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Standard Guide for Organization and Operation of Emergency Medical Services Systems[1]

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1. Scope

1.1 This standard established guidelines for the organization and operation of Emergency Medical Services Systems (EMSS) at the state, regional and local levels. This guide will identify methods of developing state standards, coordinating/managing regional EMS Systems, and delivering emergency medical services through the local EMS System.

1.1.1 At the state level this guide identifies scope, methods, procedures and participants in the following state structure responsibilities: (*a*) establishment of EMS legislation; (*b*) development of minimum standards; (*c*) enforcement of minimum standards; (*d*) designation of substate structure; (*e*) provision of technical assistance; (*f*) identification of funding and other resources for the development, maintenance, and enhancement of EMS systems; (*g*) development and implementation of training systems; (*h*) development and implementation of communication systems; (*i*) development and implementation of record-keeping and evaluation systems; (*j*) development and implementation of public information, public education, and public relations programs; (*k*) development and implementation of acute care center designation; (*l*) development and implementation of a disaster medical system; (*m*) overall coordination of EMS and related programs within the state and in concert with other states or federal authorities.

1.2 At the regional level, this guide identifies methods of planning, implementing, coordinating/managing, and evaluating the emergency medical services system which exists within a natural catchment area and provides guidance on the use of these methods.

1.3 At the local level, this guide identifies a basic structure for the organization and management of a local EMS system and outlines the responsibilities that a local EMS should assume in the planning, development, implementation and evaluation of its EMS system.

2. Referenced Documents

2.1 *ASTM Standards:*[2]

F1086 Guide for Structures and Responsibilities of Emergency Medical Services Systems Organizations

F1149 Practice for Qualifications, Responsibilities, and Authority of Individuals and Institutions Providing Medical Direction of Emergency Medical Services

F1220 Guide for Emergency Medical Services System (EMSS) Telecommunications

F1268 Guide for Establishing and Operating a Public Information, Education, and Relations Program for Emergency Medical Service Systems

F1285 Guide for Training the Emergency Medical Technician to Perform Patient Examination Techniques

2.2 *American Ambulance Association*

Standards and Accreditation Document[3]

3. Significance and Use

3.1 This guide suggests methods for organizing and operating state, regional, and local EMS systems, in accordance with Guide F1086. It will assist state, regional, or local organizations in assessing, planning, documenting, and implementing their specific operations. The guide is general in nature and able to be adapted for existing EMS Systems. For organizations that are establishing EMS System operations, the guide is specific enough to form the basis of the operational manual.

4. State Guide

4.1 *Establishment of EMS Legislation:*

4.1.1 *Methods and Procedures*—The legislative process varies from state to state. The EMS lead agency should seek a description of the process in its state from:

4.1.1.1 The legislature's staff or clerk offices.

4.1.1.2 The legislative liaison, or other appropriate staff of the governmental unit housing EMS (its "umbrella").

4.1.1.3 The legal counsel assigned to EMS.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[3] Available from the American Ambulance Association.

TABLE 1 Levels of Organization

	State	Regional[A]	Local
Standard Setting	Legislation Regulations Guidelines/policies/procedures State protocols	Regional policies Regional protocols Assistance re: personnel	Employment standards Operating policies
System Coordination	Statewide coord. and planning Licensure/certification Facility licensure Service approval/licensure Training approval MIS/QA Inter-regional coord. Inter-state coord. Statewide SMI planning Design of sub-state structure	System planning Implementation Inter-organizational coordination Regional SMI Medical audit/QA Operational coordination System evaluation Personnel authorization accreditation	Daily operations
Service Delivery	Training Technical assistance Communications guidelines Funding PI&E	Training coordination Group purchasing Technical assistance PI&E	First response Ambulance (BLS, ALS; ground, helicopter, fixed wing) Hospital services PI&E

[A] If there are no regional organizations, within the state, the State EMS will need to accomplish, either directly or through delegation, regional tasks.

4.1.2 Legislative proposals are commonly subject to the following processes:

4.1.2.1 *Drafting*—The standard-setting or other goal is put into general form by the agency, citing the sections of statute it believes are affected. The entities listed in 4.1.1 – 4.1.1.3 may be a resource, or may be required to be involved, in this proposal development.

4.1.2.2 *Sponsorship*—The proposal may be submitted through the agency's "umbrella" department to become an official part of the administration's legislative initiative. Whether this is true or not, the umbrella's legislative liaison will generally seek the sponsorship of appropriate legislators for the bill unless the bill is opposed by the administration. Sponsorship might be sought directly by the agency or by third parties on the agency's behalf under certain circumstances where practical.

4.1.2.3 *Final Drafting and Introduction*—The bill may be drafted in the form technically required for consideration by the legislature in the umbrella unit and/or legislative counsels offices. It is then read in the legislature and generally referred to a committee.

4.1.2.4 *Committee Consideration*—The committee usually holds a public hearing at which the agency and others may testify in favor of or against the bill, or neutrally. In subsequent, scheduled work sessions the bill is considered, changed as necessary, and some action usually voted. Agency and lobbyist attendance at work sessions is common and often influential.

