planning needs.

### Project Implementation

Sometimes it is difficult to know when to move out of the planning mode. This is a sense that you must develop for yourself. Most novice managers will tend to make this move too soon. In addition to the obvious necessity of allocating resources, the biggest challenge during project implementation will be to maintain credibility and focus and maintain momentum among team members. The rules are, follow your schedule, manage the team, keep others informed, and listen.

**Follow your schedule.** This may seem rather obvious, but it might surprise you how often this is not done. You worked out the schedule, now use it. Efficient use of your schedule will help you concentrate efforts and attention where they are needed most. It also will help you to anticipate your next steps. Schedules enhance coordination and communication within a team. Everyone should be able to identify not only others' responsibilities, but where they are at any given point. Commitment within the team is enhanced when responsibilities and deadlines are made public.

Your schedule also can help you predict problems. A flowchart or bar chart creates a picture that can illustrate possible problems clearly, such as bottlenecks and coordination problems that otherwise might have come as complete surprises. In addition, if problems do occur, your schedule can help you identify opportunities to get back on track.

**Manage and lead the team.** Perhaps the most important part of managing your project is keeping the excitement and commitment high. People usually are excited as a project begins, but this often dims as the realities of the grind of implementation are realized.

Five successful approaches to keeping your team committed:

1. Create challenging possibilities. This will occur as members understand the big picture, and as the importance of each member's contribution to the overall goal is emphasized.
2. Reinforce the sense of mission. Much is made of the need for a mission in today's business world. It is no different in the emergency services. The fact is that most truly successful organizations today have leaders who are able to communicate a mission to their people, and transmit goals in line with that mission.
3. Increase project visibility. Commitment and excitement are bound to rise when "outsiders" recognize the efforts of the team. People perceive that they are not laboring without appreciation. Make every effort to promote to senior management, coworkers, and the public the value of various efforts and accomplishments to overall organizational goals. Also, emphasizing interdependencies, coordination, and assistance among groups should have a positive effect.
4. Empower people. Give your members the resources and authority to accomplish their task, then sit back and **allow** them to do what they do best. Participative management leads to improved leadership on project teams. This can be especially difficult for a leader from a military or paramilitary background, but studies support a less authoritative approach. It is important to practice separating management styles of field leadership from project management.
5. Recognize individual and group contributions. Don't overlook accomplishments--keep the recognition coming. **Celebrate** accomplishments. This step should be built into the milestone plan.

**Keep others informed.** This is an obvious component, but one that often is neglected or ignored during critical periods. Schedule communication opportunities, and communicate. It should be as simple as that, but of course it may not be.

There are a number of barriers to optimum communication among members. Most communication problems are either personal or organizational. Some of the possible personal barriers include cultural, personality conflicts, emotions, stereotyping, hostility, past history, hidden agendas, daydreaming, and information overload. Organizational barriers are probably the bigger hurdle, and include organizational division of departments, information overload, too little information, special languages and jargon, status differences among departments, ambiguity, time pressures, and cultural differences within the communities that you serve.

Still, in spite of these and other problems, you must get your message across. To accomplish this:

- Package your message for the audience. Make it easy for the receiver(s) to understand.
- Make certain the members know why the message is important; sell the benefits.
- Keep the members posted; keep communication flow regular and consistent. There should be no big surprises.
- Communicate assertively but with an understanding of the others' points. Use the best of all ideas, in combination or as a new option that builds on past ideas. Remember, the most beneficial brainstorming session is not necessarily one in which all of your ideas are accepted. Rather, it is the one in which the outcome is better than the sum of the best ideas going in. For best results, no member should be too submissive to contribute or so aggressive as to dominate.

**Listen.** There is much advice available today on listening techniques. This is probably because most of us would like to excel as listeners, but few do. A few suggestions:

- eliminate distractions (both physical and mental);
- listen with closed mouth;
- understand--put yourself in the speaker's place;
- hear the speaker out;
- listen to what the speaker does not say and clarify;
- listen to how the message is said--identify the underlying feelings and emotions;
- wait out pauses; and
- provide feedback and clarify the message often by summarizing or reflecting back what the speaker has said.

### Monitor and Evaluate

Once the plan is implemented, it is critical that the results of the implementation be monitored and evaluated to determine results or problems that arise. Monitoring and evaluation may take a

variety of forms depending on the project. What is important is that the monitoring tools allow for timely feedback so that problems can be detected early.

### Revise

If problems with the plan are detected during the monitoring and evaluation phase, you must revise. Based on the problem identified, revision may require re-entering the process circle at any point.

# APPENDIX

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# Strategic Planning for EMS Agencies

By Raphael M. Barishansky, MPH, EMT-B

You are the EMS director for a small municipal EMS third service that provides both ALS and BLS services. One day, the town supervisor calls you into his office. During the conversation, he mentions that he has noticed an increase in the number of commercial ambulance services in the area. Considering this, as well as the decrease in billing reimbursement your ambulance service has been experiencing, he wants to know what the short- and long-term goals and objectives of the EMS department are, as outlined in your strategic plan. Taking in your silence and quizzical expression, the supervisor offers to set up a workshop with a local EMS consultant to help you develop a plan.

After the meeting, your mind is spinning. You know that the supervisor is "on your side" but you've never even thought about strategic planning before, let alone had to assist in writing and implementing a plan. Immediately, several questions come to mind: What is a strategic plan and what does it encompass? How do you write one? Is it difficult to implement? The task seems daunting, to say the least.

Many EMS managers may not have been exposed to a strategic planning process. But regardless of size, all prehospital organizations can benefit from this common business management tool. When we hear news of a private EMS service going out of business due to an inability to weather economic downturns, or a volunteer ambulance squad failing to recruit or retain sufficient numbers of volunteers to staff its operation, rarely is it considered that one of the significant contributing factors may have been the organization's lack of focus and direction. Perhaps such events would not occur if an agency had a well-thought-out, long-term strategic plan.

## Definitions

Strategy in business is defined as "the pattern of objectives, purposes or goals and major policies and plans for achieving those goals, stated in such a way as to define what business the company is in or is to be in and the kind of company it is or is to be."<sup>1</sup> A strategic plan, according to one state health department, is defined as "a document that defines the needs of an organization that will enable the organization to realize its vision and mission."<sup>2</sup> Another definition, from the Internet Nonprofit Center, states that strategic planning is "a disciplined effort to produce fundamental definitions and actions that shape and guide what an organization is, what it does and why it does it, with a focus on the future."<sup>3</sup>

Strategic planning is rooted in future-oriented, proactive thinking that anticipates change and adopts long-term strategies to meet the demands of that change.<sup>4</sup> In other terms, a strategic plan is a "master plan" for your EMS agency. It is a management tool that will assist your organization in focusing its energy. There are both short- and long-term strategic plans. The objectives can be immediate (accomplished within one year), short-term (two to five years) and long-term (more than three years to initiate and less than 10 years to complete). The scope of this

forecasting should focus on multiple facets of your agency, including, but not limited to, finance, personnel, logistics, operations and administration.<sup>5</sup>

### **Mission Statement**

In crafting a mission statement, you should seek to summarize the what, how and why of your organization. Your mission statement should represent a guiding set of ideas that can be articulated, understood and supported by the organization's stakeholders, board, staff, members, customers and other key players. The importance of the mission statement to the overall strategic plan is that it provides direction by answering the "what is our business?" question, as well as providing a basis for goals and strategies.

A good example of an EMS-specific mission statement is that of Boston (MA) EMS:

Boston EMS is a community-based public health and public safety service that provides and manages the integrated prehospital care system for the city of Boston to improve the health of the community.<sup>6</sup>

This mission statement is inspiring, yet it reflects attainable goals. Your own mission statement should be broad enough to allow flexibility in implementation, but not so broad as to permit a lack of focus.

### **Vision Statement**

A vision statement is a declaration that conveys the image of how the organization wants its future to look. A vision statement expresses what the organization would do or how it would function in an ideal world. A vision statement is important to the strategic plan because it allows all levels of the organization's personnel to keep an overall direction in sight, as well as to know why they are working and what they are working toward. It provides a mandate for change, inspiring an EMS agency to become better and not stay satisfied with the status quo. And it allows all levels of personnel to align their day-to-day decisions to achieve the future envisioned state.

An excellent model of an EMS-specific vision statement is that of Austin/Travis County (TX) EMS system:

Austin EMS is committed to responding to the changing needs of an expanded service area and being a recognized leader in innovative, cost-effective, clinically sophisticated delivery of comprehensive EMS.<sup>7</sup>

The vision statement should utilize key adjectives to draw a clear picture to all involved of what you feel your agency can become.

## Strategic Objectives

Appropriate, well-written mission and vision statements make an organization commit in writing to the reason for its existence and to what it will do and be in the future. In doing so, these statements assist in the formulation of goals and objectives, the next step in the strategic planning process.

Goals can be grouped into three timeframes. These are:

- Immediate--accomplished within one year
- Short-term--accomplished within two to five years
- Long-term--requiring more than three years to initiate and less than 10 years to complete.

Goals are the overarching desired end-points. They are what the strategic plan is attempting to achieve. In other words, they are how the mission and vision get realized. Goals focus on ends, rather than means.

These goals will be unique to your organization, whether you are a BLS fire department service looking to begin ALS first response; a volunteer agency facing the possibility of transitioning into a career department; or a commercial service seeking to exploit opportunities for operational growth.

Objectives are the means to the end. They ask the question: How are you planning to attain your goal? Objectives are clear, realistic, specific, measurable and time-limited statements of action that will move toward goal achievement.

For example, let's say a commercial agency with many 9-1-1 contracts has come to the realization that it needs the higher reimbursements that come from nonemergency transports if it is to remain financially stable. One of its strategic objectives would be to find a better balance between 9-1-1 and nonemergency business. This goal could fit into the short-term objectives category.

Additional questions will arise as agency managers think about what else will need to be done to make these changes. For example: Will the agency need to hire more staff (line employees, supervisors, billing personnel, etc.) and obtain more vehicles in order to maintain its level of customer service during the expansion? Will there be more bases of operation needed to keep response times within established limits?

The answers to these questions will comprise your organization's strategic objectives. Remember that the objectives support the overall goal. Within each objective you will need to create several action steps (or tasks) to help attain it, leading to the accomplishment of the agency's goals. It's important to identify timelines for the accomplishment of these objectives.

Finally, when developing your organization's objectives, make sure they align with your mission and vision statements and address the most critical issues facing your agency. Also remember that the approaches being considered must be viable--financially and otherwise.

### **Action Plans**

The outline of an action plan is one of the final steps in the strategic planning process and comes just prior to the implementation phase. An action plan--or work plan--lists a specific goal and objectives, along with the detailed actions (tasks) needed to achieve them within a definite time frame. Each strategic goal and objective should have an action plan, as well as a schedule with deadlines, for their implementation.

Action planning typically includes deciding who is going to do what, by when and in what order. The design and execution of the action plan will depend on the nature and needs of the organization. The structure and type of your EMS agency (e.g., volunteer or career, etc.) will obviously affect the method of carrying out this step.

### **Implementation**

Now that all your plans have been carefully outlined and assessed against the organization's mission, it is time to set them into motion. The implementation phase of a strategic plan can be as difficult as the planning and writing phases. More important, poor implementation has the potential to undo all of your hard work. Here are some basic steps that are critical if your strategic plan is to be successfully introduced to both line- and management-level personnel:

- Components of the plan must be explained so personnel can see their impact and benefits as they relate to their specific needs.
- Relatively complex planning tasks must be able to be broken down into smaller, more manageable elements.
- To the extent the plan may break with tradition, successful implementation occurs as a natural evolution of experience and understanding. Be patient with resistance, but firm regarding the need for change.
- There must be a well-defined, readily identifiable point person for each planning and implementation task (this also relates back to the action plan phase).
- Finally, there must be a realistic assessment of resource needs. This includes, but is not limited to, making necessary staff and support facilities available, and providing necessary budgets for training, meetings, equipment and implementation.

### **Conclusion**

Every day organizations suffer due to a lack of understanding of the type of careful planning that the delivery of EMS truly requires. The work involved in conducting a situational analysis; writing mission and vision statements; and developing strategic goals, objectives, strategies and action plans is not easy and cannot be accomplished in a short period. It will take time and effort to formulate, but strategic planning is well worth the investment.

The benefits include assisting EMS agencies with focusing on the need to change, both in the present and future, and utilizing plans as a means to identify and focus on these changes. Strategic plans can also be used to provide comfort to outside entities (e.g., governing bodies) by helping you communicate the strengths of the organization.

Once you have finished the strategic plan, your results should be formally bound and made accessible to all of your employees. As the document that spells out who you are, what you have learned, what you have accomplished, where you are going and how you plan on getting there, the strategic plan needs to be a visible part of your organization's operations. Including a basic review of it during every new employee/member orientation would further solidify not only your organization's connection to its strategic plan, but also give the new employee/member a look at the organization's future and, possibly, their personal future with the organization. If your EMS organization has a vision of where it wants to be and how to get there, everyone in the organization should know it.

As you embark on creating and implementing your strategic plan, you and your organization should also keep in mind what a strategic plan is not:

- Strategic planning does not predict the future or make decisions that can't be changed. If an unexpected shift occurs, major strategic decisions may have to be revisited sooner than they would in a typical three-to-five-year planning cycle.
- Strategic planning is not a substitute for the judgment of leadership. The data analysis and decision-making tools of strategic planning do not make the organization function--they can only support the intuition, reasoning skills and judgment that people bring to the work of their organization.
- Strategic planning is not always a smooth, predictable and linear process. No one should be surprised if the process feels less like a trip on a train and more like a ride on a roller coaster. But roller coaster cars will arrive at their destination, as long as they stay on track!<sup>8,9</sup>

By definition, a good strategic plan will be challenging but achievable.<sup>10</sup> There will be significant personal and organizational effort needed in order to meet the various goals set forth. EMS has traditionally--with few exceptions--employed a "shoot from the hip" approach in regard to planning. Due to the nature of our business, we usually operate in a reactive, rather than proactive, manner. Changing this mind-set is paramount to developing and sustaining a healthy organization. Having your agency establish a deliberate, well-thought-out blueprint for its future today may be what helps to keep it around for a long time to come. As a wise strategist once said: If you don't know where you're going...you'll probably end up somewhere else. That was Confucius.

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# **MODULE 3: COLLECTING AND ANALYZING DATA**

## **TERMINAL OBJECTIVE**

*The students will be able to collect and analyze data to determine the effects on workplace practices.*

## **ENABLING OBJECTIVES**

*The students will:*

- 1. Identify sources of EMS system data necessary for a Quality Improvement (QI) program.*
  - 2. Compare and contrast the three types of system results identified in a QI program.*
  - 3. Describe information management technologies for potential use by the EMS manager.*
  - 4. Describe the role of the EMS patient-care report, importance of complete and accurate documentation, and causes of documentation difficulties.*
  - 5. Discuss the involvement of EMS in active research.*
  - 6. Analyze the data and conclusions of an EMS research study.*
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## COLLECTING AND ANALYZING DATA

### Types of EMS Data

The Emergency Medical Services (EMS) Systems Act of 1973 defined the following basic types of data that should be collected by all EMS operations:

- patient demographic data;
- EMS vehicle information;
- EMS response/transport times;
- incident location patient chief complaint;
- patient condition and mechanism of injury;
- patient treatment;
- patient outcome; and
- receiving facility.

EMS data are compiled in the form of documentation such as patient-care reports. These reports serve several functions:

- records of patient treatment to aid in the safe and orderly transfer of medical care from emergency response members to hospital;
- a means of assessing prehospital care performance effectiveness;
- support for a legal defense in a lawsuit involving the EMS provider;
- to document compliance with State requirements regarding EMS recordkeeping;
- for use in identifying and planning for future EMS system needs and recording data for legal and tracking purposes;
- for use in quality management and quality improvement;
- for research purposes;
- for billing and reimbursement purposes; and
- for incident investigation/followup by other agencies (e.g., law enforcement, Department of Transportation (DOT), National Transportation Safety Board (NTSB), etc.).

### Sources of EMS Data

EMS data used for the purposes discussed previously must be collected from a variety of sources, including

- dispatch records;
- patient-care records;
- communication tapes;
- medical control reports;
- emergency department records;
- hospital discharge summaries;
- records on EMS members' certification, education, competency, etc.;

- incident report forms;
- medical personnel interviews; and
- direct observation of EMS members.

### National Emergency Medical Services Information System

Information systems are used to translate raw data into information that is useful in the development and evaluation of EMS systems and the delivery of patient care. The goal when designing an EMS information system is to include variables that will capture the entire EMS event, from activation of the EMS system through release of the patient from EMS care. Additionally, outcome variables only available later in the course of medical care are also important to performance assessment. To aggregate this information, data must be captured from several sources. Table 3-1 demonstrates the multiple sources (and amount of information) that must be accessed to fully illustrate an EMS contact, or the National EMS Information System (NEMSIS).

**Table 3-1  
Components of the National Emergency Medical Services Information System**

<ul style="list-style-type: none"> <li>• Dispatch data</li> <li>• Incident data</li> <li>• Patient data             <ul style="list-style-type: none"> <li>- Disposition</li> <li>- Demographics</li> <li>- Medical history</li> <li>- Assessment</li> <li>- Medical device data</li> <li>- Treatment/Medications</li> <li>- Procedures</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Injury/Trauma data</li> <li>• Cardiac arrest data</li> <li>• Financial data</li> <li>• EMS system demographic data</li> <li>• EMS personnel demographic data</li> <li>• Quality management indicators</li> <li>• Outcome indicators</li> <li>• Domestic terrorism data</li> <li>• Linkage data</li> </ul>
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An EMS data system can be labeled as "Compliant" at the "Silver" or "Gold" level with the NHTSA Version 2.2.1 EMS Dataset by meeting the following conditions:

#### Silver Compliance

##### EMS Dataset and Demographic Dataset

- The EMS software developer must identify which National Highway Traffic Safety Administration (NHTSA) Version 2.2.1 Demographic and EMS Dataset data elements will be included in the EMS software. Not every NHTSA Version 2.2.1 EMS and Demographic data element has to be used by an EMS system, but if the data element is selected for use, it must be available as defined for use.

- Minimally, all data elements noted as "national elements" must be included in the software. Only the "national elements" and any other NHTSA Version 2.2.1 data elements will be evaluated for Silver Compliance.
- No translation of the NHTSA Version 1 EMS Dataset into the NHTSA Version 2.2.1 EMS Dataset is permitted since definitions, variables, and codes are often inconsistent between the two versions.
- Additional data elements outside of the NHTSA Version 2.2.1 EMS Dataset may be collected either by using the E23\_09 Research Survey Fields (along with E23\_11 Research Survey Field Title) or by creating unique data elements outside the NHTSA Version 2.2.1 Dataset.
- An EMS data system may extend the variables associated with any NHTSA Version 2.2.1 EMS data element by using the existing definitions, variables, and codes in such a way so that any change in a data element variable and code can be collapsed back to a defined, acceptable code for data storage and transmission within the XML standard.

## **Gold Compliance**

### EMS Dataset and Demographic Dataset

- Every data element contained in the NHTSA Version 2.2.1 EMS Dataset must be available for use in the EMS data system. Not every NHTSA Version 2.2.1 EMS and Demographic data element has to be used by an EMS system, but if the data element is selected for use, it must be available as defined for use.
- No translation of the NHTSA Version 1 EMS Dataset into the NHTSA Version 2.2.1 EMS Dataset is permitted since definitions, variables, and codes often are inconsistent between the two versions.
- Additional data elements outside of the NHTSA Version 2.2.1 EMS Dataset may be collected either by using the E23\_09 Research Survey Fields (along with E23\_11 Research Survey Field Title) or by creating unique data elements outside the NHTSA Version 2.2.1 Dataset.
- An EMS data system may extend the variables associated with any NHTSA Version 2.2.1 EMS data element by using the existing definitions, variables, and codes in such a way so that any change in a data element variable and code can be collapsed back to a defined, acceptable code for data storage and transmission within the XML standard.

### XML Standard

- An EMS data system must have the capability to export data using the NHTSA Version 2.2.1 XML standard. This standard is defined by the ability to export any EMS event and/or demographic record from the EMS data system using XML with validation using the NHTSA Version 2.2.1 XSDs.
- All State EMS Data Systems must have the capability of importing data using the NHTSA Version 2.2.1 XML standard.
- It is recommended, but not required, that local EMS data systems have the capability of importing data into the system using the NHTSA Version 2.2.1 XML standard.

### **Causes of EMS Documentation Difficulties**

**Poor training.** Too often, insufficient attention is given to training EMS members in the proper methods of EMS documentation. EMS members' writing skills often are not strong, yet they are expected to learn how to complete their reports properly and to include the minimum legally-required patient-care report data, merely by observing someone else.

**EMS operations.** EMS members often do not see the importance and long-term effects of the reports they generate. For a number of reasons, they are left with the impression that the patient-care reports are not useful to anyone, except as a means of collecting prehospital patient treatment data, and are simply a formality and, consequently, a burden they must endure. Some of the indicators that give EMS members this impression include

- members do not receive adequate feedback on their reports;
- the time allowed to complete reports is insufficient;
- in smaller systems, a low volume of calls results in limited practice in writing reports;
- the run report may not be recognized as a medical record by other members of the health-care system (e.g., hospital personnel); and
- lack of buy-in by members of the importance of good recordkeeping.

**Standards and norms.** The legal standards for prehospital documentation as compared to the extensive regulations governing hospital care are inadequate and lacking. There simply is not enough guidance for EMS documentation.

### Improving EMS Documentation

It is the responsibility of the EMS manager to ensure effective documentation procedures. If documentation can be improved, the reports will be more respected and, thus, better used by EMS members. Better documentation also will be more useful in the event of a lawsuit, and for monitoring system operations and effectiveness. The EMS manager's role in improving documentation involves the following actions:

**Applicable regulations.** Review State laws and regulations concerning EMS documentation requirements and ensure compliance with them.

**Formats.** Examine the appropriateness and usefulness of the report formats as well as reporting Standard Operating Procedures (SOPs) used.

**Forms.** Review the forms used (e.g., for patient-care reports) for inconsistencies, missing items, inefficiencies, redundancies, etc., in the preprinted categories. In addition to required data collection specifications, forms may be tailored to include the specific needs of each individual EMS system. Some States have a State form that agencies are required to use. In this case, it is often very difficult to make changes or add desired local information.

Other forms and documents may be presented during the phase of patient care. These documents may include Living Wills and Advance Directives. Each State may have specific standards that will need to be followed when using these documents.

Patent care refusals also can be very important in regards to documentation of patient care. These refusal forms are not only for the protection of the patient, but add a level of protection to the EMS providers. Several examples are located in the resource disk that has been provided for you. **Remember:** It is important to have your organization's legal counsel review the refusal form that you are using. Your State EMS organization also may have specific guidelines that must be followed.

**Documentation policies and procedures.** Establish and enforce sound, comprehensive, and effective policies and procedures for EMS documentation efforts. Some examples:

- Establish a comprehensive list of approved abbreviations and symbols used on run reports and ensure that all EMS members adhere to it. The NEMSIS Data dictionary of standard terms is included on your Resource Disk.
- If reports are handwritten, ensure that reports are written in ballpoint pen instead of felt-tip pen for multiple-copy documents.
- Ensure that all copies of reports are legible.
- Ensure that members correct errors in report entries by drawing a single line through the error and writing in the correct data along with their initials and date next to the original entry.
- Ensure that copies of reports left at the hospital are kept current with the reports at the station (i.e., duplicate late entries and corrections are on all copies).

**Errors.** Be aware of any reports that contain errors. As a manager it may be your job to review the errors with the appropriate EMS members in a timely manner for risk management and quality control purposes.

**Documentation quality.** Ensure that all documentation is legible, logically presented, accurate, and complete (i.e., includes data on patient demographics and history, treatment administered, incident scene information, response and treatment times, etc.).

**Quality Improvement.** The following section is taken from the NHTSA *Leadership Guide to Quality Improvement in EMS*. You are encouraged to review the complete manual, which is included on your Student Resource Disk.

We are confronted more than ever before by the public with the demand that EMS provide the highest quality service at the lowest possible cost. There are clear expectations for improved health, improved quality, and improved efficiency. While specific activities may differ depending on the jurisdiction of the organization, the developmental stages of Quality Improvement (QI) integration will be the same for local, regional, or statewide EMS organizations. These developmental stages are

- building potential for success by developing an awareness and appreciation that QI is a worthwhile endeavor;
- expanding workforce knowledge of, and capability in, QI practices and techniques; and
- fully integrating the strategic quality planning process and related quality improvement actions into the daily EMS operation.

