



Carroll County Department of Fire and EMS

EMS Policies and Procedures

Standard Operating Procedure: 3.02	Effective Date: June 8, 2023
Subject: Quality Assurance/ Quality Improvement	Section: EMS Operations
Authorized: Michael Stoner, Assistant Chief	Revision Date: September 20, 2023

I. PURPOSE

Quality Assurance / Quality Improvement (QA/QI) is a process put in place to assess and improve the Emergency Medical Services provided within the Carroll County Emergency Services Operational Program (EMSOP). This program has been developed in accordance with the Code of Maryland Annotated Regulations (COMAR) Title 30.03.04 governing Quality Assurance for an EMS Operational Program with the goal to deliver a service that is timely, medically appropriate, compassionate, and, most importantly, beneficial to the patient's outcome.

II. DEFINITIONS

- A. Advanced Life Support Clinician (ALS Clinician) – An individual who is licensed as a Cardiac Rescue Technician or Paramedic.
- B. Adverse Event – An event in which an injury or illness occurs or is exacerbated by the medical care, or lack thereof, provided by an ALS or BLS clinician affiliated with the CCDFEMS.
- C. Basic Life Support Clinician (BLS Clinician) - An individual who is certified as an Emergency Medical Responder or Emergency Medical Technician.
- D. Benchmark - A scientifically validated, regionally accepted, or nationally recognized endpoint.
- E. Cause - The reason for a problem or defect; may be multifactorial.
- F. CCDFEMS – All career personnel and those volunteers and employees associated with any of the member departments within Carroll County.
- G. Code of Maryland Annotated Regulations (COMAR) Title 30 - A sub-section of the

Maryland Regulations that regulate Emergency Medical Services Operational Programs, and mandates that all EMS Operational programs must have a Quality Assurance Plan.

- H. Continuous Quality Improvement (CQI) - The sum of activities undertaken by the CCDFEMS to provide confidence to its patients and maintain a standard of excellence. A process based on multiple activities including, but not limited to, QA, QI, training, and education to maintain the provision of timely, efficient, and effective prehospital care to all those in need.
- I. Data - In Quality Assurance terms, refers to readily available sets of information about a process and treatment; this includes, but is not limited to, such things as dispatch criteria, run sheets, patient care reports, hospital reports, provider statements, surveys, and demographics.
- J. Database - Refers to the compiling of all pertinent information in an accessible file that can be used to input data and analyze all aspects of the data efficiently and completely.
- K. Due Process - The representation and protection of certain rights of a person under investigation; consistent with the US Constitution.
- L. Electronic Patient Care Reports (ePCR) - A standardized form that has been adopted by Carroll County Department of Fire and EMS for the intended use of documenting patient assessments and treatment modalities. This form provides much of the data used by the Quality Assurance Program.
- M. Emergency Clinician - An Emergency Medical Clinician certified or licensed in the state of Maryland and affiliated with Carroll County.
- N. EMS Operational Program - A jurisdictional EMS program, or an agency, institution, corporation, or other entity that has been approved by the State of Maryland to operate an emergency medical services program under the rules of COMAR 30.03.02.
- O. Extraordinary Care - Care that is not explicitly listed in or deviated from the Maryland Medical Protocols for EMS.
- P. Focused Review - Specific types of retrospective reviews directed at a single topic such as a specific chief complaint or assessment.
- Q. HIPPA - Health Insurance Portability Act, Promulgated in 1996. HIPPA was designed to simplify the administration of health insurance by setting national standards for the transfer and confidentiality of protected health information, in addition to the management of health care financing.
- R. Jurisdiction - Carroll County, Maryland
- S. Maryland Institute of Emergency Medical Services System (MIEMSS) - State agency that regulates and credentials all emergency medical services programs and providers within the State of Maryland.
- T. Medical Director - The Medical Director is mandated by COMAR 30.03.02 to oversee all medical aspects of the EMS Operational System. The Medical Director is ultimately responsible for the implementation and approval of the EMS Program's Quality Assurance Plan.