4.1.2.5 *Adoption/Rejection*—Bills voted out to the legislature by committee, favorably or otherwise, are then read and voted on by that body.

4.1.2.6 *Governor*—Bills adopted by the legislature may be signed, not signed (but not vetoed), or vetoed by the governor. Bills that are vetoed may be returned to the legislature to attempt to override the veto. Bills that are not vetoed generally become law immediately if designated as emergency bills, or some time after the legislature adjourns as prescribed by law.

4.1.3 The timing of legislative proposal submissions, and the tracking of their progress to assure agency input are critical to their success. Hearing announcements and progress reports generated by the legislature or umbrella unit legislative liaison are useful. A legislative "hotline" is also commonly available and of use in tracking bills but personal contact with legislative aides and/or committee staff and legal counsels are even more useful.

4.1.4 *Participants in the EMS Legislative Process:*

4.1.4.1 Drafting/Sponsorship Resources may include:

(a) Umbrella unit legislative liaison,

(b) Assistant attorney general assigned to EMS,

(c) Legislators/aides to legislators,

(d) Staff/legal counsel to committee likely to consider bill, and

(e) Agency staff, or staff of other agencies.

4.1.4.2 Formally Required Reviews/Approvals and/or Informal, Politically Expedient, Reviews/Approvals may be sought from:

(a) Umbrella unit commissioner/head (cabinet level),

(b) Other agency heads with any potential interest,

(c) State EMS and other advisory boards with potential interest,

(d) REMSO staffs and advisory councils, and

(e) EMS, fire, physician, nurse and other organized, active EMS-related professional associations.

4.1.4.3 *Resources for Monitoring Legislative Progress:*

(a) Legislature staff/clerk offices and their publications (for example, hearing notices) and hotline,

(b) Committee members and their aides,

(c) Committee staffers and legal counsels, and

(d) Sponsors of bill and their aides.

4.1.4.4 *Public Hearing Testimony Resources:*

(a) Those listed in 4.1.4.1, *a* to *e*, (sponsoring), 4.1.4.2, *a* to *e*, (review/approval), and 4.1.4.3, *a* to *d*, (monitoring),

(b) Hospital/prehospital personnel, and

(c) Consumers.

4.1.4.5 *Governor's Office Resources:*

(a) Umbrella unit commissioner/head (cabinet level),

(b) Aides to Governor (if known and appropriate), and

(c) Legislators and aides with links to Governor.

4.2 *Development of Minimum Standards:*

4.2.1 *Methods and Procedures*—A variety of standard-setting mechanisms exist, from that which is formal and explicitly housed in the state's laws to that which is the least formal, for instance, the non-binding opinion of EMS staff which is standard-setting to the extent of the dissemination and "rightness" of the opinion and the perceived expertise of the staff. The most commonly employed method and procedures are listed below.

4.2.1.1 *Origins of Standards*—State standards should be derived from the ASTM process. When this process has not provided a standard in a needed area, standards set by the National Association of State EMS Directors and/or, secondarily, by other EMS-related professional associations should be used as a foundation.

4.2.1.2 When utilizing standards documents generated by other than the ASTM process, these should be critically reviewed by experts from a range of EMS-related clinical, administrative, training, planning, regulatory and other disciplines. In these cases, this process should assure that all interested parties have an opportunity to comment. Federal standards, in law and otherwise, may exist in certain areas of EMS which may affect a state's future receipt of federal funds; these should be reviewed for consistency with planned standards.

4.2.2 *Specific Methods and Procedures:*

4.2.2.1 *Legislation*—Used for setting broad, legally-binding standards. Sets the responsibilities of the state, regional, and local EMS structures; defines areas of rule or regulation-making authority, and sets general minimum standards for the system as a whole. See 4.1.

4.2.2.2 *Rules/Regulations*—Used to set more specific standards for system design and operation including, but not limited to, the interaction of state, regional, and local EMS structures in provider operation (for example, licensure, training course approval); requirements for and terms of operation (usually through licensure or certification) for EMS personnel, vehicles, equipment and services; organization of EMS training for certification or licensure; organization of certification or licensure testing; scope of practice; causes and procedures for disciplinary actions. This process is governed by the administrative procedures act ("APA") of the state and generally requires the EMS rule-making authority to publish notices and hold hearings on proposed changes. Consult the state's APA and discuss with the legal counsel assigned to EMS.

4.2.2.3 *Executive Order*—The Governor may be empowered to take actions which have a standard-setting impact. Consult the legal counsel assigned to EMS or the Governor's staff.

4.2.2.4 *Policies/Procedures*—Used by the state agency to govern the details of its operations and interactions with providers. Examples could include the personnel licensure/certification application form, procedures for in-state grant programs, or a policy for the administration of state licensure examinations. These are generally created outside of legislative or rule-making arenas. This makes them easier to create than laws or rules but also much less binding upon the EMS system and its providers. In fact, these are generally not considered to be legally binding. They are useful, though, in defining and clarifying required licensure/certification processes for providers and in providing immediate direction to providers where such direction is not provided in law, rules, or elsewhere.

