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Standard Guide for Establishing and Operating a Public Information, Education, and Relations Program for Emergency Medical Service Systems[1]

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INTRODUCTION

The Emergency Medical Service (EMS) system exists for only one reason—to serve the public. If the system is to perform its functions, the public must be aware of it and must use it to the fullest extent. Because the public is an essential part of the EMS system, every EMS system must support a public information, education, and relations (PIER) component. However, because other elements such as categorization, critical care protocols, communications, and provider training require as much time and energy, plus the fact that most administrators lack orientation to public information principles, there is a tendency to approach the public information, education, and relations component in a less organized and scientific way. Consequently, PIER may suffer a lower priority and may become a random or fragmented activity.

The fact is that people do not readily change their attitudes and behavior unless it is specifically and immediately demonstrated to them that there is a need to do so. In this day of complex media message sending, it is often difficult to get the attention of the general public in the first place. To achieve a successful PIER program, it should be an organized and systematic effort, including:

(*1*) An assessment of the attitudes, awareness and knowledge about one's health and access to the health delivery system;

(*2*) A determination of the knowledge needs and identifiable components of the general public;

(*3*) A method for delivery of information that is relevant, accessible, understandable, acceptable, usable, timely, and cost-effective;

(*4*) Ensure that, as much as possible, the information is integrated into attitudes and behaviors of daily living; and

(*5*) Evaluate PIER objectives to assess whether or not behavioral changes have occurred, with beneficial effect upon the individual and ultimately society, and adjusting future PIER activities as indicated.

Education about health matters has to be interesting, enjoyable, uncomplicated, relevant, and have some evidence of immediate concrete benefit to the individual's activities. In EMS, some of the programs are intrinsically appealing: for example, people might readily participate in CPR training as it represents a dramatic and demonstrable learning process. However, citizens are less enthusiastic about access information, abuse and misuse messages, or other facts which are to them, less dramatic and apparently less relevant.

1. Scope

1.1 The purpose of this guide is to provide national voluntary standards and recommendations to effectively provide emergency medical service system information and education to the public.

[1] This guide is under the jurisdiction of ASTM Committee F30 on Emergency Medical Services and is the direct responsibility of Subcommittee F30.03 on Organization/Management.

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2. Referenced Documents

2.1 *ASTM Standards:*

F 1086 Guide for Structures and Responsibilities of Emergency Medical Services Systems Organizations[2]

3. Terminology

3.1 *Descriptions of Terms:*

3.1.1 *demographics*—the study of the descriptive characteristics of the population. They have long been used to divide or segment the population.

3.1.2 *external PIER attributes*—for the public or user of the EMS system.

3.1.3 *internal PIER attributes*—within the EMS system for its participants and providers.

3.1.4 *public education*—an activity that conveys knowledge or training, or both, in specific skills.

3.1.5 *public information*—an activity that factually teaches what the EMS system is and how to enter and use it.

3.1.6 *public information, education and relations (PIER) program*—the totality of efforts in all three areas. It is ideally well integrated, unified, focused, with planning and systematic execution.

3.1.7 *public information officer*—a person who disseminates appropriate and timely facts.

3.1.8 *public relations*—an activity used to foster positive public attitudes and enhance trust and credibility about the EMS system and its providers.

4. Significance and Use

4.1 It is essential to have the public's understanding and support for the EMS system to ensure its proper development and utilization.

4.2 This guide encompasses those procedures, considerations, and resources that are necessary for a successful EMS public information, education, and relations program. Complex EMS systems may integrate or augment, or both, this guide in its entirety. Less complex systems may need to collaborate with other EMS organizations and related agencies. Responsibility for this guide will vary by level of authority, that is, state, regional, and local. (See Guide F 1086.)

4.3 The PIER tasks involve research, planning, production, distribution, and evaluation. Production requires significant resources and expertise and may be done most appropriately at the higher level, such as regional, state, and national levels.

