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
  - Process of QA requires time and personnel
    - Both cost money and generally are not reimbursed
  - 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
  - Another barrier commonly listed
  - 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
  - QA program needs to be integrated with the mission and vision of the unit
  - 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
  - Compare data against pre-established benchmarks
  - 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
  - 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 –
  - Study: Jan – Mar / 2002
  - Data Review: Apr – Jun / 2002
  - Education Jul – Sep / 2002
  - 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