4.2.2.5 *Protocols*—Virtually unique to EMS in their regional or statewide application, treatment protocols may be used to set clinical and operational standards and to define scope of practice. Protocols are most effective when they are given power of law by virtue of specific reference in statute (for example, "Treatment shall be in accord with protocols established by the medical director of the state (or regional) EMS agency."). Protocol-development may require a consensus-building process among the state's medical advisory committee, regional medical directors and others.

4.2.2.6 *Contracts and/or Letters of Agreement*—Generally in return for funding or other resources, regional and local structures and providers may agree to certain standards of performance. For example, state funding of training courses or ambulance equipment items may be afforded with agreement on standards for course content or equipment use. States generally have a standard process and forms for contracts and grants. Consult the purchasing and/or contracts office or legal counsel assigned to EMS.

4.2.3 *Participants in the Development of Minimum Standards:*

4.2.3.1 *By Legislation*—See 4.1.

4.2.3.2 *By Rules/Regulations:*

(a) Agency staff (drafting),
(b) Legal counsel assigned to EMS (review),
(c) REMSO staffs/advisory councils/committees (review),
(d) State advisory council/committees (review),
(e) State EMS-related professional associations (review),
(f) Impartial legal counsel (approval),
(g) Secretary of state (records/announces proposals, certifies adopted rules),
(h) Legislature (subject to review),
(i) Umbrella unit staff and head (review/approval unless EMS agency has own rule-making authority), and
(j) Providers/general public.

4.2.3.3 *By Executive Order:*

(a) Agency staff (drafting),
(b) Legal counsel assigned to EMS (review),
(c) Umbrella unit head/commissioner (cabinet level),
(d) Governor; governor's staff,
(e) State advisory council/committees,
(f) Consider those listed in 4.2.3.2 for review.

4.2.3.4 *By Policies/Procedures:*

(a) Agency staff (drafting and review),
(b) REMSO staff (review), and
(c) Consider umbrella unit/advisory council review.

4.2.3.5 *By Protocols:*

(a) Agency staff,
(b) REMSO staff,
(c) State/regional medical directors and medical advisory boards, and
(d) Consider those listed in 4.2.2.2 for review.

4.2.3.6 *By Contracts/Letters of Agreement:*

(a) Agency staff,
(b) REMSO (contractor or reviewer),

(c) Local system/provider (contractor),
(d) Legal counsel assigned to EMS,
(e) Consider umbrella unit/advisory council review,
(f) Impartial legal counsel for contract approval,
(g) Budget office if funding involved (approval/encumbrance), and
(h) Purchasing/contract review if funding involved.

4.3 *Enforcement of Minimum Standards:*

4.3.1 *Methods and Procedures*—Enforcement may be accomplished in a variety of formal and informal ways. The more formal methods are discussed below, however, it is worth considering informal means (for example, peer pressure, training approaches, meetings with town and hospital officials and others with whom the non-complying individual or organization routinely interacts). If formal methods of enforcement are used, due process should be ensured. The need to enforce may be discovered when a specific complaint is made, from incidental information derived from the media and other sources, from routine quality assurance processes, from service/vehicle inspections, and from the EMS management information system when it is used to link training, licensure, and run/patient reporting to monitor compliance with licensure requirements.

4.3.1.1 *Of Enforcing Laws, Rules or Regulations, Executive Orders:*

(a) General information/education for those affected,
(b) Specific verbal/written warnings of potential non-compliance and consequences,
(c) Formal investigation by agency. Such investigations may lead to licensure action, fines, and/or imprisonment. Such penalties, conditions for penalties and avenues of appeal should be specified in law and rules/regulations. Refer to the Council of State Governments' certification curriculum for those who conduct administrative law investigations,
(d) Criminal investigations as appropriate.

4.3.1.2 *Of Enforcing Policies/Procedures:*

(a) General information/education for those affected,
(b) Refusal to issue licenses/certifications for non-compliance (consult legal counsel assigned to EMS), and
(c) Investigate and pursue policy non-compliance under a general "unprofessional conduct" or similar provision for licensure action under state EMS law.

4.3.1.3 *Of Enforcing Protocols*—Regional and/or state QA and EMS/MIS processes should exist to identify protocol non-compliance. If protocols are enforceable under state EMS law see 4.3.1.1. Other methods of enforcement include:

(a) Withholding of medical control orders or privileges to practice at a regional or state level,
(b) Withholding franchise to operate (dispatcher no longer calls the service), and
(c) Withholding Medicaid, indigent fees, grants or other subsidies received by non-complying provider.

4.3.1.4 *Of Enforcing Contracts/Letters of Agreement:*

(a) Withholding of grants, or the other resources or privileges identified in the particular document, and
(b) Cancellation of contract.

4.3.2 *Participants*—Those involved in enforcement are usually state EMS agency officials or their agents. Agency staff, medical directors on the state and regional levels, REMSO staff, the legal counsel assigned to EMS, and others identified in 4.2.2 may be involved in enforcement on a formal or informal basis.