5. Statement of the Problem

5.1 Despite the development and rapid expansion of emergency medical services following the passage of the Highway Safety Act of 1966 and the Emergency Medical Services System Act of 1973, underutilization and improper utilization of services still exists in the system. The general public lacks information on how to access and use the EMS system appropriately.

5.2 The public needs to learn what EMS is and especially that it is a system, the importance of utilizing EMS, how to access it, and what to do and not to do until the ambulance and therefore the EMS system arrives. If the public knowledge concerning EMS can be improved, then it is likely that appropriate utilization of EMS will increase.

6. Elements of a PIER Program for EMS

6.1 The essential elements of an effective public information, education, and relations program include, but are not limited to:

6.1.1 An understanding of EMS system design and operation.

6.1.2 Proper access to the system (9-1-1, telephone, call box).

6.1.3 Self help, for example, CPR, First Aid, Vial of Life, Medic Alert, and other emergency data devices.

6.1.4 Provision for the appropriate and timely release of information on EMS related events, issues, and public relations (damage control).

6.1.5 Evaluation of EMS.

6.1.5.1 Importance of user and provider input.

6.1.5.2 How to effectively collect and assimilate input.

6.1.6 Current health and safety habits as they relate to prevention and reduction of health risks for the public and providers.

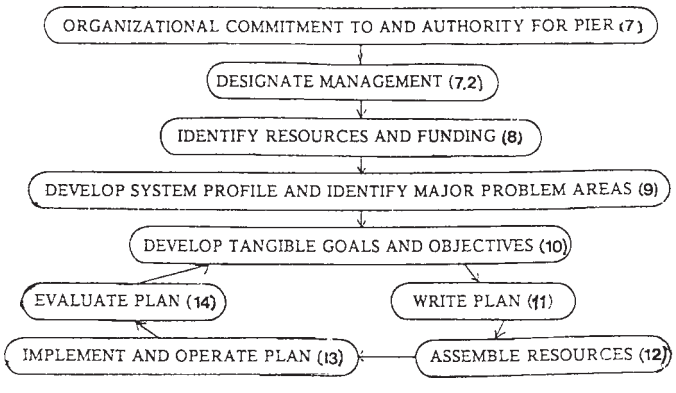
6.1.7 Provision for recruitment campaigns for career and volunteer personnel in EMS.

7. Organizational Commitment to and Authority for PIER

7.1 There must be an organizational commitment from the EMS system (See Fig. 1.)

7.2 To have an effective PIER program the chief executive officer (CEO) must be personally committed to PIER and be able to make definitive decisions concerning committment of organizational resources. This CEO must assign a PIER director who has access to the CEO. This person may in some small areas also be the CEO. The CEO must be continually apprised of the progress of the PIER program.

7.3 The organization must designate a responsible and committed public information and education person with demonstrated ability, who is accountable for the PIER program. This person will also provide the mechanism for establishing standard operating procedures for the occurrence



NOTE 1—In order to provide the elements of the PIER program, this planning model should be followed.

FIG. 1 PIER Planning Model

[2] *Annual Book of ASTM Standards*, Vol 13.02.

of unplanned events, and appropriate training for PIO's or others assuming that role. The PIO's responsibility may include, but not be limited to the news media concerning the nature and extent of an incident and emergency medical care, for planned or unplanned events.

8. Identify Resources and Funding

8.1 A successful PIER program must have a source of funding exclusively dedicated to PIER. Funding sources exist at federal, state, and local levels.

8.2 Greater expenditures may be required in areas where hard costs such as media space and time, and morbidity and mortality from medical/trauma emergencies are higher than national norms.

9. Develop System Profile and Identify Major Problem Areas

9.1 In developing the system profile you should utilize existing data included in 9.2.1 to 9.3.1.10. If public perception data is not readily available it may be necessary to collect the data using a valid research methodology. Development of the profile will enable PIER personnel to identify broad problem areas or possible problem areas, and other factors that may affect the PIER program in a positive or negative manner.

