
	STAFFORD COUNTY FIRE AND RESCUE DEPARTMENT POLICY - EMS	
	SUBJECT: Emergency Medical Services Quality Management Plan	FRD 100.205
		Initiated 12/10/2021
APPROVED: Joseph A. Cardello County Fire Chief		Page 1 of 8

A. PURPOSE

The Stafford County Fire and Rescue Department (SCFRD) Emergency Medical Services (EMS) Quality Management (QM) Plan establishes a formal process that allows for EMS system performance evaluation as a means to enhance quality prehospital patient care provided by SCFRD personnel. This program will provide a forum for continuous system improvement, and a peer review process focused on industry best practices to promote optimal prehospital care delivery. QM is a department-wide responsibility shared between and among Operations Command, EMS Division, and the Training Division; this joint effort provides opportunities to improve quality prehospital care consistent with best practices and evidence-based medicine.


This program complies with the requirements in Virginia EMS Rules and Regulations: 12VAC5-31-600 titled "*Quality Management Reporting*," which mandates an EMS agency shall have an ongoing *Quality Management (QM) Program designed to objectively, systematically, and continuously monitor, assess and improve the quality and appropriateness of patient care provided by the agency*

B. SCOPE

- 1.0 This policy applies to all members, both career and volunteer, of the Department, and the overall delivery of emergency medical care in Stafford County.

C. DEFINITIONS

- 1.0 **Data:** Information collected to evaluate all aspects of patient care, which includes but is not limited to computer-aided dispatch (CAD), patient care reports, surveys, and demographics.
- 2.0 **Database:** Compiling of all pertinent information gathered during the QM process that can be used to analyze all aspects of data wholly and efficiently.
- 3.0 **Electronic Patient Care Report (ePCR):** A standardized electronic form used to document all aspects of patient care.
- 4.0 **Medical Incident:** Refers to a significant occurrence not aligned with established medical protocols, training principles, authorized physician's orders, established or generally accepted medical practices. Examples include:
 - 4.1 Medication administration error (dose, route, wrong medication, etc.).
 - 4.2 Report falsification, including reporting incorrect or unattained patient information.
 - 4.3 Performing procedures not authorized by the OMD.
 - 4.4 Incomplete patient assessment or failure to assess a patient.
 - 4.5 Selection of the wrong medical treatment protocol.

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- 4.6 Protocol deviations / variances
- 4.7 The unanticipated outcome as a result of a medical intervention
- 4.8 Delays in patient access, assessment/stabilization, or transport.
- 4.9 Choice of destination facility

- 5.0 **Medical Review:** A systematic analysis of emergency medical care delivery. There are three levels of review.
 - 5.1 Level I Review: Daily chart review, conducted by EMS QM Coordinator and/or EMS Supervisor. Examples: Significant Incident Reports (SIR), Continuous Quality Improvement (CQI) Performance Indicators (STEMI, Cardiac Arrest, Strokes, Use of Advanced Airways/CPAP, Air Medical Transport, and audits of specific EMS related calls.
 - 5.2 Level II Review: EMS operational concern or complaint. Conducted by EMS QM Coordinator or EMS Supervisor.
 - 5.3 Level III Review: Medical Incident. Conducted by EMS QM Coordinator or EMS Supervisor and will require a formulated report to Deputy Chief of EMS. Requires peer-review analysis by the Medical Review Committee.

- 6.0 **Medical Review Committee:** Peer-Review Committee that analyzes medical incidents to conclude the nature and/or root cause of an incident; and provides recommendations to trends, research, and statistics that influence how patient care is implemented.


- 7.0 **Quality Assurance (QA):** An organized, reactive method of auditing and evaluating patient care within an EMS System. This broad definition includes collecting, reviewing, and tracking specific patient care incidents and is used to improve system-wide performance.

- 8.0 **Quality Improvement (QI):** A systematic and proactive approach to continuously improve all emergency medical services processes. It includes a combination of customer service input, EMS provider training needs, data acquisition, and a continuous improvement process from a "system-wide" perspective.

- 9.0 **Quality Management (QM) Committee:** The QM Committee is responsible for reviewing and overseeing the QM program and is comprised of the OMD, Deputy Chief of EMS, EMS QM Coordinator, and EMS Training Lieutenant.


- 10.0 **Quality Management (QM) Coordinator:** Individual designated by the SCFRD in concurrence with the OMD to facilitate the implementation of the EMS Quality Management Plan in compliance with Virginia EMS Regulations 12VAC5-31-600.

