





Module Three Part One: Medical Oversight

Wisconsin EMS Medical Director's Course

Objectives – Part One

- Outline medical oversight for state, regional and local EMS systems
- Identify minimum medical director qualifications
- Describe the process of protocol, policy, and procedure development, implementation and review
- Identify special issues related to clinical care protocols in the prehospital setting
- Define prospective, concurrent and retrospective as they relate to quality management programs
- Recognize key personnel management issues

Objectives – Part Two

Part Two of Medical Oversight will present three additional objectives:

- Recognize high risk in special situations
- Recognize legal considerations related to EMS systems and EMS medical oversight
- Identify inter-facility transportation issues

Medical Oversight Structure

Medical Oversight Structure

- Varies from state to state
- Wisconsin Medical Oversight Structure includes the following:
 - o State Medical Director for EMS
 - o Regional Medical Director
 - o Hospital EMS Medical Directo
 - o System / Service EMS Medical Director

Statutory Authority

- Authority is defined by regulations or legislative actions
- In Wisconsin, the following administrative rules apply:
 - o HSS Chap. 110 EMT Basic
 - o HSS Chap. 111 Intermediate Technician and Intermediate
 - o HSS Chap. 112 -Paramedic
 - o HSS Chap. 113 Emergency Medical Responder
 - o Trans 309 required equipment list

Qualifications

- Specific regulations and legislative actions to review include:
 - o National Level
 - Position papers and reference material by:
 - ➤ National Association of EMS Physicians
 - > American College of Emergency Physicians

o State Level

 Medical Director qualifications listed in State Statute 256.15 (8m)

Qualifications (cont.)

- Licensed to practice medicine or osteopathy in Wisconsin
- Familiarity with local/regional EMS activity
- Board Certification
 - o Emergency Medicine (ABEM / ABEOM) is preferred
 - o A clinical specialty (Internal Medicine, Family Practice, Surgery) is acceptable

Qualifications (cont.)

- Training or experience in:
 - o EMS system design and management
 - o Principles in Emergency Medical Dispatch (EMD)
 - o Principles of on-line and off-line medical control
 - o Federal, State and local statutes which apply to EMS
 - o Mass casualty and disaster planning

Sources of Authority

State

o Contained in various statutes and administrative rules

Regional

- o Regional organization
- o May or may not apply

Local

o Determined by the hospital and/or EMS service

State Authority

- HFS 113.04 (3) Emergency Medical Responder
- HFS 110.045 (4) EMT-Basic
- HFS 111.07 (7) –Intermediate Technician and Intermediate
- HFS 112.07 (7) –Paramedic

Regional Authority

- Regional may or may not apply
 - o Some areas have a Regional Medical Control Council to help mediate discrepancies between:
 - EMS service and a hospital
 - Hospitals within a region
- Regional council may help to establish consistent protocols which help to provide a consistent level of care within their region.

Local Authority

- Local determined by the hospital and/or EMS service
- Hospital may provide influence and input to an EMS service related to medications used, procedures followed, even the types of patients they will treat.

Local Authority (cont.)

- EMS service may, under the direction of the medical director elect to do or not do certain procedures that are within a regional protocol.
 - o e.g. An EMS service may not perform Central Line access, even though regional approved and practiced.
 - oe.g. An EMS service may opt to utilize valium over ativan if both are approved for use within a region.

Levels of Medical Oversight

- A medical oversight physician may be involved in:
 - o Off-line medical direction
 - Indirect medical oversight
 - o On-line medical direction
 - Through the radio
 - o On-scene medical direction

Off-line Medical Direction

- Who provides this direction?
 - o Physician with full medical oversight authority and responsibility for EMS system operations
 - o Regional medical director, hospital EMS director or service medical director
- This individual takes total responsibility of all medical care provided by the service.

Off-line Medical Direction (cont.)

 Active role in function and management of EMS service as it relates to patient care activities

oEvaluation and review of protocols

oProvider skills review and evaluation

oQuality Assurance program participation



On-line medical direction

- Remote via radio, telephone, etc.
- Any physician that provides medical direction with radio and base station communications
- May or may not be regional, hospital or service EMS medical director
- Should be familiar with and adhere to EMS protocols when applicable

On-line medical direction (cont.)

- Specific courses have been developed
- May be a specially trained "Mobile Intensive Care Nurse"
 - o Collaborates with the attending physician



On-line medical direction (cont.)