4.4 *Designation of Substate Structure:*

4.4.1 *Methods and Procedures:*

4.4.1.1 Determine purpose of substate structure (refer to Guide F1086).

4.4.1.2 Determine maximum funding available to support structure established.

4.4.1.3 Given purpose and funding level, establish regional boundaries (ideally according to natural catchment areas).

4.4.1.4 Select REMSO for each Region, using RFP or other process, and establish a specific contract for services.

4.4.2 *Participants*—This is a decision with significant systems operation and political impact. Agency staff, state and local advisory councils, appropriate local governments, professional associations, provider services, hospitals and others should be involved.

4.5 *Provision of Technical Assistance:*

4.5.1 *Methods and Procedures*—States should have a mechanism for identifying needs for technical assistance.

4.5.1.1 Dissemination of current EMS information and description of technical assistance availability through statewide newsletter, computer bulletin board service, and special notices to providers or through REMSOs.

4.5.1.2 Participation of agency staff in statewide, regional, and local conferences and other educational programs.

4.5.1.3 Regular coordinating meetings with REMSO staffs, and agency staff attendance at regional council meetings.

4.5.1.4 State agency assistance in drafting EMS legislation and obtaining outside grant funding for local and regional projects.

4.5.1.5 State agency participation in ASTM and other national EMS technical and educational programs in order to represent interests of state and import new knowledge.

4.5.2 *Participants*— State agency and REMSO staffs and agents.

4.6 *Identification of Funding and Other Resources for Development, Maintenance, and Enhancement of EMS Systems:*

4.6.1 See document of F30.03.05 ("Standard Guide for the Development of EMS Funding").

4.7 *Development and Implementation of Training Systems:*

4.7.1 *Methods and Procedures*—Development of standards (for example, specific objectives, curricula, instructor outlines) for training programs leading to certification/licensure. Determine purpose of substate structure (refer to Guide F1086).

4.8 *Development and Implementation of Communication Systems:* (Refer to the work of, and standards developed by, Subcommittee F30.04 on communications).

4.9 *Development and Implementation of Record-Keeping and Evaluation Systems:* (Refer to the work of, and standards developed by, Task Group F30.03.03 on Management Information Systems; 4.9.11 see the Centers for Disease Control's *Trauma Registry Patient Data Set*).

4.10 *Development and Implementation of Public Information, Public Education, and Public Relations Programs:* (Refer to the work of, and standards developed by, Task Group F30.03.06 on Public Information, Education, and Relations).

4.11 *Development and Implementation of Acute Care Center Designation:* (Refer to work of, and standards developed by Subcommittee F30.05 on Facilities;

4.11.1 See the American Medical Association Commission on EMS' *Guidelines for the Categorization of Hospital Emergency Capabilities* (most recent version).

4.12 *Development and Implementation of a Disaster Medical System:* (Refer to the work of, and standards developed by Task Group F30.03.07 on Disaster Management Response).

4.12.1 Resources for larger scale events involving out-of-state responses include the National Disaster Medical System (NDMS) and the Federal Emergency Management Agency (FEMA).

4.13 *Overall Coordination of EMS and Related Programs Within the State and in Concert with Other States or Federal Authorities:*

4.13.1 This broad responsibility involves the establishment and on-going maintenance of efficient and effective communication with EMS and EMS impacting agencies and organizations in state government, federal government, and other state and national governments as issues of border necessitate.

4.13.2 With state government, public health, medical, nursing, emergency management, highway safety, public safety (state police and fire marshal), and state military agencies should be considered for on-going, general or special purpose, liaison.

4.13.3 Federal government agency contacts should include the U.S. Department of Transportation's National Highway Traffic Safety Administration which is involved in EMS funding through its Category 402/403 funding and standard setting (for example, 'KKK' standards for ambulance vehicles). Other EMS-impacting agencies include FEMA, the National Fire Academy, the National Disaster Medical System, the Federal Communications Commission, the Centers for Disease Control, and the Department of Defense.

4.13.4 Mutual aid agreements and compacts across border lines, and participation in the National Association of State EMS Directors, the National Council of State EMS Training Coordinators, ASTM International, Multi-state EMS Associations, such as the New England and Mid-Atlantic EMS Councils, and other state and regional organizations and important activities in maintaining lines of communications.

5. Regional Guide

5.1 *General:*

5.1.1 EMS systems exist as a natural result of the interaction of ambulance services, first responder agencies, hospitals, and other providers. The role of EMS organizations, as defined by Guide F1086, is to improve operation of this system.

5.1.2 Although they are usually independent organizations, providers within the EMS system have high degrees of interdependence. Their actions must be coordinated in order to ensure close cooperation, to limit conflict, and to ensure that the interests of the patients are primary in the system.

