

# THE ROLE OF STATE MEDICAL DIRECTION IN THE COMPREHENSIVE EMERGENCY MEDICAL SERVICES SYSTEM: A RESOURCE DOCUMENT

Carol A. Cunningham, MD, Keith Wesley, MD, Timothy D. Peterson, MD, MPH,  
Richard Alcorta, MD, Douglas F. Kupas, MD, Joe A. Nelson, DO, Peter Taillac, MD,  
Jim Upchurch, MD

## ABSTRACT

Medical oversight is a fundamental component of every emergency medical services (EMS) system. The quality of physician medical direction has a significant impact upon the system and patient outcome. The lead agency for the state EMS system is a principal facet of our emergency care system, and the state EMS medical director is a vital component

within this comprehensive network. The selection of an experienced, qualified physician for the provision of state EMS medical direction is a critical decision. This resource document provides a snapshot of the status of state EMS medical direction in our nation in 2007 and a projection of the achievable benchmarks for the role of the state EMS medical director in the future. As an informational resource, this tool will assist state EMS officials, legislators, laypersons, and partners within the emergency care system to comprehend, create or improve, and support the state EMS medical director position within their jurisdictions. **Key words:** EMS medical direction; EMS medical oversight; state EMS medical director

PREHOSPITAL EMERGENCY CARE 2010;14:404–411

---

Received January 23, 2010, from the Ohio Department of Public Safety, Division of EMS (CAC), Columbus, Ohio; the Minnesota EMS Regulatory Board (KW), St. Paul, Minnesota; the Department of Emergency Medicine, Boone County Hospital (TDP), Boone, Iowa; the Maryland Institute for Emergency Medical Services Systems (RA), Baltimore, Maryland; the Pennsylvania Department of Health, Bureau of EMS (DFK), Harrisburg, Pennsylvania; the Florida Bureau of EMS (JAN), Tallahassee, Florida; the Utah Department of Health, Bureau of EMS and Preparedness (PT), Salt Lake City, Utah; and the Montana Department of Health and Human Services, EMS and Trauma Systems Section (JU), Helena, Montana. Revision received March 29, 2010; accepted for publication March 31, 2010.

2007 National Association of State EMS Officials (NASEMSO) workgroup: Keith Wesley, MD, Minnesota State EMS Medical Director, Minnesota EMS Regulatory Board; Carol A. Cunningham, MD, State Medical Director, Ohio Department of Public Safety, Division of EMS; Joe A. Nelson, DO, EMS Medical Director, Florida Bureau of EMS; and Jim Upchurch, MD, EMT-P, State EMS Medical Director (Designee), Montana Department of Health and Human Services, EMS and Trauma Systems Section.

2003 NASEMSO (formerly National Association of EMS Directors) workgroup: Timothy D. Peterson, MD, MPH, past State EMS Director and State EMS Medical Director, Iowa Department of Public Health; Richard Alcorta, MD, State EMS Medical Director, Maryland Institute for Emergency Medical Services Systems; Matt Anderson, EMS Unit Manager, Alaska Department of Health and Social Services; Beth Armstrong, Executive Director, NASEMSO; Douglas F. Kupas, MD, Commonwealth Emergency Medical Director, Bureau of Emergency Medical Services, Pennsylvania Department of Health; William D. Ramsey, MD, State EMS Medical Director, West Virginia Office of Emergency Medical Services; and Kathy J. Rinnert, MD, MPH, Assistant Professor of Emergency Medicine, University of Texas Southwestern at Dallas.

The position statement, Role of the State EMS Medical Director, that appears in this issue is based on this resource document.

