

The Role of State Medical Direction in the Comprehensive Emergency Medical Services System

A joint report of the following organizations:

National Association of State EMS directors (NASEMSD)

National Association of EMS Physicians (NAEMSP)

American College of Emergency Physicians (ACEP)

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I. BACKGROUND

The National Association of State EMS directors (NASEMSD), National Association of EMS Physicians (NAEMSP) and American College of Emergency Physicians (ACEP) believe that physician medical directors at the state level are an essential component of EMS systems. The state EMS medical director provides medical aspects of leadership, oversight, coordination, access to best practices, system quality management, and research in order to assure the best possible EMS system for patients. In order for the EMS system to fully embrace the medical aspects of disaster preparedness, the role of the state EMS medical director must be integrated into each state EMS office.

State EMS medical direction requires political, administrative, and financial support to achieve these goals. Presently, most states have little or no funding for a state EMS medical director, and sufficient medical direction often is lacking. The statewide EMS system and its subset components of disaster preparedness, trauma systems, etc. require medical leadership and accountability. As technology and medical science supports more medical interventions in the out-of-hospital setting and the public expectations for effective medical care increase, every state and territory would benefit from involvement of a state EMS medical director.

The NAEMSP, NASEMSD and ACEP advocate for the establishment of regular full-time positions for state EMS medical directors in all states and U.S. territories. States experiencing budget challenges 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. A sample position description is included in Appendix A.

II. JUSTIFICATION

A comprehensive state EMS system evidences an organizational structure that supports all aspects of both administrative and medical function. The current emphasis on disaster preparedness at the state, regional, and local levels requires active involvement of the state EMS medical director. System-wide practice standards and inter-jurisdictional coordination of medical services can only be effectively achieved through the establishment of proper medical authority at the state level.

It is important to point out that state EMS medical direction is not redundant with state EMS administration. The whole sphere of administrative functions including external functions like license actions, inspection and compliance determination, examination and certification, and operational procedures; as well as internal functions such as hiring, evaluating and disciplining employees, budgeting 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 here. The importance of both administrative *and* medical expertise must both be brought to bear in the configuration of the complete EMS system. The duties thereof are clearly separate job responsibilities involving both the state EMS medical director and the state EMS director working in concert.

III. STATUS

The National Association of State EMS Directors conducted a survey¹ to determine the status of state EMS medical direction positions nationally. The survey population included the U.S. states, territories² and the District of Columbia. Forty-seven of the fifty-six eligible entities responded to the survey. This represents an approximate 84% rate of return.

Twenty-eight (60%) of the respondents indicated their jurisdiction has a position for state EMS medical director. Of these, only four were regular full-time positions, five were regular part-time positions, seventeen were contractual positions, and two were uncompensated volunteer positions. Regular positions (full and part-time together) comprise only a third of this population, while contractual positions represent slightly less than two-thirds. A state-by-state breakdown is provided in the table in Appendix D.

Respondents who indicated the presence of the position in their organization were asked to identify the greatest benefits of having a state EMS medical director. These detailed responses are provided in Appendix C.

The survey also attempted to capture information on how the 19 states that do *not* have a medical director distribute and accomplish the work normally associated with such a position. The areas specifically targeted in the survey were the following seven key functions.

1. Quality assurance / quality improvement
2. Protocol development
3. EMS scope of practice
4. Educational content
5. Research
6. Standards of care
7. Response planning

States without medical directors were asked to identify if each of these key functions were addressed by any of the following means. Figure 1 and Table 1 report the responses received in detail.

1. Locally
2. Regionally
3. Statewide committee
4. EMS office staff
5. Other means
6. None (if the function is not addressed by the EMS system)

The functions related to *quality assurance / quality improvement* appear to be predominantly relegated to the local level, which may indicate an absence of state-level accountability for the EMS system patient care quality. Further study should be undertaken. The functions related to *protocol development* appear to be predominantly performed at the local level as well, though somewhat more equally distributed. The functions related to *scope of practice* appear to be done largely by statewide committees. *Educational content* is done most common equally by the EMS office staff and statewide committees. EMS system *research*, when undertaken, is most often

¹ A copy of the survey instrument is attached as Appendix B.