### **Comprehensive Quality Improvement Program**

A comprehensive QI program involves six areas:

1. **Leadership.** Involves efforts by senior leadership and management leading by example to integrate quality improvement into the strategic planning process and throughout the entire organization and to promote quality values and QI techniques in work practices.
2. **Information and Analysis.** Concerns managing and using the data needed for effective QI. Since quality improvement is based on management by fact, information and analyses are critical to QI success.
3. **Strategic Quality Planning.** Involves three major components: 1) developing long- and short-term organizational objectives for structural, performance, and outcome quality standards; 2) identifying ways to achieve those objectives, and 3) measuring the effectiveness of the system in achieving quality standards.
4. **Human Resource Development and Management.** Involves working to develop the full potential of the EMS workforce. This effort is guided by the principle that the entire EMS workforce is motivated to achieve new levels of service and value.
5. **EMS Process Management.** Concerns the creation and maintenance of high quality services.
6. **EMS System Results.** Entails assessing the quality results achieved and examining the organization's success at achieving quality.

## Information and Analysis

The efficient collection and management of data and their transformation into useful information are fundamental to a successful QI program.

### Data Selection

Specific data elements must be linked to key areas of organizational performance. The data selected for use should have the following characteristics:

- **Reliability** linked with training to ensure that everyone is knowledgeable about the data being collected and how they are used. Data collection should be automated whenever possible.
- **Rapidly accessible** so data can be analyzed quickly to answer questions.
- **Standardized** using uniform data sets, data definitions, codes, classifications, and terminology across departments and services, as well as to make them compatible with external databases.
- **Timely**, to provide accurate, up-to-date information.

### Ambulance Patient-Care Form Data

Ambulance patient-care form data are crucial for evaluating how well an EMS organization fulfills its key performance tasks (e.g., prehospital response, treatment and transport time intervals, adherence to protocols, and changes in patient health status). The minimum data set collected should facilitate benchmarking comparisons.

### Stakeholder Data

Stakeholder data include data from insurance companies, employers, and managed care organizations. These data are used to determine the types of EMS services needed or desired. This information can be obtained and updated periodically by questionnaire or interview.

### Satisfaction Data

Satisfaction data are used to determine how well the EMS system is meeting the needs of patients and other stakeholders. Satisfaction data can include whether the response was viewed as timely; were the providers efficient, courteous? Although it may not be possible to collect these data at the time of initial contact, they may be collected after the patient encounter.

## Process Data

Process data are important for identifying and managing local needs, such as vehicle use, age, mileage, maintenance status, and reliability; provider training, education, and accreditation data; financial data; and administrative data such as personnel hours worked. Process data also are used to determine the root cause of problems and to compare performance against standards or other peer agencies.

## Data Management

Comparative reports are highly useful. Regional reports can compare data with those from other regions; reports to a provider agency can compare that agency's results with those of other agencies within the regions. These comparisons can 1) help recipients determine performance areas that need improvement; 2) increase benchmarking as a QI technique; and 3) hasten adoption of "best practices" throughout EMS.

The statewide registry may be the most able to link the run form database with related database(s) such as hospital discharge. There are many useful applications for linked databases. An example is evaluating trauma triage criteria, where trauma system registry and/or hospital discharge databases are linked with the EMS registry information.

Using a local registry software/run form database containing data abstracted from completed run forms has several advantages:

- permits initial as well as indepth review and analysis of information;
- performs checks for data quality and requires that data anomalies be resolved and records closed before they are transferred to an intermediate database; and
- allows for standard "built-in" analysis of unit and provider performance.

Comparisons and benchmarks are important for each key EMS performance area. Comparisons and benchmarks based on data from other States, regions, or agencies can put an organization's performance into perspective.

Performance comparisons can occur in two ways: 1) point comparisons can be made of time-specific performance indicators that are compared to established standards; or 2) comparisons can include monitoring of trends over time in key performance areas. The results from comparisons and benchmarking may suggest no action (already among the best performers); a need to review and refine current work processes (performance is "close" to benchmark); or total re-evaluation and search for new approaches (performance is far below the benchmark).

Initially, benchmarks could be derived empirically from statewide EMS data. State EMS agencies can spearhead interactions with benchmark-level performers in each area, identify their "best practices," and distribute that information to others while maintaining confidentiality when necessary. State agencies also can lead the search for relevant benchmarks from other States and industries.

## Use of Organizational Level Data

At the organizational level, data can be related to quality, customers, medical markets, and operational performance. Together with relevant financial information, these data are integrated and analyzed to support organization-level review, action, and planning.

- **Understanding customers and markets.**

Access to demographic databases is helpful, as is partnering with health insurers and managed care organizations in the service area to gather and analyze incidence data for acute illness and injury.

- **Improving customer-related decisionmaking and planning.**

Understanding the needs of customers (payers) requires ongoing communication with the employers, private parties, and governments that pay for EMS services. Billing information can provide data on payer mix and use, augmented with data on prevalence of paying organization.

- **Improving operations-related decisionmaking and planning.**

Incidence and demand data are critical bits of information. Demand pattern analysis results can be used for refining current operations and long-range planning for future operations.

- **Understanding organizational capabilities.**

Operations performance may be evaluated using indicators of operational performance (response-time reliability, etc.) and cost (base charge, per capita annual subsidy, etc.). This allows for comparison across systems.

Systemwide efforts are vital to determine if EMS organizations make measurable clinical differences to their communities. Whenever possible, EMS organizations should use standardized methods to evaluate cardiac arrest survival. Use of cardiac arrest survival, the most widely recognized and reliably measured clinical performance indicator, permits comparison of results with other, similar systems. Similar outcome measures are sorely needed for other patients (e.g., trauma, pediatric) that would allow for outcome comparisons across systems.

- **Understanding competitive performance.**

Identifying and understanding the competition is important to ensure that EMS systems are responsive to the needs of patients and other stakeholders. Answering the following questions can help focus EMS systems on performance improvement:

- **Who** is the competition?
- **What** services do they offer at what cost?

- **What** is their level of performance?
- Can and should EMS realign its services within the framework of managed care needs?
- What other technologies may be potential competitors with EMS system components?

## **EMS System Results**

QI activities are designed to have a positive effect on the performance areas defined as the most critical to the success of the EMS system or agency as it works to achieve its mission. Measuring system results serves to assess how well the system is doing in its efforts to improve the critical performance areas.

The ability to interpret system results accurately and reliably depends primarily on the types of data used and the methods employed to collect the data. Results should be defined prospectively and be clear and quantifiable. Current performance levels, trends, comparative performance levels, rate of improvements, and demonstration of sustained improvement can be examined in all of the critical performance areas. Information about the results provides a basis for ongoing quality planning and QI project definition.

Results can be divided into three major categories:

### **1. Input results.**

Input results focus on the necessary resource components of the system (e.g., leadership, workforce, suppliers, equipment). To obtain useful results data might be gathered in the following areas:

- staffing;
- capital and other assets and resources;
- cost of system administration; and
- safety, absenteeism, and job satisfaction.

### **2. Process results.**

Process results focus on the effectiveness of the design and delivery of work processes, productivity, and operational performance. These would include activation time interval (time of call dispatched to time of vehicle response), overall scene response time, and success rate of field interventions. It also includes the delivery of clinical services. Process results that show trends in success rates, such as airway management, defibrillation, or pharmacological intervention among selected high-risk patients, demonstrate how well the quality planning and improvement process is working.

3. **Outcome results.**

Outcome results look at the effectiveness of patient care, support services, and fulfillment of public responsibilities (such as disaster response and public health emergencies).

**Patient Health-Care Results**

The outcome that is most important in terms of EMS effectiveness and improvement is patient health results from care rendered. There is little consensus in the literature as to what constitutes "quality" patient care, and it is difficult to pinpoint with assurance the cause of a good patient outcome. The most commonly accepted definition of quality care is an increased rate of survival from a life-threatening event. Other, broader patient-care results are also important and include a variety of changes in the patient's health status. Focusing on the "5 Ds" will help EMS personnel examine the results of the care they render:

1. **Death**--Did the patient survive to hospital discharge?
2. **Disability**--Was there an improvement in the patient's functional status as a result of patient care rendered?
3. **Discomfort**--Was there improvement in the patient's symptoms?
4. **Dissatisfaction**--Was the patient (and/or family) satisfied with service rendered?
5. **Destitution**--Was the treatment provided at lowest cost to the patient, the payer, and to society as a whole?

Comparative data from similar systems or "best practices" data can help provide an objective indication of system effectiveness. The patient health-care result applied most often to EMS is survival after an out-of-hospital cardiac arrest. However, focusing on cardiac arrest has its limitations. Typically, cardiac arrest cases comprise only a small percentage of the care provided by an EMS system. An EMS system may not have a large enough number of cardiac arrests from which to derive useful information.

Another patient health-care result important to EMS is outcome from injury. In contrast to cardiac arrest survival, however, field trauma care, in and of itself, has not been shown to have an impact on survival. Examination of trauma outcomes generally requires a degree of complexity and expense. For smaller systems or individual services, focusing on more basic trauma outcomes may be helpful. Preventable death studies, performed in conjunction with hospital multidisciplinary committees, as well as field and physician representatives, are important indicators of system performance. The focus, however, should be on improving performance and on what can be learned from the death, rather than on where blame can be assigned.

## Research and EMS

Research is the foundation of any profession. It is investigation and/or experimentation aimed at discovery and interpretation of facts. Research findings are the basis of the specific body of knowledge that identifies a profession.

Over the past 20 years, the medical research that has been conducted related to EMS has resulted in multiple changes in practice. It is even bringing about a change in the basic philosophy. More and more, the reference to "EMS" is being replaced by "out-of-hospital care." This shift in philosophy regarding the purpose of EMS is reflected in the current issues of expanded scope of practice and the significantly expanded curricula for advanced level providers. In addition, national organizations including the NHTSA, National Association of State EMS Officials (NAEMSO), National Association of EMS Physicians (NAEMSP), and Federal Interagency Coordination of Emergency Medical Services (FICEMS) are stressing the need for evidence-based standards based on solid research. The *National EMS Research Agenda* developed through NHTSA is included on your Student Resource Disk.

EMS leaders and practitioners first must understand the basic concepts of the research process, then interpret research findings with a critical eye. Finally, if they are to have any direct impact on the future of EMS, they must become involved actively in conducting studies.

## Overview--Basic Concepts of the Research Process

### Types of Research

#### Quantitative

- looks at facts;
- collects data that can be measured in numbers;
- involves researcher as outside observer; and
- most accepted type of research in medicine.

#### Qualitative

- looks at perspective;
- collects nonnumerical data;
- involves researcher as participant; and
- is gaining credibility in medicine as valid research.

## Types of Studies Commonly Used for EMS

**Field**--is conducted in real-life situations.

**Simulation**--is a type of laboratory study where the researcher presents subjects with situations designed to approximate real life.

**Explanatory**--involves a search for causal explanations. Researcher manipulates one or more variables and examines the influence of this manipulation on another variable.

**Retrospective**--focuses on the past. Starts with examination of "effect" and looks back in time to determine "cause." Audits of patient-care reports for compliance or effects of interventions on patient outcome are common retrospective studies.

**Prospective**--focuses on the future. Starts with the "cause" and looks forward in time to determine the "effect." Effects of educational curricula are often prospective studies. This type of study is very time consuming and can be expensive.

### **Reading Research with a Critical Eye**

Most EMS personnel have a very limited understanding of the research process; thus, they tend to read (and accept as fact) only the conclusions section of a study or a summary of the study found in a clinical-based journal. Reading "Research Review Critique Guidelines" found in Activity 3.1 in your Activity Manual (AM) will give you basic questions to ask as you read a study, and basic guidelines to help you interpret a study's results.

### **Active Involvement in the Research Process**

Currently, the majority of changes occurring in EMS are the result of research conducted by physicians. These changes generally are accepted by the EMS community without question. EMS research **must** involve physicians. However, the time has come for EMS personnel, especially managers, to take an **active** role in:

- performing critiques of, and questioning, completed studies;
- identifying areas where research is needed;
- designing the study;
- interpreting the results; and
- making recommendations for system change based on the results.

Only with this type of involvement can managers and personnel directly influence establishing EMS as a true profession and guiding its future.

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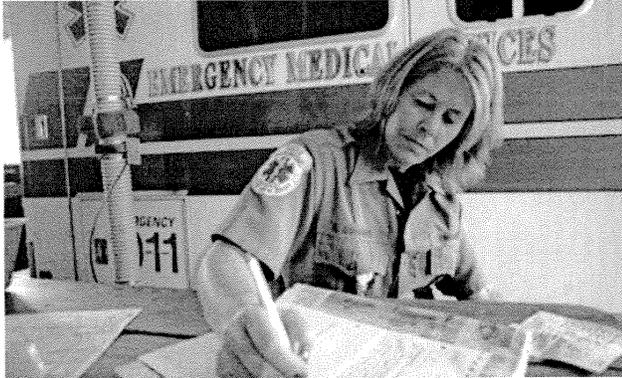
# APPENDIX

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## **JEMS.com**

### **Article**

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Not all researchers will be formally trained research scientists. Within any EMS system, there are likely to be EMS professionals with an interest in research. (Photo Mark C. Ide)

Although things are improving, many EMS practices remain unsupported by research. Benefits to support EMS research include providing a new career path for employees, building a rapport with the medical community, improving community ties, creating a positive image and -- most importantly -- ensuring optimal patient care. The only way for research to be conducted in the real-world prehospital setting is for EMS systems to support and participate in research. Few EMS administrators, managers or supervisors doubt the importance of research, but most don't think of themselves as "researchers" and many aren't sure what role they can or should play in the process. This article outlines some of things EMS administrators, managers and supervisors can do to support research.

According to the Institute of Medicine, successful research environments require seven things: individual scientists, training and education, funding, policies and procedures, tools, support systems and an ethical climate. Although these are presented as discrete items, they frequently overlap. EMS administrators, managers and supervisors can influence each of the components in this framework.

#### **Individual Scientists**

For many years, EMS researchers were primarily physicians who developed study ideas and then requested participation by EMS systems. However, more and more EMS professionals are becoming researchers, with some of them pursuing advanced training through Master's- and Doctorate-level education. It is advantageous for progressive EMS systems to cultivate relationships with these traditional researchers. With the right relationship, these scientist will not only bring forth studies for implementation in a system, they can help with decisions about participating in other studies, and with evaluating the evidence behind proposed new interventions before they are implemented.

Of course, not all researchers will be formally trained research scientists. Within any EMS

#### **Supporting EMS Research**

##### **Some Pearls for Administrators, Managers & Supervisors**

Lawrence Brown, EMT-P, MPH&TM, Bob Audet, MBA, NREMT-P  
2007 Nov 3

Although things are improving, many EMS practices remain unsupported by research. Benefits to support EMS research include providing a new career path for employees, building a rapport with the medical community, improving community ties, creating a positive image and -- most importantly -- ensuring optimal patient care. The only way for research to be

system, there are likely to be EMS professionals with an interest in research. Administrators, managers and supervisors should foster those interests. These "interested" EMS providers can play an important role in implementing research studies, serving as study coordinators or liaisons with the primary investigators. They may also be an important source of study ideas, identifying important questions that need to be addressed through research.

One advantage of supporting emerging researchers within an EMS system is that it opens up an additional career track for EMS professionals. While it is not yet commonplace, most EMS systems could benefit from a "research officer" position (which is -- or at least should be -- different from a quality improvement or training officer). Such a position would provide a point person for a system's research activities, as well as provide an additional mid-level leadership position that could be used to promote career development.

### **Training and Education**

It's unrealistic to expect every EMS provider to be a trained scientist, just as it's unrealistic to expect that of every physician, nurse, or engineer. For some studies, it may be possible to use only a small cadre of interested EMS providers to collect data, but larger studies will require broader participation. Therefore, every EMS provider should have at least a basic understanding of research principles. Administrators, managers and supervisors can ensure that all employees of an EMS system receive adequate education about general research principles as a part of the ongoing continuing education program. It's also important for system leaders to reinforce the importance of research and promote provider buy-in.

Some EMS professionals will want more than a general understanding of research, and EMS systems should support the pursuit of more formal research education to the same extent as they support other interests. Sending a provider to a course to attain better research skills can be as valuable to an organization as, for example, sending the provider to an advanced extrication course or an ACLS instructor course.

It's also important to educate the public about the EMS system and its research activities. Some studies will require community consultation and public disclosure prior to implementation. The more the public knows about an EMS system and the research it has done, the easier that process will be. This is win-win: educating the public about EMS research is an opportunity to promote the EMS agency.

### **Funding**

Research costs money. When systems participate in small studies that require few resources, they often absorb any costs associated with those studies. It's appropriate for systems to include some research infrastructure as part of their basic operating costs. As the size and number of studies grows, however, systems may have to explicitly fund those activities. For example, if a study requires 75 employees to participate in two hours of study-related training, those employees should be paid for that time -- and study-related funds should cover those costs.

Larger studies are usually supported through grants or contracts, and it is appropriate for EMS systems to be compensated for their efforts on those studies, just as the hospital laboratory or pharmacy expects to be paid for their study-related services. This may be in the form of a single lump-sum payment, or a small amount paid for each subject enrolled. Be reasonable. While actual costs should be compensated, research will not be a get-rich-quick panacea for any EMS system.

### **Policies & Procedures**

Research is protocol driven, and strict adherence to the study protocol is of the utmost importance. That is one advantage that EMS systems have in doing research: EMS systems and providers are well adapted to protocol driven activities. Still, it's useful for progressive EMS

systems to consider and/or include research issues in their policies and procedures. When studies are taking place, complete research data should be as much a priority as complete medical and billing data. Also, enrolling subjects, collecting data, and completing data forms should be made a part of all job descriptions.

### **Tools**

EMS administrators, managers and supervisors need to ensure field personnel have the tools they need to successfully implement as study. "Tools" can be many things, including such study-related supplies as necessary computers and communication equipment, record-keeping systems and data collection forms. The investigators will usually provide supplies, such as study medications or experimental devices. If supplies aren't provided, EMS systems should be reimbursed for their costs. Systems may need additional computer equipment and/or data storage media; whether those costs should be reimbursed by a single study or considered general infrastructure will depend on whether the equipment has a life beyond the single study.

Data collection tools deserve special mention. While study investigators will usually develop and provide data collection forms, it is incredibly useful for field personnel -- the people who will be using the forms -- to have a hand in their creation. This requires a pre-existing relationship with investigators, and that administrators, managers and supervisors allow work-time for interested providers to participate. Such relationships can ensure that data collection processes are realistic and streamlined; in research it is generally not a good idea to collect large amounts of data just because it is available, data collection should focus on the specific research question at hand.

### **Support Systems**

One integral support system in EMS is medical direction. EMS systems that participate in research must have an involved, supportive medical director. The medical director must be involved in decisions about participating in studies, and should review and approve all study protocols. This may be a thorny process for systems that only occasionally participate in research; it will become more streamlined with experience.

Data systems are also important to research. Administrators, managers and supervisors should support use of a consistent, uniform data collection process that at a minimum includes the NHTSA-developed prehospital dataset and provides data to the National EMS Information System (NEMSIS). System leaders will also have to ensure they have HIPAA compliant data-sharing agreements with researchers and participating hospitals.

### **Ethical Climate**

Research ethics are different from medical ethics. EMS systems that participate in research must ensure their personnel are well informed about research ethics. Most academic institutions provide education about research ethics, and study investigators can make that training available as part of the research project. Such training is usually available in an online, self-study format. Administrators, managers and supervisors will have to provide staff with the time necessary to complete the training, and make sure the training is completed. Again, employees should be compensated for this time, and research funds should be available to cover those costs.

The full extent of ethical issues is beyond the scope of this article, but consent is a key component of ethical research. Consent for research is different from and more complicated than consent for medical care. One major difference is that there is no such thing as "implied consent" for research. When research involves subjects who can't provide informed consent, a specific process -- including community consultation and public disclosure -- must be completed before the study begins. As discussed briefly in the "Training and Education" section, EMS administrators, managers and supervisors will need to participate in that process.

In summary, EMS administrators, managers and supervisors can influence the research enterprise of any EMS system in a number of areas. Some costs are associated with supporting research, but most of these costs can be absorbed as general system infrastructure or reimbursed from individual study funding. Providing EMS personnel with support -- in terms of time and resources -- is the main way to ensure a successful research environment.

**Lawrence Brown** is the author of "An Introduction to EMS Research" and a member of the JEMS editorial board. **Bob Audet** is with Nature Coast EMS in Citrus County, Fla.

## User Comments

Added Nov 7 2007 10:53AM

I would like to add to the suggestions in the article.

The scope of EMS research and the application of the scientific method can extend far beyond clinical issues. Most of the changes made in the policies, procedures and protocols of any EMS system are done with the thought that the 'new' way will be better than the 'old' way. A new policy for preventing backing up collisions with the ambulance; A change in the new employee orientation program; Switching from laryngoscope A to laryngoscope B; Switching from brake pad A to brake pad B. I'd suggest that we treat any these changes as a hypothesis to be tested using the scientific method. I'm suggesting that research methods be a more integral part of how changes are made in most any of our processes. From that perspective, we should all be 'researchers' in finding ways to make valid and verified improvements our processes - be they operational, administrative, or clinical. The end point of all research is not necessarily publication (but if you find something that is important to share with your colleagues, please fdo consider publishing it!).

--- Mic

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# **MODULE 4: COMMUNICATION**

## **TERMINAL OBJECTIVE**

*The students will be able to communicate effectively in varying workplace situations.*

## **ENABLING OBJECTIVES**

*The students will:*

- 1. Compare and contrast one-way communication, two-way communication, and authentic dialogue.*
  - 2. Describe the causes of miscommunication.*
  - 3. Discuss sources of conflict in EMS.*
  - 4. Describe typical responses to conflict and methods to resolve conflict.*
  - 5. Demonstrate appropriate communication techniques for dealing with a variety of simulated situations.*
-

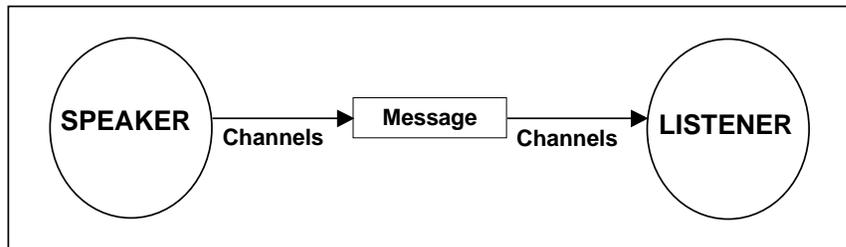
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**COMMUNICATION**

Communication is frequently the "make or break" factor that dictates how successful a manager will be at all the other functions of management.

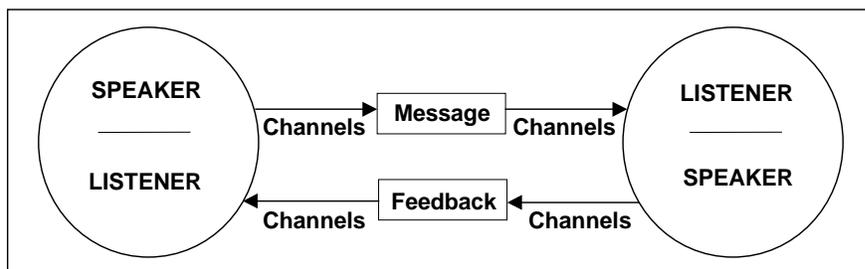
**The Communication Process**

The communication process starts when a speaker creates and transmits a message. Speakers can transmit messages in many ways, including writing, speaking, gestures, and expressions. These methods for transmitting messages are known as channels. When a message reaches a listener, the speaker has completed a one-way transmission of information. This is known as one-way communication (Figure 4-1).



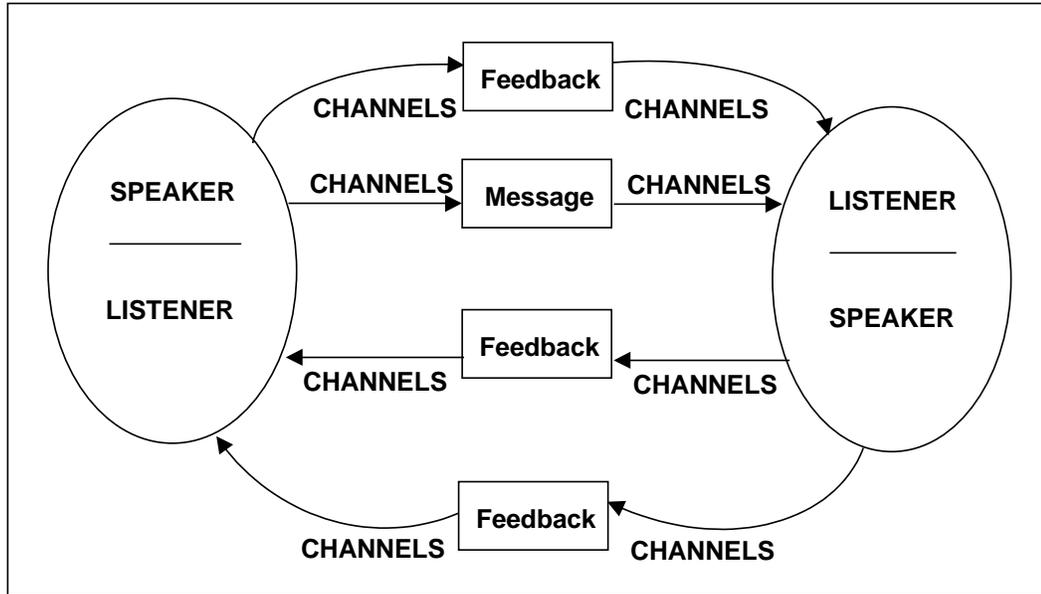
**Figure 4-1  
One-Way Communication**

If a listener provides feedback by making a discernible response to a speaker's message, the listener has initiated two-way communication (Figure 4-2).