5.2 *Planning Functions:*

5.2.1 An EMS system plan should be developed for each system. The plan should:

5.2.1.1 Determine the optimal system design for the EMS system, based on appropriate ASTM standards, when not in conflict with state law, rules, or regulations, or with local ordinances. The system design should be based on predetermined, desired goals (for example, response time, clinical performance, fiscal performance, and the like) and should include:

(a) The staffing level and level of training of hospital and pre-hospital personnel,

(b) The number, location, and service level of pre-hospital providers,

(c) Communications pathways and methods necessary to address citizen access, dispatch, coordination, and medical control,

(d) The role of hospitals and speciality care centers, including initial patient triage, and interfacility transfer, and

(e) Policies, procedures, personnel, and facilities, to provide medical control, as described in Practice F1149,

(f) A program for regular public information and education on system access, first aid, CPR, injury prevention, and system capabilities,

(g) A program for system evaluation, as described in ASTM Standard Guide for Establishing and Operating EMS Management Information Systems (in progress),

(h) Programs to ensure appropriate emergency response throughout the system,

(i) Programs to ensure sufficient coordinated response to significant medical incidents, as described in Guide F1285, and

(j) The roles, responsibilities and relationships of agencies participating within the system.

5.2.1.2 Describe the area covered by the system

5.2.1.3 Determine what resources (including, but not limited to, personnel, vehicles, facilities, and services) are needed within the system, based on workload, geographic, demographic, and epidemiologic factors.

5.2.1.4 Determine system financial needs.

5.2.1.5 Inventory and assess the resources which are currently available within the EMS system.

5.2.1.6 Determine the needs of the system.

5.2.1.7 Provide a process for meeting the identified system needs, including identification of sources of funding.

5.2.2 The organization developing the EMS plan should ensure that consumers of emergency health services and existing EMS providers have an opportunity to participate in development of the plan.

5.3 *Implementation Functions:* (See Note 1)

NOTE 1—These functions, particularly those requiring regulatory powers may be performed by agencies at the state, regional, or local levels, depending on the division of responsibility and authority within the state.

5.3.1 The EMS system is generally implemented through the actions of participating provider agencies. The implementing organization is not required to perform any or all of the

required functions, but instead should establish the framework to ensure that they are all done.

5.3.2 The implementing organization should promote the need for the system through education of the public, current providers, and public officials and should encourage and facilitate the voluntary participation of existing provider agencies.

5.3.3 Some components of the system may be implemented through regulatory processes. Regional organizations should evaluate the status of other regulatory programs, given regional standards. Such processes include:

5.3.3.1 Certification/licensure of personnel,

5.3.3.2 Accreditation/designation/certification of facilities,

5.3.3.3 Approval of pre-hospital provider services,

5.3.3.4 Licensing/permitting of emergency pre-hospital provider vehicles and equipment (not including non-emergency (for example, wheelchair) services),

5.3.3.5 Approval of training programs, and

5.3.3.6 Development of policies, procedures, and protocols.

5.3.4 Some components of the system may be implemented through use of competitive processes, including:

5.3.4.1 Ambulance franchising, and

5.3.4.2 Request for proposals for facility designation.

5.3.5 Some components of the system may be implemented through direct operation of a service by a state or regional EMS organization, including:

5.3.5.1 Training programs,

5.3.5.2 Recruitment of personnel,

5.3.5.3 Operation of a communications center,

5.3.5.4 Operation of a communications system,

5.3.5.5 Provisions of technical assistance to providers, and

5.3.5.6 Sponsorship of group purchasing programs.

5.4 *Coordination/Management Functions:*

5.4.1 Policies, regulations, guidelines, procedures, and protocols should be developed to determine appropriate actions where a decision by one agency impacts on another or where more than one agency must interact. These include, but are not limited to:

5.4.1.1 Triage and patient flow,

5.4.1.2 Pre-hospital treatment,

5.4.1.3 Inter-facility transfer,

5.4.1.4 Operations,

5.4.1.5 Communications,

5.4.1.6 Incident command system, compatible with NIIMS, including on-scene command,

5.4.1.7 Response to *multiple casualty* incidents *and medical disasters*, and

5.4.1.8 Medical control, in accordance with Practice F1149.

5.4.2 Communications resources should be available to allow coordination of participating agencies, including:

5.4.2.1 A single access number for emergencies,

5.4.2.2 Common radio frequencies for:

(a) Dispatch,

(b) On-scene coordination

(c) Hospital notification

(d) Medical contro

(e) Inter-facility coordination

5.4.2.3 Dispatch protocols,

5.4.2.4 Pre-determined response policies, and

5.4.2.5 Move-up and coverage plans.

5.4.3 Provision should exist for general coordination of public and private services, medical facilities, first responders and other appropriate public and private entities.

5.5 *Evaluation Functions:*

5.5.1 The evaluating organization must consider the overall effectiveness of the system and the day-to-day operation of the system.

