Montgomery County Fire & Rescue Service
Quality Assurance Plan

1. Introduction

The Code of Maryland Regulations (COMAR) Title 30, Subtitle 03 Chapter 4 requires that each Emergency Medical Services (EMS) system develop a Quality Assurance (QA)/Quality Improvement (QI) plan, approved by and operating under the jurisdictional Medical Director. This plan must provide for an organized method of auditing and evaluating care provided within the EMS system. Each plan is required to have certain components that include a Medical Review Committee (MRC).

The Montgomery County Fire and Rescue Service Quality Assurance Plan provides for the establishment of the Medical Review Committee and both a mechanism for continuous system improvement and a means to review significant incidents. It is consistent, provides due process to all parties, and insures quality patient care. All activities of the medical review process are confidential; therefore, members will sign a confidentiality agreement.

Certain Local Fire/Rescue Departments (LFRD) have a pre-existing program for QA/QI and complaint handling that may operate in conjunction with and under this plan.

2. Confidentiality

2.1. Since the MRC is established as a committee of the Maryland Institute of Emergency Medical Services Systems (MIEMSS), all proceedings, records and files of the MRC are confidential by law pursuant to section 14-501 of the Health Occupations Article of the Annotated Code. Additionally, the information gathered by the MRC will be deemed confidential by law (State Government Article Sections 10-616(j) and 10-617(B)) because it contains medical or psychological information about individuals and/or constitutes a hospital record.

2.2. It is required that all members of the MRC and/or any invitees will maintain the confidentiality of all MRC information. Willfully and knowingly releasing information deemed confidential by law could result in criminal penalties (State Government Article Section 10-627). Willfully and knowingly disclosing a confidential record that identifies any individual, could result in liability to the Individual for actual and punitive damages. (State Government Article Section 10-626).
2.3. All members of the MRC and any other individual who becomes exposed to this confidential information as described above will be required to sign a confidentiality statement.

3. Medical Review Committee (MRC)

3.1. Purpose
As mandated by COMAR Title 30.04.03.A, each EMS operational program shall have a Medical Review Committee. The MRC is a fundamental basis of the QA/QI program, which is a peer review process with active participation of all the EMS operational program components. For any significant QA/QI incident or concerns about detrimental trends in performance of a particular provider, or system performance shortfalls, the QA program mandates recommendations to the jurisdiction, the local medical director, and ultimately to MIEMSS. This is accomplished through the MRC.

Components of the EMS operational program include, but are not limited to:
- MRC Chairperson
- EMS Providers
- Administrators
- Jurisdictional Medical Director

3.2. Structure
The Montgomery County Fire Rescue Service operates a Maryland approved EMS Jurisdictional Program. COMAR Title 30 assigns quality assurance responsibilities to the Jurisdictional Medical Director who will establish an MRC, which will include:

- DFRS EMS Section Chief - Chair
- LFRD Fire Rescue Command Officer – Vice Chair
- LFRD EMS Providers
  - One ALS
  - One BLS
- DFRS EMS Providers
  - One ALS
  - One BLS
- Medical Advisor - MCFRS Medical Director

3.2.1 Term of service on the MRC is two years. In accordance with Title 30, the Fire Administrator recommends the appointments, after a solicitation of interest within the MCFRS. The Jurisdictional Medical Director makes final approval.
3.3. Quality Improvement

For quality improvement efforts, the MRC may invite specific parties such as:

- Hospital personnel
- Nursing home personnel
- Consumers
- Community representatives
- Public information officers
- EMS training personnel
- Any other party as deemed appropriate

4. Medical Review Committee Responsibilities

4.1. To review documented allegations that an EMS provider failed to act in accordance with applicable law or protocols or that the pre-hospital care was below the applicable standards of care.

4.2. To review concerns within the system that affect the quality of service or patient care.

4.3. The Medical Review Committee (MRC) will establish a schedule when to meet. Additional meetings may be called by the Jurisdictional Medical Director or the Medical Review Committee Chairperson as needed.

