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:
  - State Medical Director for EMS
  - Regional Medical Director
  - Hospital EMS Medical Director
  - System / Service EMS Medical Director
Statutory Authority

- Authority is defined by regulations or legislative actions
- In Wisconsin, the following administrative rules apply:
  - HSS Chap. 110 – EMT Basic
  - HSS Chap. 111 – Intermediate Technician and Intermediate
  - HSS Chap. 112 – Paramedic
  - HSS Chap. 113 – Emergency Medical Responder
  - 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
  - Emergency Medicine (ABEM / ABEOM) is preferred
  - 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.
  
  o e.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
  - Evaluation and review of protocols
  - Provider skills review and evaluation
  - Quality 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”
  - Collaborates with the attending physician
On-line medical direction (cont.)

- May supersede off-line medical authority
  - 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:
  - Evaluate providers
  - Evaluate protocols
  - Learn how different hospitals handle EMS situations

- Ride-a-Long experience can lead to:
  - Performance improvement
  - Education of providers
  - Evaluation and improvement of patient care
On-Scene/Ride-a-Long (cont.)

• 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?
On-Scene/Ride-a-Long (cont.)

- Performance improvement
  - Immediate evaluation of protocol adherence
    - Did the crew adhere to established protocols?
  - What areas can the crew improve upon?
  - Did the crew show concern for pain and patient discomfort?
On-Scene/Ride-a-Long (cont.)

- Protocol Evaluation
  - Are the established protocols feasible?
  - Do they work in the field?
  - Do they need revision?
  - Often these things can only be identified from field experience.
On-Scene/Ride-a-Long (cont.)

• Technical Skills of Crew
  - How are the crew’s skills?
  - How does the crew work together?
  - Does the crew make good decisions in a timely fashion?
  - What advice do you have for the crew?
  - How can they do it better?
On-Scene/Ride-a-Long (cont.)

• 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
On-Scene/Ride-a-Long (cont.)

- Update on new treatments and techniques
  - Medical director needs to be involved with state and national EMS organizations which evaluate and recommend new and promising treatments.

- Evaluate Patient Care
  - Observing provider and their interaction with the patient family and bystanders
  - 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.
  - Medical director’s roles and responsibilities? (employee or independent contractor?)
  - Part-time or full time?

- Compensation
  - Hourly or salaried?
  - Cover travel, lodging, conference fees?
  - 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?
  - 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.
  - Who is going to pay for them?
  - Do you need additional compensation to cover such items?
Potential Contract Items (cont.)

- Evaluation of medical director’s performance
  - Who performs the evaluation?
  - Who has input into the evaluation?
  - How often is the evaluation done?
  - 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:
  - Communications/dispatch
  - Response to scene
  - Scene triage
  - Clinical care
  - 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:
  - Training or re-training of personnel
  - Medications
    - Stability in temperature extremes
    - Controlled substances
    - Storage and space issues
Protocol Considerations (cont.)

- Clinical care protocols development considerations:
  - Administrative issues
  - Equipment issues
  - 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:
  - Review of research projects
  - Read published literature
  - Talk with other medical directors
  - Designing one’s own research project for evaluation
  - Monitor and review the modality appropriately
  - 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
  - What did they find on scene and what actions did they take?
  - Was the radio report long, short, accurate?
  - Was the report well written and defensible?
  - 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:
  - Cardiac/traumatic arrest and resuscitations
  - Refusal of care and transport
- Periodic evaluations of areas of care:
  - Aspirin administration
  - Pain evaluation on medication administration
  - Spinal immobilization
  - Viagra screening with nitroglycerin administration
  - Pulse-oxygenation/respiratory distress evaluation
Outcome Measures

- Outcome measures of prehospital care include:
  - Scene times
  - Procedure completion rates
  - 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
  - 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
  - Review of random or selected radio communication tapes
Personnel Management

- Issues require familiarity with applicable personnel policies, procedures and labor laws
- Use caution when counseling individuals
  - Have at least one other individual in attendance
- 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:
  - Disciplinary actions
  - Remedial training
  - Skills check-off
  - Targeted chart audits
  - Due process
  - Withdrawal of medical direction privileges
  - 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