5.5.2 Day-to-day operation of the system can be evaluated through:

5.5.2.1 Retrospective medical control, including chart and tape reviews, and audits,

5.5.2.2 Operational reviews,

5.5.2.3 Reviews of problems, and

5.5.2.4 Critique of significant medical incidents.

5.5.3 Overall operation and outcome of the system can be evaluated through:

5.5.3.1 Analysis of trends,

5.5.3.2 Outcome studies, and

5.5.3.3 Analysis of emergency medical care data bases.

5.5.4 Review and update of the EMS system plan.

6. Local Guide

6.1 *Structures*—The basic structures of a local EMS organization should consist of the following:

6.1.1 Local EMS Council or Committee composed of representatives from public and private provider groups involved in the delivery of EMS including but not limited to: ambulance services/rescue squads, medical society (all disciplines), emergency nurses, hospitals or hospital councils, local boards of health, police departments, fire departments, dispatch agency, and other related governmental or political subdivisional bodies.

6.1.2 *System Access*—It is desirable to have centralized access such as 9-1-1 or a single 7 digit number for all emergency services (for example, police, fire, EMS).

6.1.3 *Dispatch/Communications*—It is desirable to have coordinated dispatch of local resources and centralized communications with regional and state groups. If possible, dispatch personnel should have been trained consistent with the guidelines of the F30.02.04 committee on dispatch/communicator training.

6.1.4 *Personnel:*

6.1.4.1 *Basic Life Support (BLS)*—Should include all levels of training identified in the guidelines of the F30.02 committee on personnel training and education and state certification processes.

6.1.4.2 *Advanced Life Support (ALS)*—ALS capabilities should be consistent with state certification criteria and need should be determined by the local EMS council or committee.

6.1.5 *Medical Direction*—Should be provided by a physician(s), qualified in a manner consistent with the guidelines on medical control in Practice F1149, who is involved with local EMS providers.

6.1.6 *Transportation*— Transportation guidelines for all aspects (land, air, and water) according to need should be developed by the local component council or committee.

Establishment of minimum response times to the site as well as transit time to the receiving facility should be done by the local council or committee in accordance with state and regional guidelines. Provisions should also be included for interfacility transport in accordance with local and state laws.

6.1.7 *Receiving Facilities*—Each facility should be identified as to the hours of operation, level of care provided, and capacity for multiple casualties. Provisions should be made to identify special needs for the local area and facilities identified for provision of these needs. Input will have to be solicited from the local component medical control, REMSO groups, and appropriate state agencies.

6.2 *Responsibilities:*

6.2.1 *Planning/Development*—To implement the level(s) of services identified by the local committee or council consideration must be given to the following:

6.2.1.1 Determine local system design/needs with input from state, REMSOs, Federal, and Local Provider

(a) Determine area of coverage, vehicle needs and staffing available,

(b) Determine local resources available, and

(c) Identify process to be used to meet system needs.

6.2.1.2 Personnel training levels as identified in section 3.1.4 and their availability. In addition to continuing education requirements that may be mandated by the state, the local council or committee should identify any other continuing education needed at the local level to maintain standards.

6.2.1.3 Medical Control as identified in 3.1.5 and in Practice F1149.

6.2.1.4 Develop plan with participation from consumers of emergency health services and existing EMS providers.

6.3 *Implementation:*

6.3.1 Functions identified in this document may not necessarily be implemented by the local agency but by participatory provider agencies. The implementing organization is not required to perform any or all of the functions but to ensure that they are all done.

6.3.2 The implementing local council or committee should promote the need for the local system through public education and education of the local provider agencies.

6.3.3 Some processes utilized in the implementation of the local system include but are not limited to:

6.3.3.1 Regulatory processes (both Regional and State),

(a) Certification/licensure of personnel,

(b) Accreditation/designation/certification of facilities, and

(c) Approval of training programs.

6.3.3.2 Competitive processes (both private and commercial),

(a) Ambulance franchising, and

(b) Proposals for complete local system development.

6.3.3.3 Direct provision of service by regional or state

(a) Training programs,

(b) Dispatch provision and operation,

(c) Recruitment of personnel,

(d) Technical assistance for participating agencies,

6.4 *Methods and Procedures for the Operation of a Local EMS System:*

6.4.1 The clear delineation of service ownership and organizational structure is necessary to assure accountability to consumers and governmental entities. Full disclosure of the agency ownership is required.

6.5 *Inter-Agency Relations:*

6.5.1 Inter-agency relations are necessary to provide high quality patient care services. A high quality EMS system depends on cooperation between various types of public-safety agencies as well as among all local EMS providers. These standards are to emphasize these relationship.

6.5.2 *Mutual Aid*—The ambulance service shall develop and maintain mutual aid relationships with other ambulance/EMS organizations in its immediate or neighboring service areas. (See Appendix X3)

6.5.3 *Disaster Coordination*—The service should play an active role in the regional disaster plan and response.

6.5.4 *Conflict Resolution*—The agency should develop and maintain a means to resolve conflicts among personnel of all organizations directly or indirectly involved in patient care (for example, other ambulance providers, police and fire departments, medical personnel, and the like). The conflict resolution policy should include appropriate follow-up activities.