Address correspondence and reprint requests to: Dr. Carol A. Cunningham, Ohio Department of Public Safety, Division of EMS, 1970 West Broad Street, Columbus, Ohio 43223. e-mail: docmaynard@earthlink.net

doi: 10.3109/10903127.2010.483152

## BACKGROUND

The National Association of State EMS Officials (NASEMSO), the National Association of EMS Physicians (NAEMSP), and the American College of Emergency Physicians (ACEP) have issued a joint position statement supporting the role of physician medical directors at the state level as an essential component of emergency medical services (EMS) systems.<sup>1</sup> The position statement applies to states, the District of Columbia, and the U.S. territories; however, for the purpose of this resource document, the term *state* will be used in reference to all of the aforementioned geographic divisions. This document serves as a resource for state EMS offices by providing additional supportive material related to the role of the state EMS medical director.

Emergency medical services systems flourish when the leadership positions within the state EMS office fully support the needs, capabilities, and expectations of the emergency care system. The state EMS medical director provides medical aspects of leadership, oversight, coordination, access to best practices, system quality management, and research in order to ensure the best possible EMS system for patients. In this role, the state EMS system gains a dedicated and invaluable conduit to the legislative, public health, public safety, and emergency management agencies necessary for the facilitation of the national, state, regional, and local initiatives of the state EMS office. The state EMS medical director delivers a solid core of professional and specialized expertise to the EMS system that cannot be provided to the state EMS office by another individual, committee, or agency. The role of the state

EMS medical director must be fully integrated into the lead agency for EMS within each state, and the position should be officially designated, preferably by statute, by the state authorities.

State EMS medical direction requires political, administrative, and financial support to achieve these goals. The statewide EMS system and its subset components of disaster preparedness, time-critical systems of care, EMS education, quality improvement, patient safety, and research require medical leadership and accountability. As technology and medical science support more sophisticated and complex medical interventions in the out-of-hospital setting and the public expectations for effective emergency medical care increase, every state and territory will benefit from involvement of a qualified state EMS medical director.

The joint position statement supports the establishment of a regular full-time position for a state EMS medical director in every state. Ideally, a full-time state EMS medical director will provide optimal medical oversight to the state's EMS system, but there are financial and other challenges to attaining this goal. States may not be able to compensate the most qualified physicians for this role at a level that would enable the physician to take the state EMS medical director position over clinical practice. In addition, continued clinical practice may increase the credibility of the state EMS medical director with EMS providers and other physicians with whom the medical director must maintain liaison; therefore, states that create a full-time position must consider the positive benefit and support some continued clinical practice for the physician serving in this role. States experiencing budget challenges or that are unable to secure a full-time state EMS medical director should establish part-time positions or contract positions. Either of these choices may be suitable, and in any case are far preferable to not having the necessary medical oversight for the EMS system. The recommended components of the state EMS medical director contract and a sample position description are included in Appendixes 1 and 2, respectively.

## JUSTIFICATION

A comprehensive state EMS system requires an organizational structure that supports all aspects of both administrative and medical function. All of the current emergency care system activities at the state, regional, and local levels require active involvement of the state EMS medical director. Systemwide practice standards and interjurisdictional coordination of medical services can be most effectively achieved through the establishment of proper medical authority at the state level.

The responsibility for functional EMS coverage in all jurisdictions lies with each state. The state EMS sys-

tem is also a critical link to local and regional EMS systems, federal resources, and other emergency care delivery and health care administrative organizations. The state EMS medical director is recognized as an imperative and invaluable component of the state EMS system. The state EMS medical director is often the primary source of emergency care and prehospital expertise that is requested from local, state, federal, and partner organizations. The merit of the state EMS medical director is also highlighted by the increase in federal funding sources for which medical direction is an allowable expenditure. The Federal Interagency Committee on Emergency Medical Services recently recommended that all federal grants related to EMS require state EMS medical direction as part of the grant consideration process.

It is important to note that state EMS medical direction is not redundant with state EMS administration, but is complementary to it. The whole sphere of administrative functions including the external functions of licensure actions, inspection and compliance determination, examination and certification, investigation and discipline, and operational procedures—as well as internal functions such as hiring, evaluation, and discipline of employees, management of budget and resource allocation, strategic and operational planning, and policy development and implementation—all exist separately from the essential medical aspects of system development set forth within this document. Both administrative and medical expertise must be brought to bear in the configuration of the complete EMS system. This is accomplished by the coordinated effort of the state EMS director and the state EMS medical director working in concert with each other.