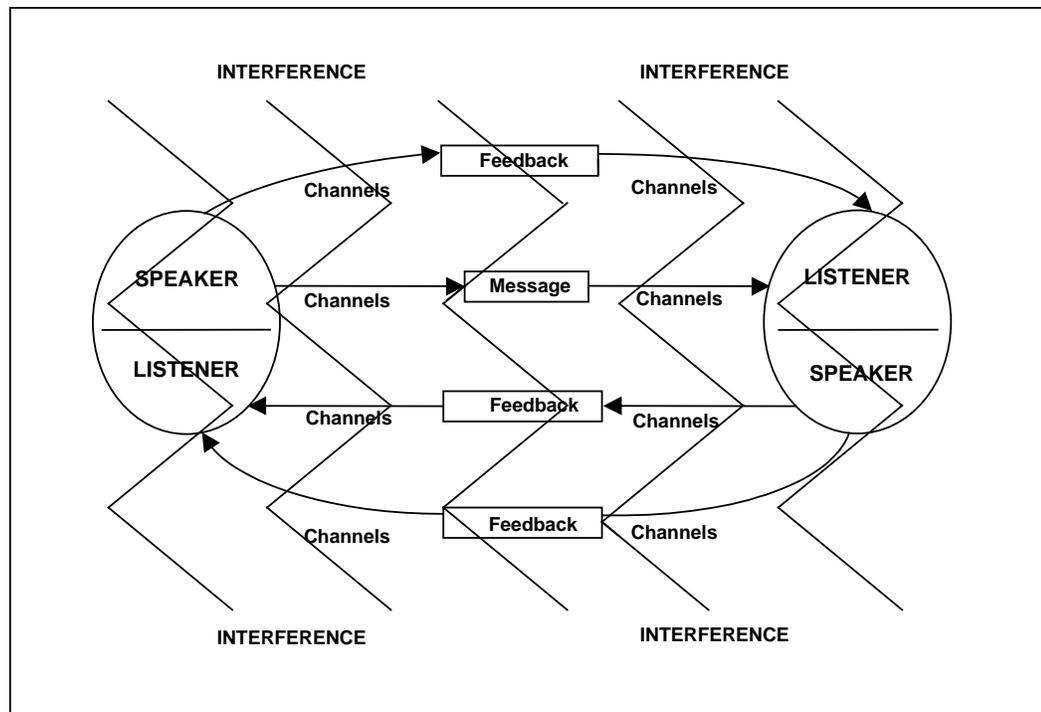
**Figure 4-2  
Two-Way Communication**

After a period of time, two-way communication should lead to a match between the messages and ideas of the speaker and listener. When a match occurs, communication is successful. This is known as authentic dialogue (Figure 4-3).



**Figure 4-3**  
**Authentic Dialogue**

Unfortunately, problems occur often during communication. Certain forces, known as interference, can disrupt communication throughout the communication process (Figure 4-4).



**Figure 4-4**  
**Interference**

## Interference

Four different types of interference often cause miscommunication: external, physiological, psychological, and semantic.

1. **External interference** includes all those outside distractions that make it difficult to focus and pay attention. For example, engine noise, road noise, car radios, ventilation fans, and modern sound-insulation techniques often make it difficult for drivers to hear emergency sirens. Other examples of external interference include loud noises, smoke, extreme temperatures, and crowds. External interference is unique in that it can interrupt communication at almost any point in the process.
2. **Physiological interference** refers to factors within the listener that disrupt the listener's biological ability to hear. The listener's hearing can be disrupted by the effects of medication, alcohol, fatigue, or illness.
3. **Psychological interference** refers to factors within the speaker and listener that make it difficult to comprehend or to communicate effectively. For example, personality conflicts, stereotypes, emotions, boredom, status differences, hidden agendas, or information overload can cause speakers and listeners to stop paying attention to one another.
4. **Semantic interference** occurs when the listener does not decipher a message in a manner that matches the speaker's meaning. Several types of semantic interference can cause the listener to fail to understand a message in the way the speaker intended:

First, problems can occur because words often have more than one meaning. In the article "Effective Communication: So to Speak," author Thomas Swan discusses a situation in which he asked his rookie EMT partner to bring him a "4-by-4" from the rig. The rookie returned a few minutes later carrying a piece of wooden cribbing.

Second, semantic problems often occur when relative words are used. Relative words become meaningful through comparison. For example, is Frederick, Maryland, a large city or a small one? Compared to Baltimore, Frederick is small, but compared to Emmitsburg it is large. To prevent misinterpretation, relative terms must be explained or anchored to more precise terms.

Third, the use of abstract or general terms often causes misunderstanding. For instance, has anyone ever said to you something like, "Please bring me that thing over there" when they couldn't remember the name of the item they wanted? Certainly communication would be much more effective if they specifically described the item they wanted like this, "Please bring me that thing over there against the wall with the long wooden handle and bristles tied at the end. I need it to sweep up this dirt on the floor."

Finally, problems develop when the speaker uses vocabulary that is unfamiliar to the listener or when the speaker fails to organize his/her message before transmitting it.

## Nonverbal Communication

Nonverbal communication means conveying messages through actions rather than words. Research suggests that nonverbal communication conveys a person's meaning more accurately than words. It is important that EMS managers understand the different forms of nonverbal communication in order to improve the communication process at all levels of an EMS organization: subordinates, peers, and superiors. Managers must be able to use nonverbal means effectively when communicating with others, as well as to recognize the meaning of nonverbal messages sent by others. The better the manager is at understanding what someone is saying--both verbally and nonverbally--the more effective he/she can be as a manager.

Nonverbal behaviors can be used to repeat a verbal message, substitute for a verbal message, complement a verbal message (i.e., put it into the proper context, support the message), accent or emphasize a verbal message, regulate verbal behavior (e.g., use voice or body position to let the other person know he/she may speak), or contradict the verbal message. The contradiction between verbal and nonverbal messages can be subtle or obvious. Contradictory behavior can be either conscious or unconscious. Research has shown that when a receiver perceives an inconsistency between a verbal and nonverbal message, the nonverbal one carries more weight.

An awareness of the various types of nonverbal communication is important to the success of the communication process, both as the sender and the receiver. Nonverbal communication can be categorized as follows:

- body orientation--position towards another person;
- posture;
- gestures--tapping foot, fidgeting, pointing;
- facial expressions;
- eyes--expression, use of eye contact;
- voice--inflection, tone, volume, speed, use of pauses;
- touch;
- space--personal distance between two people;
- clothing/appearance; and
- environment--physical setting, lighting, seating.

## The Speaker's Responsibilities

Because of the problems caused by the different types of interference, effective communication is the responsibility of both the speaker and the listener. The speaker has six responsibilities:

1. **Avoid undercutting the meaning of the message.** Speakers frequently undercut the meaning they are trying to convey by using phrases like "Maybe we should," and "It could be." These types of phrases are known as hedges. Tag questions and disclaimers are also ineffective ways of communicating messages. Tag questions are questions like "It's about time we got started, isn't it?" and "That gauge doesn't look right, does it?"

Adding "isn't it" and "does it" at the end of these statements causes them to lose a lot of their power. Disclaimers are statements such as "I'm not really sure but..." and "I probably shouldn't say this but..." Disclaimers also act to undercut the meaning of the speaker's message.

2. **Avoid sending double messages.** Speakers frequently transmit double messages by using gestures, expressions, and tones that are inconsistent with the message they are speaking. For instance, have you ever had someone tell you "I'm not mad" while frowning at you? Speakers must make every attempt to express their messages in both a verbal and nonverbal manner that is consistent with the message's meaning.
3. **Use clear and specific language rather than general terms.** Thoughts, intentions, feelings, and needs should be described in specific, observable, and behavioral terms. For example, instead of describing someone as dependable, it is better to say, "He/She has a perfect attendance record this year, he/she thoroughly and accurately completes his run reports, and he/she consistently volunteers to do extra projects and chores around the station."
4. **Establish a climate conducive to communicating by minimizing both external and psychological interference.** If communication is going to be effective, the listener must feel comfortable and free to express himself/herself without fear of retribution.
5. **Verbalize the message effectively.** Form the message in an organized fashion and use terminology familiar to the listener.
6. **Ensure that the correct message was received.** Insist on feedback. Listeners often hear what they want to hear, and what they hear may be quite different from what the speaker intended them to hear. It is extremely important that the speaker get verification that his/her message was understood correctly.

### **The Listener's Responsibilities**

While the speaker has six basic responsibilities, the listener has only one: he/she is responsible for becoming an active listener. Unfortunately, this is not an easy task for most people. Studies at Florida State University, Michigan State University, and the University of Minnesota demonstrate that the average person remembers only 50 percent of what he/she has heard immediately after hearing it. Effective listening is difficult because the brain thinks far faster than most people can speak. The average rate of speech for most Americans is 125 words per minute, while the brain can process language at a much higher speed. Consequently, the brain tends to engage in other thoughts while it waits around for the words to arrive. In order to become an active and effective listener, one must concentrate on the message being sent and avoid letting the mind wander.

In addition to concentrating on the speaker's message, active listening involves understanding the speaker from the speaker's viewpoint. Listeners must avoid judging or evaluating the message too quickly or becoming defensive. By attempting to understand the speaker's point of view, the

listener is more likely to remember a larger percentage of what is being said. In addition, the speaker will have little need to protect or defend, and will in turn be more likely to listen.

Finally, active listening involves paraphrasing. Listeners must restate in their own words what they thought the speaker said or meant before going on. The objective of paraphrasing is to provide information to the speaker so he/she can determine whether the listener understood the message as it was intended. For paraphrasing to be effective, the listener must restate the message in his/her own words as much as possible. Simply repeating the speaker's message verbatim will not alert the speaker to any misunderstanding.

### **Establishing Authentic Dialogue**

Most people want to work for honest communicators. Honest communicators are upfront with their coworkers and subordinates. They have no hidden agendas, and everyone always knows where they are coming from. Unfortunately, however, honest communicators are difficult to find. Clark Moustakas, in his book *Loneliness and Love*, highlights one of the major problems of the day:

Increasingly, I have become painfully aware of the terribleness of most communication: of people talking but not saying what they mean; of the contradiction between the outward words and expressions and the inner meanings and messages; of people looking as if they were listening without any real connection or contact with one another. (p. 130)

The problem focused on by Moustakas is the lack of authentic dialogue between humans. Authentic dialogue is hard to find in many organizations because the prevailing forms of communication are either monologue or technical communication. A monologue is one-way communication. The speaker sends a message to the listener with no response from the listener. Technical communication occurs when the speaker and the listener exchange data and information, but no real information about their inner selves. In contrast to monologue and technical communication, authentic dialogue occurs when a speaker and listener are involved in an open exchange of honest information about themselves with the intention of establishing a living, mutual relationship. To be effective communicators, managers must make a commitment to establishing authentic dialogue whenever they communicate with others in the organization.

There are several guidelines for establishing authentic dialogue.

- Be willing to express your thoughts and feelings. Move beyond merely exchanging data and information. Enrich your communication with a clear expression of your feelings.
- Express thoughts and feelings clearly and in an organized manner. Think through what you plan to say before you say it.
- Be an active listener. Don't be preoccupied with other thoughts. Ask good questions. Put yourself in the place of the other person. Paraphrase others' messages to ensure understanding.

- Report behavior in specific and observable terms without judging right or wrong or making accusations about attitudes and motives.
- Postpone evaluation of new ideas until they are understood fully.
- Avoid becoming hostile when another's viewpoint differs from your own.
- Keep an open mind. Be willing to change your convictions as new information is uncovered.
- Be willing to confront. Conflict is a fact of life, not something to be avoided. Instead, it should to be guided and channeled for productive ends.
- Think win-win. Ask yourself: In this particular confrontation, what might be done to assure that both my adversary and I achieve our objectives? How can we both emerge as winners?

### **Conflict Resolution**

Conflict in the workplace can cause disruption, loss of productivity, and make members lose motivation. Areas of conflict in EMS include

- supervisor/employee;
- dispatch/responding unit;
- provider/receiving hospital;
- provider/patient;
- volunteer/paid providers; and
- public/private providers.

People respond differently to conflict. These responses include

- Argue.
- Withdraw from the source of conflict.
- Become a "victim": Victims often whine, but do nothing.
- Defend their position; often "at all costs." Defenders do not listen and become more sure of their position as the conflict continues.
- Become passive-aggressive: falsely cooperative but angry and resentful under the surface.
- Vent to everyone around them except the source of the conflict. This response often results in an active rumor mill.

Most of us respond to conflict with a combination of these responses, and may respond differently to different situations.

When resolving conflict you must find a balance between psychological and emotional responses. You must broaden your perspective and use good communication skills. To resolve any conflict you need specific information. You must use active listening and provide feedback. Several methods are used to resolve conflict:

- **Avoidance**--Manager withdraws/fails to take a position.
- **Accommodation**--One side allows other side to get what it wants; manager chooses quick fix.
- **Competition**--Each side tries to win, even at the expense of others; manager chooses who he/she thinks should win, works to achieve this.
- **Compromise**--Each side is willing to give up some objectives; manager gets concessions from both sides and guides negotiations until conflict is resolved.
- **Collaboration**--Each side accepts other's objectives and works toward mutually best outcome.

Remember, for the conflict to be resolved both/all parties must agree.

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# **MODULE 5: ISSUES IMPACTING EMS PRACTICES**

## **TERMINAL OBJECTIVE**

*The students will be able to discuss major issues impacting EMS practices.*

## **ENABLING OBJECTIVES**

*The students will:*

1. *Identify legal and ethical issues that frequently confront emergency response personnel.*
  2. *Describe steps to take to safeguard against patient-care litigation and to ensure compliance with local, State, and Federal regulations.*
  3. *Discuss health and safety issues that concern EMS managers, including:*
    - a. *Stress.*
    - b. *Infection control.*
    - c. *Defensive driving.*
    - d. *Workplace violence.*
    - e. *The Health Insurance Portability and Accountability Act of 1996 (HIPAA).*
    - f. *Pandemic.*
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## LEGAL AND ETHICAL ISSUES

### Ethical Issues

- patient confidentiality, informed consent;
- patient rights;
- truth telling;
- when to refuse to treat a patient; and
- when to refuse to follow a supervisor's or physician's orders.

EMS managers also are confronted with legal issues:

**Corporate legal issues**--those that apply to the organization, e.g., corporate law, tax matters, liability, employment issues, compliance with regulations (licensing, Occupational Safety and Health Administration (OSHA), zoning laws, etc.).

**Issues related to operation of an ambulance service**, e.g., ambulance licensing, medical malpractice laws, Federal Communications Commission (FCC) rules, Medicare/Medicaid reimbursement regulations.

Confronting ethical dilemmas--the lack of ethical standards for the EMS industry can make it difficult to determine the best course of action. Ask these questions when making a decision involving ethics:

- Is it legal?
- Is it just?
- How will this decision make me feel about myself? Can I live with myself after I make this decision?

Basic guidelines when confronting ethical dilemmas: Know the existing applicable regulations and guidelines. Preplan--try to anticipate potential ethical situations and determine how best to respond. Develop, implement, and enforce SOPs/policies for your organization for dealing with ethical dilemmas.

### Safeguard Against Patient-Care Lawsuits

System responsibility--must provide the level of care to which the system is authorized at all times; cannot adjust the level based on staffing, time of day, equipment problems, etc.; once the call is received by 9-1-1, cannot selectively respond to calls. When confronted with a patient refusing care or transportation, the responder must document thoroughly on the run report that he/she explained the recommendations of the medical control physician and the possible ramifications of refusing treatment/transport. Impaired patients must not be allowed to refuse

EMS care; they may be treated under the concept of implied consent; physical restraint is allowed, especially if the patient is considered a threat to him/herself or others.

Once members respond to an emergency, they are responsible for the patient until arrival at an emergency facility/other approved destination; must follow system's transport guidelines. Interhospital transfers should follow applicable established guidelines. Follow statutes and guidelines regarding obviously deceased patients; notify medical control physician; complete required documentation properly. Transport emergency patients only to facilities classified as EMS receiving facilities; prescheduled transport to other facilities is acceptable, if authorized properly. Follow established guidelines for handling the situation of a physician at a prehospital scene.

Terminate cardiopulmonary resuscitation (CPR) only in accordance with proper guidelines.

Respect adult patient's religious beliefs in the administration of treatment; parents may not refuse treatment for their children on the grounds of religious beliefs; if this occurs, contact a law enforcement or protective service agency.

Be aware of **the differences between a Do Not Resuscitate (DNR) and a Living Will** as it pertains to the prehospital setting.

**Document** all activities regarding prehospital care and ensure that proper **quality assurance** procedures are performed regularly.

### **Protect Confidentiality**

State regulations may be unclear as to whether EMS members are bound by the same legal obligation as a physician regarding protection of patient confidentiality. Health-care professionals have an obligation to protect confidentiality, unless required by law to divulge the information, such as in suspected child abuse cases.

Ensure compliance with State regulations governing EMS procedures:

- Maintain knowledge of current regulations.
- Establish procedures for implementing regulations within the EMS system.
- Ensure members are trained on State regulations and system procedures for ensuring compliance.
- Conduct regular checks to ensure member compliance.
- Maintain complete, accurate system documentation.

## **Health Insurance Portability and Accountability Act**

Establishes mandatory regulations that require changes in the way health providers conduct business, establishes standardized process for electronic data interchange, security, and confidentiality of health-care data, and mandates standardized formats for all patient health, administrative, and financial data.

## **HEALTH AND SAFETY ISSUES**

In the course of providing prehospital emergency care, EMS responders face the potential for daily exposure to infectious disease, hazardous materials, and violence. Getting to and from the scene of a call involves the hazards of operating emergency vehicles in traffic at high speeds. All of these external forces affect the health and safety of EMS providers. Concurrently, the health and safety of EMS providers may be affected by internal system forces, such as member stress, burnout, and personal problems; 24-hour shifts and overtime; and concerns over compensation and management support, etc. Many EMS leaders see the 1993 health-care reform initiatives as responsible for assigning EMS additional responsibilities for providing some degree of primary health care in addition to prehospital response to patients.

EMS health and safety is a **now** issue. How proactive are you and your system regarding EMS health and safety? When considering approaches to EMS health and safety, do you consider such diverse effects as system funding, community image, recruiting, and system effectiveness? The following paragraphs expand upon some of the issues that an EMS manager must deal with when considering the health and safety of system members. What is your position on these issues? Have your EMS leaders considered them and their effects on your EMS system?

### **Stress**

Emotional stress is an everyday part of being an EMS member. Stress occurs as a normal part of making a run, but stress is also a normal response to waiting for a call to occur. Run stress is something that each EMS member must learn to cope with, mostly on an individual basis. However, a component of organizational stress also affects EMS members. Organizational (or administrative) stress includes such factors as long hours, levels of compensation, EMS image, etc. Organizational stress for the most part is beyond the control of individual EMS members; too much stress can result in burnout and a high turnover rate. EMS managers must be aware of stressors and indicators of burnout in their system members and initiate adequate and timely stress management response. Effective stress management programs must address operational and organizational stress to ensure the readiness of all members to provide the highest levels of emergency prehospital patient care.

## Critical Incident Stress

In the course of providing emergency prehospital patient care, EMS members must learn to cope with the pain and suffering that accompany human tragedy. Coping is a necessity, because EMS members are not dispassionate or impervious to what they see and experience on their runs. However, there are extraordinary experiences, such as mass casualty incidents, accidents involving children, child abuse incidents, or the death of a child that traumatize EMS responders beyond the limits of their normal coping mechanisms. When this occurs, EMS members may become dysfunctional to the point of not being able to carry out their normal routine. This stressed condition is not unlike the combat-related posttraumatic stress disorder experienced by many veterans of the Vietnam and Iraq Wars. In EMS, the condition is referred to more commonly as critical incident stress (CIS). EMS managers must learn to recognize the signs of CIS and ensure that their system has programs in place to assist members who have experienced extraordinary stressors.

A critical incident stress management (CISM) program was developed in the 1980s and adopted by a majority of EMS programs. Since that time there have been some modifications. Stress management involves defusing and debriefing.

Defusing has three major components.

- **Introduction phase**--Facilitator is introduced; purpose of defusing is stated including the rules and confidentiality.
- **Exploration phase**--Personnel are asked to describe the incident. Questions to clarify descriptions may be asked. Personnel share experiences and reactions. Facilitator determines need for additional help.
- **Information phase**--Information is summarized. Coping skills are suggested and discussed.

The original Mitchell debriefing model has been modified to the following:

- Stage 1--Introduction;
- Stage 2--Fact phase;
- Stage 3--Thought phase;
- Stage 4--Reaction phase;
- Stage 5--Symptom phase;
- Stage 6--Teaching phase; and
- Stage 7--Re-entry phase.

Regardless of whether defusing or debriefing is used, it must be stressed that the process is **not** a critique of the incident or personal performance.

As of this update (2008), the validity of that program has been questioned. A 3-year study commissioned by the Federal Emergency Management Agency (FEMA) on the effectiveness of

critical incident stress debriefing (CISD) as an early intervention for traumatic stress in firefighters was published in 1998. According to this study, "the CISM process may alter the normal psychological processing following a traumatic event. CISM may also lead affected personnel to bypass established personal support systems (family, friends, coworkers, clergy) usually used for nonoccupational-related crises in the belief that the CISM session should be sufficient to alleviate their distress."

Controversy also focuses on the harm that can be done by forcing individuals to talk about a trauma when they don't want to. A best practices workshop conducted by the National Institute of Mental Health in 2002 stresses that intervention should be only as needed, and voluntary. Individuals who do not want to participate should not be forced to, but can be offered individual sessions. Because CISM is controversial, you should continue to assess ongoing study results and review the effects of your department's stress management program to make an informed decision on effectiveness.

### **Family Stress**

EMS members must keep their emotions in check in order to function effectively at the scene of calls. However, these same members must find a means to vent their emotions in a safe manner to maintain their emotional stability. Some EMS members are not able to "let themselves go" and, consequently, repress their emotions, creating a gap between themselves and their families and friends. They believe they will never fail on a call, and when they do they begin to doubt their own abilities. This process widens any existing gap between the EMS member and those who can best support his/her needs. Adding to the difficulty is the fact that many EMS members speak a language that only other EMS members can relate to, and often resort to morbid "gallows" humor. All of these factors combine and continue to multiply to intensify stressed relationships. EMS members need to understand the impact of their job on their personal relationships and to deal with their emotional stability. EMS managers also must recognize that family stress is real and, if left untreated, may result in poor performance, lost time, and an inordinately high personnel turnover rate.

### **Infection Control**

By its very nature, EMS is a risky business. The increasing incidence of bloodborne and airborne diseases contributes to the stress experienced by EMS members. The impact of human immunodeficiency virus (HIV) or Hepatitis B virus (HBV) on EMS prehospital health-care providers is measurable. Nearly 66.6 percent of more than 1,200 EMS providers surveyed by the Emergency Health Services Department, University of Maryland (Baltimore County), identified the risk of contracting acquired immune deficiency syndrome (AIDS) as a major occupational stressor. Most survey responders (92 percent) said they would treat an AIDS patient, but 38 percent said, given a choice, they would rather not. EMS members must know and be able to overcome the risk of bloodborne and airborne infection. The Occupational Safety and Health Administration (OSHA), Centers for Disease Control and Prevention (CDC), National Fire Protection Association (NFPA), and the U.S. Fire Administration (USFA) all have produced

guidance to help reduce these risks to emergency response personnel. Obviously, EMS managers and system medical directors must be proactive in their approach to infectious diseases and infection control. Together, they must ensure their members are trained properly, confident in their approach to patient care, and provided with the necessary equipment to manage the risk involved safely.