6.6 *Coordination:*

6.6.1 The local council or committee should be the contact agency for coordination with REMSOs and state groups. The local council or committee should also assist in coordination with local providers, medical facilities, and medical control through utilization of guidelines developed by the local component in addition to guidelines developed by other group's (REMSOs, State, and so forth) and hold regularly scheduled meetings of all involved agencies. (See Regional document F30.03.02).

6.6.2 The local council or committee should assist in the establishment of guidelines with the local provider(s) for communication, training, mutual aid, and participation in local mass casualty and emergency plans (See document from F30.03.04).

6.6.3 Responsibilities to REMSOs and state agencies should be guided by local identification of areas of need and implementing mechanisms for meeting those need requirements.

6.7 *Quality Assurance*—Local EMS agencies should provide mechanisms for medical review and quality assurance of runs with local medical control, local medical facilities, and local participating agencies. The local implementation of this should be consistent with regional guide 5.5.

6.8 *Funding*—Local responsibility should be developed within the local council or committee and should include provisions to identify funding mechanisms for financial support due to changes made in regulations from REMSO, State, or Federal agencies.

6.9 *Safety*—The local council or committee should emphasize usage of all applicable OSHA, FEMA, ASTM, and other available documents.

APPENDIXES

(Nonmandatory Information)

X1. THE EMS SYSTEM PLANNING PROCESS (see Figs. X1.1 and X1.2)

X1.1 EMS system planning begins with the question "what need will the system meet?" The answer to this question establishes the overall goals of the system. The goals identify the targets of the system, such as patients within various emergency clinical target groups. The system's boundaries are defined in this initial step.

X1.2 The second step of the planning process if to define the optimal system. The planner answers the question "If I could start this system totally from scratch, without any limitations or constraints caused by past practices or decisions, how would I design it?" This approach allows the planner to consider the ultimate system prior to determining legal constraints, financial limitations, political considerations, the inertia of the status quo, and other limiting factors. The optimal system is based on national, state, and local standards for emergency medical care and operations, legal minimums, and demands which are placed on the system through the public policy arena.

X1.3 After determining the optimal system, the planner can then look at the environment in which the system operates. At this stage, system constraints—legal, financial, political, technological—can be identified. The result is the system design—the ultimate system which is realistically possible, given the constraints which are present.

X1.4 The existing system is then examined and compared to the system design. Problem areas are identified and objectives are developed for overcoming these problems. With consideration of the resources which are available for system development, the objectives are prioritized into immediate and long-range. The result becomes part of the annual workplan for the agency.

X1.5 For each system need, an objective should be stated which explains what the need is and how it will be met. All areas in which the current system does not meet the system design should be identified.

X1.6 In planning, the process is often more important than the resulting document. The plan can be a tool to focus attention on system needs and to involve appropriate parties—both provider and consumer—in the system. The value of an

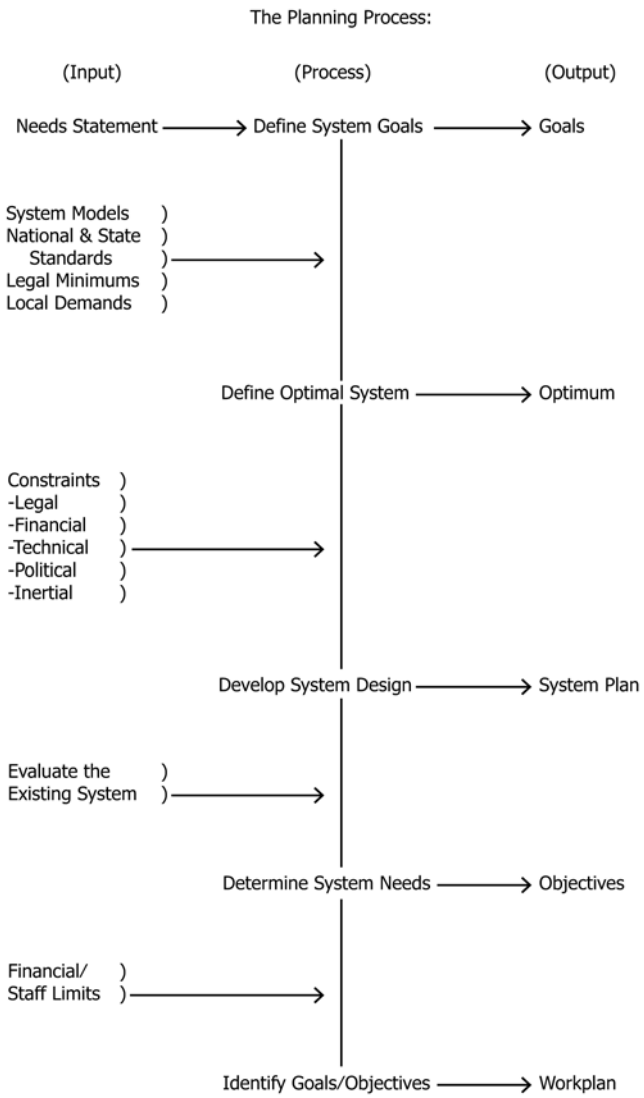

FIG. X1.1 The Planning Process

(Example of EMS Plan Objective)

STANDARD:

The REMSO should assess, and periodically reassess the EMS-related capabilities of acute care facilities in its service area.