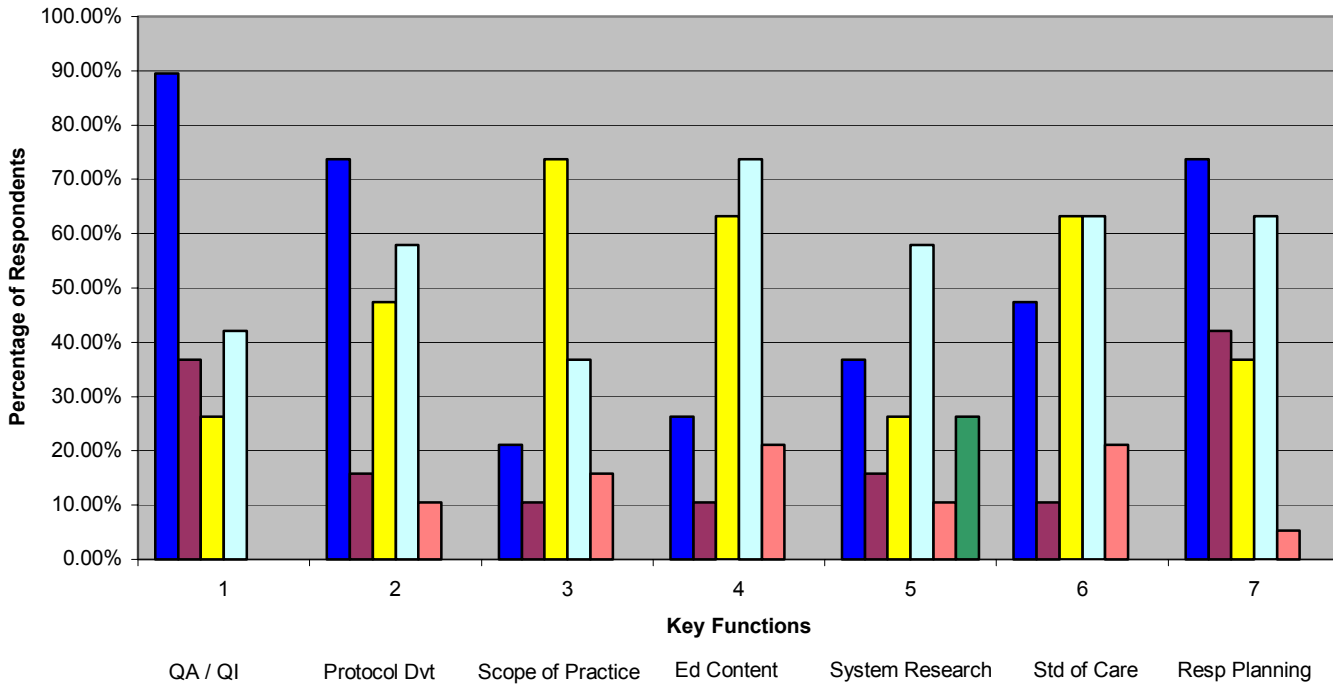
² U.S. Territories include American Samoa, Guam, Puerto Rico, the Northern Mariana Islands, and the US Virgin islands

performed by the EMS office staff. The degree to which it is descriptive versus statistical in design was not determined. Research was the only key function that yielded the response of *none*, which was reported five times. *Standards of care* are predominantly determined by both EMS office staff and by statewide committees. *Response planning* is done mostly at the local level and by EMS office staff, however reporting across the spectrum of the system was reported to be present.