## STATUS

The National Association of State EMS Directors, which has since become the NASEMSO, conducted a survey in 2003 to determine the status of state EMS medical director positions nationally. The survey population included all 50 states, the U.S. territories, and the District of Columbia. Various parameters were assessed by the survey, and 47 of the 56 eligible entities responded, resulting in an approximately 84% rate of return. Within the survey, barriers to creating a state EMS medical director position were identified, and they are compiled in Table 1.

## Barrier Frequency Reported

The NASEMSO Medical Directors Council, a council within NASEMSO, completed an updated survey in 2007 to reassess the status of state EMS medical direction positions nationally. In comparison with the 2003 survey, the survey conducted in 2007 focused on the specific aspects of the state EMS medical

TABLE 1. Barriers to the Creation of a State EMS Medical Director Position in 2003

Barrier	Frequency Reported (%)
Inadequate funding	17
Lack of statutory authority	12
Inadequate support from department administration	9
Needs are met in other ways	8
Other priorities take precedence	6
Other political considerations	5
Legal liability issues	3
Inadequate support from medical community	2
Inadequate support from EMS community	2
No need for such a position	1
Other	1

EMS = emergency medical services.

director's relationship with the state EMS office and the resources provided to the position. The population invited to complete the survey were all of the existing state EMS medical directors. For jurisdictions lacking a designated state EMS medical director, the survey was presented to the state EMS director for completion. Responses were received from two U.S. territories and 36 of the 50 states. Eight of the nonresponding states and the District of Columbia did not have a designated state EMS medical director at the time the survey was conducted. The most crucial components that should be encompassed within the state EMS medical director job description or contract identified by the NASEMSO Medical Directors Council in the 2007 survey and the percentages at which they had been achieved at that time are outlined in Table 2.

## QUALIFICATIONS

The ideal qualifications for the state EMS medical director are listed in the sample position description (Appendix 2). The qualifications of a state EMS medical director should be clearly defined, preferably within statute or regulation. A legislated state EMS medical director position serves as a formal acknowledgment for the need and value of EMS medical direction and

TABLE 2. Components of the State EMS Medical Director Job Description in 2007

Component	Percentage of Responses
Contractual relationship with state EMS office	45
Position based within statutory language	47
Stable funding source provided for position	39
Compensation	74
Clearly delineated roles and responsibilities	66
Credentials for the position	79
Clearly delineated accountability and benchmarks	42

EMS = emergency medical services.

TABLE 3. State Medical Director Qualifications/Prerequisites in 2007

Qualification/Prerequisite	Percentage of Responses
Valid state medical license	76
Valid Drug Enforcement Administration license	29
Board certification in any specialty	10
Board certification in emergency medicine	89
Residency trained in emergency medicine	3
Completion of EMS fellowship	0
Number of years of active EMS medical direction	21
Active practice of medicine	29
Other	13

EMS = emergency medical services

ensures that an experienced and well-qualified physician will be retained to lead the state EMS system. As a basic foundation, the credentials for a state EMS medical director should include possession of a valid medical license in the jurisdiction where the physician will serve, substantial experience in EMS medical direction, and significant experience in the active practice of emergency medical care delivery.

The state EMS medical director provides specialized medical oversight in the development and administration of the EMS system and is an essential liaison with local, state, and federal EMS agencies. Leadership capabilities are inherently important in addition to the polished communication and networking skills necessary to engage the general public, EMS colleagues and other medical professionals, and organizations that support the EMS system.

Individual states should add other qualifications as appropriate for their EMS systems. Tables 3 and 4 outline the 2007 survey results on current state EMS medical director candidate prerequisites and qualifications and a profile of the foundation of experience of the current state EMS medical directors.