### **Emergency/Nonemergency Response, Red Lights and Sirens, and Defensive Driving**

Managers of EMS systems are becoming increasingly aware of the rising rate of accidents involving EMS vehicles. Traditionally, EMS vehicles respond and transport at high speed using red lights and siren (RLS). High-speed driving is dangerous, hard on the driver, hard on a patient being transported, and hard on the vehicle and brakes. Because of the excessive wear on vehicles, fleet maintenance managers should be part of any system safety program. Ironically, "going RLS" does not seem to improve response/transport time significantly, but may confuse other drivers in the vicinity of the emergency vehicle. Judges have begun to impose liability, including fines and jail terms, on emergency vehicle operators involved in accidents, and insurance agencies have advised EMS system managers to clean up their driving acts or face termination of insurance coverage. Some system managers have responded to the challenge by initiating defensive driver training programs and emphasizing low-force driving. If for no other reason, low-force driving helps to maintain patient comfort and safety during transport, which translates into improved customer satisfaction. Managers need to impose accountability on drivers for their actions and vehicle condition. Technology is improving emergency vehicle warning devices but, at the same time, technology is making emergency vehicle warning devices less effective. Emergency vehicle drivers must realize that sound isolation in new vehicles combined with powerful audio systems; make it virtually impossible for other drivers to hear anything outside of their vehicles.

### **Violence in the Workplace**

The EMS providers of today are at a much greater risk of facing violence and its aftermath than were providers 10 years ago. You only have to think about the number of dispatches that involve assaults, stabbings, or shootings to realize that risk is increasing. Injured people frequently show up at the station door steps. Although this is a nondispatched run, it should always be treated with the same potential for threat/violence as dispatched runs.

It is essential that EMS managers prepare and train their personnel to recognize when a violent situation has occurred, and how to minimize the dangers to themselves. This training should include the following:

- Immediately request law enforcement at any scene involving violence or potential violence.
- Never enter a violent scene until law enforcement has secured it.

- Always carry a radio or some communication device so additional assistance can be requested if needed.
- Be alert for the sounds of violence (shouting, objects being thrown, doors slamming).
- If required by the organization, consider or wear body armor for protection.

In October 1998, the issue of violence in the health-care workplace had become a concern significant enough that OSHA began developing a standard on workplace violence in the health-care setting. That involves analysis of workplace violence hazards, training and prevention, protective equipment, and violence treatment program.

Violence in the workplace also includes employee-employee violence. This type of violence has increased considerably in the past years. Managers and employees should be trained to recognize early warning signs and monitoring methods should be established.

The Texas State Office of Risk Management identifies the following signs of potentially violent employees in its Workplace Violence Prevention and Bomb Threats course:

- white males, 30 to 40 years old;
- negative changes in behavior;
- lowered production and/or performance;
- unkempt physical appearance;
- feels people have done them wrong/out to get them;
- feels organization "owes them";
- distances self from coworkers/loner/socially isolated;
- displays anger/hostility;
- makes direct or indirect threats of violence;
- fascination with workplace violence and/or weapons;
- chemical dependence;
- history of violence;
- obsession with job; and
- depression.

It should be noted that these signs come from trends and the presence of some or all of the signs do not, by themselves, indicate that a person will commit violence. They should, however, raise the awareness of the supervisor.

Refer to your resource disk for additional information on workplace violence.

### **Other EMS Issues in Health and Safety**

- burnout;
- occupational injuries;

- EMS and hazmat;
- shifts and member fatigue;
- risk management;
- HIPAA;
- terrorism events;
- chemical, biological, radiological, nuclear, and explosives (CBRNE); and
- pandemic.

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# **MODULE 6: MANAGEMENT OF HUMAN RESOURCES**

## **TERMINAL OBJECTIVE**

*The students will be able to effectively manage human resource issues as a first-line EMS manager.*

## **ENABLING OBJECTIVES**

*The students will:*

- 1. Identify the essential elements of an effective EMS orientation program.*
  - 2. Describe the five broad areas of EMS training.*
  - 3. Identify the various classroom presentation methods and describe the type of information most appropriately presented through each of these methods.*
  - 4. Design and develop an EMS training program following activity guidelines.*
  - 5. Discuss at least four methods of encouraging motivation in EMS members.*
  - 6. Develop a complete, written orientation program specific to their organizations, and prioritize that content for a 20-minute presentation.*
  - 7. Conduct an effective counseling session for a member with a problem.*
  - 8. Describe the purpose and importance of an effective performance appraisal process.*
  - 9. List common sources of problems in implementing and sustaining an objective performance appraisal system.*
  - 10. Develop performance-based measurement criteria and rating descriptions.*
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## ORIENTATION AND TRAINING

### Orientation

Starting new members out in the right way is important, in order to reduce the feelings of anxiety that they often possess when beginning a new job ("Will I be able to handle it?" "How will I get along with my boss?" "Where do I start?"). Poor orientation programs can damage EMS organizations financially because they can reduce new member effectiveness and can contribute to dissatisfaction and turnover. New members often go through a process known as "organizational socialization." This involves learning attitudes, standards, and patterns of behavior that are expected by the organization and its various subunits. Although the process of "learning the ropes" is a continuous one, it is intensified whenever one changes organizations and/or jobs. It is important that orientation programs facilitate this socialization process by conveying to new members the expected standards of behavior within the organization. The better the EMS manager is at communicating applicable goals and expectations, the more confidence the new member will experience, and the quicker he/she will adapt to the organization.

Orientation training should be the joint responsibility of the organization's general training staff and the first-line EMS manager. There must be a clear understanding of the specific responsibilities of each, so that nothing is left to chance. Generally, the training staff should be responsible for providing information involving matters that are organization-wide in nature and relevant to all new members. The EMS manager should concentrate on those items unique to the new member's workplace. Although the specific content of training will vary from organization to organization, the items shown in Table 6-1 typically are covered during new EMS member orientation training.

Orientation programs should be planned in advance. Several aspects regarding the orientation program should be considered, in addition to the content:

- hold the orientation as close as possible to the member's start date;
- develop a schedule of activities and arrange for necessary individuals to be available to meet with the new member;
- allow adequate time for the new member to meet with the supervisor and others as required;
- schedule followup meeting with the new member at periodic intervals during the first few weeks on the job; and
- encourage ideas/suggestions from the new member on both the orientation program and the organization itself.

**Table 6-1  
Types of New EMS Member Orientation**

<b>General Organizational Orientation</b>	<b>Specific Department/Unit Orientation</b>
<p>1. <b>Overview of the organization</b>--brief history, what the organization does, where it does it, how it does it, the organizational structure.</p>	<p>1. <b>Department/Unit functions</b>-- explanation of the objectives, activities, and structure of department/unit, along with a description of how the department's/ unit's activities relate to those of other departments/units and the overall organization.</p>
<p>2. <b>Policies and procedures</b>--tardiness and absenteeism; vacations, holidays; grievances; grooming; trial period and evaluations; warnings, probation, suspension; promotion, transfers, training, etc.</p>	<p>2. <b>Job duties</b>--a detailed explanation of the duties of the new EMS member's job, how the job relates to the activities of the department/unit, and expected standards of performance.</p>
<p>3. <b>Compensation</b>--pay scale, overtime, holiday pay, shift differentials; when and how paid; time clock procedures, etc.</p>	<p>3. <b>Policies and procedures</b>--those that are unique to the department/unit, such as work schedules, station duties, emergency vehicle operation, radio communications, patient-care protocols, time requirements (expected out-of-chute times, hospital turnaround times, etc.), documentation procedures, onscene Command, infection control, proper lifting and moving techniques, etc.</p>
<p>4. <b>Benefits</b>--insurance, retirement, tax-sheltered annuities, credit union, employee discounts, suggestion system, recreational activities, etc.</p>	<p>4. <b>Department tour</b>--a complete familiarization with the department facilities, including layout, equipment, lockers, supply room, bulletin boards, etc.</p>
<p>5. <b>Safety information</b>--relevant policies and procedures.</p>	<p>5. <b>Introduction to department members.</b></p>
<p>6. <b>Union</b>--name, affiliation, officials, joining procedure, contract, etc.</p>	

## Training

Effective training programs are a necessary part of every EMS organization. They serve several functions, including 1) education; 2) building self-confidence; 3) improving patient-care/job performance; and 4) meeting recertification requirements. EMS organizations must deal with six basic types of training:

1. **Basic clinical education.**

These include courses for first responder, EMT-basic, EMT-intermediate, and EMT-paramedic. Basic clinical training standards usually are set by the individual States or counties. Successful completion usually is a prerequisite to employment. These training programs may be provided by the EMS organization or externally (and paid for by the organization).

2. **Field training.**

Ensuring providers are competent to deliver care is an ongoing training issue. It applies to students your members precept, new members, and members with seniority. Policies should be developed that address the following issues:

- a. Hours versus competencies.
- b. Call volume versus time assigned to EMS units.
- c. Remediation.
- d. Preceptor selection and training.
- e. Skills maintenance.

3. **Continuing education.**

These training programs are based on requirements to maintain minimum standards such as certification/licensure. Organizations may follow State requirements or use requirements set by the National Registry. These training programs may be provided by the EMS organization or externally (and paid for by the organization or by the member, or both).

4. **Inservice training.**

Inservice training is tailored to the organization. It may involve organizational policy and procedures, equipment, or operations. It is usually given as a periodic refresher or when policies, procedures, equipment, etc., change.

5. **Quality Improvement (QI) training.**

QI training is designed to improve organization-wide quality. It is an ongoing and results-oriented process.

6. **Performance-enhancement training.**

Performance-enhancement training may be directed at either individual or organizational enhancement. Examples of performance enhancement include

- a. Clinical (advanced life support (ALS), basic life support (BLS)).
- b. Managerial (supervisory skills, member motivation techniques).
- c. Other (customer service).

### **Principles of Adult Learning**

The adult learner is different from the child learner; the adult is motivated to learn by the value and applicability of the subject matter. Trainability (the ability to train a person) is a function of the individual's ability and motivation. If a person has neither the ability to perform the task nor the motivation to learn and improve, effective training will not occur. The following variables need to be taken into account to develop an effective training program.

- **Conditions of practice.**

- Active practice. The student should be given the opportunity to practice what is learned, guided by the instructor as necessary.
- Overlearning. Providing students with continued practice far beyond when the task has been performed correctly several times; this is especially relevant when practicing under simulated conditions, or when using emergency procedures that are not performed frequently on the job.
- Massed versus distributed practice (one continuous session or multiple smaller segments). Distributed practice usually is better for students with lower trainability, for learning motor skills, and for factual information that is less meaningful to the student and more lengthy or difficult.
- Size of the unit to be learned. Whether to teach the whole task at once, break it into subtasks and then combine later, or use a combination of both. The method chosen depends on the task complexity and task organization (interrelationship between subtasks). For highly organized tasks, use the whole method; for highly complex tasks, the part method is better.

- **Feedback.** Student knowledge of results is critical for learning and motivation. Feedback should be provided as soon as possible after the behavior has occurred. Positive feedback is especially important in adult learning; it is accepted more readily and recalled more accurately.
- **Meaningfulness of the material.** How well the student can relate the material to his/her job, life, or experiences. Factual information is learned and retained more easily if it is meaningful to the student.
- **Behavior modeling.** Learning by imitating others' actions that are perceived as desirable. This is especially effective when the person being imitated is seen as competent, powerful, highly regarded and rewarded for positive actions, and when display of the behavior is clear and detailed.
- **Motivation.** Extremely important to the effectiveness of the training. Many theories on motivating students exist. Following are some key principles:
  - Training goals should be challenging, and presented to the student before training begins.
  - Positive and negative consequences of behavior must follow the behavior closely. Target behaviors must be made known to the student prior to the training.
  - A student will be motivated to choose a behavior that is most likely to have positive consequences. The student must believe that participation in training will lead to more desirable rewards than not being in the training.

### **Maximizing Retention and Transfer of Training**

Take action to ensure that what is learned in training will be retained and transferred to the job. There are a number of ways to do this; some examples follow.

- maximize the similarity between the training situation and the job situation;
- provide as much practice and feedback as possible for the task being taught;
- provide a variety of examples when teaching concepts or skills;
- label or identify important features of a task;
- ensure that general principles are understood before expecting much transfer;
- ensure that trained behaviors and ideas are rewarded on the job;
- design the training so the student can see its applicability to the job; and
- use questions to guide students' attention.

## Steps for Designing a Training Program

Effective training programs meet the needs of EMS members by continuing their education, building self-confidence, improving patient care, and meeting recertification requirements. In order for a training program to be successful, there are certain steps that must be performed before developing the program. The following paragraphs describe six **major** steps in designing a training program.

1. **Analyze training needs.** Where is training needed in the organization? What must a student learn in order to perform the job effectively? Who needs training and what kind of training do they need (e.g., certification, recertification)?

Methods of determining training needs:

- job analysis;
- performance appraisal information;
- brainstorming;
- interviews;
- informal talks;
- observation;
- tests;
- surveys; and
- committees.

Based on the needs determined, identify topics to be taught. Include a variety of topics and levels (basic to advanced, depending on the audience), to keep the instruction interesting and to keep the students motivated to attend.

2. **Establish performance objectives.** What exactly is the training program expected to accomplish? Learning objectives must state clearly what each student must do to demonstrate competency in a particular area.

Objectives should meet the SMART parameters. SMART is used to develop objectives for a variety of situations. Objectives should be

S = Specific;  
M = Measurable;  
A = Achievable;  
R = Relevant; and  
T = Timeframed.

There are two types of objectives:

- Terminal objectives identify what the student should be able to do at the end of a unit, lesson, or module.

- Enabling objectives identify what the student must do to achieve the terminal objective.

There is only one terminal objective per unit/module. There should always be more than one enabling objective, since the enabling objectives identify the various items that must be learned/accomplished to be able to complete the terminal objective.

Objectives are expressed in terms of the behavior (which is always identified with an action verb), the conditions under which it will be performed, and the standards or level of mastery to which it will be performed. The following objective provides an example of the parts for your review:

"Given a written examination, the student will be able to list and describe at least four methods encouraging motivation in EMS members."

- **Behavior:** "list and describe" (motivational methods);
- **Conditions:** "written examination"; and
- **Criteria:** "four."

See page SM 6-1 for examples of additional learning objectives.

3. **Assess instructor and equipment resources.** What equipment and facilities are available/will be needed for the training program? What training materials are needed for the course? What is the level of expertise of the available instructors? Will instructors need to be trained, or do additional instructors need to be identified?
4. **Select training techniques.** When selecting training techniques, first identify appropriate delivery methods based on the facilities and resources available/obtainable, the size of the target audience, and the identified learning objectives. After identifying a number of methods fitting those three criteria, select techniques that apply the principles of adult learning and maximize retention and training transfer. Various types of training techniques are listed below.

- Classroom techniques.

**Platform presentations** such as lecture, research reports, book reviews, symposiums, debates, audiovisual aids, dramatizations, demonstrations, communicate information to students through a one-way flow of information. Students generally are passive learners, primarily expected to listen. This lack of control over one's learning can result in negative behavior, such as absenteeism, tardiness, and boredom. Despite these drawbacks, however, platform presentation techniques are very useful for introducing new information and for providing instructions necessary for learning tasks that will be developed through other instructional methods. When used in conjunction with the more participative techniques discussed below, platform presentation techniques can increase the meaningfulness of the material and, thus, result in greater retention and transfer of learning to the workplace.

**Audience participation** (e.g., role playing, simulation exercises, case studies, training games, question and answer, small-group discussion, group reports, group problem-solving). In contrast to platform presentation techniques, audience participation techniques allow students to become involved actively in the learning process. Students find these techniques much more engaging, since they are active, rather than passive, participants. Some of these techniques are described below.

- Case study. The case study method involves presenting the student with a description of a problem. Each student individually is given the opportunity to read the description, diagnose the underlying issues, and exercise judgment in deciding what should be done in the situation. After analyzing the problem, the student meets with other students and, as a small group, they discuss the various diagnoses and proposed solutions. This training technique teaches students to analyze problems and formulate decisions, and exposes them to a variety of approaches and interpretations.

- Role-playing. Instead of simply presenting a problem for discussion, as is done in the case study method, role playing actually requires students to respond to specific problems. In doing so, students get an opportunity to practice reacting to problems similar to those they encounter on the job. This technique enables students to learn by doing, rather than merely talking about ways to handle a problem. The benefit of role playing is that it incorporates several of the principles of adult learning:

-- Active practice: Role playing provides the opportunity for practice, experimentation, and trial-and-error learning. Repeated experience with a series of role-play problems allows students to begin to conceptualize the principles being taught.

-- Behavior modeling: Students observe how others handle problems and then imitate their successful behavior.

-- Feedback: Students learn about their personal strengths and weaknesses through the feedback they receive from fellow students who are observing their behavior.

In the role-play technique, students often are divided up into small groups (three to four students) in which two students role play while the remaining student(s) observe and take notes about the interaction. While imagining themselves in situations described by the trainer, students participating in the role play practice the skills and behaviors being taught in the training course. A discussion immediately follows each role play with students receiving feedback about their performance from other students in the group. Following the feedback discussion, students rotate (observers become role players, and role players

become observers) so that all students get a chance to practice the new skills/behaviors before the end of the training session.

**Simulation exercises.** This technique includes many types of exercises, such as in-basket, leaderless group discussion, and problem analysis exercises. Like role playing, simulation exercises place students in situations similar to those that they would experience on the job. For example, an in-basket exercise is a partial simulation of the administrative tasks of a manager's job. The exercise materials consist of a sample of the types of documents which might appear in a manager's in-basket. Under time restrictions, students review the materials, organize and prioritize the items, and make decisions about how to deal with various issues presented in the exercise. After the exercise, students are given feedback on the effectiveness of their decisions and actions. Simulation exercises allow students to practice new skills and behaviors actively and get feedback on their performance. In addition, because these exercises "simulate" the student's job, they increase the likelihood that the new skills and behaviors will be transferred to the workplace.

- **Computerized techniques** (e.g., computer-based training, interactive videodisc). With these techniques students interact directly with a computer, these often are considered to be very powerful training methods. Techniques such as interactive videodisc (IVD) can simulate situations that occur in a student's job and can adjust the stimuli, problems, or tasks presented to a student in response to a student's performance. This is known as "adaptive training," and is important because the student receives information equal to his or her level of ability.
- **On-the-job techniques** (e.g., orientation, on-the-job training, job rotation, apprenticeship/mentorship, counseling). These are the most widely used training methods. Generally, new members are assigned to experienced workers or supervisors who are told to teach the newcomer "the ropes." Usually, the new member is expected to learn the job by observing the experienced worker and by working with the actual materials, personnel, and/or machinery that comprise the job. On-the-job techniques have several positive features, one of which is economy. Students learn while producing, thereby offsetting the cost of instruction. Further, students learn by doing and receive immediate feedback about the correctness of their behaviors. This feedback can come from their performance on the job itself as well as from their coworkers and supervisors.

While on-the-job techniques can and often do work, they also can be a mistake. On-the-job instruction should not be used in situations where such training might result in danger to the student or others, or result in damage to costly equipment. In addition, on-the-job training often is instituted simply by telling an individual to "train Pat," with little or no regard for the trainer's willingness or ability to train. Trainers should be chosen carefully--based on their ability to teach and their desire to take on this added responsibility. Finally, on-the-job techniques should be used in conjunction with other training approaches such as lectures and

audiovisual instruction, which provide factual knowledge. In this way, students can develop a better understanding of the principles, rationale, or theory underlying what they are being taught each day on their jobs.

5. **Design the learning environment.** Determine the sequence of instruction. It is important to sequence instruction logically so it guides the learner. Design the learning environment in a way that arouses curiosity and captures and maintains the students' attention. Limit instructor "on air" time. For example, in place of long lectures, present shorter ones of 10 to 20 minutes or combine a lecture presentation with class discussion by focusing the presentation around questions requiring a response from class members.

At the start of each section or module, present the learning objectives to the students. Knowing where they are going will help them to learn better.

Develop a course schedule which includes a **detailed** description of each training activity (including any quizzes and/or exams) and the amount of time required/allotted for it. Be sure to allow time in the schedule for meals and short breaks. At the end of each module or major topic area in the course schedule, identify any training aids and/or materials which will be necessary for that segment. Figure 6-1 depicts a sample from a course schedule used this course.

6. **Identify ways to determine if the program accomplished the intended results.**

Learning can be identified on different levels. One method uses the written test. This is one approach, but used alone it does not provide you with an accurate assessment of program effectiveness. Effectiveness should be measured by identifying and assessing behavior changes that accomplish the program goal.

<b>COURSE OUTLINE</b>	
<b>Monday-Week 1</b>	
8:00-8:45	Instructor and student introductions.
8:45-9:15	Get-acquainted exercise.
9:15-10:00	Course overview and student expectations.
10:00-10:15	Break
<b>MODULE 1:</b>	<b>LEADERSHIP</b>
10:15-11:00	<p><b>Leadership</b> (lecture/class discussion).                      Sample discussion questions:</p> <ul style="list-style-type: none"> <li>• What are some key factors affecting the EMS workforce?</li> <li>• Why is it important to identify and adapt to the changing needs of the EMS workforce?</li> </ul>
11:00-11:30	<p><b>Giving Orders Exercise</b>--Students individually complete an exercise in which they describe exactly what they would say to EMS members in specific situations, in order to get them to perform certain tasks or provide information.</p>
11:30-12:30	Lunch
12:30-1:00	<p><b>Giving Orders Exercise (cont'd)</b>--(small group discussion). In groups of three, students compare responses and rate each response on an authoritative-participative scale.</p>
1:00-1:45	<p><b>Giving Orders Exercise (cont'd)</b>--(class discussion). The instructor records the chosen responses on a chalkboard. Students determine where each response falls on the scale, and discuss the following:</p> <ul style="list-style-type: none"> <li>• Which type of responses seem best for each scenario? Why?</li> <li>• Do EMS managers have difficulty changing leadership styles to fit the appropriate situation?</li> </ul>

**Figure 6-1  
Sample Course Outline**

**COURSE OUTLINE--(cont'd)**

1:45-2:00	<b>Planning and Time Management</b> (lecture/class discussion).
2:00-2:45	<b>GCS-I</b> --Students are each given an 8- to 10-item In-Basket focusing on planning and time management skills. The In-Basket is based on the background materials presented the day before on Green County and places each student in the role of a newly promoted EMS manager.
2:45-3:00	Break
3:00-4:00	<b>Exercise I (cont'd)</b> (self-review, small group discussion). Students individually review and compare their responses with those presented in a Model. In groups of three, students discuss the exercise. Sample discussion questions: <ul style="list-style-type: none"> <li>• What items/issues did you deal with first, second, etc.?</li> <li>• Which issue(s) did you see as top priority, and which could wait? Why?</li> </ul>
4:30-5:00	Discussion of course reading assignments.

**MATERIALS REQUIRED FOR MODULE 1**

Instructor Guide

Student Manual

Chalkboard, chalk, eraser, easel pad, markers.

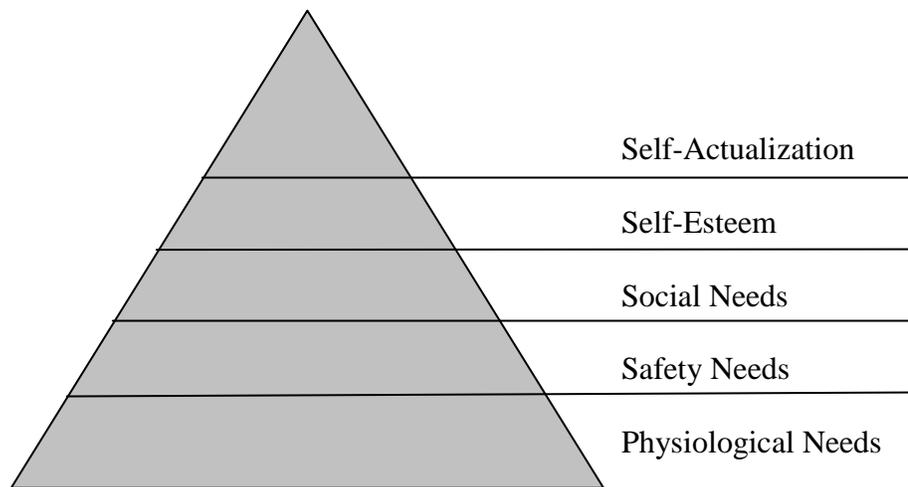
Exercise Materials: Get-Acquainted Exercise, Giving Orders Exercise and Model, In-Basket Exercise materials (including Model Checklists); highlighters, paper clips, Post-it® notes, paper.

**Figure 6-1 (cont'd)**

## MOTIVATING, MENTORING, AND COUNSELING

### Motivation

Everyone wants to feel satisfied. Doing something you can feel proud of is a natural desire in everyone. Abraham Maslow developed a pyramid model of human needs (Figure 6-2) that starts with the basic physical needs we all have, food and water, and moves up to satisfying needs for safety, then social and ego needs, and finally needs that actualize ourselves in some significant way. Maslow claims that people are motivated to move up the pyramid only when the lower needs have been satisfied. It also must be remembered that once a level is reached, it does not mean it is permanent. We can move up and down in the pyramid based on our life situations at any given time.



**Figure 6-2**  
**Maslow's Hierarchy of Needs**

Motivation is an internal drive. The individual is the only one who can motivate him/herself. Managers cannot really motivate anyone, they can only create an environment in which the person wants to be motivated and will be self-motivated.