4.4. To identify trends in protocol variations; identify system variation; identify the root cause, which may be lack of knowledge, limitations of resources, poor communications, conduct issues, etc. To address the root cause and make recommendations for protocol, policy, procedure or administrative changes.

4.5. To recommend and document remedial actions to resolve patient care issues.

4.5.1. Remedial actions may include training, counseling or disciplinary action. Disciplinary action is not normally considered unless the incident review demonstrates that a conduct (behavior) problem occurred or that a pattern of similar patient care issues exists with the provider. Actions that are classified as disciplinary, prohibited conduct in Title 30 will be referred to the appropriate DFRS/LFRD pathway for further action.

4.5.2. Such actions involving the local fire rescue departments are the responsibility of the LFRD. The medical director may take additional action as directed by the prohibited conduct section in Maryland Title 30. These
remedial actions handled by the LFRD are to be documented with the QA Database and forwarded to the MRC on a semi-annual basis.

4.6. To notify MIEMSS, as appropriate, utilizing the Medical Case Review-Patient Care Quality Assurance Incident Notification Form.

4.6.1. Extraordinary Care Protocol - notification to State Medical Director within 24 hours.

4.6.2. Protocol variances/other care issues - preliminary report within five days of notification and final report within 35 days.

4.7. The MCFRS QA officer will analyze sentinel events to determine if a change in protocol, policy, equipment, resources or remedial action is necessary. The results of this analysis will be forwarded to the MRC and EMS Committee for further action.

4.8. To maintain confidentiality of all records as directed in Section 2 of this plan.

5. Identification of QA/QI Concerns

5.1. The MCFRS QA Officer is responsible for performing retrospective review of system records. The MCFRS QA Officer may employ other staff including LFRD and DFRS employees to assist with record reviews. The MCFRS QA Officer, LFRD QA Officer or record reviewer will review a representative sampling of Montgomery County Fire Rescue Services, (MCFRS), Records Management System (RMS) reports and other data sources. This review should include the following data: name, address, vital signs and documentation method, as required by MCFRS policies and procedures and the Maryland Medical Protocol. These may include Automatic External Defibrillator (AED) reports, Cardiac Arrest Reports, and additional narratives to check for completion and compliance and other QA concerns.

5.1.1. Certain local fire rescue departments (LFRD), (Bethesda-Chevy Chase Rescue Squad, Wheaton Volunteer Rescue Squad and Rockville Volunteer Fire Department) have a pre-existing program for QA/QI and care complaint handling. These pre-existing programs comply with Title 30 and meet the spirit of the regulation and this plan. In the future LFRDs may propose QA plans for the medical director's consideration.

5.2. During the records review, if protocol violations, serious violations or positive actions are found, (refer to the Medical Referral Review Criteria in Table 1) a standardized form (EMS Incident Referral Form) will be completed by the QA Officer or record reviewer and forwarded to the EMS District Chief or appropriate
LFRD Command Officer. This information will be evaluated and forwarded to the appropriate LFRD or DFRS QA officer. The QA Officer will ensure the incident information is entered into the EMSQA Database, initiate investigation, and make notifications as soon as possible. These notifications will include the appropriate DFRS and LFRD Command Staff, Medical Director, and provider.

5.2.1. The EMSQA database is a tool used by the EMS section to record, compile and analyze EMS QA issues. Direct access to the database is limited to the DFRS EMS Assistant Chief, the DFRS QA Officer, the DFRS EMS District Chief and the DFRS EMS Duty Officers.

5.3. Concerns that do not appear to meet the criteria for referral to the MRC will be documented with the Emergency Medical Services Incident Referral Form and forwarded to the EMS District Chief or appropriate LFRD command officer for further action.

5.4. The Emergency Medical Services Duty Officer (EMSDO), or the record reviewer from LFRD's with an approved program, will review documentation of a representative sample of reports to check for specific elements (name, address, vital signs, and documentation method). These components will be placed into a database for analysis and dissemination to the training staff.