Figure 1

Key Functions of Medical Direction and Primary Means of Achieving Them

Responses Reported by 19 States Without an EMS Medical Director



Color Key	
Local	Blue
Regional	Red
State Committee	Yellow
State EMS Office	Cyan
Other	Orange
None	Green

Table 1

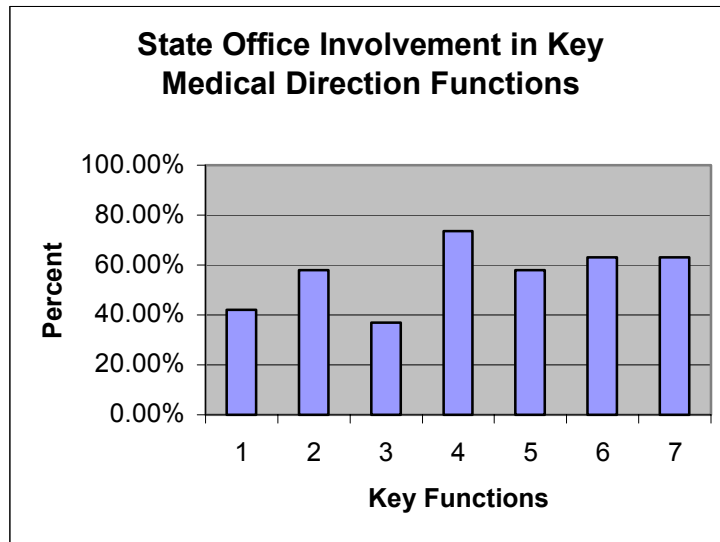
Reported Responses by States Without an EMS Medical Director

Function	Local	Regional	State Committee	State EMS Office	Other	None
QA/QI	17	7	5	8	0	0
Protocol Development	14	3	9	11	2	0
EMS Scope of Practice	4	2	14	7	3	0
Educational Content	5	2	12	14	4	0
EMS System Research	7	3	5	11	2	5
Standards of Care	9	2	12	12	4	0
Response Planning	14	8	7	12	1	0
Total Responses	70	27	64	75	16	5

State EMS Office Involvement

State EMS office involvement in the 7 key functions was found overall to be present 59.39 percent of the time in the 19 states without EMS medical director presence. Figure 2 displays percentages for each key function. If one accepts the premise that the key functions surveyed represent important aspects of the comprehensive EMS system, it is disturbing to note lack of full involvement with the execution of these functions.

FIGURE 2



- Key: 1 – QA / QI
 2 – Protocol Development
 3 – Scope of Practice
 4 – Educational Content
 5 – EMS System Research
 6 – Standards of Care
 7 – Response Planning

Barriers

The identification of barriers is critical understanding their causes and potential solutions. This understanding represents an opportunity to improve the overall EMS system design and function. Table 2 lists the barriers to the creation of a state medical director position that were identified by respondents in states currently without the position.

TABLE 2

Barriers to the Creation of the State EMS Medical Director Position

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

IV. QUALIFICATIONS

The ideal qualifications for the state EMS medical director are listed in the attached position description. Generally, it is most desirable that the individual in this position be a physician with extensive and current knowledge of all aspects of the EMS system.

The ideal candidate will have served as a local or regional medical director and should also have evidenced leadership in volunteer committee work or through representation via one or more professional associations.

Individual states should add other qualifications as appropriate for their EMS system.

V. AUTHORITY

The authority of the state EMS medical director must be aligned but not overlap with the state EMS director’s administrative functions, and should focus on the clinical and patient care aspects of the statewide EMS system.

VI. RESPONSIBILITY

The responsibility of the state EMS medical director must encompass all aspects related to the quality and availability of medical care within the statewide EMS system. The medical director must also serve as an advocate for efficient and effective emergency medical services throughout the state.

It is the role of the state EMS medical director to ensure the delivery of medical care is consistent with professionally recognized standards and that quality care management is maintained in a manner that assures professional and public accountability for medical care provided within the statewide EMS system.