- U. Medical Review Committee - This committee is mandated by COMAR 30.03.04. It is comprised of personnel appointed by the Jurisdictional Medical Director and the EMS Operational Program Manager. The Medical Review Committee is responsible for reviewing and overseeing the Quality Assurance program.
- V. Operational Program Manager – Represents the EMS Operational Program as defined by COMAR 30.03.02. For Carroll County Department of Fire and EMS, the designated EMS Operational Program Manager is the Assistant Chief of EMS
- W. Patient Care Incident – In Quality Assurance terms, refers to a significant occurrence or event involving emergency response or care, or a variance from the standard of care.
- X. Protocol Variation – Any act or failure in practice or judgement, involving patient care, that is not consistent with established protocols, whether it results in any changes in the patient’s status or condition, defined in the Maryland Medical Protocols and COMAR Title 30.
- Y. Re-Education – Review of didactic information and/or skills from course material.
- Z. Remediation Process – Means improving competence, remedying, or correcting faulty habits that have the potential to negatively affect patient care. Fostering partnerships between pre-hospital EMS clinicians and the QA and QI operational programs. Guiding change is a principal activity of the QI program, and positive feedback is an essential part of the process.
- AA. Reporting/Feedback - All QA/QI activities shall be reported to the EMS Operational Program Manager in a manner to be jointly determined. Because of continuous quality improvement activities, changes in system policy or procedures may be made.
- BB. Root Cause - Is the basic, underlying reason for the variance from the standard of care. If a root cause is identified, quality improvement strategies should target the root cause to reach the desired outcome.
- CC. Sentinel Event - A rare incident or occurrence that has significant impact on patient outcome or system function.
- DD. Quality Assurance Officer - Designated by the EMS Operational Program Manager and the Medical Director. The QA Officer is responsible for implementing and monitoring the Quality Assurance program.
- EE. Quality Assurance (QA) - The process by which the performance of individual EMS providers shall be continuously monitored to ensure compliance with treatment protocols and operational procedures.
- FF. Quality Assurance Plan - A COMAR mandated plan that defines and lays out an EMS Operational Programs Quality Assurance / Quality Improvement program. This policy shall serve as the QA/QI plan for Carroll County Department of Fire and EMS.
- GG. Quality Improvement (QI) - A systematic, organizational approach for continuously improving all processes to deliver quality services.
- HH. Quality Improvement Officer - Designated by the EMS Operational Program Manager and the Medical Director. The QI Officer is responsible for implementing a

systematic and pro-active approach for continuously improving EMS providers within the system.

III. CONFIDENTIALITY

A. All individuals involved in the EMS Operational Program, with a need to know, may have access to confidential health care information. These individuals shall protect the confidentiality of this information. The Medical Review Committee (MRC) has a special duty to preserve this information, as they shall be involved in the review of significant incidents which could lead to a recommendation for clinician disciplinary action, suspension, or revocation. The proceedings, records, and files of the EMS Operational Program QA/QI Plan are confidential pursuant to Maryland law. Willful and knowing release of information deemed confidential by law, could result in criminal penalties. Additionally, willful and knowing disclosure of a confidential record that identifies any individual could result in liability for actual and punitive damages. Documents shall be secured by the EMSOP Quality Assurance Officer and only viewed or accessed by authorized individuals. The EMS Operational Program shall retain records for a period required by state and federal law.

IV. POLICY

A. The Carroll County Department of Fire and EMS Quality Assurance has been put in place to provide for a retrospective, systematic, and objective process to assure the optimal delivery of pre-hospital care. This is done by identifying both individual provider and system failures such as protocol variances, medication errors, standard of care concerns, poor documentation, and various other standard of care related issues. It also identifies positive patient care related activities and trends that could be utilized to improve overall system performance and delivery of patient care. This policy is in accordance with Code of Maryland Annotated Regulations (COMAR) 30.03.04 governing quality assurance for an EMS operational program. The Quality Assurance program shall apply the standards, as set forth by the following state and local emergency medical review policies:

1. COMAR 30
2. MIEMSS
3. Carroll County Department of Fire and EMS Policy and Procedures
4. Carroll County Department of Fire and EMS, Medical Director

V. QUALITY ASSURANCE PLAN

- A. Quality Assurance shall be conducted in an organized method to allow for audits and evaluation of medical care provided.
- B. The DFEMS Quality Assurance plan shall be reviewed annually.
- C. The Quality Assurance plan shall include the following:
 1. Reviewing Electronic Patient Care Reports
 2. Identify and analyze trends in EMS care

3. Provide remedial action to resolve issues
4. Identify violations that need further action
5. Identify actions that are above and beyond the normal treatment modalities.
 - a) Primary focus is on improving the quality of care provided by DFEMS, rather than a concentration on discipline.