- May supersede off-line medical authority
 - o It is expected that on-line medical control will follow approved EMS medical protocols
- If deviating from protocols, on-line medical director assumes greater liability

On-Scene/Ride-a-Long

- Ride-a-Long provides chance to:
 - o Evaluate providers
 - o Evaluate protocols
 - o Learn how different hospitals handle EMS situations
- Ride-a-Long experience can lead to:
 - o Performance improvement
 - o Education of providers
 - o Evaluation and improvement of patient care

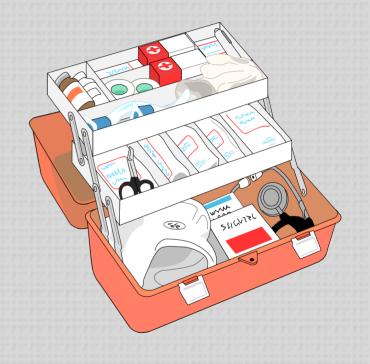


- Performance improvement
 - o Direct assessment of crew performance
 - How did the crew respond?
 - Did the crew take body fluid precautions?
 - What was the crews interaction with the patient and family?

- Performance improvement
 - o Immediate evaluation of protocol adherence
 - Did the crew adhere to established protocols?
 - o What areas can the crew improve upon?
 - o Did the crew show concern for pain and patient discomfort?

Protocol Evaluation

- o Are the established protocols feasible?
- o Do they work in the field?
- o Do they need revision?
- o Often these things can only be identified from field experience.



- Technical Skills of Crew
 - o How are the crew's skills?
 - o How does the crew work together?
 - o Does the crew make good decisions in a timely fashion?
 - o What advice do you have for the crew?
 - o How can they do it better?

- Opportunity to review and educate o Review skills
 - Endotracheal intubation and airway skills
 - Cardiac dysrhythmia identification
 - Splint and other equipment application
 - o Review disease and pathology

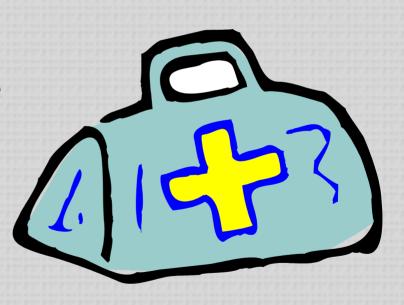
- Update on new treatments and techniques
 - o Medical director needs to be involved with state and national EMS organizations which evaluate and recommend new and promising treatments.
- Evaluate Patient Care
 - o Observing provider and their interaction with the patient family and bystanders
 - o Opportunity to make on the spot recommendations regarding patient treatment

Medical Director Contracts

- Contractual arrangements should exist between medical oversight and the EMS agency.
- A contractual arrangement will help to provide protection to the physician as well as the EMS agency.
- There are several very important items which should be included in every medical director contract.

Contract Items

- Medical oversight authority and structure in system – roles and responsibilities
- Compensation
- Malpractice insurance coverage
- Occupational health responsibilities
- Equipment provision
- Evaluation of performance



Contract Items (cont.)

- Medical oversight authority and structure in system – roles and responsibilities.
 - o Medical director's roles and responsibilities? (employee or independent contractor?)
 - o Part-time or full time?
- Compensation
 - o Hourly or salaried?
 - o Cover travel, lodging, conference fees?
 - o Cover professional organization membership?

Potential Contract Items

- Malpractice insurance coverage
- Is liability coverage provided by EMS organization or your professional carrier?
- Who covers the cost of liability coverage?
 - o Be sure to contact your professional liability carrier to determine limits and need for additional coverage.
- Equipment provision.
- Many items are necessary and the cost can add up rapidly.
 - o Who is going to pay for them?
 - o Do you need additional compensation to cover such items?

Potential Contract Items (cont.)

- Evaluation of medical director's performance
 - o Who performs the evaluation?
 - o Who has input into the evaluation?
 - o How often is the evaluation done?
 - o How does the outcome of the evaluation effect the contract (does it effect length of contract or pay scale / raises)?