5.5. The Emergency Communications Center (ECC) has specific QA requirements under Title 30 for Emergency Medical Dispatch (EMD). ECC managers will conduct internal review of the EMD process and will provide a report to the Medical Review Committee on a semi-annual basis.

5.6. During the record review process positive actions should be recognized at the appropriate level. Such recognition may include commendations, awards, etc.

5.7. The Quality Assurance record reviewer will complete a quarterly data review from RMS run reports of skills documented by ALS/BLS providers. This information will forwarded to the MRC to be used to trend skill and training requirements for the service.

5.8. The MCFRS QA officer, with the DFRS EMS District Chief, will compile, analyze and present, on a semi-annual basis, the QA activities undertaken during this period. This information will be forwarded to the MRC for evaluation and direction. Those LFRD's with an existing program will report these activities to the MRC on a semi-annual basis.

5.9. The QA officer will send a customer service questionnaire to clients from a representative sampling of EMS incidents. This information will be forwarded to the MRC on a semi-annual basis. The MRC will review the information and
publish a report to MCFRS. If concerns are identified during this process, the
EMS District Chief will assign the appropriate Quality Assurance person to
investigate

5.10. The MRC will monitor performance indicators to determine the effectiveness
of the EMS system. These indicators in cooperation with the MIEMSS Quality
Assurance Office will be selected and evaluated on an annual basis, or as
required by system needs.

5.11. The MRC will modify and adjust the QA/QI plan as needed to meet the needs
of the MCFRS. These changes will be the result of input from the Medical
Review and EMS Committees, who will review and recommend changes to the
plan, if necessary, on an annual or periodic basis.

6. Handling Medical Inquiries or Concerns of System Performance

6.1. Upon receiving an inquiry concerning patient care or provider or system
performance, the point of contact should document as much information as
possible on the EMS Incident Referral Form. The EMS Incident Referral Form is
located at all work sites within the county and at the five County hospitals. This
form provides a template to guide the process for gathering initial information.
This form shall be forwarded to the DFRS EMS District Chief or appropriate
LFRD Command Officer who may assign a QA officer and notify the Medical
Director, as appropriate. The assigned Fact Finder/ QA Officer will document
additional information.

6.2. The QA Officer or Fact Finder will conduct and document an interview of the
complainant to identify their concern.

6.3. The QA or LFRD officer will acknowledge the inquiry in writing to the
complainant in a timely manner. Acknowledgement shall contain a statement
that a review has been started, provide a time frame for completion of the
process, and a contact person for information or follow up.

6.4. The QA Officer or Fact Finder will initiate the investigation and complete the
investigation packet and further the investigation process for those concerns that
meet the reasonable standard of referral to the MRC.

6.5. The EMS District Chief or LFRD Command Officer shall notify appropriate
personnel as needed. For example: the provider, Command staff, Medical
Director, Regional/State Medical Director, MCFRS Quality Assurance Officer. If
the concern is considered prohibited conduct then notification may include
Montgomery County Police (MCPD), or MCFRS Internal Affairs Division (IAD).
6.6. Written statements, with a specific completion time, will be requested from all involved parties. The usual completion deadline is ten business days from initial contact. The Medical Director or DFRS/LFRD Command Officer, depending on the circumstances, may change this deadline at the request of the QA Officer or Fact Finder.

6.7. The QA Officer or LFRD Command Officer will:

6.7.1. Review the current Maryland Medical Protocol for relevant protocols,

6.7.2. Refer to policy or procedure, Executive Regulations or Maryland Law, as needed,

6.7.3. Present the information to the MRC for review and recommendations,

6.7.4. Prepare a final report for distribution to those involved which includes but may not be limited to the appropriate LFRD Chief, DFRS EMS Section Chief, DFRS shift Assistant Chief, DFRS shift District Chief, DFRS Station supervisor, MRC, Medical Director and the involved provider. The above DFRS chain of command is notified for incidents involving DFRS personnel only,

6.7.5. Follow-up in writing with the complainant who initiated the concern,

6.7.6. Develop a follow-up plan to assure those remedial actions, as directed by the MRC, are completed. This should include notification to the DFRS Assistant Chief, the appropriate shift District Chief and Station Supervisor for DFRS personnel or the appropriate LFRD Chief for LFRD personnel,

6.7.7. Close the case in the database upon completion of all anticipated activity,

6.8. The Medical Director will complete the state notification form for the five day and 35 day notifications. The Medical Director may also request additional assistance from the Maryland Incident Review Committee as needed.