VI. QUALITY ASSURANCE PROCEDURE

- A. Quality Assurance will be completed in the following areas at a minimum but could include additional sources.
 1. Electronic Patient Care Reports (EPCR)
 2. On- Scene observations
 3. Performance standards and skills evaluations
 4. Patient Outcomes
 5. Information for billing company
 6. EMD determinates and dispatch criteria
- B. At a minimum, all EPCR's for all priority one patients and all patient refusals shall be reviewed daily by the Assistant Chief of EMS or designee for the following medical components.
 1. Completion of EPCR per Policy and Procedure 3.17
 2. Correct medical care provided, based upon Maryland Medical Protocols see Appendix A
 3. Correct interpretation and transmission of EKG
 4. Review of Cardiac Arrest data
 5. Advanced Airway placement
 6. Overall documentation of patient care
 7. Usage and documentation of controlled substances
- C. A report shall be prepared monthly which will include number of calls reviewed, pertinent incident data, trends in EMS care, significant responses, number of issues investigated, number of issues sent to the Medical Review Committee.
 1. This data can be utilized to evaluate the need for additional training, changes in training, changes in procedures or inventories, and additional supplies needed, or supplies removed.
 2. All incidents that have been reviewed, with no additional actions needed, shall be marked complete.
 3. Any exceptional patient care or patient advocacy that goes above and beyond the standard of care shall be documented and forwarded to the provider and DFEMS medical director for recognition.
- D. Corrective actions shall be handled as follows:

1. Minor documentation issues such as missing fields in eMeds that are not treatment related:
 - i. These issues shall be handled via email, stating the issue and a date in which corrections must be made. Once the issue has been resolved, the provider shall reply to email stating all issued have been resolved and report is complete.
 - ii. Records shall be kept of these types of errors. Repeat offenders may be entered into the progressive disciplinary policy.
2. Minor care variances such as missing fields in eMeds regarding treatment issues, vague narratives, citizen complaints, or hospital complaints:
 - i. These issues shall be handled either by direct contact with the provider to assure adequate care was provided.
 - ii. These issues shall either be corrected with clarification, or an amended eMeds report.
3. Any minor variance, after review, that is determined to be more serious shall be reviewed by the Medical Review Committee for further action.
 - i. Records will be kept of these types of variances with repeated offenders entered into the progressive disciplinary policy.
4. Protocol violations or variations without report of actual or the potential for patient harm, that does not require immediate suspension of privileges:
 1. Immediate notification to the Assistant Chief of EMS.
 2. The Assistant Chief of EMS shall notify the Medical Director
 3. Notification to the provider that an incident is being reviewed and request further documentation to explain actions documented.
 4. Notification to Medical Review Committee of protocol violation and actions taken.
 5. Significant infractions or competency issues that require immediate suspension of privileges due to the potential for or actual patient harm:
 - a. Immediate Notification to the Assistant Chief of EMS
 - b. Notification to Medical Director and/or Associate Medical Director.
 - c. If clinician is a Volunteer, notification to Volunteer Chief
 - d. Notification to clinician that privileges have been suspended pending an investigation.
 - e. Notification to the clinician's supervisor of a change in status.
 - f. Medical Review Committee notified and shall meet within 14 days
 6. Notification to MIEMSS within allotted time frame.

7. It will be at the discretion of the Medical Director and MRC as to whether a suspended ALS provider shall be allowed to function at a BLS level while their ALS privileges are under review.
8. All corrective actions shall place a primary focus on improving the quality of care provided rather than discipline, however, it is understood that serious infractions, or continued infractions may lead to disciplinary action.