9.2 A statistically valid comprehensive poll must be taken to establish a baseline of information on the EMS system operation. The required baseline components of the poll should include:

9.2.1 *Demographic Variables*—These include age, race, sex, population characteristics and trends, income levels, predominant languages, education levels, cultural factors, and other socioeconomic factors (religion, employment, and related).

9.2.2 *System Utilization Variables*—These include number and type of EMS personnel (volunteer and paid) and attrition rate, trends in EMS responses (coverage and response time), access type (9-1-1, tele, multi or single, number, radio, and so forth), appropriate use or abuse problems, or both, and outcome costs and other utilization data.

9.2.3 *Medical Facilities*—These include number, location (and service area), beds, type, trauma center designation, teaching facility, and the interface/cooperation with the EMS system.

9.2.4 *Current Public Information and Education Programs*—These include type and scope of existing programs, effectiveness, program costs and funding sources, and related programs of other organizations and institutions (for example, AHA, ARC, and so forth).

9.2.5 *Current Public Perceptions and Knowledge*—This includes knowledge of existing system structure, capabilities, and quality, access to the system, self help programs (CPR, first aid, and related programs), and current health habits, for example, diet, smoking, exercise, substance abuse, and so forth, as it is related to prevention and reduction of emergency health risks.

9.2.6 *Emergency Health Data*—This includes morbility/mortality from critical care, subgroups of cardiac, trauma, poison, drugs, burns, neonate, CNS, behavioral, and other emergency health data that may affect the EMS system. This includes prehospital, hospital, and rehabilitation data.

9.2.7 *Risk Variables (Possible Public Health Hazards and Possible Dangers in Particular Area or System)*—These include insufficient medical facilities, cultural, occupational, criminal, recreational, transportation, system maturity (ALS versus BLS capabilities), weather, sanitation, disease, and geographic considerations (rivers, mountains).

9.2.8 *Media Resources*—These include type (radio, TV, print, public, private), availability, cost, public relations and marketing firms, and contacts.

9.2.9 *Contributory Variables*—These include adjoining systems/resources, political and financial considerations, type and effectiveness of EMS management at all levels, and applicable regulatory factors.

9.3 *Methods to Accomplish System Profile and Baseline Study*:

9.3.1 Compile data already in existence from:

9.3.1.1 Census,

9.3.1.2 Vital statistics (health, government, and planning agencies, phone companies, realtors, and so forth),

9.3.1.3 Commercial sources,

9.3.1.4 Voluntary organizations (AHA, ARC, ATS),

9.3.1.5 National and state agencies,

9.3.1.6 Current EMS system data,

9.3.1.7 College/universities,

9.3.1.8 Chambers of commerce,

9.3.1.9 Cultural/civic organizations, and

9.3.1.10 Medical facilities registries.

9.3.2 Collect data not currently in existence using valid research methodologies. Identify appropriate technical expertise who can assist with the research methodology.

10. Develop Goals and Objectives

10.1 This guide requires the development of tangible PIER goals and objectives. Goals must be realistic and should be consistent with program needs. PIER objectives whether long or short term, must be concise, consistent, attainable, measurable, written, flexible, revised periodically, reliable, and accountable. Since objectives are, by definition, measurable, their impact can be estimated.

10.1.1 Measurement criteria and evaluation mechanisms should be identified in advance and minimal standards for performance should be set. Baseline data will also help to determine priorities of the goals and objectives identified. Goals and broad objectives should be analyzed according to the public as a whole, and specific objectives may be addressed to a distinct public segment.

NOTE 1—By way of example, baseline data can be gathered from system analysis to determine the false alarm rate, and from survey to determine the percentage of adult population who know 9-1-1. One goal might then be to "increase the appropriate use of 9-1-1." Objectives might be (*1*) to ensure that 80 % of the adult population knows to dial 9-1-1 for medical emergencies, and (*2*) to decrease false alarms to less than 2 % of the total calls by ___ (date).

10.2 The final product of the goal setting process is a work plan that should include explicit goals and objectives.

11. Writing the PIER Plan

11.1 The work plan should include goals, objectives, implementation steps, required resources, and time lines. Management roles, functions, and activities should be identified. Identify specific problems anticipated in accomplishment of a goal: develop alternative solutions that are more realistic if necessary.