VII. 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.*

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 financial interest in any regulated entity.

Recusation

Under some circumstances, the state EMS medical director may be required to recuse him/herself from the execution of certain duties. Examples may include 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 of 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 practice. Under such circumstances, the state EMS medical director would normally be recused from any investigations or actions involving the second employer.

VIII. 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 line item budget for material, support services, and indirect costs. For full or part-time regular positions, states usually have a salary classification system for physicians that provide a basis for the salary line item of the overall budget.

As previously mentioned, some states may not be in a fiscal position under the current circumstances to create such a position. Contracts for professional services are another way to meet this need without incurring the additional costs of benefits associated with regular positions. Contract positions can also be created with grant money under most of the current grants to improve domestic preparedness.

IX. 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 A. State medical societies and advocacy groups should play an integral part in further defining specific needs and solutions for their respective states.

X. RELATED RESOURCES

NASEMSD Policy Platform

http://www.nasemsd.org/policy_platform.pdf

NAEMSP Position Paper

Physician Medical Direction in EMS

<http://www.naemsp.org/Position%20Papers/physicianmedical.pdf>

ACEP Policy Education Resource Paper (PREP)

Medical Direction of Prehospital Emergency Medical Services

<http://www.acep.org/3,617,0.html>

NHTSA Document

NHTSA EMS Agenda for the Future

<http://www.nhtsa.dot.gov/people/injury/ems/agenda/emsman.html>

NASEMSD / NAEMDP resource document on Domestic Terrorism: Issues of Preparedness

http://www.nasemsd.org/report_on_national_ems_resourc.html

Appendix A.

**Sample Position Description
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 Emergency Medical Services System.

An employee in this class is responsible for all medical aspects of the planning, evaluation and supervision of the comprehensive emergency medical services system. The employee in this class will work in close consultation with the EMS 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 the 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 (e.g., trauma / burn plan, Stroke plan, Cardiac plans)
- Domestic preparedness
- EMS for children / neonatal transport
- 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 quality improvement program.

Establish credentialing requirements of local and regional EMS medical directors.

Serve as an advocate for efficient and effective emergency medical services throughout the state.

Ensure delivery of medical care is consistent with recognized professional standards.

Assure quality care management to ensure professional and public accountability for medical care provided within the statewide EMS system.

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

Ensure 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's or EMS provider's certification or license
- Recommend corrective action and disciplinary action when necessary for an EMS service or EMS provider when cause is related to a quality of 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 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 ensure that standards, needs, and requirements are met and resource utilization serves to optimize efficient and effective medical care.

Ensure a coordinated effort of all medical activities for disaster planning and response.

Promote public information and education on prevention of illness and injury.

Maintain knowledge levels for all levels of medical response (in the context of not only traditional EMS but also for first responders involving police, fire, hazmat, and others) through ongoing professional and personal education in order to provide coordinated medical advice and system-wide 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 any existing subset systems of trauma, pediatrics, burn, cardiac, stroke, and other specialized components of the EMS system)

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

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

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 / performance improvement process

Desirable

Board certification in emergency medicine

Continued involvement with the ED 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.

Appendix B.

NASEMSD Survey: State Medical Direction in the Comprehensive EMS System

Name of person completing survey	State/Territory
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1. Does your state have an existing *position* for State EMS Medical Director?
 Yes No (If no, then skip to question #2)

A. If yes, which of the following best describes the type of position? (check only one)
 Regular full-time Regular part-time Contractual position? Other (explain: _____)

B. What do you consider the greatest benefits of having this position?

2. If your state does *not* have a position for State EMS Medical Director, please indicate whether the following functions of medical direction are addressed locally, regionally, by a statewide committee, by EMS office staff, by other means, or by *none* if the function is not addressed by the EMS system in your state. (Check all that apply)