Management theories have revolved over the years. Before the Industrial Revolution, workers were "motivated" through fear of punishment. The Industrial Revolution brought the traditional model of motivation. Basic assumptions of the traditional model are

- Work is inherently distasteful to most people.
- What they earn is more important than what they do to earn it.
- Few desire or can handle work requiring creativity, self-direction, and/or self-control.

When it became apparent that this model was not working, the human relations model was developed. Basic assumptions of the human relations model are

- People want to feel useful and important.
- People want to belong and be recognized.
- Feelings of belonging, usefulness, importance and recognition are more important than money.

Both the traditional and human relations models of management are based on the authoritative leadership style. Current management theory on motivating workers, known as the human resources model, encourages use of the participative leadership style to create an environment in which all workers can contribute to the limits of their ability. Full worker participation is encouraged on all important matters, and worker self-direction and self-control is broadened continually. Basically, managers need to make full use of each member's "untapped" human resources.

Managers must recognize that people have different values and are motivated by different things. Each EMS member must be treated as an individual with unique values, concerns, and problems. It is the manager's constant responsibility to look for ways and opportunities to give feedback and incentives/rewards for good performance to motivate EMS members. Some ways to do this are listed below.

- **Help the member develop a "can-do" attitude.** This can be facilitated in a number of ways:
  - Encourage the member to see problems as challenges.
  - Show the member he/she is critical to the success of the organization.
  - Express confidence in the member's abilities.
  - Give positive feedback as often as possible.
  - Set up a trial period for measuring performance, effort, and progress.
  - Recognize errors/disappointments as indicators of progress.
- **Show the EMS member that good, hard work will be rewarded.** This can be accomplished either by using existing rewards available in the system, or by developing different, more imaginative rewards.
- **Work with the member to set specific performance objectives.**
- **Encourage the member to get involved in making decisions about the job.** Through open communication, soliciting input/ideas, performance feedback, etc.

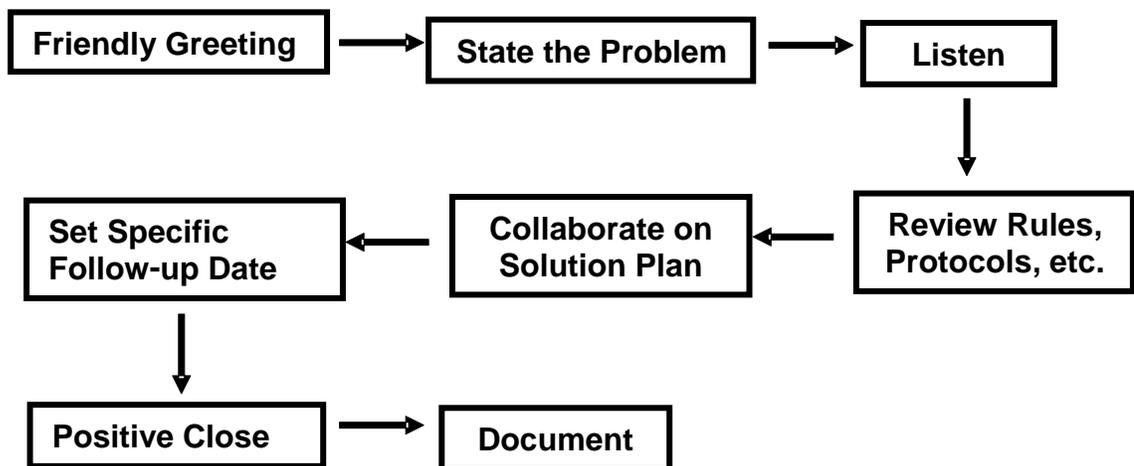
- **Continually increase members' responsibilities and give them challenging yet achievable goals.**
- **Encourage teambuilding/consensus-building among members.** Motivates members and improves system quality and effectiveness.
- **Offer motivators that appeal to the higher levels of Maslow's Model versus the basic needs levels.**

## **Counseling**

Counseling members must be planned before the session and should follow a given order.

- Begin with a friendly greeting.
- State the facts as you know them.
- Allow the member an opportunity to explain the situation from their perspective.
- Ensure they understand the problem by restating facts and asking for clarification if necessary.
- If applicable, explain any rules, regulations, laws, and standards and their consequences that apply to the behavior.
- Work together to create a plan of action to correct the problem.
- Review what has been discussed and decided.
- Close on a positive note.
- Document the session and provide a copy to the member. You should ensure that the member signs the documentation to agree that the counseling occurred. (They may not agree with what was said, but the signature should indicate they attended the session and the facts were covered.)

Figure 6-3 graphically shows the flow a counseling session should follow.



**Figure 6-3**  
**Counseling Session Flow**

## EVALUATING PERFORMANCE

When most people think of "performance appraisal," they think of the form that is completed annually by a member's manager. The manager and apprehensive member meet to review the completed form, which then is filed away carefully. In some cases, raises are based on the results of that form, but all too often nothing else results. Performance appraisal is an annual event which everyone involved dreads and looks forward to forgetting. Clearly, this is not the ideal approach.

In fact, performance appraisal is any personnel decision that affects a member's job status. Performance appraisal should be a process, not an annual event. The process includes the **identification** of standards or criteria by which to measure members' performance, actual **measurement** against those criteria, **review** of the level of performance achieved, and continuing **development** of members' performance. The entire process is ongoing, and should be in a constant state of revision. This section provides an overview of the performance appraisal process, focusing on the needs of the typical EMS manager.

The performance appraisal process has a wide variety of objectives. The primary functions are to:

- measure members' job effectiveness;
- identify training needs; and
- motivate members through feedback and goal-setting.

Additionally, the performance appraisal process serves as a:

- communication tool between manager and member for discussing performance issues;
- advancement documentation tool; and
- compensation measurement tool.

Managers use performance appraisal information when making a variety of decisions: Personnel decisions regarding member retention, promotion, demotion, salary adjustment, transfer, and termination are based on motivation and training as measured by performance appraisal. A variety of operational decisions also may be based on combined performance results. The core of any performance appraisal process is effective member behavior. Valid performance appraisal is a prerequisite to good selection, motivation, and training procedures in an organization. Further, performance appraisals must contain the documentation needed to support a manager's decision regarding a member's job status, should the decision be challenged by upper management, in the courts, etc.

### Steps of the Performance Appraisal Process

There are nine basic steps to an effective performance appraisal process:

1. **Review legal requirements**, as discussed below. At this time it also is helpful to seek input from the various groups who currently use, or could benefit by using, performance appraisal data. Some of these groups would never see individual members' results, but could make use of compiled data. Examples include upper management, trainers, Equal Employment Opportunity Commission (EEOC) officers, recruiters, etc. What information do they need? How could that information be gathered? Is it appropriate to meet their needs as part of the performance appraisal process? Find out.
2. **Conduct a thorough job analysis.** Identify performance-based, job-relevant EMS criteria jointly with members. Criteria are, simply, those aspects of members' performance that are measured during the process. They are the performance standards which are used to evaluate members' knowledge, skills, abilities, motivations, or behaviors. Only those aspects that are **critical** for effective performance should be identified and subsequently measured, evaluated, and developed. The list of criteria must be a **thorough list of those aspects of the job that are important for success**. Thus, the criteria also become goals for which members should strive.

Continually review performance standards and revise as necessary to improve the quality and validity of the measures. Remember, this is an ongoing process. No matter what your position, you always should provide input regarding the accuracy and effectiveness of the standards you use.

3. **Develop the appraisal instrument.**
  - a. Both manager and member must be clear on what constitutes average, below-average, and above-average performance.
  - b. Review criteria must be understood clearly by members; if not, rewrite the criteria.
  - c. Performance/Review criteria must be communicated clearly to members before the beginning of the appraisal period.

- d. Members must be convinced that the measurement criteria are valid. If not, they will not respect the results and, most importantly, will not adopt the standards as personal goals.
4. **Select observers/evaluators.** The direct manager most often serves in this role. It is critical, however, that the evaluator be perceived by the members as qualified to review performance in order for the appraisal process to be successful. If not, the process is bound to fail. Just such a situation often arises in dual-responsibility organizations. For instance, when a manager has come up through the ranks as a firefighter with no EMS/medical experience, that manager's credibility may be limited when assessing clinical skills. One solution might be to have the medical director and/or "Lead" paramedic assist with, or assume responsibility for, the observation, evaluation, and even feedback/goal setting discussions of those skills. (Making use of these resources is a sound approach, regardless of the manager's experience. Courts have found that managers who evaluate performance must have had **many** opportunities to observe performance; their subjective evaluations must be only **one** performance measurement; and that additional raters should be used if additional, relevant information can be obtained.)
5. **Train the observers.** Managers must be trained sufficiently to measure job performance and conduct appraisals. Training should be more than a class on "filling out the form." Observers/Evaluators should receive sufficient training in developing a common frame of reference with other raters; when and how to observe and document relevant behaviors; evaluating behaviors against the standards; avoiding rater errors; providing consistent, ongoing feedback; conducting the performance review and development planning meeting; and monitoring and promoting member development. Raters should receive the opportunity to practice their skills and receive feedback until they are comfortable and their results are reliable. A chance to observe an expert in these skills often is helpful as well.
6. **Measure performance.** Objectively observe, document, and evaluate behavior against the performance criteria.
7. **Present results to the member.** Be honest, open, objective, nonthreatening. Ask for input and feedback from the member. Remain open to his/her ideas/suggestions, and change the appraisal if appropriate. Treat the session as a problem-solving session. Emphasize performance and expectations, not personality characteristics, which members are more likely to perceive as threatening and difficult to change. Avoid focusing only on negatives or positives.
8. **Establish performance goals.** Develop specific behavioral performance goals/objectives jointly with members. Make certain the goals are within the member's **ability and control** to accomplish. Remember to establish followup procedures for measuring progress toward goals.

9. **Praise/Reward performance on an ongoing basis following** appraisal. Ideally, this should be an integral part of a manager's routine. Provide frequent, specific feedback on job performance. Coach/Counsel members as necessary to provide encouragement, support, assistance, and adjustments as the member works toward goals. Feedback is most effective when it is timely and noticeable. Feedback should be objective, based on performance rather than on personality traits.

### **Legal Aspects of the Performance Appraisal Process**

Performance appraisal processes must comply with legal expectations. Federal laws and ethical considerations prohibit discrimination on the basis of race, color, religion, gender, or national origin. Performance appraisal systems must be developed and administered with great care to avoid bias in any of these areas. Further, factors such as race, gender, or age may be behind comments which, on the surface, seem objective. For this reason, courts and legislative bodies scrutinize performance appraisal systems closely for underlying discrimination. Violation of Federal laws regarding performance appraisal can be very costly, labor intensive, and time-consuming to resolve.

Numerous legal acts, regulations, and policies affect performance appraisal systems:

- Title VII of the Civil Rights Act of 1964;
- EEOC;
- Office of Federal Contract Compliance Programs;
- 1978 Civil Service Reform Act;
- major court decisions;
- agency policies; and
- union agreements.

So just how can organizations ensure a legally defensible performance appraisal system? This question has no easy answers, but the best advice is to ensure that the entire performance appraisal process is as logical and fair as possible. Following is a list of the major characteristics of a legally defensible system.

- Performance standards must be based on **critical** elements of the job.
- The member must be advised of critical job requirements prior to the appraisal.
- The member must be evaluated solely on how well he/she performs the job, not on a comparison with other members.
- Tests, performance appraisal forms, and other measurement instruments must be related directly to the job.
- Appraisals must be based on a valid job analysis.
- Performance criteria must be well-defined and **specific**.

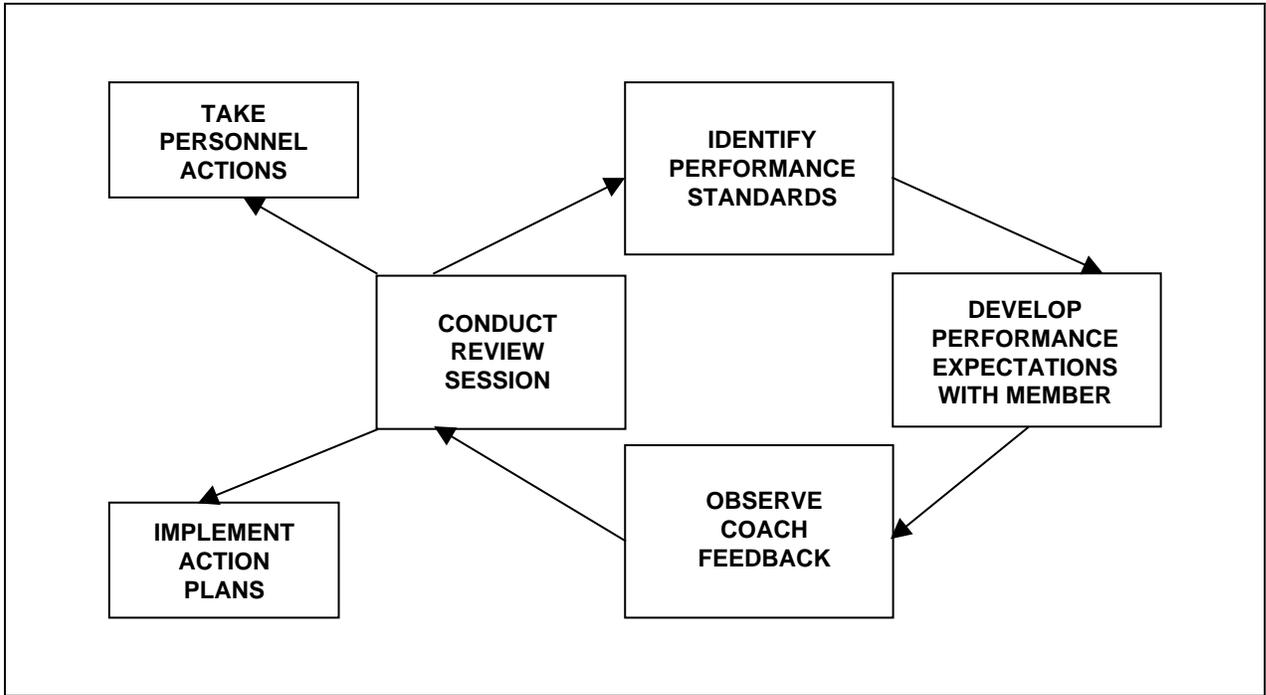
## Problems Affecting the Performance Appraisal Process

While performance appraisal processes differ, a number of common problems can diminish a system's effectiveness. Some of the most typical:

- **Misunderstanding the purpose of the appraisal.**
- **Using a form that does not meet the needs of the appraisal.**
- **The difficulties involved in measuring EMS members' performance accurately.** Performance information can, and should, be gathered from a variety of sources. An effective ride-along program is the ideal, but supervisors often do not go out on calls with members. Thus, they must rely on feedback from peers or patients, which can differ significantly from the member's perceptions of his/her performance. Please note, however, that these are valuable sources of information. If accurate, those differences may be a valuable learning experience for the member. Research shows that appraisals completed by peers (other members of equal position) are the most reliable source of performance data for two reasons:
  1. Peers have daily interaction with the member being evaluated; thus they see how the member interacts with subordinates (if applicable), the supervisor, customers/patients, Emergency Department (ED) personnel, etc. They also observe the member's performance frequently, and typically possess the technical know-how to make an accurate evaluation. Further, their ratings tend to be fair and unbiased.
  2. Obtaining ratings from a number of peers allows the ratings to be averaged, which creates a more reliable result than a rating from a single evaluator.
- **A lack of specific goals/expectations.** Effective performance appraisal must be based on clear goals known and understood by both manager and member. This problem is prevented easily when members are deeply involved throughout the process.
- **Differing perceptions of performance criteria.** Both parties must be clear as to the duties and responsibilities of the job; members should help the manager develop the performance criteria.
- **Rating errors.** These are errors in judgment that occur in a systematic manner when one individual evaluates another; the rater usually is unaware that he/she is making these errors.
  - Contrast effects. The tendency for a rater to evaluate a member relative to other members, and not on-the-job requirements.
  - First impression error. The tendency for a rater to make an initial favorable or unfavorable judgment about a member, and then ignore or distort subsequent information to support the initial impression.

- Halo effect. Making inappropriate generalizations from one aspect of a member's performance to all aspects of job performance.
- Similar-to-me effect. The tendency for a rater to judge more favorably those members more similar to him/herself.
- Central tendency error. "Playing it safe," consistently rating a member on or close to the midpoint of the scale when the member's performance clearly warrants higher or lower ratings.
- Positive and negative leniency errors. When a manager is too hard or too easy in rating members.
- **Too much emphasis placed on administrative aspects of the job**, i.e., rating on productivity (how many calls) versus the quality of the performance behaviors (clinical proficiency, decisionmaking and customer service).
- **Inadequate performance documentation.** The data used in making performance decisions must be specific and carefully documented (with dates, times, details, etc.). Documentation not only helps ensure the quality of the rating, but is invaluable during performance discussions between manager and member and in justifying demotion or termination decisions at a later time, should that become necessary.
- **One-sided performance reviews.** Ideally, the review should be an open, two-way discussion. The manager must give the member the opportunity to provide feedback. The member may need clarification, may object to some observations, and even may need to clear up misperceptions or misunderstandings. The manager should have the option to, and be willing to, change or adjust the ratings as a result of this discussion.
- **Failure to develop an improvement plan.** Goals and specific plans for improvement/future development must be set by the end of the review. These goals and progress toward them should be documented (possibly on the appraisal form/instrument), and discussed during regular meetings between the manager and member. They also should be discussed and considered when evaluating the member's progress during future reviews.

Performance appraisal is a process that requires accurate measurement and evaluation of members' behavior, and has performance enhancement as the ultimate goal. The Performance Review Model (Figure 6-4) illustrates the cyclical nature of the process. Managers do have a better option than treating performance appraisal as an "annual review," allowing frustration and conflict to develop. The EMS manager instead can view the appraisal as an ongoing cycle and the means to achieving goals--those of the organization, the manager, and the member.



**Figure 6-4**  
**Performance Review Model**

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# APPENDIX

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## **JEMS.com**

### **Column**

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#### **Stress Under Fire**

##### **Living Healthy in EMS**

Jason A. Smith  
2007 Feb 20

It's 3 a.m., and you are enduring one of the busiest nights you've seen in a long time. Enjoying the first opportunity you've had the entire shift to put your feet up and relax, you hope to coast through the rest of your 12-hour rotation. Your eyes get heavy and you slowly begin to slump further and further into your chair as you simultaneously and desperately try to decompress from tonight's proverbial bends. A feeling of unsettled anxiety sets in that gradually feels more like a wet blanket that makes it difficult for you to get comfortable.

Suddenly, the inevitable happens and the emergency tones blare from your radio like a bullhorn straight into your eardrum. Your body is instantly catapulted into a "fight or flight" response, and your sympathetic nervous system fires into action. Your heart and respiratory rate instantly skyrocket. Your bronchioles dilate to give you better O<sub>2</sub> exchange in the lungs, pupils dilate allowing more light to enter, muscles tense up as blood is being drawn away from less useful areas of your body and for an instant, it felt like your stomach was turned inside out. The hypothalamus gland goes to work immediately by coordinating the necessary nerve cell, firing sequences as well as the catecholamine release of epinephrine, nor-epinephrine and dopamine into the brain required to bring pull you into high alert.

What you have just experienced only takes a fraction of a second while your body initiates nearly 1,400 various physiological responses. Like it or not, these natural defense mechanisms against stress and danger will happen with or without your consent. You rely on this response in times of life or death, and you will need it the next time your patient crashes. You thrive on it in times of emergency when the outcomes of quick thinking and split second decisions are decided by how you respond under acute stress. Without question, the human body has an amazing way of dealing with all of this without a single voluntary action. Also called eustress (good stress), it allows you to wake up, think and triage your next move when you may otherwise tend to draw a blank in the face of crisis. This response also allows you to manage and even eliminate certain autonomic reactions that you feel are unnecessary for the task at hand. If you allowed yourself to completely succumb to all of its effects, you might find yourself emptying your bladder and unable to move.

In the business we have chosen, there a few "givens" that we have simply just come to terms with:

1. We eat when we can, not when we want;
2. Back pain is a bad thing; and
3. We will experience some form of stress today, tomorrow and most likely forever.

The good news is you have a choice with how to manage these three issues. For the sake of this article, we'll examine No. 3 by pointing out some of the biggest factors that stress contributes to the daily life of an EMS provider, the possible outcomes of subjecting your body to this kind of physiological pounding day after day and how it is directly related to the unique nature of our job.

When your body initiates a "fight or flight" response, you may be overcome with sensations that mimic superhuman abilities. You hear stories about people who are given the strength to lift an entire car off someone who's trapped or others who are able to fight off an attacker twice their size because they are certain that their lives are in danger. The chemicals emitted in the body of those individuals are the same ones that infiltrate your body when you are brought to the sudden attention of a critical situation.

While the acute symptoms are more easily noticed, chronic stress remains the most difficult to identify, since its symptoms tend to be more subtle and gradual. The medical consensus seems to be that this doesn't come without consequence if left completely unchecked over time. I am talking about heart disease and chronic sleep deprivation. That's why learning how to take some sort of control over the symptoms can be beneficial. Not only will it improve your psychological and physical well-being, but it will become crucial if you want to ensure any kind of longevity in this business.

### **Heart Disease**

You hear a lot about the three high-profile contributors that precipitate heart disease: poor diet, lack of exercise and smoking. But one that isn't talked about that much is stress. Why is that? Well we all experience some sort of stress from day to day, be it money matters, family issues, etc. But according to the American College of Occupational and Environmental Medicine, there is evidence that the daily seesaw-like stress delivered to the body of the EMS worker has a higher potential for heart attack or stroke, due to an activation of fibrinogen in plasma, which induces blood clotting. This is the first real scientific indication suggesting that stress increases the risk of a myocardial infarction.

Another major factor is the hormone cortisol, which is secreted by the adrenal gland and mainly used to help turn food into energy under stress. Like most things in life, this is only good in small, short doses, and cortisol is meant to be a short-term acute stress manager. Prolonged amounts of time under acute stress will also prolong the amount of time cortisol stays in the body outside of its intended purpose. Over time, this can lead to weight gain, hypertension and heart disease.

### **Sleep Deprivation**

After a long day, you may find yourself lying in bed unable to disconnect from the events of the day. You have bills on the table that need to be paid. You haven't spent a quality night with your spouse in two weeks. The lawn needs to be mowed. You ask yourself, will you have enough money to pay for a desperately needed vacation? Not to mention that the screams of a 7-year-old girl with third degree burns on her hands still echo through your head. You will be lucky to get four hours of sleep tonight before your next shift, where it all starts over again. Sometimes, the ability to just snap out of it and go to sleep at the end of the day seems impossible. You are not alone. Chronic sleep deprivation has been shown to have a profound effect on some very key areas that EMS providers count on to do their job effectively, such as decreased alertness, cognitive and memory impairment and even injury.

### **Tips for Managing Stress**

**Talk to co-workers:** There may always be support figures in your life like family, friends or a spouse that will be there for you, but there are few that will understand your difficulties at work like a fellow employee. Find one that you trust, and ask them if you can confide in them.

Chances are you will find that you're not alone.

**Breathing:** The average adult human takes approximately 23,000 breaths in a single day. If you stop to concentrate on just a few of them during a stressful situation, you help to lower your blood pressure, heart rate and potentially the risk of an acute heart attack. It sounds strange, but hey, no one will ever have to know what you're doing. Remember, you're no good to the patient if you're worse off than they are. Stop and take some deep breaths—in through the nose and out through the mouth ... just like you tell your patients. Each repetition should take about eight seconds. It will help to relax your vascular system and divert O to areas that need it most, like your brain.

**Sleep habits:** Stress is one of the most universally recognized prohibitor of sleep. There are of course medications available for those with severe sleep disorders, and only a doctor can tell you if it's right for you. However, I will tell you what I have done to help with this dilemma, and maybe you will find some help with it, too.

When you're lying in bed trying to fall asleep, there seems to be what can only be described as a radio that constantly changes stations. Those stations are your stressors, and they won't let you sleep without first being heard.

First, try something that creates ambient noise like a sound or some classical music from your alarm clock/radio. Turn it on low, so it does not to disturb you after you fall asleep. By doing this, it should concentrate a large portion of your focus to that noise, but not too much to prevent you from falling asleep. Think of your body as a lead weight, and focus your attention on relaxing every muscle in your body from head to toe. Any deviation from thinking about stress in your life could be a step closer to falling asleep.

**Exercise:** I know, "exercise is recommended for everything," but hear me out. Imagine there was a pill that gave you tons of natural energy, a stronger heart, better metabolism, longer life and even helped you sleep by reducing your overall stress level. The only way it would work is if that pill got you off the couch and onto a treadmill. There are few things that could be more beneficial to you than 30 minutes of exercise a day, and its effects tend to reciprocate to other areas of well-being. That makes it a one-task option for a multiple of potential problems.