Roles and Responsibilities of EMS Medical Directors

Roles & Responsibilities

- Responsible for protocol, policy, procedure development and review
- Broad categories of responsibilities:
 - o Communications/dispatch
 - o Response to scene
 - o Scene triage
 - o Clinical care
 - o Transportation including destination and diversion

Clinical Care Protocols

- Should be developed by the medical director with input from other medical specialists and providers as appropriate
- Protocols should broadly cover every anticipated patient encounter
- Wisconsin encourages the use of its approved set of sample guidelines

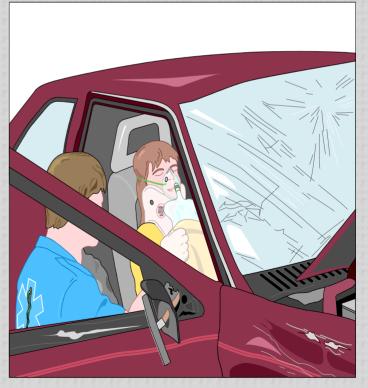
Protocol Considerations

- Clinical care protocols development considerations:
 - o Training or re-training of personnel
 - o Medications
 - Stability in temperature extremes
 - Controlled substances
 - Storage and space issues



Protocol Considerations (cont.)

- Clinical care protocols development considerations:
 - o Administrative issues
 - o Equipment issues
 - o Costs to EMS agency



New Modalities

- New modalities can only be added with State approval. The scientific rationale for new modalities should be closely investigated. Include:
 - o Review of research projects
 - o Read published literature
 - o Talk with other medical directors
 - o Designing one's own research project for evaluation
 - o Monitor and review the modality appropriately
 - o Present new treatment ideas to the Physician Advisory Committee or State EMS Medical Director

Quality Improvement

- Quality improvement concepts should be applied to evaluate pre-hospital treatment.
- Oversight of quality improvement activities is the responsibility of medical oversight.
- Selected aspects and reviews can be delegated to appropriate staff.

Quality Improvement (cont.)

- Physicians should be familiar with general principles and methodology of quality management programs
 - o Run review
 - Timely dispatch
 - Crew interaction with other agencies on the scene
 - o Quality assurance markers and benchmarks
 - o Comprehensive quality assurance programs

Quality Improvement (cont.)

Run Review

- o What did they find on scene and what actions did they take?
- o Was the radio report long, short, accurate?
- o Was the report well written and defensible?
- o What problems occurred and how can they be corrected?
 - If possible give patient outcome information in conclusion

Quality Improvement (cont.)

- Quality assurance markers and benchmarks should evaluate:
 - o Cardiac/traumatic arrest and resuscitations
 - o Refusal of care and transport
- Periodic evaluations of areas of care:
 - o Aspirin administration
 - o Pain evaluation on medication administration
 - o Spinal immobilization
 - o Viagra screening with nitroglycerin administration
 - o Pulse-oxygenation/respiratory distress evaluation

Outcome Measures

- Outcome measures of prehospital care include:
 - o Scene times
 - o Procedure completion rates
 - o Mortality reviews

Evaluation Methods

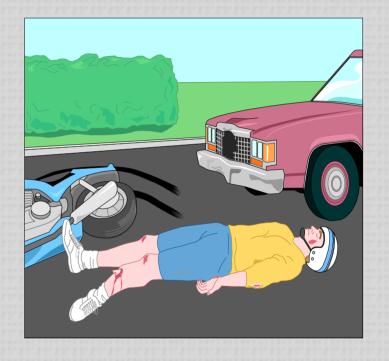
- Concurrent reviews
 - o Review of care while treatment is ongoing
 - o This can be accomplished by riding with EMS personnel in an observer capacity or real-time critique of EMS radio communications

Evaluation Measures (cont.)

- Retrospective reviews
 - o Review of written EMS patient care paperwork. This can focus on specifically selected areas:
 - Personnel
 - Procedures
 - Selected patient calls i.e. all trauma calls
 - High risk situations

Evaluation Methods (cont.)

- Tape audits
 - o Review of random or selected radio communication tapes



Personnel Management

- Issues require familiarity with applicable personnel policies, procedures and labor laws
- Follow a clear, distinct or outlined process of counseling and discipline each and every time

Personnel Management (cont.)

- Areas where medical directors frequently handle personnel issues include:
 - o Disciplinary actions
 - o Remedial training
 - o Skills check-off
 - o Targeted chart audits
 - o Due process
 - o Withdrawal of medical direction privileges
 - o Selection and training of personnel

Personnel Management (cont.)

- Credentialing of new employees
- Probationary period of newly hired
- Re-credentialing of existing employees
- Issues in dealing with unions
- The medical director must interact with and educate a variety of hospital staff to assure smooth operations and interface with the EMS system
- Includes medical, nursing, and ancillary staff

Please continue with the module entitled Medical Oversight – Part Two