VII. QUALITY IMPROVEMENT PLAN

- A. The Quality Improvement plan emphasizes the overall improvement of EMS delivery. The goal of our QI plan shall focus on enhancing the provider's ability to provide excellent patient care and customer service while continuously being clinically sophisticated and fiscally responsible.
- B. Policy Development:
 1. Shall establish policies and aid clinicians to ensure compliance with policies and procedures, state, and federal laws. In addition, the policy development will aid clinicians' safety and allow for the opportunity to provide the highest level of care.
- C. Educational Development:
 1. Shall ensure that all clinicians meet or exceed the educational prerequisites for their position and allow for additional optional educational opportunities to provide care above the minimum standard set forth by department policies and procedures.
- D. Networking and Outside Agency Interactions:
 1. The EMS Operational program shall strive to seek out new opportunities and innovative methods, along with best practices from surrounding jurisdictions through regional meetings, conferences, and training programs. This includes educational programs and feedback programs for those patients that we transport. Such programs may include STEMI Feedback, Stroke Feedback, Case Study reviews, etc.
- E. Quality Improvement will also look at electronic patient care reports, narratives, Cardiac Monitor records, and other forms of material to improve the services that are provided.
 1. Data collected from these reviews can be used to identify system issues, departmental issues, or other opportunities for improvement.

VIII. MEDICAL REVIEW COMMITTEE

- A. Medical Review Committee is a body charged to assist with Medical Quality Assurance and Improvement in the jurisdiction. For Quality Improvement efforts, it may be expanded to include members such as hospitals, nursing facilities, consumers, community representatives, and training personnel. These efforts may be a separate committee formed under the Medical Review Committee or can be completed by the Medical Review Committee with guests present to offer insight on topics. These guests shall not have voting privileges and shall not be privy to the confidential information related to specific cases being evaluated under the QA process.
- B. The Medical Review Committee shall consist of, at a minimum, the following representatives from Carroll County Department of Fire and EMS.
 1. Medical Director and/or Associate Medical Director
 2. Assistant Chief of EMS - Chair of the Medical Review Committee
 3. Shift Commander- Field quality assurance review
 4. ALS representatives both career and volunteer
 5. BLS representatives both career and volunteer
 6. Member(s) at large
 7. Members may be added or removed by the Assistant Chief of EMS
- C. Qualifications for MRC Member:
 1. A current active member affiliated within Carroll County
 2. Completion of MIEMSS QA Officer course within 6 months of appointment to the MRC
 3. Required to complete MRC orientation
 4. At least three years minimum experience in providing EMS care
 5. Clinician has no significant or recurring QA or performance concerns in previous two years.
 6. Must attend at least 75% of regularly scheduled meetings
 7. Must make every effort to attend emergency meetings of the MRC
- D. Appointment to the MRC:
 1. The Medical Director and/or Associate Medical Directors are automatic appointments to the MRC.
 2. The Assistant Chief of EMS is also an automatic appointment and shall chair the MRC.
 3. General membership shall be voluntary, and the interested personnel shall complete a resume and a letter of intent signed by the company they are affiliated with or their supervisor.
 4. All members shall be required to sign a confidentiality agreement prior to accepting position on the Medical Review Committee.

5. Only members of the Medical Review Committee can vote on issues brought for review.

E. Length of Appointment:

1. Medical Director/Associate Medical Director shall be appointed throughout their tenure
2. General Membership shall be effective for two years
3. Reconfirmation to the MRC is not automatic however members can serve multiple terms
4. Membership can be terminated at the discretion of Assistant Chief of EMS and/or the Medical Director.