Since there is no telling what a new day will bring us, we need to come to work physically and mentally prepared for the worst everyday. We don't get to start the shift with an agenda, except that of what we need to do when the moment comes. For this reason, EMS will simultaneously remain one of high respect and high demand for our public. It's also yet another reason why caring for our patients must parallel caring for ourselves.

**Reviewed by:** Dr. Bradley Barth Medical Director/ER Physician for St. Joseph's hospital, St. Paul, MN.

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## **User Comments**

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*MGMA Connexion, Vol. 4, Issue 9, October 2004*

**Know-How: Expanding knowledge for practice administrators**

## **360-degree feedback systems**

### **Development and effectiveness**

*By Stephanie D. Saucier, MBA, CMPE, CTT+, RHE, MGMA member, Atlanta, [carlsons@mindspring.com](mailto:carlsons@mindspring.com)*

Organizations in a variety of settings use 360-degree feedback to gather information about employees' performance. This method, also known as multisource, multirater or full-circle feedback, is in place in almost all Fortune 100 companies, including Cigna, Aetna, Prudential Insurance and Johnson & Johnson.<sup>1,2</sup> Although often used as a developmental exercise, 360-degree feedback has also been adapted for performance review and appraisals, training and development planning.

Until the 20th century, the "all-knowing" supervisor or manager performed employee assessment. A top-down appraisal process best served the authoritarian workplace.<sup>2</sup> But today the manager is not necessarily the best source of information about employee performance.

The general premise behind 360-degree feedback is that employees work with a wide variety of people, and a single manager cannot accurately assess a person's contribution. A valid evaluation requires observations by others, both internal and external, who interact with the employee. In 360-degree feedback, employees usually evaluate themselves, as well.

Anecdotal evidence suggests that employees generally appreciate the 360-degree feedback system. They value input from peers, vendors, co-workers, subordinates, customers and others who know their work. Furthermore, they benefit from participating in their own review process.

#### **Development**

Introduce a 360-degree feedback program as tool for individual development and growth. Start with one department or small division. Don't institute it merely for the sake of

trying something new but to change corporate culture, enhance the performance management system or other legitimate reasons. Train everyone involved on issues such as confidentiality and data quality. Managers must buy into the concept and communicate their commitment to employees. Follow feedback with one-on-one meetings and an action plan for an individual's improvement.

In 2002, [www.centerpointssystem.com](http://www.centerpointssystem.com)<sup>3</sup> identified the following questions for inclusion in a 360-degree feedback evaluation. Remember, each situation warrants individualized surveys to best meet the organization's needs.

- Is employee X responsive to employee needs?
- Is employee X committed to the growth of other employees?
- Does employee X demonstrate a thorough knowledge and understanding of details related to his/her area of responsibility?
- Does employee X demonstrate commitment to personal productivity and work quality?
- Is employee X receptive to suggestions for changing or improving the way work is accomplished?
- What do you like best about employee X?
- Does employee X communicate honestly and constructively?
- Does employee X treat employees with fairness, respect and integrity?
- Does employee X deliver work/projects on time and on budget?
- Is employee self-reliant, requiring little or no supervision?

### **Follow-up**

After implementing the program, conduct proper follow-up. [href="#1"](#)<sup>4</sup> leaders must determine what they hope to accomplish, considering business needs and objectives. They can create a survey to administer to a pilot group, followed by a larger group, and analyze the data.

Ask respondents:

Was the 360-degree feedback you received positive, negative or neutral?

- Compared to your direct reports, were your ratings higher, lower or about the same?
- Was the feedback you received unexpected or expected?
- What was the degree of agreement among the feedback statements you received (high, moderate or low)?
- Did the feedback you received increase your motivation and willingness to change specific behaviors?
- Did the feedback in which you participated increase the trust, cooperation and communication between you and your supervisor?
- Overall, do you support the 360-assessment and feedback process?

### Downsides

Potential risks and hurdles accompany 360-degree performance reviews, however:

- Employees may “gang up” on each other to give someone a poor review;
- An organization must create different surveys for different types or levels of employees, making 360-degree feedback labor-intensive;
- Managers need thorough training in the process and in follow-up, and must train their employees;
- The organization must establish trust among its workers, or employees will have little motivation to support this type of program; and
- Follow-up evaluation is imperative for the program to be worthwhile.

Most employees cite the face-to-face conversations with their supervisors as the most valuable part of the 360-degree feedback program.<sup>5</sup> Managers should celebrate achievements as much as strive to improve performance. This technique often leads to better communication within the organization and a culture that values development and growth.

### Alternatives

Although I believe that the 360-degree feedback model is one of the most effective, many other choices are available. Self-appraisals have recently gained support, as have rated scales and outcome measurement instruments. Some employers use systems similar to school grading scales (i.e., A, B, C, etc.). Each organization should make a genuine assessment of its needs and desired outcomes and to choose the most suitable method.

The 360-degree feedback model can help enhance workplace performance, communication and training. Employees report increased satisfaction with the appraisal process. However, an organization must provide proper training, execution and follow-up for any program of this type.

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# **MODULE 7: MANAGEMENT OF SYSTEM RESOURCES**

## **TERMINAL OBJECTIVE**

*The students will be able to effectively manage system resources as a first-line EMS manager.*

## **ENABLING OBJECTIVES**

*The students will:*

- 1. Differentiate between the types of vehicle/equipment maintenance (corrective and preventive).*
  - 2. Compare and contrast capital versus noncapital equipment/expenditures.*
  - 3. Use an accepted method to develop a justification for a capital equipment purchase.*
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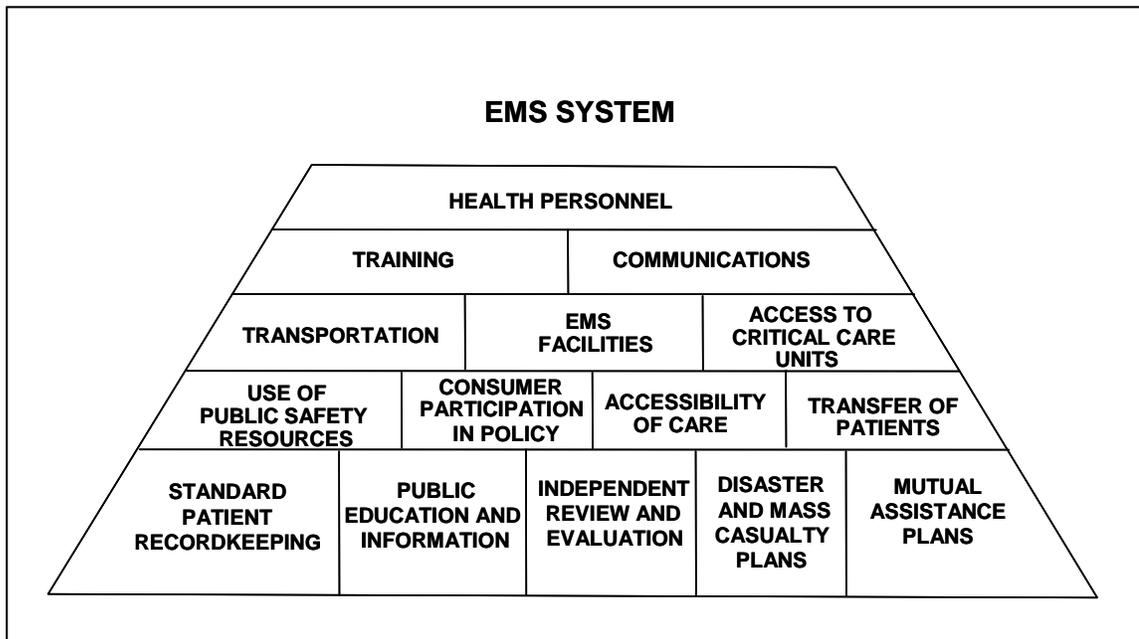
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**MANAGEMENT OF SYSTEM RESOURCES**

**First-Line EMS Systems Management**

Currently, there is no national standard that defines requirements for an EMS system; therefore, no two are exactly alike. The American Society for Testing and Materials (ASTM) provides a basic standard for EMS system participants: *Guide for Structures and Responsibilities of EMS Systems Organizations* (ASTM Standard F 1086). System coordination is vested in State EMS offices as lead agencies, with authority for the integration of system components and facilities. State agencies are responsible for enforcing EMS laws and regulations, often through units of local government, nonprofit organizations, or divisions of State agencies. ASTM standards assist the lead agencies in managing/coordinating interagency relationships and standardization. ASTM standards assist local administrators in making equipment procurement decisions and establishing operating procedures.

Each EMS system must adapt to meet local needs. However, EMS systems should provide the generally acceptable components. The 15 blocks shown in Figure 7-1 represent the foundation of an EMS system as required by the EMS Systems Act of 1973.



**Figure 7-1  
Standard Requirements of an EMS System**

The authority for EMS activities is derived from State laws or executive orders, and may be defined further by local statutes. Regulatory authority includes certification/decertification of EMS personnel other than physicians/nurses. Most States require an EMS system to operate under a local medical director. The medical director recommends certification for EMS providers and provides his/her licensure as additional authorization to practice (also called delegated practice). Although State organizations provide a system master plan, each local agency must develop a system plan to meet local needs within the guidelines of the State master plan. Some general areas that are addressed in setting system standards:

- **Type of response.** Depends upon resources available. Most systems use either all advanced life support (ALS) or a tiered response. All providers must be designated as to their capability. Dispatch protocols specify the appropriate responders for each type of call. Tiered response requires availability of ALS within a reasonable amount of time and a communication link between first-response basic life support (BLS) and ALS intercept. If multiple transport (ALS/BLS, air/ground) is available, decisions must be made on patient needs and the best available medical facility for transport. ALS intercept and tiered response extend EMS when care is required beyond the scope of first response or an emergency medical technician (EMT).
- **Response times.** The first need of EMS is a rapid first response using any available responder. The placement of provider vehicles is a concern before and between responses. System Status Management (SSM) and Peak Load Scheduling (PLS) are two examples of management tools for enhancing system response capability. SSM monitors a system's response capability between calls to determine the best response for the next call. PLS uses response data (incidents, time, and location) as a determinate for flexible scheduling and deployment of units. Mutual-aid agreements and coordinated system response are other management tools. A system manager or supervisor needs valid data to establish staffing and resource patterns.
- **Level of response.** First responders are members who arrive at an EMS scene before any transport units and begin the process of patient stabilization. The availability of ALS first response permits early invasive care under direct/indirect medical control. ALS first response is considered an extension of hospital emergency department care and requires the availability of EMT-P or EMT-D (physician extenders). Prolonged ALS treatment of trauma patients remains a controversial issue, especially if a trauma center is available. Activities that affect patient care must be under the control of the system medical director. Triage protocols must be written and promulgated by the medical director to cover specific circumstances. On calls where a patient refuses treatment/transport, EMS members must either ensure that the patient understands the consequences of his/her decision or request an online medical control decision. If a prehospital provider makes an independent decision, without medical direction or protocol authority, not to transport, and a legal issue is raised as a result of that decision, the EMS provider may not be covered by EMS protective legislation.

- **Communications.** The communications plan must be fully coordinated/integrated with other public service providers. The plan must define minimum communications equipment on EMS response/transport vehicles and establish communications protocols.
- **Dispatch.** Dispatch should be accomplished through a coordinated communications center handling all public service providers (fire/police/EMS). A center maximizes coordination and use of resources. The EMS agency should establish emergency medical dispatch (EMD) policy to respond to a request, via 9-1-1 or a well-published emergency number, for EMS response. EMD policy should include prioritization of calls, level of response, and providing callers with postdispatch first-aid instructions.

Prioritization of calls requires an EMS-trained dispatcher and an approved algorithm for questioning the caller, to determine the best response. A trained dispatcher also may obtain information regarding the patient and emergency scene that will have an impact on responder health and safety. From the information received, a trained dispatcher also may determine if responders should be sent in the emergency mode.

If EMD is not under EMS system control, a medical director must establish training requirements and certification of dispatchers to handle EMS calls. A trained dispatcher can work with a caller to help establish a calmer, safer situation for EMS members when they arrive. In addition, putting the dispatcher on the EMS team establishes a collegial relationship and encourages the dispatcher to provide responders with a maximum of information concerning their runs. However, exercise care if an EMS dispatcher is directed to screen calls and possibly decide to provide no EMS response. A decision by the dispatcher not to respond may lead to legal consequences.

### **First-Line Management Data Requirements**

Providing an effective, coordinated, quality prehospital emergency health-care response is the mission of all EMS systems. First-line managers are the key managers within an EMS system responsible for mission accomplishment. This requires that managers have access to relevant data in order to determine the efficacy of the system. These data come from a variety of sources.

- **Dispatch information.** Comparing patient information given at dispatch with what is found on arrival can supply you with information to determine the need for changing the dispatch questions, public education programs, or provider training. Dispatch and arrival times are critical for determining unit placement or need for additional units.
- **Provider information.** Several types of data related to providers are necessary to coordinate the system effectively. Information regarding skills proficiency is necessary to determine the need for additional training. A great deal of information is available on benchmarking performance to establish acceptable proficiency standards. Information regarding provider injury is relevant to determine the need for additional training or modification of equipment. Provider driving records are another source for assessing safety practices and the need for additional training.

- **Equipment/Vehicle records.** Tracking both scheduled and unscheduled maintenance provides data to determine a routine replacement schedule as well as the justification for changing vendors.

## EQUIPMENT MANAGEMENT

### Planned Maintenance

In today's climate of tight budgets and limited resources, it is absolutely imperative that EMS system managers take positive steps to keep their vehicles and equipment online. This is especially true for small- and medium-sized services. Faulty or poor equipment and vehicle maintenance can be an EMS system manager's major exposure to liability through contributory negligence. A quality maintenance program supported by user involvement and awareness is the key to success, and money is the bottom line. Although planned maintenance programs can save thousands of dollars per year, they have not been implemented universally. However, there is a downside to this proposition when system and maintenance managers fail to take into account the useful service life of vehicles and equipment. Extending the useful service life of equipment or vehicles beyond established standards may lead to failure of a piece of equipment during critical patient care, or an inability to respond to a situation. Legal liability in either situation may be much more costly than the prudent replacement of the equipment or vehicle. To get a handle on the problem, someone needs to have responsibility for both preventive and corrective maintenance for a system's equipment and vehicles. To make the system work, each member must be involved as part of a team maintenance effort to prevent or uncover and report problems. Unless problems are reported, they cannot be corrected before failures occur. EMS managers must insist that EMS members be accountable for vehicle and equipment maintenance documentation, and managers must be accountable to review maintenance records for compliance with requirements and schedules.

**Preventive maintenance.** The objective of a preventive maintenance (PM) program is to prevent a malfunction or failure, not just to correct it after it occurs. Equipment and vehicle manufacturers normally provide routine maintenance and inspection recommendations for their products. These recommendations should be used by an EMS maintenance manager as the basis for developing the system's routine maintenance requirements and PM schedule. Individual team members should be accountable for performing and documenting routine inspections, cleaning, and maintenance using standardized checklists as part of regular shift changes. Using a standardized checklist makes the task easier and helps to avoid overlooking any requirements. Relying on individuals to take responsibility is essential to maintaining equipment and vehicles. An extensive PM schedule permits EMS managers to plan for equipment and vehicle downtime, ensures equipment and vehicles receive more detailed inspections and maintenance procedures, and ensures equipment and vehicle warranties remain in force. An extensive PM schedule also facilitates coordination between operational managers and fleet maintenance managers. In the case of vehicles, a manager must be aware of the number of hours the vehicle has been in service, as well as the number of miles traveled since the last service period. Allowing a vehicle to idle for any length of time is extremely hard on its engine, especially a diesel engine.

Excessive idle time may be detected when reviewing vehicle records if recorded engine hours increase disproportionately to the vehicle time/distance usage data.

**Corrective maintenance.** A corrective maintenance program depends upon each user identifying specific problems and reporting them to the maintenance manager. A simple standardized format should be used to identify the equipment or vehicle and the specific problem, including as many details as possible that might aid in accomplishing the corrective action. Managers need to review vehicle and equipment incident reports to detect trends that might indicate serious maintenance deficiencies or poor operator practices. After corrective action is taken, the results must be documented in order to compile the equipment and vehicle maintenance repair history and to record the costs incurred. A well-documented record of repairs/costs is an invaluable indicator when it comes time to make cost-effective decisions regarding replacement of the equipment/vehicle.

### **Feedback**

Feedback should be provided through the system to indicate to all concerned what the actual problem was, the corrective action taken, any indicators that might point out future problems, and any recommendations to be incorporated into the system PM program. In addition, maintenance should be a regular topic for discussion at staff meetings, training sessions, or safety meetings. Involving everyone in regular discussions extends the "team concept" and makes it easier to keep everyone informed and involved.

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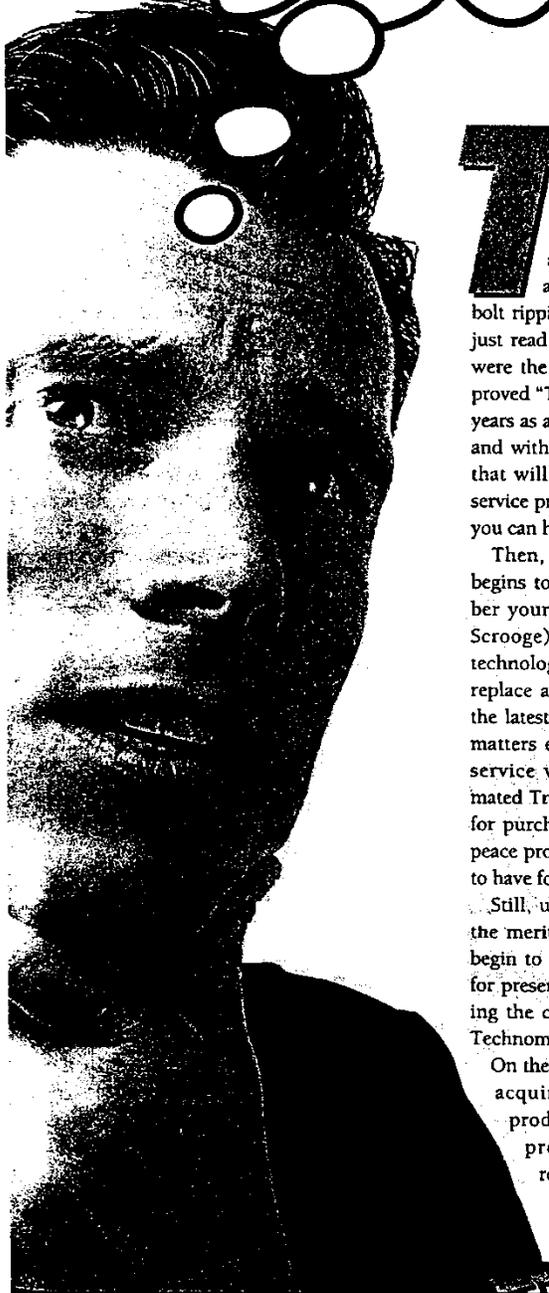
# APPENDIX

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# How to Influence Purchasing Decisions

By Matt Zavadsky, EMT-P

Reprinted with permission of Jems, Journal of Emergency Medical Services. Zavadsky, M. (1995). How to Influence Purchasing Decisions. JEMS; 20(9):39.



## This is it!

It's like a light bulb flashing above your head (or more appropriately, like a lightning bolt ripping through your brain)! You just read the *JEMS* Buyer's Guide and were the first to see the new and improved "Technomedic." In all your vast years as a street provider, this is clearly and without a doubt the one product that will revolutionize the way your service provides care. You're so excited you can hardly contain yourself.

Then, just as the clap of thunder begins to fade, you suddenly remember your agency president (aka Mr. Scrooge). Yes, it's true, the last big technologic advance he made was to replace all the federal 'Q' sirens with the latest electronic version. To make matters even worse, ever since your service was purchased by Amalgamated Transport, the approval process for purchases makes the Middle East peace process seem like deciding what to have for lunch.

Still, undaunted and convinced of the merits of the Technomedic, you begin to ponder the correct approach for presenting your idea and influencing the company's decision to buy a Technomedic for each unit.

On the surface, making a decision to acquire the latest revolutionary product may seem like an easy process. But so many EMS-related products on the market can produce sweaty palms on

even the most confident chief executive officer (CEO). In many ways, it is similar to the proliferation of computer software. However, never underestimate the influence you, as a field provider, can have on purchasing decisions. With careful planning and skillful presentation, miracles do happen.

In fact, any effective CEO will seek the guidance and input of field providers prior to making a purchasing decision that will affect the care delivered in the street. Jerry Overton, executive director of the Richmond (Va.) Ambulance Authority, explains that provider input is paramount in the decision-making process.

"From the smallest piece of EMS equipment to developing bid specifications for the ambulance fleet, the people using the equipment need to be intimately involved in the purchasing decision," he maintains. "The provider-agency relationship needs to be a true partnership."

Obviously, some buying decisions are easier than others. For example, choosing a 4 x 4 vendor is much different than choosing an ambulance manufacturer. However, purchasing decisions have an operational and fiscal impact on the organization. It's because of this that provider input is crucial to both. Knowing the basics of making these decisions will help you prepare a presentation or make a sound recommendation.

TOM PAGE

SEPTEMBER 1995 JEMS

**Five Keys to Unlocking the Treasure Chest**

When considering any change within an organization, including the purchase of new technology, the buyer must consider five key elements of change<sup>1</sup>:

**1** **Is there a theoretical basis for the change?**  
It's true that change for the sake of change doesn't usually benefit anyone. Before recommending the Technomedic, try to make sure it will provide a true benefit to your patients, the providers or the system as a whole. While we never can be absolutely sure that perceived benefits will be fully realized, objectivity and careful evaluation will help prevent frivolous purchases. In a similar

fashion, the product or service must meet a specific need.

In some cases, the ability of a product or vendor to meet the need is more important than the actual cost involved in the purchase. As Vince Mejer, purchasing agent for the city of Lincoln, Neb., explains, "The person making the recommendation for a product needs to

clearly define why this particular product needs to be purchased. Mowing a golf course is pretty standard stuff; it's not enough to say that 'the current lawn mower turns on a quarter, but the new one turns on a dime.' There has to be a specific need answered or a problem solved by the purchase."

PETER R. ESCOBEDO

JEMS SEPTEMBER 1995

**2** **Is there solid, human scientific research available to support the change?**

Consider the current thoughts on the pneumatic antishock garment (PASG). When first introduced, it seemed clear to all that this device would revolutionize trauma care. However, several scientific studies have been conducted and published, which demonstrate that perhaps the PASG does not have the positive effect initially believed (see "Pneumatic Antishock Garments: Are the Benefits Overinflated?" November 1994 JEMS). True, future clinical research trials may bring into question many devices and procedures we now use, but providing clinical research data as a routine part of any purchasing decision may help prove the device's clinical efficacy.

**3** **Is the proposed change clinically important?**

It's universally accepted that determining the patient's oxygen saturation is an extremely helpful diagnostic tool. Knowing his or her

mining any purchasing decision. When preparing your case for the Technomedic, it would be prudent to seek the advice and support of your medical director.

**4** **Is it practical, teachable, affordable and safe?**

This step seems simple enough, right? But as a field provider making a buying recommendation, you need to be ready to answer each of these elements.

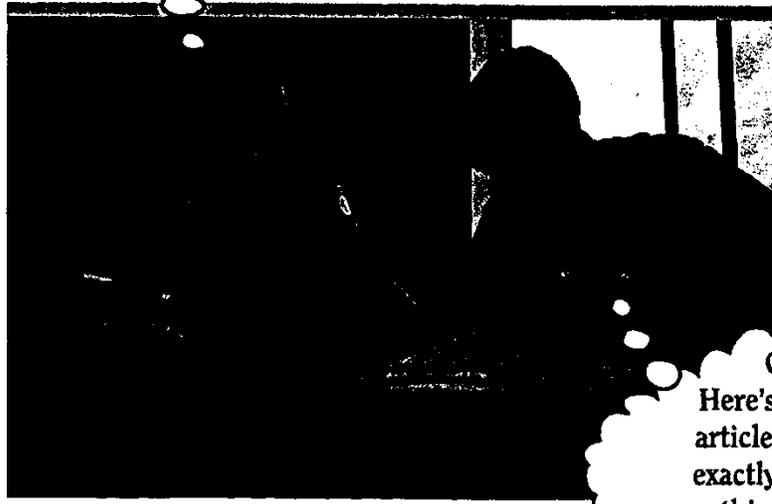
First, *practicality*. Here's an example of a current scenario in my system. The local fire department has been providing first response services at the EMT-defibrillation level and for the past several years has administered the defibrillation skill manually with LifePak 5s. Needless to say, several difficulties have arisen recently with the manual approach to defibrillation, not the least of which is the limited availability of parts to repair a crucial component of the hardware. Add to that the stringent requirements for monthly recertification. Consequently, the time has come for the fire department to replace all 15 of its manual defibrillators (no small purchase).