6.9. Hard copies of all information related to an investigation are maintained by the MCFRS QA officer for a period of five years. The EMSQA database is purged of any record older than five years.
GLOSSARY

**Compliance** Follow the policy, procedure, executive regulation, medical protocol or Maryland Law as related Emergency Medical Services.

**Credentialing** the process by which the Jurisdictional Medical director evaluates the qualifications of an EMS provider and approves them to practice at a specific level.

**Data** in quality assurance terms refers to readily available sets of information about a process, treatment, etc and includes such items as patient care reports, Automatic external defibrillator reports, dispatch information, surveys, demographics etc.

**Discipline** punitive action such as written reprimand, fine, suspension, or revocation of certification or license, termination taken by a jurisdictional operation program or EMS Board in response to a medical incident or prohibitive conduct issue.

**Emergency Medical services Operational Program** A jurisdictional EMS operational program, institute, agency, corporation, or other entity that is licensed by MIEMSS as a commercial service.

**Extraordinary Care** implies to maintain a life of a specific patient, it may be necessary, in rare instances, for the physician providing on line medical direction, to direct a pre hospital provider rendering care that is not explicitly listed in with the *Maryland Medical Protocols*. Both the physician and the pre hospital provider must acknowledge that the care needed is not addressed in the protocols. The provider must also feel capable of carrying out the care directed by the physician. The consulting physician and provider will notify the State medical Director via SYSCOM and the provider must fax the State Medical Director via SYSCOM with written documentation within 24 hours.

**Incident** A significant event involving emergency response or care, a variance from the standard of care.

**Indicator** A specific point that is tracked for evaluation purposes.
Jurisdictional EMS Operational Program means an EMS operational program approved under COMAR 30.03.02.03 and are not licensed as commercial services under Educational Article 13015, Annotated Code of Maryland.

Medical Practice the approval to practice at a specific level within a jurisdiction or state. The jurisdiction or state medical director may suspend or limit medical practice at any time that the provider poses a threat to the health and welfare of patients.

Patient Care Incident An incident in which patient care is not within the normal parameters. Investigation may lead to retraining of the providers involved, a change in the medical protocol, operational policy change, or a change in the training of all providers.

Practice Review Process is a State peer review process, which recommends whether or not a pre hospital provider's certification or license needs to be suspended or revoked by the appropriate State Board.

Privileges benefits associated with the employment or membership in an EMS program.

Protocol Variation is any act or failure to act in practice or judgment, involving patient care that is not consistent with established protocol, whether or not it results in any change in the patient's status or condition.

Record Reviewer: a person within DFRS or the LFRD who is designated by the QA officer for that Department responsible for reviewing EMS incident call records for quality assurance and improvement.

Re-education To provide review of didactic information and / or skills from course materials.

Remediation Process is a means of improving competence, remedying or correcting faulty habits.

Root Cause Analysis The process to evaluate the underlying reason for variance from the standard of care or sentinel event. If root cause is identified, improvement strategies should target the root cause to reach desired outcome.
**Sentinel Event** An incident or occurrence that has significant impact on patient outcome, system function or provider safety.

**Quality Assurance (QA)** A retrospective organized method of auditing and evaluating patient care within EMS systems. The data collected includes EMBERS reports, investigations, customer surveys, and any other data that may have an impact on the provision of emergency care.

**Quality Assurance Occurrence** means a patient care incident in which protocol variation occurs, an Extraordinary Care procedure occurs, providers are unable to carry out physician orders or some other sentinel event impacts patient care negatively.