## AUTHORITY

The authority of the state EMS medical director must be aligned with and supported by the state EMS director's administrative functions, and should focus

TABLE 4. Profile of the State EMS Medical Directors' Experience in EMS Medical Direction in 2007

Years as an Active EMS Medical Director of an EMS System	Percentage of State EMS Medical Directors in 2007
0 years	6
1-5 years	9
6-10 years	14
11-15 years	24
16-20 years	12
21-25 years	26
26-30 years	9

EMS = emergency medical services.

TABLE 5. Scope of State EMS Medical Director Activities in 2007

Scope of Activities	Percentage of Responses
Patient care protocol approval/review/development	89
State policy approval/review/development	89
Legislative statute/rule approval/review/development	87
Investigation/mediation	74
Disaster/HAZMAT/terrorism preparedness	76
Hospital/emergency department preparedness	66
Emergency telecommunications issues	55
Service operational plan review/approval	42
Trauma system oversight/development/participation	11
Public health/prevention	74
Training and education standards/policy development	79
Tactical or law enforcement oversight	29
Professional organization liaison activities	84
No response	3

EMS = emergency medical services; HAZMAT = hazardous materials.

on the clinical and patient care aspects of the statewide EMS system. Currently, a few states have a physician who serves as both the state EMS director and the state EMS medical director.

## RESPONSIBILITY

The responsibility of the state EMS medical director must encompass all aspects of the statewide EMS system related to the quality and availability of medical care. The medical director must also serve as an advocate for efficient, effective, and evidence-based health care delivery by EMS systems throughout the state.

It is the role of the state EMS medical director to oversee the delivery of medical care that is consistent with professionally recognized standards and to institute and maintain process improvement measures that ensure professional and public accountability for medical care provided within the statewide EMS system. The roles and responsibilities of the state EMS medical director vary widely by state. Table 5 displays the 2007 survey results of the scope of activities of the state EMS medical directors and highlight the potential for state EMS offices to increase the breadth and depth of this scope to maximally utilize the expertise of the state EMS medical director.

## CONFLICT OF INTEREST

Conflict-of-interest considerations for a state EMS medical director are under the jurisdiction of the employing state agency, and should be significantly similar to those considerations relating to any state employee or contractor as appropriate. Specific considerations may include declarations, recusation, and

outside employment and standing. The individual states may have additional criteria or operational avenues to address conflict-of-interest issues.

## Declarations

Applicants for the position of state EMS medical director may be required to disclose or declare any potential conflict of interest, such as familial or intimate relationship to a regulated person, a history of past or pending legal or other actions that may influence decision making, or a financial interest in any regulated entity. Ethically, the state EMS medical director should declare any conflict or perceived conflict related to any part of the job.

## Recusation

Under some circumstances, the state EMS medical director may be required to recuse himself or herself from the execution of certain duties. Examples may include, but are not limited to, the investigation or pending action against a recent past employer (in another capacity or position) of the state EMS medical director, a close business associate or familial relationship or intimate of the state EMS medical director, or an entity in which the state EMS medical director has disclosed or revealed a financial or other significant interest.

## Outside Employment and Standing

State EMS medical directors may be required either by professional licensing requirements or their state employer to maintain currency in the field of emergency medicine by active clinical practice. Under such circumstances, the state EMS medical director would normally be recused from any investigations or actions involving the second position. In addition to other positions involving clinical practice, there are ethical considerations related to involvement with vendors, consultant roles, and speakers' bureaus that may be significant conflicts of interest. The state EMS medical director must be aware of these issues and follow state policies and ethical principles when considering these forms of supplemental income or involvement.