- 11.0 **Virginia EMS Regulations:** The official compilation of all regulations issued by the Virginia Department of Health that regulates emergency medical services and establishes the Virginia Office of EMS as the lead EMS agency in the state.

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D. POLICY

- 1.0** The QM Plan provides a retrospective, prospective, systematic, and objective process to assure the optimal delivery of prehospital care. This is accomplished by evaluating, utilizing current research and feedback from both our internal and external customers. Data is then used to develop strategic planning of our service delivery, forecasting changes, and developing system-wide goals to improve the EMS system. Sources of this data include, but are not limited to Medical Review Database, ePCR Continuous Quality Improvement (CQI) Database, Cardiac Monitor, and AED (Codestat) information. The QM Plan will identify system challenges through the Medical Review Committee and, when combined with clinical best practices, will be utilized to develop focused training programs for EMS clinicians or EMS policies and/or procedures.
- 1.1** The EMS QM process will utilize a "just culture" approach to systematic improvement. This means that reactive-based QM processes, its findings or conclusions are typically non-discoverable and are non-punitive. Any information disclosed under the QM process cannot be used as part of other department reviews or investigations per Virginia Code 8.01-581.17 *Privileged communications of certain committees and entities*.
- 2.0** QM Program Responsibilities-
- 2.1** Field Clinician:
- 2.1.1** Provide emergency medical care
- 2.1.2** Participate in initial and refresher training.
- 2.1.3** Maintain expert-level knowledge and proficiency of SCFRD policies, procedures, and medical protocols.
- 2.1.4** Complete ePCR includes attaching EKG and vital sign data, documenting all activities, procedures, and treatments to achieve a validity score of 100.
- 2.2** Station/Hub Officer: The Station or Hub Officer plays an essential role in QM by providing direct administrative review and scene supervision. The Station/Hub Officer:
- 2.2.1** Provides direct clinical oversight on emergency incident scenes.
- 2.2.2** Conducts tailboard reviews.
- 2.2.3** Delivers initial and remedial training
- 2.2.4** Conducts inspections and inventory accountability
- 2.2.5** Reviews BLS Intern Taskbooks
- 2.2.6** Completes ePCR Daily Review to confirm an ePCR was completed for all patients treated, patient refusals, and patients transported for the last shift day worked (0700-0700) for all assigned units (see ePCR Review Flow Chart for Station/Hub Officer).
- 2.2.6.1** The Station or Hub Officer shall reconcile Enroute Web and the ePCR Server to identify reports requiring completion.

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2.2.6.2 If an ePCR is found missing, the Station or Hub Officer shall contact the provider responsible for the ePCR for immediate action. In cases that cannot be corrected or completed, contact the on-duty EMS Supervisor.

2.2.6.3 A station logbook entry shall be logged to reflect a daily reconciliation has been completed. Ex. *Daily ePCR Reconciliation has been completed for 1/1/2021, and all required ePCRs have been entered, or Daily ePCR Reconciliation has been completed for 1/1/2021, and an ePCR for #20210041232 is missing.*

2.3 EMS Supervisor: An essential component in the QM process as they provide the necessary link between the EMS Division, the medical community, station/hub officers, and field clinicians. The EMS Supervisor:

2.3.1 Provides direct clinical oversight on the emergency incident scenes.

2.3.2 Conducts tailboard reviews.

2.3.3 Delivers initial and remedial training

2.3.4 Conducts inspections and inventory accountability

2.3.5 Reviews BLS/ALS Intern Taskbooks

2.3.6 Conducts Medical Reviews and formulates Medical Review Report

2.3.7 Completes ePCR Daily Continuous Quality Improvement (CQI) Review for the last shift day worked (0700-0700) who treated/transported (see ePCR Review Flow Chart for EMS Supervisor):

2.3.7.1 Patient Refusals (AMA)

2.3.7.2 Cardiac Arrests

2.3.7.3 Chest Pain/Acute ST-elevation myocardial infarction (STEMI)

2.3.7.4 Use of Air Medical Transport

2.3.7.5 Use of advanced airway procedure/CPAP

2.3.7.6 Specific Continuous Quality Improvement (CQI) Performance Indicators as identified by the QM Coordinator.

2.3.8 The chart review should include:

2.3.8.1 Patient's demographic information, to include the hospital Medical Record Number (MRN).

2.3.8.2 At least two complete sets of vital signs.


2.3.8.3 Physio-Control Data (EKG/Vital Signs) is downloaded to ePCR

2.3.8.4 Pertinent Activities, Procedures, and Medications are documented

2.3.8.5 Medication uses and medical care are compliant with SCFRD protocols.

2.3.8.6 Accurate and appropriate narrative.

2.3.8.7 Valid signatures were obtained for patient, witnesses, hospital staff, and clinicians.


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2.4 EMS QM Coordinator:

- 2.4.1 Maintains a database that is inclusive of all medical reviews, significant incidents, and complaints/concerns, which is then used to identify trends, monitor system performance, and develop future training programs.
- 2.4.2 Develops key performance indicators that measure the effectiveness and quality of EMS processes; and implements QI interventions to improve system-wide performance.
- 2.4.3 Measures and evaluates the key performance indicators continuously with periodic presentations.
- 2.4.4 Conducts reviews with EMS clinicians, healthcare facilities, internal and external customers to evaluate clinical performance and compliance with current policies and procedures.
- 2.4.5 Completes QA reviews of emergency incident critiques (hospital emergency administrative radio (HEAR) audiotapes, AED, and LifePak (Codestat) downloads.
- 2.4.6 Conducts Medical Reviews and formulates Medical Review Report
- 2.4.7 Coordinates the activities of the Medical Review Committee.
- 2.4.8 Completes ePCR Continuous Quality Improvement (CQI) Chart Review for all department units. The CQI chart review specifically looks at those chosen performance measures for:
 - 2.4.8.1 Respiratory/Cardiac Arrest
 - 2.4.8.2 Chest Pain/STEMI
 - 2.4.8.3 Stroke
 - 2.4.8.4 Sepsis
 - 2.4.8.5 Multi-System Trauma
 - 2.4.8.6 Advanced Airway Procedures and CPAP Use
 - 2.4.8.7 Air Medical Transport
 - 2.4.8.8 Randomized Patient Refusals
 - 2.4.8.9 System or Patient Care Complaint
 - 2.4.8.10 Significant Incident Reports
 - 2.4.8.11 As directed by the OMD or Deputy Chief of EMS
 - 2.4.8.12 Focused topics to evaluate specific patients, procedures, or medical care.

2.5 Medical Review Committee: The Medical Review Committee will review Medical Incidents and make recommendations for clinical and/or organizational initiatives to improve performance through remediation, system process change, or other means to enhance EMS delivery. The Medical Review Committee will meet monthly, or as needed and be composed of the following individuals:

- 2.5.1 OMD
- 2.5.2 Deputy Chief of EMS
- 2.5.3 EMS QM Coordinator (Committee Chair)
- 2.5.4 EMS Training Lieutenant

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- 2.5.5 EMS Supervisor
- 2.5.6 Career BLS or ALS Clinician (will serve one year committee appointments)
- 2.5.7 Volunteer BLS or ALS Clinician (will serve one-year committee appointments)

3.0 Electronic Patient Care Reports (ePCR) Review: Review of ePCRs is a valuable tool for the QM process. The ePCR is the principal record of every patient encounter. It plays an essential role in ensuring quality care, improving overall system performance, establishing a legal record of service provided, and enabling accurate transport billing. ePCR chart reviews are accomplished using the CQI or QM feature in the reporting software.

3.1 The value of chart review dramatically increases when crews receive feedback on their documentation. When indicated during the CQI/QM process, notes can be sent to providers to acknowledge good documentation and/or to address areas for improvement. Reports requiring correction or updating may be performed by adding an addendum.

4.0 Medical Review Process: It is understood not all queries require a formal review process. Personnel should handle routine requests for information or clarification about system function and/or interpersonal relations in consultation with superiors.

4.1 Reporting Procedure: Personnel who witness or receive a report of a Medical Incident shall report it to the on-duty EMS Supervisor and complete a Medical Incident Intake Form. The completed Medical Incident Intake Form shall be emailed to the EMS QM Coordinator within **24 hours**.

4.1.1 The EMS Supervisor will immediately notify the Deputy Chief of EMS of a Medical Incident. In certain circumstances that include harm to a patient or other clinically relevant medical errors, a determination to remove an EMS clinician's right to function in the field may occur from the Deputy Chief of EMS. These determinations will only be made in consultation with the OMD and the County Fire Chief. In these circumstances, a formal memorandum will be sent to the clinician, OMD, and command staff.