11.2 This guide requires the written preparation of a PIER plan and then the implementation of that plan, as well as the evaluation of the effectiveness of the PIER plan and proper modification to meet changing needs on an ongoing basis.

11.3 There must be a process for the identification of public information needs for the PIER plan and several methods and requirements are noted within this guide.

11.4 The development of a PIER plan must include the following information to ensure the PIER plan is realistic and that it has tangible goals and measurable objective and is an improvement over past performance data (see 9.2).

12. Assemble Resources

12.1 There are four types of resources that can be assembled: human, information, financial, and materials/equipment. Select from these resources as necessary to implement the plan.

12.2 Large organizations and institutions (for example, universities, corporations, hospitals, trauma centers, and so forth) are excellent resources to assist with marketing, survey development, and other PIER activities.

13. Implementation and Operation of PIER Plan

13.1 The PIER director must assign the work to his/her employees.

13.2 Each employee must be trained for his/her task.

13.3 The relationship of public information goals and objectives to the development of other system components should be analyzed to assess appropriate timing. Timing can be the most important element.

13.4 The director and employees must follow the schedule of events devised for each project.

13.5 The director and employees must confer quickly when problems arise in carrying out a project. They must promptly specify and phase in solutions, amending workplans in that process.

13.6 Employees must continually report project results to their supervisors.

14. Evaluate Plan

14.1 Evaluation is a process of assessing past or proposed actions and their results against the criteria, goals and objectives, and other normative elements of the plan and defined problem. Assessment and appraisal are usually used as more general terms than evaluation, connoting the drawing of conclusions from the examination of a situation and its elements. Additionally, evaluation and measurement are not synonymous, as measurement is basically a counting mechanism, which is part of evaluation. For instance, criteria are measurable components or test of a standard that permits determinations to be made of when or in what respect that standard has been met. Standards are explicit conditions to be fulfilled, either in operating a process or as a characteristic or an end state.

14.2 A basic evaluation process model includes information about procedures; a comparison with a norm (expression of what is desired); decision about program actions to be taken, compiling and reporting back their findings, and recycling as often as necessary to solve the original problem. Essential evaluation components include:

14.2.1 Resource allocation,

14.2.2 Media/communication used,

14.2.3 Quality of technical/production aspects,

14.2.4 Funding resource status (increasing, stable, decreasing),

14.2.5 Relationship between media and systems,

14.2.6 Number of people reached by media type and message disseminated,

14.2.7 Analysis of system utilization information as it relates to PIER,

14.2.8 Behavioral change/knowledge perception change, and

14.2.9 Timing of evaluation should also be considered (what is reasonable or necessary deadline for completion/evaluation).

14.3 And finally consider the needs as defined by goals and objectives, in relation to available time, money, and expertise. It may be that one or more lower priorities must be revised or totally dismissed until additional money becomes available. In other words, measure your goals and objectives against the reality of expectations to achieve them.

15. Performance Standards for Evaluation of EMS PIER Programs

15.1 A statistically valid survey or other scientific valid method of measuring the PIER will be completed annually. The public's knowledge and attitudes established in the baseline evaluation, will be updated every 3 years, as a minimum.

15.2 An ultimate goal is that 100 % of a community should know how to access the EMS system at all times.

15.3 There should be a 5 % improvement per year in the public's knowledge and attitude as established in the initial system survey. An accepted minimum national practice will be that 50 % of the population in every community have the knowledge. The areas addressed in this requirement include: prevention, knowing when to call, who to call, how to call, what to say, and what to do and not to do until the system arrives, including knowledge of resuscitation such as CPR and knowledge of what to expect from the EMS system, to facilitate the systems effective performance.

15.4 A minimum of 50 % of the distributed population should know the direct or most effective way of accessing the EMS system under usual circumstances. In extraordinary circumstances, such as vacationing in a rural area, the 50 % should have enough knowledge to choose an appropriate means for ensuring EMS system activation and response.