## SALARY AND SUPPORT

The state EMS medical director should be provided with a salary commensurate with the qualifications and responsibilities listed above including the necessary reimbursement for material, travel, support services, and indirect costs. Ideally, the state EMS medical director position should be supported by a dedicated funding source. For full- or part-time regular positions, states may have a physician salary classification system that provides a basis for the compensation. Appropriate compensation for a state EMS medical

TABLE 6. State EMS Medical Director Relationship with the State EMS Office in 2007

Relationship with State EMS Office	Percentage of Responses
Employee	29
Independent contractor	45
Volunteer	11
Appointed	7
Full-time	13
Not full-time	87
Written contract or agreement	45
No written contract or agreement	53
Agreement/contract with state EMS medical director	50
Agreement/contract with practice	0
Agreement/contract with employer	3
Agreement/contract with university	11
Agreement/contract with institution	3
Agreement/contract with other agency	3
Written job description	56
No written job description	39

EMS = emergency medical services.

director should be consistent with the compensation of other physicians who are either employed by or contracted as consultants to the state for the oversight and administration of other aspects of health care.

As previously mentioned, some states may not be in a fiscal position under their current circumstances to create such a position. Contracts for professional services are another avenue to meet this need without the cumbersome process of adding an additional state employee status position. Grants may serve as a temporary funding source to create a contract position until a permanent funding source is secured.

The recommended components of a state EMS medical contract are included in Appendix 1. Tables 6 and 7 outline the 2007 survey results for the employment relationship between the state EMS medical director with the state EMS office and the number of hours of work requested or contracted for the position.

The state EMS medical director should have access to appropriate staff support from the state EMS office

TABLE 7. Dedicated Hours of Work by the State EMS Medical Director in 2007

Requested/Contracted Hours per Month	Percentage of Responses	Actual Hours Committed in Last Calendar Year	Percentage of Responses
No response	13	No response	13
0-20	11	Less than 100	7
21-40	26	100-500	31
41-60	8	501-1,000	18
61-80	10	1,001-2,000	21
81-100	8	Greater than 2,000	10
101-120	3		
121-140	5		
141-160	16		

EMS = emergency medical services.

TABLE 8. Professional and Administrative Liability Protection Provided to the State EMS Medical Director by the State EMS Office in 2007

Insurance Product Provided	Percentage of Affirmative Responses
Professional liability including medical malpractice	24
Professional liability excluding medical malpractice	16
General liability (errors and omissions, slander, etc.)	29
Employee practice liability	5
Workers' compensation	26
Disability insurance	14
Medical insurance	26
None of the above	45

EMS = emergency medical services.

to facilitate the successful completion of the assigned duties and responsibilities. Additional benefits may be provided to the state EMS medical director as deemed necessary by the state EMS office and the state director to support the position and to advance the state EMS system. The provision of adequate professional and administrative liability protections that are specific to the unique needs of the position is critical. The 2007 survey results for these parameters are compiled in Tables 8 and 9.

### SAMPLE POSITION DESCRIPTION

A sample position description that delineates the medical director's authority and responsibilities and the EMS system's obligations is included in Appendix 2. State medical societies and advocacy groups should play an integral part in further defining specific needs and solutions for their respective states.

TABLE 9. Additional Provisions Provided to the State EMS Medical Director by the State EMS Office in 2007

Additional Provisions Provided	Percentage of Affirmative Responses
Vehicle	10
Equipment/radio	24
Cell phones	37
Travel expenses	60
Leave time	21
Professional organization dues	26
Health insurance	26
Workers' compensation	24
Conferences	32
Continuing medical education	8
Retirement/pension	26
Books/subscriptions	11
Other	8
None	3

EMS = emergency medical services.

## SUMMARY

The success, stability, and advancement of an EMS system require dedicated and qualified medical direction. This document is meant to serve as a resource for state EMS offices during the development or enhancement of the state EMS medical director position.

## Reference

1. Role of the state EMS medical director: a joint statement by the American College of Emergency Physicians (ACEP), the National Association of EMS Physicians (NAEMSP), and the National Association of EMS Officials (NASEMSO) [position paper]. *Prehosp Emerg Care*. 2010;14:XXX-XX.