4.1.2 Process Responsibilities- EMS QM Coordinator

4.1.2.1 In consultation with the Deputy Chief of EMS, defines the level of review.

4.1.2.2 Contacts complainant to acknowledge receipt, if applicable.

4.1.2.3 Enter database elements to include:

4.1.2.4 Date received

4.1.2.5 Incident Type


4.1.2.6 The person assigned to complete Medical Review Report

4.1.2.7 Medical Review Committee conclusion and recommendations.


4.1.2.8 Date inquiry closed

4.1.2.9 Assign Medical Review with a target completion of two weeks.

4.1.2.10 Initiates Medical Review Notification

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- 4.2 EMS Supervisor:** Ensures the incident review process is consistent with established department policies, procedures and completed by the established deadline. If the incident review cannot be completed within the identified time, an extension request can be submitted to the Deputy Chief of EMS or delegated authority. Elements of the Medical Review Report process include:
- 4.2.1** Written accounts from SCFRD personnel who witnessed the alleged incident.
 - 4.2.2** Written accounts and/or interview notes (with acknowledged signature) from a non-department witness.
 - 4.2.3** ePCR and Codestat™.
 - 4.2.4** Supporting documents to include policies, procedures, protocols, Virginia Office of EMS Regulations, and/or training records.
 - 4.2.5** Medication accountability forms, daily checklists, etc., if applicable.
 - 4.2.6** Enroute Web CAD Records, EMD Records. CrewSense Calendar
 - 4.2.7** Videos, Photographs, online medical direction recordings, audio files, if applicable.
 - 4.2.8** The written document (Medical Review Report) shall be formulated with a synopsis of the event/issue, chronological timeline, factual findings, conclusions, and recommendations. The Medical Review Report and other elements (excluding the ePCR) shall be emailed or delivered to the EMS QM Coordinator.
- 4.3 Medical Review Committee:** The Medical Review Committee will review, analyze and discuss the completed Medical Review Report. Once facts are finalized and a finding is concluded, the committee, through a majority consensus, will make recommendations for individual and/or organizational initiatives to prevent recurrence through remediation, system process change, or other means to enhance emergency medical service delivery.
- 4.3.1** The Medical Review Committee's recommended resolutions may include:
 - 4.3.1.1 Remedial Training
 - 4.3.1.2 Counseling/Mentoring
 - 4.3.1.3 Policy/Protocol Change
 - 4.3.1.4 No Action Warranted
 - 4.3.1.5 Other Action Warranted
 - 4.3.2** The OMD may temporarily modify a clinician's emergency medical credentials. Decision-making authority lies with the OMD for medical issues and the Deputy Chief of EMS for operational matters.
 - 4.3.3** Discipline investigations or determinations are outside the purview of the EMS Division and are referred to Operations Command. No documents, interviews, or other information collected during a QM process will be disclosed or utilized as a part of a punitive investigation.
- 4.4 EMS Review Closure-** The EMS QM Coordinator will:

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- 4.4.1 Document the Medical Review Committee's determination and recommended resolutions.
- 4.4.2 Initiate Medical Review Conclusion.
- 4.4.3 Mail complainant and advise a Medical Review has been completed.
- 4.4.4 Coordinate the implementation of recommended resolutions.
- 4.4.5 Update Medical Review database elements to include conclusion, recommendations and date closed.

5.0 Cooperation with the Quality Management Medical Reviews: When any member of the Department is contacted by the OMD, QM Coordinator, EMS Supervisor or their designee conducting a Medical Review it shall be their duty to promptly and with all due diligence, respond and cooperate in the review, inquiry, or request. These conversations will be limited to the individual involved and the officer or OMD conducting the review. This ensures confidentiality as defined by state and federal statutes.

6.0 Confidentiality: Information gathered during the QM process to include interviews, written accounts, proceedings, minutes, records, and reports are considered privileged communications which may not be disclosed or obtained by legal discovery proceedings under Virginia Code §8.01-581.17. *Privileged communications of certain committees and entities.*

- 6.1 All correspondences (emails/documents) related to QM and or Medical Reviews shall include "*For Quality Assurances Purposes*" in the subject line or header.
- 6.2 Medical Review Committee members and invited guests shall maintain confidentiality of all information regarding individual clinicians and will be required to sign a Confidentiality Agreement.

7.0 Related documents located under members area, EMS Operations, EMS Forms:

- 7.1 ePCR Review Flow Chart for Station/Hub Officer
- 7.2 ePCR Review Flow Chart for EMS Supervisor
- 7.3 Medical Incident Intake Form
- 7.4 QM/EMS Inquiry Review Committee Confidentiality Agreement