The simplicity of semiautomatic defibrillators makes them an attractive purchase, but choosing which defibrillator to purchase requires careful,

Great!  
Here's a research article that shows exactly how much this will help.

initial pulmonary wedge pressure might be nice, but there is currently nothing we can do with the information. Therefore, does it make sense to add this invasive monitoring device to your cadre of diagnostic tools? Probably not. While this is a rather dramatic example, the fact is clinical significance plays a major role in deter-

practical analysis. One significant factor is the compatibility of the hardware with the ambulance service, which has just purchased several LifePak 10s. It would be desirable to use the same defibrillator pads



This will definitely have a positive impact on patient care.

Wow! That's had some great reviews and it's not too expensive.



applied by the first responders for applying the LifePak 10. Therefore, purchasing semiautomatic defibrillators that are not capable of this compatibility would not be practical.

Taking this a step further, obviously, semiautomatic defibrillation is *teachable* and, in fact, easier to teach than manual defibrillation.

*Affordability* is a comparative issue each agency needs to evaluate individually. The decision process essentially consists of two steps. First, is the technology itself affordable? In some cases, the technologic advance may be designed to save money in the long run. If so, how long it takes to pay for itself (the payoff) becomes the important determiner. Second, of the models available, which produces the desired results at the lowest overall cost? (*Heavy on the overall!*)

"When considering the purchase of a new piece of equipment, it is important to compare vendors for the most competitive pricing," explains Kurt Krumpertman, general manager of Eastern Paramedics in Syracuse, NY. "In addition to the actual price, we look to the field providers to evaluate overall performance, reliability, added clinical value and user-friendliness of the product."

The initial price is only one of the costs involved in the purchase. In cases of sophisticated equipment, necessary support materials and ease of maintenance will be important factors to evaluate.

And don't forget to check out the product's *safety* record. If it isn't safe, it isn't worth looking into further.

**It's Time to Make Your Pitch**  
OK, so you've taken all the necessary steps as outlined. You have clinical research trials provided by the manufacturer. You have the anticipated cost breakdowns. And you've prepared a cost/benefit analysis, compared pricing of several Technomedic vendors

**5** **Who else has used it?**  
So far, so good. You've gathered volumes of information on the product, and you are ready for the next step—*references*. There's an old adage that you never buy a car in the first model year; let someone else 'test it out' and determine if any design changes are needed. In the same manner, ask the vendor to supply you with a list of other agencies and contact people who are using the Technomedic so you can call them and find out how they like it. If the vendor can't supply a list, there's probably a good reason for it—the same reason you don't want to pursue the purchase!

When checking references, develop a written list of standardized questions. For example:

- How long have you been using the product?
- Why use the Technomedic as opposed to the Star-O-Medic?
- Has the product lived up to your expectations?
- What has been the greatest benefit?
- What has been the worst detriment?
- Would you make the same purchase again?
- How would you rate the vendor's service after the purchase?

and have a list of positive reference responses. Now you need to develop a plan to present your case to management.

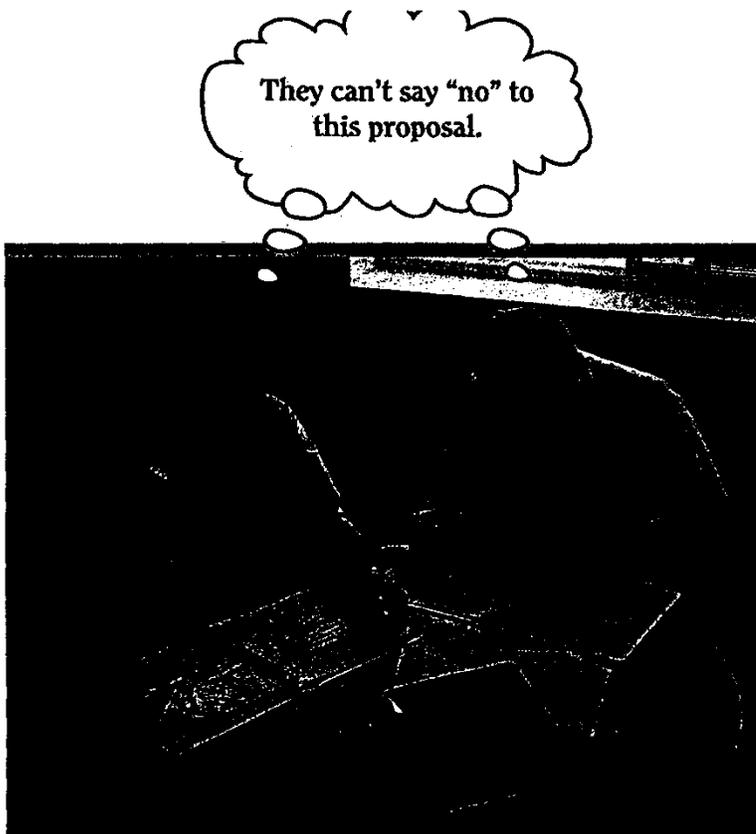
Savvy field providers know the best way to get orders approved for a desired field treatment modality is to:

- Clearly and concisely describe the patient's *clinical presentation*.
- Relate the *pertinent medical history*.
- Indicate the *need for treatment*.
- State your *planned course of action*.

Then, you always state that you'll re-evaluate the patient's status after treatment, and give a follow-up report. This way, it is easier for the base physician to make the decision to approve your recommended course of action instead of developing one on his or her own. In many ways, making a purchasing recommendation is the same.

Develop a written "infomercial" on the product, and include it in a written proposal. The proposal packet should contain:

- An explanation of the problem and its current causes (*the clinical presentation*)
- A description of the device, including all supporting documentation, research and potential costs (*the medical history*)
- A summary of why the problem is



They can't say "no" to this proposal.

important to the agency and/or the patient (*the need for treatment*)

- An explanation of why you believe the product will solve the problem (*the treatment requested*)
- A plan to implement the product, including field testing, evaluation, testing and phase-in (*the follow-up report*)

This last section may be the most important. Always recommend a field test of any planned innovation. Select a time period, sample protocols, forms for standardized evaluation and a follow-up meeting with everyone who tested the product, ask them for feedback and suggestions. Most vendors will agree to participate in a test period to facilitate this evaluation. (In Lincoln, we have field tested four different semiautomatic defibrillators in three separate fire stations over the course of four months.)

Once you've assembled all the information you've gathered, prepare it in a logical, well-organized written format. Request to meet with the person in your agency responsible for making purchasing decisions, and present your plan. It helps

to deliver your written proposal to the manager a few days before the meeting to avoid spending precious meeting time reading the proposal.

In your preparation, try to anticipate all the possible, relevant questions, and remember that the final question you may be asked is "What is *your* recommendation?" Because you prepared well, you should encourage questions, and offer sound answers. If you don't know the answer to a specific question, offer to do the research to find out. Assumptions are dangerous in this situation and could have a very negative effect on your future credibility.

Don't become discouraged by an "I'll have to get back to you" or "Let me think about it" response to your proposal. It actually may be the truth! In small agencies, decisions may be relatively easy. However, larger purchases may require a board approval or a revision in the budgeting process. One tactic to help prevent your proposal from getting lost in the shuffle is to ask the manager when a good time would be for you to follow up on it. If the manager is really efficient, he or she

will give you a date, so you can recheck the status of your proposal. If you work for a large agency, the manager may ask you to attend a meeting of the board or similar governing body to present your plan. If so, jump at the opportunity—this is how careers are launched!

It's best to realize that doing your homework and developing a sound proposal and implementation plan do not mean your recommendation will be adopted. There are many reasons an agency may not be willing or able to make a particular purchase. Again, don't be discouraged. Instead, think how easy it will be to make your next recommendation.

### Oh My Gosh! They Said Yes!

If your plan is adopted, now comes the hard part—implementation. This phase will be a lot of fun, and your preparation will truly pay off. Be sure to stick to the evaluation process and provide timely feedback to those who made the purchasing decision. If the results are favorable, you'll experience a great deal of personal satisfaction. However, if the results are not favorable, report these findings as quickly as possible. Management will sincerely appreciate your feedback and take any necessary corrective action (maybe even a course of action you recommend).

You can significantly influence purchasing decisions, but to do so, you have to wear the manager's shoes. Going through the process is a valuable learning experience for you and will have a positive impact on the care your agency delivers or the way it operates. Don't be afraid, just go for it—the Technomic probably is the best EMS discovery since the color orange! □

### Reference

1. American Ambulance Association. *Contracting for Emergency Medical Services*. Sacramento, Calif.: American Ambulance Association, 1994.

**Former general manager of Ace Ambulance in Fairfield, Conn., Matt Zavadsky is currently the executive director of Emergency Medical Services Inc., the EMS oversight agency for Lincoln, Neb. He has been a paramedic and EMS instructor for 12 years.**

PETER R. ESCOBEDO

# **MODULE 8: EXTERNAL PARTNERSHIPS, INTERFACES, AND INFLUENCES**

## **TERMINAL OBJECTIVE**

*The students will be able to interact with external entities to ensure regulatory compliance and continuity of care.*

## **ENABLING OBJECTIVES**

*The students will:*

- 1. Discuss the integration of the NIMS and the ICS into EMS practice.*
  - 2. Discuss the impact of other agency rules/regulations/standards on EMS training.*
  - 3. Identify issues relating to EMS system interface with medical control.*
  - 4. Describe the responsibilities of the EMS medical director.*
  - 5. Discuss the major issues related to system funding, billing, and reimbursement.*
  - 6. Determine issues involved with public/community relations.*
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## NATIONAL INCIDENT MANAGEMENT SYSTEM

As required by the Department of Homeland Security (DHS), every new and existing DHS training course will include an appropriate amount of information explaining the NIMS and the National Response Framework (NRF). For this level course, the NIMS/NRF video, along with the following information, will meet the intent and obligation for this training and education update.

NIMS is more than the ICS. The NIMS is comprised of the following six components:

1. Command and Management--NIMS incident command and management systems.
2. Preparedness--Necessary components of operational preparedness systems.
3. Resource Management/Mutual Aid--Standardized procedures for resource management processes.
4. Communications and Information Management--Establishing common operating framework, accessibility, and interoperability.
5. Supporting Technologies--Research and development; technology supporting interoperability and compatibility.
6. Ongoing NIMS Management and Maintenance--NIMS Integration Center.

Command and Management envisions the most familiar (and easily implemented) part of NIMS--the ICS. Organizations must, as a condition of Federal preparedness assistance, take steps to begin institutionalizing the use of ICS during prevention and response efforts. Actions to institutionalize the use of ICS take place at two levels--policy and organizational/operational.

- At the policy level, institutionalizing the ICS means government officials, i.e., governors, mayors, county and city managers, tribal leaders, and others:
  - Adopt the ICS through executive order, proclamation, or legislation for the jurisdiction; and
  - Direct that incident managers and response organizations in their jurisdictions train, exercise, and use the ICS in their response operations.
- At the organizational/operational level, evidence that incident managers and emergency response organizations are institutionalizing the ICS would include the following:
  - ICS is being integrated into functional and system-wide emergency operations policies, plans and procedures;
  - ICS training is planned or under way for responders, supervisors, and Command-level officers; and

- Responders at all levels are participating in and/or coordinating ICS-oriented exercises that involve responders from multiple disciplines and jurisdictions.

Additional information, requirements, and guidelines for fulfilling an organization's NIMS compliance can be found on the NIMS Integration Center's Web site: <http://www.fema.gov/nims/> Of particular interest to fire service organizations is NIMCAST (National Incident Management Compliance Assessment Tool)--a Web-based self-assessment system that will allow evaluation of an organization's preparedness and response capabilities against the requirements of the NIMS.

The NRF specifies how the resources of the Federal Government will work in concert with State, local, tribal governments, and the private sector in response to Incidents of National Significance. The NRF is predicated on the NIMS. Together the NRF and the NIMS provide a nationwide template for working together to prevent or respond to threats and incidents regardless of cause, size, or complexity.

Two online, self-study courses developed by the Emergency Management Institute (EMI) are available to learn more about the NIMS and the NRF:

- IS700 NIMS: An introduction to the NIMS and is a Web-based awareness-level course that explains NIMS components, concepts, and principles.
- IS800: An introduction to the NRF, including the concept of operations upon which the plan is built, roles and responsibilities of the key players, the organizational structures for NRF coordination, the field-level organizations and teams activated under the NRF, and the incident management activities addressed by the NRF. The course is designed for DHS and other Federal department/agency staff responsible for implementing the NRF, as well as State, local, and private-sector emergency management professionals.

Both of these courses, as well as other NIMS-related training, can be accessed at the National Emergency Training Center (NETC) Virtual Campus at [www.training.fema.gov](http://www.training.fema.gov)

## **NATIONAL RESPONSE FRAMEWORK (January 2008)**

The NRF presents the guiding principles that enable all response partners to prepare for and provide a unified national response to disasters and emergencies--from the smallest incident to the largest catastrophe.

This important document establishes a comprehensive, national, all-hazards approach to domestic incident response.

The Framework defines the key principles, roles, and structures that organize the way we respond as a Nation. It describes how communities, tribes, States, the Federal Government, and private-sector and nongovernmental partners apply these principles for a coordinated, effective national response. It also identifies special circumstances where the Federal Government

exercises a larger role, including incidents where Federal interests are involved, and catastrophic incidents where a State would require significant support. The Framework enables first responders, decisionmakers, and supporting entities to provide a unified national response.

### **Framework Evolution**

In recent years, our Nation has faced an unprecedented series of disasters and emergencies and, as a result, our national response structures have evolved and improved to meet these threats. The NRF reflects those improvements and replaces the former National Response Plan (NRP).

This Framework represents a natural evolution of the national response architecture. Although the NRF was originally called a plan, it was actually a framework written to guide the integration of local, tribal, State, and Federal response efforts. By adopting the term "Framework" within the title, this document is now aligned more accurately with its intended purpose.

### **Who Needs To Know About This Framework?**

The Framework is written for senior elected and appointed leaders, such as Federal department or agency heads, Governors, mayors, tribal leaders, and city or county officials--those who have a responsibility to provide an effective response to preserve the safety and welfare of the community.

At the same time, the Framework informs emergency management practitioners, explaining the operating structures and systems used routinely by first responders and emergency managers at all levels of government.

The Framework document is augmented with online access to supporting documents, further training, and an evolving resource for exchanging lessons learned.

An effective, unified national response requires layered, mutually supporting capabilities. The Framework systematically incorporates public-sector agencies at all levels, the private sector, and nongovernmental organizations (NGOs). It also emphasizes the importance of personal preparedness by individuals and households.

### **Additional Information**

The National Response Framework Resource Center provides ready access to information and tools needed for all response partners to fulfill their roles under the Framework.

## Key Documents and References

### Key Documents

- NRF delineates our Nation's response doctrine, responsibilities, and structures.
- NIMS establishes a systematic approach for managing incidents nationwide.
- ESF, Support, and Incident Annexes provide concept of operations, procedures, and structures for achieving response objectives.
- National Strategy for Homeland Security reflects the National Preparedness Guidelines, which include the National Planning Scenarios.
- Response Partner Guides provide a ready reference of key roles and actions for local, tribal, State, Federal, and private-sector response partners.

### References

- authorities and references;
- Stafford Act support overview;
- Federal-to-Federal support overview;
- task books/position descriptions;
- standard operating procedures (SOPs);
- Glossary of Terms/Acronyms; and
- additional links.

### Learning Resources

- job aids;
- training courses; and
- online videos.

Comprehensive information at [www.fema.gov/NRF](http://www.fema.gov/NRF)

## A Framework for Sharpening National Response

The NRF is a guide to how the Nation conducts all-hazards response. Guided by the input and help of many hundreds of stakeholders, the Framework represents a natural evolution of the national response architecture. Specifically, the Framework:

- reflects lessons learned and defines the core principles for managing incidents;
- broadens the focus from a purely Federal plan to one that is truly national;

- methodically describes the who, what, and how of emergency preparedness and response; and
- articulates the five key principles of response doctrine.

### **Response Doctrine: Key Principles**

- **Engaged partnership.** Leaders at all levels must communicate and actively support engaged partnerships by developing shared goals and aligning capabilities so that no one is overwhelmed in times of crisis.
- **Tiered response.** Incidents must be managed at the lowest possible jurisdictional level and supported by additional capabilities when needed.
- **Scalable, Flexible, and Adaptable Operational Capabilities.** As incidents change in size, scope, and complexity, the response must adapt to meet requirements.
- **Unity of Effort Through Unified Command.** Effective Unified Command is indispensable to response activities and requires a clear understanding of the roles and responsibilities of each participating organization.
- **Readiness To Act.** Effective response requires readiness to act balanced with an understanding of risk. From individuals, households, and communities to local, tribal, State, and Federal governments, national response depends on the instinct and ability to act.

### **National Response Framework Components**

The Framework's clear, simple writing style makes the serious work of incident management understandable for government and business executives as well as emergency management practitioners. The Framework is structured as follows:

- **Chapter 1: Roles and Responsibilities:** Sharpens the focus on who is involved with emergency management activities at the local, tribal, State, and Federal levels and with the private sector and NGOs.
- **Chapter 2: Response Actions:** Describe what we as a Nation collectively do to respond to incidents.
- **Chapter 3: Response Organization:** Explains how we as a Nation are organized to implement response actions.
- **Chapter 4: Planning:** Emphasizes the importance of planning and summarizes the elements of national planning structures.

- Chapter 5: Additional Resources: Summarizes the content and plan for the online NRF Resource Center.

## **INTERAGENCY COMMUNICATION AND COOPERATION**

Whenever one system or agency comes up against another, there is the potential for problems. These problems can range from basic interpersonal communications to more difficult interprofessional issues such as turf control, differences in procedures, differences in rank structure, or competition for funding. When interfacing with another system or agency, the goal of EMS members must be to avoid problems or adapt to the situation to achieve a cooperative working interface. Unfortunately, EMS managers generally are faced with reacting to a problem after the fact rather than having the opportunity to be proactive. For EMS providers, the key issue is to ensure delivery of the best patient care possible. While working a response, the patient is not concerned with interagency issues: he/she wants quality care and transportation.

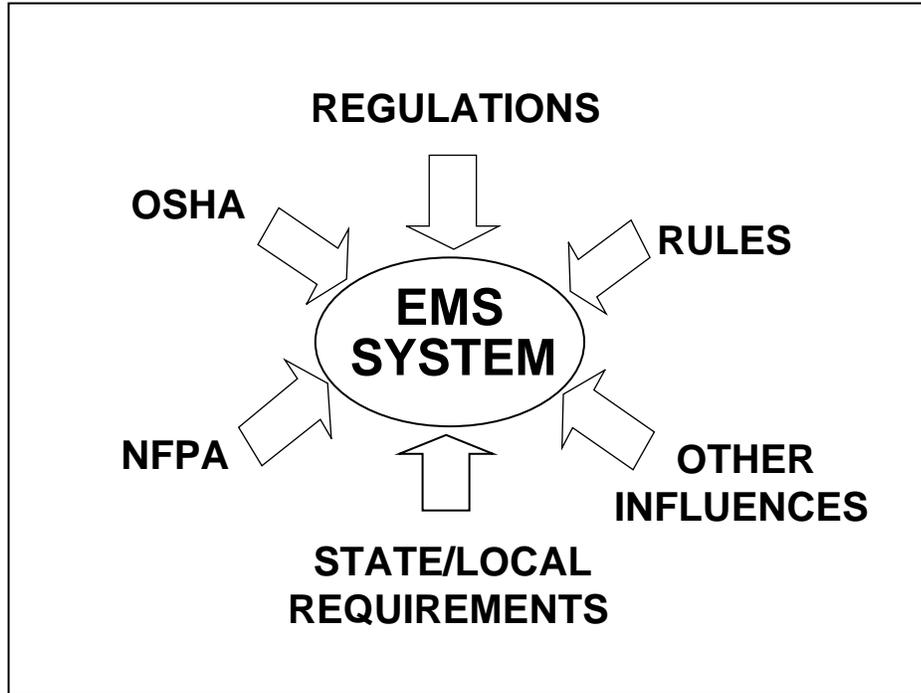
EMS managers and system decisionmakers must remain cognizant of interagency issues and factor consideration of those issues into their decisionmaking process. In addition, managers and decisionmakers must solicit input from field providers in order to avoid serious "street impact" from their decisions. This is especially important since managers may be far removed from responders where and when the "impact" of their decisions is felt.

Interagency problems can escalate quickly whenever the EMS response involves mass casualties or the scene of a major disaster. Mass casualty and disaster scenarios may involve multiple EMS agencies, as well as police and fire agencies. Preplanning for major incident command and control can reduce interagency problems significantly. Mutual aid and cooperation agreements need to be in place, and SOPs written to guide their implementation. Various ICS models are available to assist with the management of response resources at the scene of large-scale emergency operations. Both the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA) have written the requirement for establishment of an ICS into some of their regulations. The Federal Emergency Management Agency (FEMA) has taken the process a step further, combining ICS management with tactical action plans (fire/hazmat, etc.) in an Integrated Emergency Management System (IEMS). IEMS is a detailed planning tool for use when multiple agencies are involved at a disaster scene that will require a prolonged period of operations to conclude.

## **EXTERNAL AGENCIES AND SYSTEM INFLUENCES**

Every day, EMS managers are involved with rules, regulations, and other influences generated by external agencies and affecting their organization and personnel (Figure 8-1). Managers must know the extent of involvement and whether the particular agency has regulatory power over their operations. The best practice is to comply with applicable rules and regulations. If a situation arises that makes compliance difficult, the manager must work to achieve compliance or a reasonable solution to the problem. During this period, the EMS manager must be careful to document the problem and the action taken to achieve resolution. Failure to comply with

applicable rules and regulations can cause administrative nightmares, preclude effective delivery of certain health-care services, and, in extreme cases, result in litigation and/or shut down the entire EMS system. Figure 8-1 graphically demonstrates the various external influences on EMS systems.



**Figure 8-1**  
**External Pressures/Influence on EMS System**

## **Rules and Regulations**

### Occupational Safety and Health Administration/National Fire Protection Association

The OSHA, the Centers for Disease Control and Prevention (CDC), and the National Fire Protection Association (NFPA): each of these agencies has promulgated guidance, standards, and recommendations for health-care providers.

In States covered by Federal OSHA, the guidelines apply only to the private sector. In States that have their own OSHA program, both public and private sectors must comply. Of particular interest currently are provisions regarding bloodborne pathogens and infectious disease control. OSHA regulations require health-care employers to have followup procedures for human immunodeficiency virus/Hepatitis B virus (HIV/HBV) exposure.

Because many EMS systems are not, by legal definition, a health-care service, NFPA has issued requirements that apply to all EMS systems. The impact of these regulations to an EMS manager is one of ensuring total compliance. Protocols, SOPs, and standing orders must be developed for washing and decontamination, minimizing needle sticks, specimen handling, etc. All EMS members must be immunized for HBV. Personal protective clothing and equipment must be purchased and made available to EMS members. Training must be developed and implemented; individual training must be documented, and records retained for 3 years. Medical records for personnel at risk to exposure must be maintained for the duration of employment plus 30 years, and they must be held confidential.

Obviously, compliance is necessary for the health and safety of the individual EMS responders, but there is a substantial cost, in dollars and time, to the EMS system managers. Failure to comply resulting in worker's compensation claims or lawsuits may be even costlier. Failure to comply also may result in substantial fines. For example, failure to comply with 1993 OSHA regulations regarding working in confined spaces could result in fines of up to \$70,000 per violation.

### Hazardous Materials

Not long ago, hazmat response was left to trained fire department response teams. However, in 1989, OSHA published rules entitled "Worker Protection Standards for Hazardous Waste Operations and Emergency Response" or the HAZWOPER standard. HAZWOPER requires all emergency services to develop and implement a written incident plan to handle hazmat emergencies. With the crossover into hazmat response, EMS planners, managers, and responders were forced to modify their incident response procedures to preclude EMS responders from becoming victims themselves. As part of their planning, EMS managers must consider the action or requirements of various governmental agencies. The Department of Transportation (DOT) has issued hazmat guidelines and recognition tools, OSHA has mandated training for emergency medical responders, FEMA is providing funds for training, and the EPA is providing hotline support. The crossover to hazmat response also has resulted in funding requirements for personal protective clothing and equipment. By virtue of other agency involvement, EMS managers are forced to take action to ensure compliance with rules, regulations, and standards. In-house, they must ensure adequate training to protect the health and safety of EMS members as well as provide the protocols and SOPs necessary to ensure the delivery of quality medical care.