## APPENDIX 1

### Lead EMS Agency Relationship with the State EMS Medical Director

#### Overview

In the best interest of both parties, the lead emergency medical services (EMS) office of a state or jurisdiction and the physician who is selected to serve as the state EMS medical director must possess a mutual understanding of the duties, goals, and expectations of the position. The communication of the plan ensures maximal benefit to the EMS system within the local, state, federal, and international network. Although many agreements can be sealed with a handshake, the National Association of State EMS Officials (NASEMSO) Medical Directors Council supports the delineation of the responsibilities of the state medical director and the state EMS office in writing by contract, employment agreement, job description, regulation, or legislation.

The NASEMSO Medical Directors Council has identified several fundamental features that should be considered within a state medical director contract. This compilation is presented as a tool to assist state EMS offices that wish to create a state medical director contract or job description, or to refine and improve an existing contract, and it is not meant to be mandatory or all-inclusive.

#### Preferred Components of a State EMS Medical Director Contract or Job Description

A written job description is helpful to both the state EMS office and the potential state medical director candidate. The job description must contain at least the minimum level of roles and responsibilities that will facilitate the smooth operation of the state EMS of-

fice and the state EMS system. The state EMS director may or may not wish to determine the percentage of time that should be devoted to specific duties, but should communicate any expectations to the physician. The job description also serves as the platform for periodic evaluation of the state medical director's performance. Establishment of accountability, delineated performance measures, and annual or biannual benchmarks promote overall satisfaction for all members and colleagues of the EMS system. Duties that should be considered within the job description for the state medical director include the following:

- Prehospital protocol development, review, revision, and approval
- State policy or legislative development, review, revision, and approval
- EMS training, education standards and program development, review, revision, and approval
- Program development, review, revision, and approval of specialized EMS operations (hazardous materials [HAZMAT], disaster and health crisis planning, tactical EMS, trauma, public health and education, prevention, communications, time-critical systems of care, system operations, etc.)
- Active involvement and participation with specified local, state, and federal EMS organizations and EMS partners

The state medical director should be reasonably and fairly compensated, ideally, from a stable funding source. The methods of compensation will vary from state to state as the state medical director may be contracted as a state employee, hired as an independent contractor, or appointed by the state EMS office or other party. The compensation package may be solely monetary in the case of an independent contractor or may include various job benefits in the case of a state employee. The compensation for the state medical director should include the following:

- An adequate salary or hourly wage that correlates with the expertise and experience of the state medical director, the contracted hours, and the duties outlined in the job description
- Adequate professional and administrative liability insurance coverage and legal representation that are specific to the unique needs of a physician serving as a state EMS medical director
- Resources to support and enhance the performance of the duties outlined in the job description (conference fees, travel expenses, professional organization dues, EMS educational materials or subscriptions, etc.)

## APPENDIX 2

### Sample Components of a Position Description for a State EMS Medical Director

#### Definition

This is advanced professional medical and regulatory work providing specialized medical oversight and consultation in the development and administration of the state emergency medical services (EMS) system.

The selected physician is responsible for all medical aspects of the planning, evaluation, and supervision of the comprehensive EMS system. The selected physician will work in close consultation with the state EMS director in select areas of system administration.

*Any one position may not include all the listed duties or knowledge, skills, or abilities; nor are the listed examples intended to be exhaustive of those required.*

#### Examples of Work

Provide oversight for all medical aspects related to planning, development, implementation, and evaluation of the statewide EMS system. This includes all medical components for response systems of care supported by public policy that integrate or interface with the EMS system, such as the following:

- State plans (i.e., burn, cardiac, pediatric/neonatal, trauma, stroke plans)
- Domestic preparedness
- Other systems of specialized care through which EMS patient care is delivered

Oversee the establishment of statewide protocols, policies, and procedures for all patient care activities from dispatch through triage, treatment, and transport for all emergency responders (EMS, fire, HAZMAT, police, etc.).