F. Meetings

1. All incidents that are brought to the Medical Review Committee shall be handled with complete confidentiality. Any violations of confidentiality shall be handled per disciplinary policy.
2. The Medical Review Committee shall meet monthly or at a minimum quarterly, unless a time sensitive issue arises that requires holding an emergency meeting.
3. A quorum of at least 50% of the committee shall be present to vote on issues brought before the board.
4. The Medical Review Committee shall make recommendations to the Medical Director for remedial training, re-education, or revocation of privileges of a clinician.
5. The Medical Review Committee shall make recommendations for any citizen or entity complaints brought before the Committee.
6. Meeting notes shall be recorded, however, any identifying information, action taken, and recommendations shall be redacted for clinician confidentiality.
7. All incidents brought to the Medical Review Committee shall be investigated by the Assistant Chief of EMS or designee prior to bringing to the MRC, per the following guidelines.
 - a. Identify the facts
 - b. Identify any root cause or contributing factors
 - c. The Assistant Chief of EMS or designee shall gather the following
 - i. Copy of the EPCR with identifying fields removed or blacked out.
 - ii. Statement of facts from the provider with identifying fields removed or blacked out.
 - iii. Any statements of complaints with identifying fields removed or blacked out.

- iv. Any audio files from the incident that would add value to the investigation
 - v. Documentation from the receiving facility when available
 - vi. Supporting documentation of violation or complaint.
 - vii. Copy of any additional material needed to support or refute claims.
- d. This investigation shall be completed within (7) days of notification or finding of QA issue.
 - e. The Assistant Chief of EMS or designee shall prepare a report for the MRC and shall convene the MRC within (14) days of notification of finding the QA issues.
 - f. Clinicians under review by the MRC may request to present their case at the MRC meeting.
 - g. A clinician under review may be asked to attend an MRC meeting to clarify the details of their case when questions remain after the preliminary investigation.
 - h. The time may be extended under exceptional circumstances, or as requested by the clinician.
 - i. The MRC shall provide the Assistant Chief of EMS and the Medical Director with the findings of this investigation along with recommendations for remedial training, reeducation, suspension, discontinuation of privileges. The report shall:
 - i. At no time have the clinicians name, affiliation or identifying data be revealed during the MRC investigation, except on a need-to-know basis to the members of the MRC, such as when necessary to establish a pattern of behavior for a particular provider
 - ii. Shall not identify the patient's name or receiving facility during the investigation.
 - j. All notifications to MIEMSS shall be made through the Assistant Chief of EMS regarding results of investigation and actions taken to avoid any similar situation from happening in the future.
 - k. Any system wide recommendations from the incident investigation shall be forwarded to the Medical Director and Assistant Chief of EMS for implementation or future continuing education.

1. All recommendation from the Medical Review Committee shall be submitted to the Assistant Chief of EMS within 3 business days from the meeting.

G. APPEALS

1. Every effort is made to provide all parties due process in the consideration of matters brought before the MRC. The Operational Program acknowledges the parties involved may believe the actions taken are excessive or unjust.
2. The clinician must submit written notification of an appeal to the Assistant Chief of EMS within (7) days of notification of the results of the MRC
3. The Assistant Chief of EMS shall convene an appeals committee to review the finding.
4. All parties and witnesses involved shall be present for the appeal meeting.
5. The Appeal Committee shall be:
 - a. Fire Chief / Director
 - b. The Assistant Chief of EMS
 - c. Region III Medical Director
 - d. Two additional at large ALS personnel affiliated with Carroll County Fire and EMS.

H. CLINICIAN RESPONSIBILITY

1. It is the responsibility of the clinician to provide the best possible patient care to every patient and family member during all incidents.
2. Clinicians shall report to the Assistant Chief of EMS when they believe that they may have varied from the standard of care.
3. Clinicians are responsible for maintaining a working knowledge of the latest version of the Maryland Medical Protocols for Emergency Medical Services.
4. Clinicians shall report to the Assistant Chief of EMS any concerning treatments or care rendered by themselves, or fellow clinicians as soon as identified.
5. If a clinician is being investigated for quality-of-care issues, that clinician shall promptly respond to and cooperate with the quality assurance investigation.
6. Clinician shall be available for questions during the Medical Review Committee investigation.

7. Clinicians are provided with Due Process under COMAR 30 and have the right to appeal any decisions made by the Medical Review Committee, Medical Director, or Assistant Chief of EMS.

IX. RECISION

- A. This Standard Operating Procedure rescinds all directives regarding Quality Assurance/ Quality Improvement or similar content previously issued for personnel of the Carroll County Department of Fire and EMS.