QA/QI	<input type="checkbox"/> locally <input type="checkbox"/> regionally <input type="checkbox"/> statewide committee <input type="checkbox"/> EMS office staff <input type="checkbox"/> other <input type="checkbox"/> none
Protocol Development	<input type="checkbox"/> locally <input type="checkbox"/> regionally <input type="checkbox"/> statewide committee <input type="checkbox"/> EMS office staff <input type="checkbox"/> other <input type="checkbox"/> none
EMS Scope of Practice	<input type="checkbox"/> locally <input type="checkbox"/> regionally <input type="checkbox"/> statewide committee <input type="checkbox"/> EMS office staff <input type="checkbox"/> other <input type="checkbox"/> none
Educational Content	<input type="checkbox"/> locally <input type="checkbox"/> regionally <input type="checkbox"/> statewide committee <input type="checkbox"/> EMS office staff <input type="checkbox"/> other <input type="checkbox"/> none
EMS System Research	<input type="checkbox"/> locally <input type="checkbox"/> regionally <input type="checkbox"/> statewide committee <input type="checkbox"/> EMS office staff <input type="checkbox"/> other <input type="checkbox"/> none
Standards of Care	<input type="checkbox"/> locally <input type="checkbox"/> regionally <input type="checkbox"/> statewide committee <input type="checkbox"/> EMS office staff <input type="checkbox"/> other <input type="checkbox"/> none
Response Planning	<input type="checkbox"/> locally <input type="checkbox"/> regionally <input type="checkbox"/> statewide committee <input type="checkbox"/> EMS office staff <input type="checkbox"/> other <input type="checkbox"/> none

3. What barriers do you believe exist in your state to the creation of the position of State EMS Medical Director? (Check all that apply):

<input type="checkbox"/> Inadequate Funding <input type="checkbox"/> Inadequate support from EMS community <input type="checkbox"/> Inadequate support from department administration <input type="checkbox"/> Inadequate support from medical community <input type="checkbox"/> Lack of Statutory Authority	<input type="checkbox"/> Legal liability issues <input type="checkbox"/> Other priorities take precedence <input type="checkbox"/> Needs are met in other ways <input type="checkbox"/> Other political considerations <input type="checkbox"/> No need identified for such a position <input type="checkbox"/> Other (explain: _____)
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4. Comments:

Appendix C.

Reported benefits of having an existing position for state EMS medical director

The following statements are taken directly from respondents in states that indicated the organizational presence of a state EMS medical director position.

- “The ability to get advice on protocols and system development in a timely manner. The position allows us to move in medically appropriate directions and serves as a great interface to the EMS community.”
- “Current medical practice standard”
- “The state EMS medical director assist[s] with investigations and offers advice pertaining to EMS issues. Serves as chairman for the EMS Advisory Council. The state Medical [Director] is a volunteer position. He does not receive payment as a medical director.”
- “The ability to have a dedicated EMS physician resource available to weigh in and advise on system development, response, treatment & transport protocols — ED diversion, trauma/EMS system integration & to guide us through recent preparedness issues.”
- “Provision of medical expertise throughout spectrum to include trauma system reviews, prehospital drug and training issues.”
- Chairing the state EMS board’s clinical issues committee, which always advises the board on protocols, medical procedures and scope of practice.”
- “EMA/EMS coordination for resource support and planning issues.”
- “Access to an emergency physician for guidance and consultation on all areas of system planning, regulation, Q.I., etc...”
- “Have on staff a stable position (0.5 FTE) to address issues relevant to medical EMS practice and direction. Also chair/lead advisory groups.”
- “Peer to peer with EMS service medical directors. Timely review and input of [sic] protocols, CQI issues, and many other medical/clinical issues (scope of practice).”
- “Quality improvement and quality assurance of EMS system standards, clinical practice, and relationships with the healthcare system.”
- “Oversight of Medical Control Physicians and QA/QI of EMS providers.”
- “I need his expertise to help me make decisions on such things as scope of practice.”
- “Weekly presence of an EMS physician in the office dedicated to system issues. This gives us greater influence in the EMS community as well as within the structure of Public health.”
- “The physician EMS medical director readily bridges the gap that seems to always exist between the physician medical community and the EMS community. He does so by lending great knowledge and skill, and thus credibility to protocols and guidance that are so much a part of our interaction with the medical community. He has proven exceedingly valuable to our daily involvement with our state Division of Public health in preparing for terrorism. He also commands a great respect in our effort to establish a state-wide integrated trauma system.”
- “Medical oversight and guidance.”