CURRENT STATUS:

Hospitals in the region have not been categorized according to their capabilities in the critical care target categories.

NEED(S):

The REMSO has only limited information regarding the capabilities of hospitals and is unable to rationally develop a patient destination policy.

OBJECTIVE X.XX:

The REMSO should categorize hospitals according to state standards.

TIMEFRAME FOR OBJECTIVE:

[X] Annual Implementation Plan

[ ] Five Year Plan

FIG. X1.2 Example of EMS Plan Objectives

open planning process should be self-evident.

X2. HOW TO RECRUIT AND SELECT AN EMS MEDICAL DIRECTOR

X2.1 Develop a position description, based on a job analysis of the tasks that the medical director will be expected to perform (refer to Practice F1149 for further information on the roles and responsibilities for medical control). The analysis should include:

X2.1.1 A description of the tasks to be accomplished in both general and descriptive terms.

X2.1.2 Identification of key individuals and agencies with whom the medical director will need to work to accomplish these tasks.

X2.1.3 A description of the general political climate of the area (as it relates to the EMS community, medical community, and key agencies).

X2.1.4 A description of the time commitments involved.

X2.2 The position description based on this analysis should include the tasks to be accomplished, the specific skills (including interpersonal skills) needed to accomplish them, and other requirements of the agency (for example, ABEM board certification, and the like).

X2.3 Once the position description is established, the agency may select the most appropriate means for securing the services of a medical director, given local needs and the local climate. These may include:

X2.3.1 An informal recruitment process led by the advisory council/committee or agency staff, intended to bring on an individual physician known to meet the needs of the agency.

X2.3.2 A more formal recruitment process involving advertising, application, and interviewing several candidates. If this process is used and multiple candidates apply, the agency must establish a means of evaluating the candidates' credentials in light of structural interview panels using set questions and interview rating systems. More complex evaluation processes, such as assessment centers, may be used if the position involves a large time commitment, substantial remuneration, or a very sensitive political climate.

X2.3.3 Structural interview materials and recruiting aids are available from a wide variety of sources, including the American Personnel Association, and so forth.

X2.3.4 Groups which should be consulted in the medical director selection process may include the medical society, EMS professional associations, and advisory councils.

X3. DEVELOPMENT OF MUTUAL AID PLANS AND AGREEMENTS

X3.1 *Definition*—"Mutual aid" must be considered more broadly than as just an agreement between organizations for the provision of assistance. It includes:

X3.1.1 Policies and procedures to maintain coverage within the EMS system on a day-to-day basis and during significant medical incidents.

X3.1.2 Policies and procedures to provide for response when the primary ambulance is busy and for sufficient response to significant medical incidents.

X3.1.3 Agreements among counties for responses which cross EMS system lines.

X3.2 *General Framework for Mutual Aid:*

X3.2.1 All participants with the EMS system should function as part of that system, not as independent entities. The REMSO is responsible for coordinating the actions of all participating entities so as to ensure an optimal response to the entire EMS area. Policies and procedures can be implemented by regulation or by contract—with or without a subsidy payment.

X3.2.2 REMSOs should develop policies and procedures for day-to-day response and response to significant medical incidents. These should include response to day-to-day incidents within the ambulance's primary response area and other parts of the county, response to significant medical incidents, and a move-up and cover plan. The latter two responses should be considered part of an optimal system response, and not as mutual aid.

X3.2.3 For inter-system responses, two levels of mutual aid agreements are necessary. To provide for instances when resources within the EMS system are not sufficient, each REMSO should first have agreements with its neighboring REMSOs. The agreement should include the circumstances in which mutual aid may be requested, procedures for requesting mutual aid, operational responsibilities, medical control, cross-system advanced life support operations, and financial responsibilities.

X3.2.4 Each REMSO should then have arrangements with specific providers to participate in cross-system responses. Again, these can be implemented by regulation, voluntary agreement, or payment for services. Participating providers must agree to accept the financial arrangements.

X3.3 *Specific Points:*

X3.3.1 *Primary Response*—Ambulance zones should be defined as "primary response areas." The providers should be obligated, through contract or regulation, to provide service as needed to the EMS system.

X3.3.2 Secondary Response and Response To *Multiple Casualty* Incidents *and Medical Disasters*—While most medical emergencies within any area will be managed by the primary ambulance, there will be times when that ambulance is busy or when additional units are needed. The EMS system should ensure that the closest available unit responds to any emergency request.

X3.3.3 *Move-Up and Coverage*—Ambulances should be moved to pre-determined standby points as needed to ensure coverage throughout the EMS system. Move-ups may be appropriate when day-to-day demand has removed ambulance coverage within a portion of the area or when multiple ambulances are required to respond to a single incident. The policies and procedures which are required resemble a provider's "system status management plan" but encompass all providers within the system.

X3.3.4 *Mutual Aid Agreements*—Agreements, as described in the general framework above, are necessary to implement the cross-system portion of the above items.