



# Module Eight Special Issues: Quality Assurance

Wisconsin EMS Medical Director's Course

# Objectives

- Develop a better understanding of Quality Assurance as it relates to EMS
- Outline the nine steps of a comprehensive QA program
- Identify the role of the medical director within a service QA program

# What is Quality Assurance

- Quality Assurance (QA)
  - Process by which certain events are selected and monitored as quality indicators
- Process allows for the gathering of information and data
  - Data protected for legal discovery

# Quality Assurance

- Emergency physicians may have become acquainted with QA
  - Daily life in the Emergency Department may have provided exposure
- Same concepts apply within the field of EMS

# Quality Assurance & EMS

- Quality assurance is, at this time, generally unique to EMS units
- Several reasons why
  - o Cost
  - o Manpower
  - o Philosophy

# Quality Assurance & EMS

- Cost
  - o Process of QA requires time and personnel
    - Both cost money and generally are not reimbursed
  - o Much of these monies are recovered through enhanced patient care and improved risk management

# Quality Assurance & EMS

- Manpower
  - o Commonly listed as a reason why units do not have a QA program
  - o Quite beneficial to have someone familiar with the QA process to lead to team
  - o Often a team of individuals is developed in an effort to get multiple people involved

# Quality Assurance & EMS

- Philosophy
  - o Another barrier commonly listed
  - o Philosophy that it
    - is not needed
    - will leave them open to more legal exposure
    - will not improve patient care



# Nine Steps to a QA Plan

- Assign Responsibility
- Describe the scope of the service
- Identify aspects of care that are high-risk, frequent or problem prone
- Develop indicators and measurable components

# Nine Steps to a QA Plan

- Collect and organize data
- Analyze data
- Create an action plan
- Evaluate the effectiveness of action
- Communicate relevant information

# Nine Steps to a QA Plan

- Assign Responsibility
  - Responsibility for the QA program needs to be clearly identified
    - Usually one individual is the head or lead QA person
    - Commonly, multiple other individuals are involved and in some cases the entire unit has responsibilities

# Nine Steps to a QA Plan

- Describe the scope of the service
  - o QA program needs to be integrated with the mission and vision of the unit
  - o Unit conceives a mission and vision statement in conjunction with a Quality Assurance program

# Nine Steps to a QA Plan

- Identify aspects of care that are high-risk, frequent or problem prone
  - o Team identifies those situations that need review and are in need of evaluation

# Nine Steps to a QA Plan

- Suggested QA projects
  - o Deaths
  - o No transports
  - o Against medical advice
  - o Procedural complications

# Nine Steps to a QA Plan

- Suggested QA projects
  - o Track of personnel procedures and benchmark establishment
  - o Aspirin administration in chest pain
  - o Pain medication administration in long bone trauma
  - o Pulse oximetry measurement in patients with shortness of breath
  - o Lung sound assessment in respiratory distress
  - o Documented Viagra screening in patients receiving Nitroglycerin

# Nine Steps to a QA Plan

- Develop indicators and measurable components
  - Set benchmarks that actions will be taken upon if data does not meet
    - Intubations 95% after three attempts
    - ASA in chest pain 95% cases without contraindications
    - Pulse oximetry 100% patients with CP/SOB or oxygen Rx



# Nine Steps to a QA Plan

- Collect and organize data
  - o Set a time frame for study; e.g. 3 months
  - o Set up a QA calendar
    - Outline QA projects for the year three months prior to new year
  - o Collect data for review by multiple segments
    - Personnel
    - Time & Date of call
    - Medical control

# Nine Steps to a QA Plan

- Analyze data
  - o Compare data against pre-established benchmarks
  - o Determine trends across several segments
    - Do personnel need additional training?
    - Are there medical control education or performance issues?
    - Does performance vary by time of day or day of week?

# Nine Steps to a QA Plan

- Create an action plan
  - o Determine necessary fixes to correct shortfalls
  - o Implement fixes and monitor progress

# Nine Steps to a QA Plan

- Evaluate the effectiveness of action
  - o Repeat study without changing mechanisms, unannounced at a pre-determined interval after fix

# Nine Steps to a QA Plan

- Communicate relevant information
  - o Keep personnel involved and informed of the process
  - o Do not keep QA a mystery
  - o Display information anonymously for unit review
  - o Review individual material in private

# Example QA Study

- Topic: Viagra Screening in patients receiving Nitroglycerin
- Time-frame: Jan – Mar / 2002
- Data: Review all charts that list nitroglycerin being administered

# Example QA Study

- List; personnel, day, time, medical control, vital signs, meds, allergies, complications and Viagra screening
- Compare data against pre-established benchmark – 100%

# Example QA Study

- Publish data and implement training: e.g. protocol review, medication review
- Repeat review –
  - o Study: Jan – Mar / 2002
  - o Data Review: Apr – Jun / 2002
  - o Education Jul – Sep / 2002
  - o Repeat study: Jan – Mar / 2003



# Closure

- How does quality assurance relate to EMS?
- Nine steps of a comprehensive QA program
- Medical director's role in a service QA program