- “Having a physician speak with local medical authority on a standard of practice issue & use of medication and procedures in the field.”
- Provides oversight [sic] on local protocols.”
- He chairs the physician board that is responsible for treatment issues/protocols — and is an invaluable resource to this office when treatment issues arise.”
- “Provides an agency focus on medical oversight including protocol development and QI. The medical director also interfaces with the local jurisdictions and leads efforts regarding domestic preparedness.”
- “In-house consultation on clinically-related matters and the opportunity to get the ear of the medical community on administrative issues.”
- “Emergency medical expertise, someone with whom to consult, credibility.”
- “MD liaison with the Medical Board in issues relating to the scope of practice for each level of credential. Also, it is imperative that the standard of care be consistent statewide. The medical director can influence the clinical practice of EMS working as an agent of the state office. Basically all of the areas listed in question 2 are an important function of the medical director as well.”
- “Need the emphasis and presence in a fire based state. Validation of medical component to EMS. state – local coordination; protocol guidance. QA/QI, etc...”
- “Medical credibility, appropriate expertise to review protocol and policy decisions that are medically based (the extension of the practice of medicine as well as the impact of interventions on care), leadership for quality assurance and the capability of a peer-to-peer relationship for a very important group of stakeholders in the EMS system.”
- “One physician medical authority to provide guidance within the context of our regulatory responsibilities.”
- “Provision of medical direction and oversight for training programs; investigations; review of complaints and challenges ranging from licensure issues to local protocol issues. This position provides credibility and validation of our programs and services to our EMS agencies, providers and the medical community.”
- “Full time effort dedicated to issues involving medical decision making. Examples include: direction of state medical direction system, protocol development, QA/QI systems, on-line medical command, etc...”
- “The state EMS [medical] director is available to assist with any medical issues that arise. His expertise is utilized when investigating complaints, especially patient care issues. He provides input on policy development, scope of practice, curriculum development, protocols, and bioterrorism activities.”

Appendix D.

State EMS Medical Director Positions and Types by State			
State/Territory	Position Type	State/Territory	Position Type
Alabama	Part Time	Missouri	NONE
Alaska	Contractual	Montana	NONE
Arizona	Part Time	Nebraska	NONE
Arkansas	Volunteer	Nevada	NONE
California	Contractual	New Jersey	NONE
Colorado	Contractual	North Carolina	Contractual
Delaware	Part Time	North Dakota	NONE
District of Columbia	NONE	Ohio	Contractual
Florida	Contractual	Oklahoma	NONE
Georgia	Full Time	Oregon	NONE
Guam	Contractual	Pennsylvania	Part Time
Hawaii	Part Time	Rhode Island	Contractual
Idaho	NONE	South Carolina	Contractual
Illinois	Contractual	South Dakota	NONE
Indiana	Full Time	Tennessee	Contractual
Iowa	NONE	Texas	NONE
Kentucky	Contractual	Utah	NONE
Louisiana	NONE	Vermont	Contractual
Maine	Contractual	Virginia	Contractual
Maryland	Full Time	Washington	NONE
Massachusetts	Contractual	West Virginia	Full Time
Michigan	NONE	Wisconsin	Contractual
Minnesota	Volunteer	Wyoming	NONE
Mississippi	NONE		

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