**Quality Control** is the comparison of outcome to specifications.

**Quality Improvement** The process to improve the system through evaluation, measurement, interpretation and application. This process is referred to as the Plan, Do, Check and Act model.
Quality Assurance Plan Responsibilities

After reviewing the Quality Assurance Plan a list of responsibilities has been developed to assist the members of the MRC with who does what. This list should be reviewed on a semi-annual basis and amended as required.

**Medical Director**
Overall supervision of the Quality Assurance Process
Completion and submission of the 5 day and 35 day form to MIEMSS

**Emergency Communications Center (ECC)**
Will conduct an internal review in compliance with the American Academy of Medical Dispatch. A report will be forwarded to the MRC on a semi-annual basis for review and dissemination to the appropriate groups or personnel.

**Fire Administrator**
Solicits members for the MRC
Appoints members to the MRC after consultation with Medical Director
Responsible to assure compliance with Maryland Law.

**DFRS District Chief of EMS**
Initial contact for EMS Incident Referral Form.
Assigns QA Officer for fact finding process
Monitors and reports all QA activities from the database to the MRC on a semi-annual basis.

**Emergency Medical Services Duty Officer**
Quality Assurance Officer/Record Reviewer/Dbase entries/Investigations/Notifications oral and written to appropriate personnel
Provide quarterly reviews of reports reviewed to the MRC.
Written follow up to complainant
Develop document follow up plan for remedial action

**Medical Review Committee**
Develop Medical performance Indicators for the system with Managing for Results, MIEMSS model. Annual review should be considered.
Review QA Plan annually and amend as required.
Report data and other reports to the system.
Complete and comply with section 4 of the QA Plan.

**Quality Assurance Officer**
Documentation of sentinel events
Record review of EMBRS/ Data Base entries
Initiate investigations/Notifications to appropriate personnel written/oral
Report QA activities to the MRC semi-annually
Customer Service Survey, sent out and received, analyzed and complied
To be completed by fire/rescue or hospital personnel. Forward to the District Chief of EMS Operations: 101 Monroe Street, 12th Floor, Rockville MD 20850 or fax to 240-777-2415. This form must be received within 24 hours following any incident involving:
- EMS personnel, guests, patients, or general public which is not consistent with Operational Policies and/or Medical Protocols.
- Malfunction of EMS equipment or communications.
- Any "unusual" event that occurred on an incident which may require review.

<table>
<thead>
<tr>
<th>Type of Incident (&quot;X&quot; Appropriate Block)</th>
<th>Control Number</th>
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<tbody>
<tr>
<td>ALS</td>
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<tr>
<td>BLS</td>
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<tr>
<td>NON-EMERGENCY</td>
<td></td>
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<tr>
<td>OTHER</td>
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<thead>
<tr>
<th>Name of Person Initiating Inquiry</th>
<th>Station or Organization</th>
<th>Shift</th>
<th>Title</th>
<th>Status (Salary/Volunteer)</th>
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<tr>
<th>Address of Person Initiating Inquiry</th>
<th>City</th>
<th>State</th>
<th>ZIP Code</th>
<th>Phone Number</th>
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<table>
<thead>
<tr>
<th>Patient's Name</th>
<th>How is complainant related to patient (self, Phys,bystander,etc)</th>
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<thead>
<tr>
<th>Patient's Address</th>
<th>City</th>
<th>State</th>
<th>ZIP Code</th>
<th>Phone Number</th>
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<tr>
<th>Date &amp; Time of Incident</th>
<th>Location of Incident:</th>
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Name(s) of Personnel Involved in Incident

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<thead>
<tr>
<th>Name</th>
<th>Unit</th>
<th>POS</th>
<th>Name</th>
<th>Unit</th>
<th>POS</th>
<th>Other Comments</th>
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Witnesses to Incident (if Fire/Rescue, indicate unit/position)

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<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>State</th>
<th>ZIP</th>
<th>Phone</th>
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☐ Check Here if Attached Confidential
EMS Operational Program QA/QI Quarterly Aggregation of Data Reporting Form
(Required by COMAR 30.03.04.02)

If you need assistance with this form, please contact John New, MIEMSS Director of Quality Management, at (410) 706-3977 or pager (410) 475-9650. Reports are due 45 days after the end of each period to the EMS Medical Director's office by mail (MIEMSS, 653 West Pratt Street, Baltimore, MD 21201) e-mail (ralcorta@miemss.org), or secure fax to (410) 706-0853.