Oversee statewide EMS continuous performance improvement program.

Establish credentialing, training, and certification requirements of local and regional EMS medical directors.

Serve as an expert advocate for efficient, effective, and evidence-based emergency medical services throughout the state.

Oversee the delivery of medical care that is consistent with recognized professional standards.

Develop and oversee performance improvement programs designed to assure professional and public accountability for medical care provided within the statewide EMS system.

Recommend and approve medical policies and procedures to be included in the state treatment and transport protocols.

Oversee appropriateness of training and certification of EMS providers.

Assist the state EMS regulatory agency to assure compliance with applicable rules and regulations.

Represent the state EMS regulatory agency at meetings involving matters related to EMS medical issues and related public policy development.

Provide guidance and assistance to the state EMS office on the following matters:

- Scope of practice issues for EMS providers
- Restrictions placed on an EMS service or EMS provider certification or license
- Recommend corrective action and disciplinary action when necessary for an EMS agency or EMS provider when the cause is related to a medical care issue
- Corrective action and disciplinary action when necessary for regional and local EMS medical directors

Provide education on roles/responsibilities, EMS rules/regulations, and emerging issues in EMS to local and regional EMS medical directors.

Provide consultation, support, and assistance to local and regional EMS medical directors as needed.

Promote and participate in EMS system research.

Maintain liaison with the local, regional, state, and national medical community and professional medical organizations.

Interact with local, regional, state, and national EMS authorities to oversee that standards, needs, and requirements are met and resource utilization serves to optimize efficient, effective, and evidence-based medical care.

Oversee the coordination of all medical activities related to disaster planning and response.

Promote public information and education on prevention of illness and injury, recognition of emergency conditions, and timely 9-1-1 EMS access.

Maintain knowledge of and familiarity with all levels of medical response including, but not limited to, traditional EMS providers, first responders, firefighters, HAZMAT responders, and law enforcement through ongoing professional and personal education in order to provide coordinated medical advice and systemwide consistency for interagency activities and disaster response.

#### Examples of Knowledge, Skills and Abilities

The following are key professional attributes that the state EMS medical director should have in order to successfully interact with a diverse group of coworkers and EMS system stakeholders:

- Thorough knowledge of state EMS laws
- Thorough knowledge of system level data analysis
- Considerable knowledge of EMS dispatch and communications
- Considerable knowledge of mass-casualty and disaster plans
- Considerable knowledge of group dynamics relating to advisory committee structures
- Significant knowledge of out-of-hospital care research
- Significant knowledge of public health education, injury prevention, and health promotion
- Considerable communication and interpersonal skills
- Considerable technical writing skills in grant preparation, protocol and policy development, and regulatory language
- Ability to analyze and comprehend data
- Ability to deal tactfully with the media, elected officials, and others on sensitive matters
- Ability to make public presentations

## Experience and Education Requirements

### Essential

Significant experience and familiarity with the organization and operation of the statewide EMS system, including but not limited to, any existing subset systems for handling trauma, burns, cardiac arrest, stroke,

and pediatric emergencies, and other specialized components of the EMS system

Significant experience, leadership, and success in working with state EMS committees

Significant experience in on-line and off-line medical direction of out-of-hospital EMS

Significant experience with the emergency department and field treatment of acutely ill and injured patients

Successful experience in working with national and state-level professional EMS and medical organizations

Experience with the EMS quality improvement/continuous performance improvement processes

### Desirable

Board certification in emergency medicine

Completion of an EMS fellowship and/or EMS subspecialty certification

Continued involvement with the emergency department management of acutely ill and injured patients

Recent or current involvement in local, state and national EMS organizations

### Necessary Special Qualifications

The state EMS medical director must be able to secure a license to practice medicine in the state where serving in this capacity.

Copyright of Prehospital Emergency Care is the property of Taylor & Francis Ltd and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.

Copyright of Prehospital Emergency Care is the property of Taylor & Francis Ltd and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.