### Advance Directives

In 1990, the Patient Self-Determination Act (PSDA) was passed as part of the Consolidated Omnibus Budget Reconciliation Act (COBRA). Although PSDA is applicable directly to various medical agencies accepting Medicare/Medicaid, many provisions of the act now affect EMS systems. PSDA recognized a patient's right to self-determination, including the right to refuse lifesaving treatment. PSDA also required institutions to ask patients if they have executed any advance directives such as a living will, durable power of attorney for health care, or a do-

not-resuscitate (DNR) order. Because of the law, more advance directives have been executed, and EMS members are much more likely to encounter them. Several States have enacted prehospital DNR legislation, but even with SOPs in hand, the EMS member is faced with making life-or-death decisions, while legal and ethical pressures add to the burden.

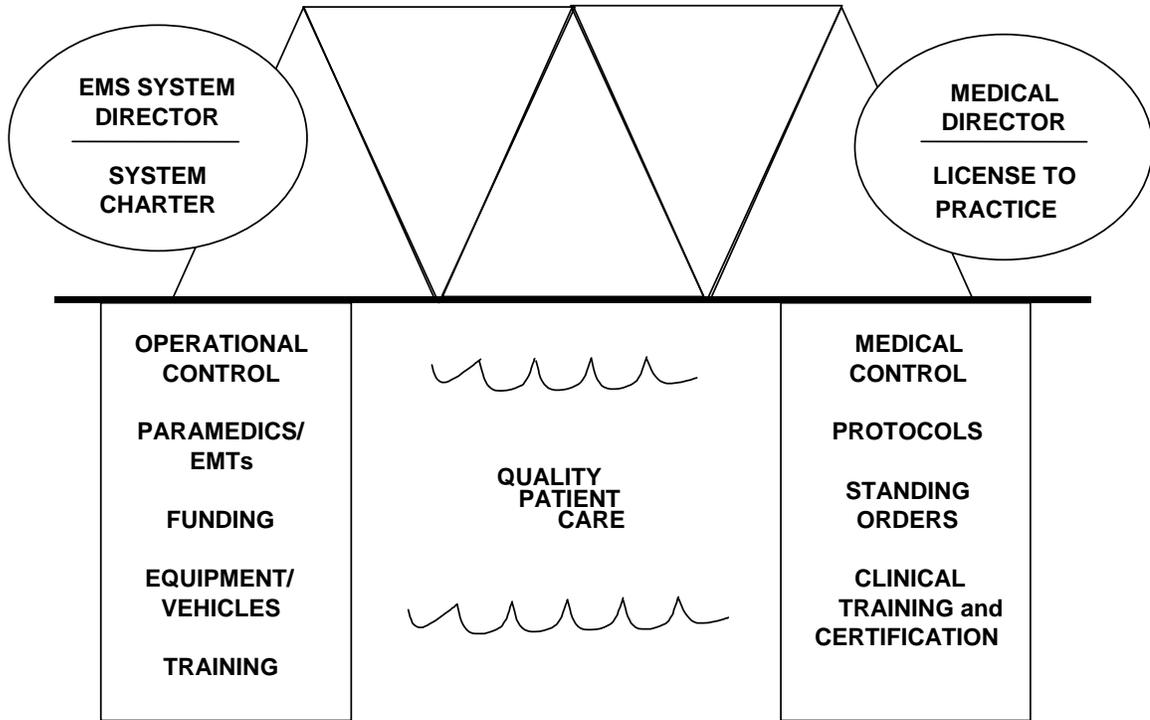
### **Medical Control/Medical Director**

EMS members must understand that, in the course of performing their professional health-care duties, they serve as an extension of their system's medical director. The medical director provides the key to quality patient care and the competency of EMS members. By his/her presence in the organization, the medical director extends medical accountability and clinical supervision, and provides clinical training and continuing education of prehospital providers. The medical director also provides his/her medical license to the EMS members. With such a major investment, the medical director needs to be involved in the management of the EMS system, must understand its operation, direct its clinical practice, and know and trust the personnel involved. Medical accountability ensures that prehospital procedures and the action of providers are in accordance with acceptable medical practice.

Clinical supervision of EMS members is both offline (indirect) and online (direct). Offline (indirect) supervision provides standards, policies, procedures, and treatment protocols. It also includes medical auditing of both specific responses and overall system quality management. Providing online direction/supervision to field providers requires that the physician know the capabilities/limitations of providers, their treatment protocols, and their standing orders.

To assist EMS members with clinical direction, the medical director must provide treatment and triage protocols. Treatment protocols are standards of practice for an EMS system and apply to all parties to the system. Standing orders are used to guide members when direct medical control is not established or available. Triage protocols provide patient destination policy (point-of-entry plan) or designate a facility for transport. Treatment protocols prevent medical control facilities from usurping patient destination decisions.

The interface between EMS medical control and EMS operations is a team effort (Figure 8-2). EMS members must know the medical director and recognize that every clinical action they take, or in some cases fail to take, reflects upon the medical director. That reflection may shine only on the director's reputation but, when things go wrong, it may extend as far as medical regulatory action or civil/criminal action against the director **and** the EMS provider in the court system.



**Figure 8-2  
Operations/Medical Control Interface**

In large EMS systems, most EMS managers will have little direct contact with the system medical director. In small systems, the contact between system managers and the medical director may be more frequent and less structured. Generally, any questions or formal recommendations from managers regarding specific medical policy, procedures, or clinical changes should go to the medical director via the system chain-of-command. Routine questions regarding clinical procedures, standing orders, protocols, or patient care may be handled on a more informal basis directly with the medical director's office or during any regularly scheduled meeting with the medical director.

Unless otherwise defined in State or local statutes or requirements, a medical director must have authority over all clinical and patient-care aspects of an EMS system. These aspects include certification, recertification, and decertification of nonphysician prehospital providers (including EMS dispatchers); establishing, implementing, revising, and authorizing system medical protocols, policies, and SOPs or standing orders; establishing criteria for the level of initial emergency response; establishing patient destination protocols; establishing guidance for any concurrent medical direction of EMS providers; and establishing procedures or protocols under which nondispatch or nontransport of patients may occur. The medical director's involvement in the certification process also includes responsibility for establishing certification requirements and criteria, providing initial training and testing, and providing continuing medical education. For its part, an EMS system must provide a medical director with the necessary resources (personnel, vehicles, and equipment) and authority to accomplish his/her assigned medical responsibilities.

The American College of Emergency Physicians has created a standard document of *National Standards for EMS Medical Directors*. A copy of these standards can be found at <http://www.acep.org>

## System Funding

Many things can affect the financial stability of an EMS's operation. It is important that the organization understand the cost of running the operations as well as the regulations involved in revenue collection.

Providing services to the community can be costly for the organization. It is important to monitor the services provided and compare them to the cost of provision. The amount of money spent directly impacts the survival of the organization.

The most frequent methods for system funding include tax-based, subscription, fee for service, Public Utility Model (PUM), and capitated contracts.

- **Tax-based.** Most often uses existing general services revenues, and service is provided through an existing public service agency. However, the issue may go to voters for a tax levy to operate an independent third service. A tax levy fixes system income and can lead to call screening if dollars begin to run short. The most frequent situation is to establish EMS as a component of a fire service. This is very cost-effective as fire suppression requirements decline.
- **Subscription.** A system similar to a voluntary tax-based system, where the user (subscriber) pays in advance. Some potential users may gamble that the service will never be required; without subscribers a subscription system cannot be cost-effective.
- **Fee for service.** This type of system may use central EMS dispatch, but each user pays for the cost of service. Call fees may be regulated, but usually provide for any cost of expansion to be passed on to the users.
- **Public Utility Model (PUM).** A regulated monopoly, quasigovernmental entity. An EMS agency sets system requirements and solicits bids from potential providers. The selected provider must conform or face fines or termination. Patients are billed for services provided. A PUM is usually single-tiered, all advanced life support (ALS).
- **Capitated contracts.** Contracts with managed care agencies that provide a flat fee for the length of the contract. The provider agency is given a set amount of money regardless of the number or patients transported or treatment given.

Managed care focuses on decreasing health-care costs through preventive programs and screening for the need for hospitalization/treatments. The core of the impact of managed care on EMS lies in a change in philosophy from fee for service to a flat monthly sum of money up front (capitation).

Managed care was a huge movement in the 90s, but interest in it has somewhat dissipated in the past few years. While some agencies still use managed care, it is important to understand that this issue is driven by location, as well as major health-care organizations that support this type of health-care management.

## **Billing**

Many factors affect EMS billing including the following:

The Medicare Ambulance Fee Schedule is a schedule that is approved by Medicare for what services you, as a provider, can charge for including certain delivery skill at the BLS and ALS level. It also covers things like mileage charges for both in-area and out-of-area travel. More information can be located at [www.medicare.gov](http://www.medicare.gov)

Other billing issues:

- Medicaid fee schedule for services;
- timeframe for billing for services;
- who is eligible to bill for services:
  - first response/nontransport, and
  - transporting agencies.

Both Medicare and Medicaid fee schedules change on a regular basis. It is important that your organization stay current on all of the regulations that govern this.

## **PUBLIC/COMMUNITY RELATIONS**

Public/Community relations is the specific area of dealing with those who interact directly with EMS, this includes employees.

### **Patients**

Within any EMS system, the majority of managers and street responders spend a significant amount of time in training to improve their response capability. Technical skills training concentrates on clinical patient care in dangerous and often life-threatening situations, as well it should, and is reinforced through continuing education programs. Unfortunately, it appears that little time is spent in learning about the need or means of providing for the personal and emotional needs of patients who are, in fact, the system's best customers. Without this second aspect of total patient care, EMS responders can end up providing a patient with excellent clinical care and still be accused of mistreatment by the customer or the customer's family.

Of course, responders see themselves going out on an ever-increasing number of calls, spending long hours on the street or in the back of an ambulance or rescue vehicle, and, if patient accusations of mistreatment are true, there is not much gratitude expressed for the lives they save. It's a fact that negative member attitudes do occur, and there are causes that sustain them: violence against EMS responders, abuse from drunks, personal problems, stress, and too many responses to nonemergency calls, among others. The task for managers is to provide the system commitment, leadership, support, and training necessary to change negative attitudes to positive, integrate customer service into the delivery process, and cause members to understand the need for behaviors that reflect courtesy and customer concern, in addition to providing the best patient care during every response.

As is the case in most scenarios, EMS managers may be far removed from the scene when conflict or some form of inappropriate or misunderstood behavior occurs between an EMS member and a patient/customer. The member may think everything went well on a call, but the customer may perceive things differently. These perceptions may stem from an unflattering or derogatory comment made (it was thought) out of earshot; comments regarding the patient that should have been held confidential; or maybe just failing to manifest concern and common courtesy towards the patient. While EMS responders may say these perceptions are not true, they establish the customer's reality. A key component of any customer-relations program is management response to complaints. This response includes contact with both the patient and the provider to determine the facts of the situation.

There are tools available that EMS managers may use to assist in the development of local programs regarding customer service. The U.S. Fire Administration (USFA) publication *Strategies for Marketing Your Fire Department Today and Beyond* in your supplemental handouts contains a section in Chapter 2 on customer relations programs.

## **Employees**

Public relations also involves the employees. The challenge for EMS managers is to develop and maintain a work environment that supports the EMS members during good and bad times, in addition to reflecting an organizational concern for the public. Quality care is far more likely if you support your internal customers. Tom Peters, noted author and speaker on organizational quality, says it best: "If your job isn't taking care of people, then you should be taking care of someone who is."

## **Public/Community**

In addition to those who interact directly with EMS, the service must concern itself with the impressions of the general public and their relationship with and obligations to the community they serve. Dealing with the public and the public's perception of EMS is an ongoing affair. Public information and public relations must be a concern for EMS system managers, supervisors, and responders because they are topics that affect all levels within the system. For the system manager, it's how the system is perceived as a public service entity and, at budget

time, if it is worth the cost. A good example of public service is ensuring that the community knows how to obtain emergency medical services. For the first-line supervisor, it's presenting a good public image while offering tours for schoolchildren, conducting community blood pressure screenings, or making sure the appearance of the rescue truck or ambulance throughout a shift presents a positive, professional image of the service. For the member, it's a clean uniform and outwardly caring behavior, in addition to the expected cool, calm, and collected clinical persona.

If a public relations/information program is going to have a positive impact, EMS system managers and supervisors must allocate time to train everyone involved. The time to work on creating the desired public image is before a negative incident occurs that erodes public confidence and perception. The public has a short memory. The consequences of that fact require that all EMS personnel be prepared to bolster a positive image of EMS at every opportunity. A perceived negative image of an EMS system on the part of the public generates negative comments and an increased number of complaints. Managers must be prepared to respond to comments or resolve complaints in order to reestablish a positive system image.

The public image of EMS is based largely on news media coverage. Every EMS response can be considered a public event, and the media have a right to cover the event. EMS managers and supervisors must train responders to deal with pushy and sometimes overbearing news media without compromising patient care. Legal media requests should be complied with whenever possible; however, everyone must pay due regard to the issue of protecting patient confidentiality. The alternative, preventing the media from doing its job, has legal ramifications and often will make the headlines. That alternative will neither boost a unit's public image nor improve EMS and media relations. On a positive note, the media can assist in enhancing the public image of EMS by making time or space available upon request for public service announcements or messages regarding emergency medical services.

EMS system managers and supervisors never must lose sight of the fact that what they do to promote and enhance the public and community image of EMS translates into system support. System support may be manifested by new recruits or volunteers, support at budget time, support by community and agency officials when dealing with complaints, and better press. EMS responders must learn that a system's image may be shaped by management, but it is the responder's direct interface with the public, on a day-by-day street basis, that is the basis for a system's public image. EMS members should be encouraged to emphasize the "4 Cs" during interactions with the public:

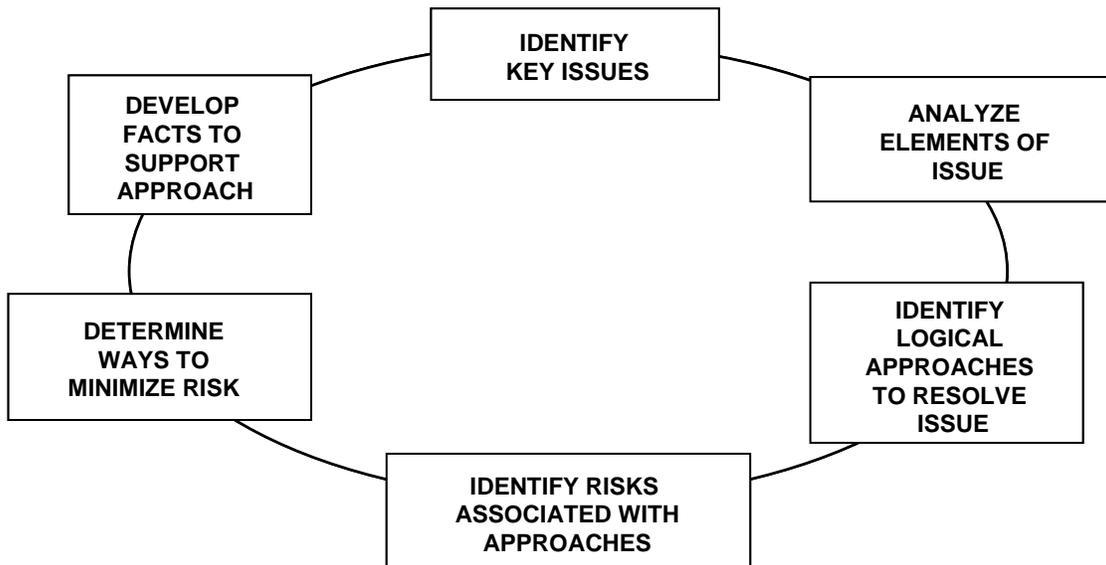
- Courtesy;
- Competence;
- Concern; and
- Customer sense.

## DEVELOPING ISSUES

The Emergency Medical Services Systems Act of 1973 is generally considered the beginning of the modern era of EMS. Since 1973, EMS has continued to change; each change bringing its own reactions. Previous modules have discussed the need for EMS managers to look at new ideas and respond to the need for changes in EMS. Some changes may be uncomfortable, but necessary.

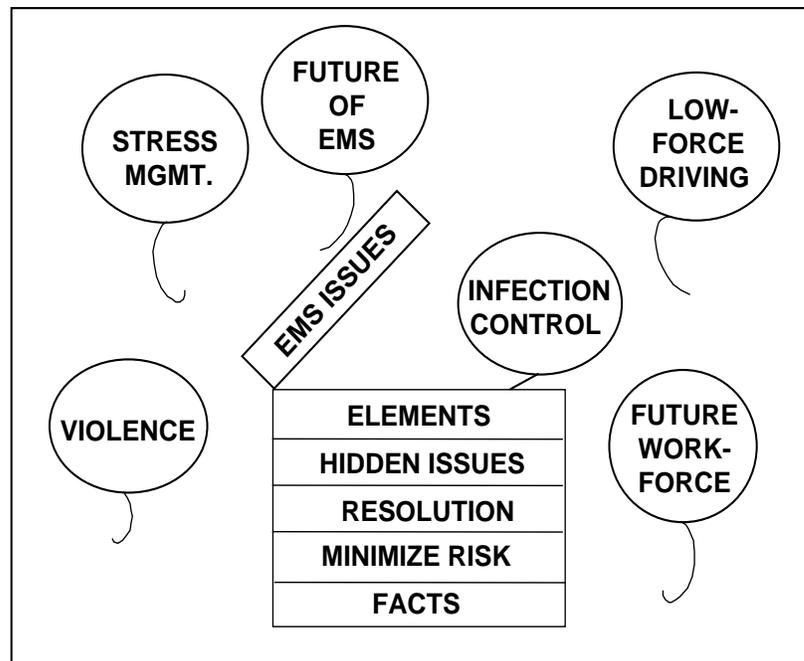
EMS issues originate from a variety of sources. EMS managers must listen to their system members as they articulate their needs, wants, and concerns, any or all of which may translate into system issues requiring resolution. They also must listen to their contemporaries in similar systems, and evaluate the forces and influences affecting their systems. They must read EMS magazines, journals, research, and other literature to learn what others have to say about EMS. EMS managers also must learn to interpret their own system quality data to identify trends that might indicate developing problem areas. All of these represent information sources to an astute manager. Finally, they must listen and respond to the legitimate needs and expectations of their stakeholders.

Managing EMS issues may be a six-step process, as illustrated in Figure 8-3.



**Figure 8-3**  
**Managing EMS Issues**

After identifying an issue, EMS managers must be able to research and break it down into its elements. Managers need to know what makes up the issue and if there are any hidden issues. Once the issue is broken down into its elements, managers can examine the elements for logical approaches to resolution or, if need be, look for new and innovative approaches to resolution. Whatever approaches are identified, managers need to examine them very closely to identify all risks associated with a particular approach. Failure to identify risks may lead a manager down the path to more problems. Managers then must consider various alternatives to minimize acceptable risks associated with a specific approach. Finally, managers need to develop the facts necessary to support any recommendations regarding their proposed approach. EMS managers need to be aggressive in pursuing issues. As illustrated in Figure 8-4, once the EMS issues box is open, the issues are out, and EMS managers must be ready to deal with them. Some issues may have greater impact than others, but today's future issues will be current issues tomorrow.



**Figure 8-4**  
**The EMS Issues Box**

## **EMS ISSUES**

The following paragraphs discuss other current EMS management issues. They should stimulate thought and cause you to ask yourself, "What am I or my system managers doing with regard to the issue? Are we being proactive? Are we being innovative?"

## **EMS and Health-Care Reform**

In September 1993, President Clinton presented to the American people an outline of his proposed American Health Security Act. Although the Act did not become law, the proposal initiated significant changes in the health-care industry. Health-care costs are out of control, and millions of Americans either have no health-care insurance or stand to lose their health-care benefits due to unemployment. As a result, the concept of "managed care" evolved. This did not prove successful for the patient, but did provide opportunity for companies to make a profit. Health care continues to be a major issue in this country and costs continue to rise while employers continue to cut back benefits. EMS agencies must become actively involved in determining the impact of any health-care reform on their own EMS system. Issues such as medical necessity, balance billing, claim procedures, managed-care networks, pathway management, primary-care delivery, data definitions, and advance directives are sure to affect EMS. The National Highway Traffic Safety Administration (NHTSA), in conjunction with other Federal agencies, began hosting roundtable discussions between EMS and managed-care organizations in June 1997. EMS/MC bulletins are posted on the NHTSA Web site.

## **Paramedic Expanded Scope of Practice**

The revision of the DOT's curriculum for paramedic training in the 1990s has allowed for a significantly expanded paramedic scope of practice. This involves major commitments of training time and dollars. Expanding scope of practice, with the inherent change in scope of services delivered by an EMS organization, may be viewed as making a major contribution to improved community health standards and general welfare. Is the expanded role worth the time and expense? Are we pushing paramedics beyond their limits of care and responsibility? Does your State EMS office address the expanded role through changing current rules and regulations? What steps has your organization taken to analyze system capabilities, financial impact, and legal liability to assess their ability to commit to expanded services?

## **Other EMS Issues for Consideration**

- the growing threat of violence;
- workforce of the future;
- proving the worth of EMS;
- the EMS manager and local politics;
- promulgation and acceptance of national standards for EMS;
- awareness of government/legislative affairs and regulatory organizations;
- measures to reduce system response time;
- fitness and wellness standards for EMS personnel; and
- funding alternatives.

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National Response Plan at [http://www.dhs.gov/xprepresp/committees/editorial\\_0566.shtm](http://www.dhs.gov/xprepresp/committees/editorial_0566.shtm)

NIMS Compliance and Technical Assistance at  
[http://www.fema.gov/emergency/nims/nims\\_compliance.shtm](http://www.fema.gov/emergency/nims/nims_compliance.shtm)

Medicare Claims Overview at <http://www.medicare.gov/Basics/ClaimsOverview.asp>

Medicare/Medicaid details: <http://www.cms.hhs.gov/home/medicare.asp>

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# GLOSSARY

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## GLOSSARY

<b>ACLS</b>	Advanced cardiac life support.
<b>ADA</b>	Americans with Disabilities Act.
<b>Advance Directive</b>	Legal document executed to convey person's treatment/nontreatment wishes (e.g., living will, DNR order).
<b>AIDS</b>	Acquired Immune Deficiency Syndrome.
<b>ALS</b>	Advanced life support.
<b>ASTM</b>	American Society for Testing and Materials.
<b>BLS</b>	Basic life support.
<b>CAD</b>	Computer-aided dispatch.
<b>Capitation</b>	Flat fee for services paid by managed care organization.
<b>CBD</b>	Criteria-based dispatch--level of care required determines level of response.
<b>CDC</b>	Centers for Disease Control and Prevention.
<b>COBRA</b>	Consolidated Omnibus Budget Reconciliation Act.
<b>Dispatch Protocols</b>	Standards for dispatching response.
<b>DNR</b>	Do Not Resuscitate.
<b>EMD</b>	Emergency medical dispatch.
<b>EMS</b>	Emergency medical services.
<b>EMT</b>	Emergency Medical Technician.
<b>EMT-D</b>	Emergency Medical Technician--Defibrillator.
<b>EMT-P</b>	Emergency Medical Technician--Paramedic.
<b>Fee for Service</b>	User pays for cost of service.
<b>FEMA</b>	Federal Emergency Management Agency.

<b>First Responder</b>	First on scene--level of response and training may vary.
<b>Functional Responsibility</b>	Responsibility for the aspects of a job that specifically relate to the position, assignment, or title (versus general responsibilities, such as providing EMS care when necessary or serving as the supervisor in his/her absence).
<b>Hazmat</b>	Hazardous materials.
<b>HAZWOPER</b>	Worker protection standards for Hazardous Waste Operations and Emergency Response.
<b>HBV</b>	Hepatitis B virus.
<b>HIV</b>	Human Immunodeficiency Virus.
<b>ICS</b>	Incident Command System.
<b>IEMS</b>	Integrated Emergency Management System.
<b>MCO</b>	Managed Care Organization.
<b>Mutual-Aid Agreement</b>	Support agreement between neighboring systems.
<b>NFA</b>	National Fire Academy.
<b>NFPA</b>	National Fire Protection Association.
<b>NHTSA</b>	National Highway Traffic Safety Administration.
<b>OSHA</b>	Occupational Safety and Health Administration (Federal).
<b>PIER</b>	Public information, education, and relations.
<b>PLS</b>	Peak-load scheduling--allocates resources by demand for services.
<b>PM</b>	Preventive maintenance.
<b>PSDA</b>	Patient Self-Determination Act.
<b>Public Service Providers</b>	Fire/Police/EMS.
<b>PUM</b>	Public Utility Model--quasigovernment entity.

<b>RLS</b>	Red lights and siren.
<b>SSM</b>	System status management--manages resources before/ between calls.
<b>Third/Separate Service</b>	Unique independent EMS organization funded and operated by fire/police departments.
<b>Tiered Response</b>	Level of response varies (ALS/BLS) based on patient need.
<b>Triage</b>	Sorting multiple casualties by priority for treatment/transport.
<b>USFA</b>	U.S. Fire Administration.

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