Reporting Period: July - September, 2003
Report Due Date: November 15, 2003

Name of EMS Operational Program (EMSOP)/Jurisdiction:
QA/QI Contact Person:
Contact Person's Phone Number:
Contact Person's E-mail Address:

<table>
<thead>
<tr>
<th>Types of Cases</th>
<th>Cases Reviewed by QA Officer(s)</th>
<th>Cases Reviewed by Medical Review Committee</th>
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</thead>
<tbody>
<tr>
<td>Protocol Variation (e.g., medication error)</td>
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<tr>
<td>Skills issue (e.g., esophageal intubation)</td>
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<tr>
<td>Documentation Issue (e.g., incomplete documentation of care, improper documentation of refusal)</td>
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<tr>
<td>Transport Issue (e.g., prolonged transport time, incorrect destination hospital)</td>
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<tr>
<td>Dispatch Issue (e.g., ALS not dispatched)</td>
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<tr>
<td>Communication Issue (e.g., misunderstanding in relay of information)</td>
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<tr>
<td>Resource Issue (e.g., insufficient resources)</td>
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<tr>
<td>Prohibited Conduct (e.g., criminal activity, substance abuse)</td>
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<tr>
<td>Conduct Issue (e.g., unprofessional behavior on call)</td>
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<tr>
<td>General Incident Issue (e.g., chain-of-command, others not listed above)</td>
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<tr>
<td>Exceptional Circumstances/Special Cause (e.g., blizzard)</td>
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| Origin of Cases (# in each category):                                      |                                 |                                            |
| Provider directly involved in case (self-reported)                         |                                 |                                            |
| Other provider                                                             |                                 |                                            |
| Police/other agency                                                        |                                 |                                            |
| Patient/other customer                                                     |                                 |                                            |
| Jurisdictional QA Officer                                                  |                                 |                                            |
| Jurisdictional Medical Director                                            |                                 |                                            |
| MIEMSS Medical Director/QA Officer                                         |                                 |                                            |
| Hospital                                                                   |                                 |                                            |
| Nursing home/extended care facility                                       |                                 |                                            |
| Routine run report form review                                             |                                 |                                            |
| E-mails triggers                                                           |                                 |                                            |
| Automatic triggers                                                         |                                 |                                            |
| Media                                                                      |                                 |                                            |
| Other                                                                       |                                 |                                            |
### Outcome of Cases (# in each category):

- Remediation/Re-training
- Provision of additional resources
  (e.g., new equipment added to ambulance stock)
- Change in jurisdictional procedures
  (e.g., new local QA/SOP developed)
- Recommended change in State protocol
- Referral for disciplinary action (e.g., for conduct issue or multiple similar offenses)
- Limitation or suspension of privileges (Medical Director)
- Referred to Maryland Board of Nursing
- No action required

### Total # of runs in period for EMSOP/Jurisdiction

### Total # of QA Cases reported above for this period

### Disposition of Cases (of total cases, # in each category):

- Completely resolved by EMS Operational Program
- Referred to State recommending closure
- Referred to State recommending additional action
I. Quality Assurance

a. Did you observe any trends within your program during this reporting period (e.g., problems with use of a particular medicine, problems with pediatric cases, etc.)?

b. Have you been able to address these issues within your jurisdiction or do you need assistance from the State (if so, please specify)?

II. Quality Improvement

a. Please list and describe jurisdictional QI projects
   (only new or updated information is required, e.g., new projects, results of projects previously reported):

<table>
<thead>
<tr>
<th>Nature of Project</th>
<th>Status</th>
<th>Results</th>
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b. Please list and describe any recommendations for the State (e.g., recommendations for protocol revisions, recommendations for statewide training):