Quality improvement implementation strategies for EMS Agencies

1. PURPOSE:

The purpose of this document is to assist EMS agencies in the Monroe-Livingston Region to set up and manage a progressive QA/QI program in accordance with REMAC and NYS policies.

2. GENERAL PHILOSOPHY OF ADVERSE EVENTS:

When an adverse event occurs, the current EMS culture often results in a response where agencies attempt to place blame and close the case by disciplining the individual. This response follows what is called the blame and shame mentality and is known to be ineffective in improving quality of care and patient safety for several reasons. First, it ignores the fact that other factors in the system (besides the individual provider) might have contributed to, facilitated, or even caused the adverse event. This is important, because if these factors can be identified and modified, the chance of future similar events can be reduced. Second, focusing blame on the individual doesn't prevent the same event from happening to another individual in the future. Third, the "blame and shame" mentality creates a culture where EMS providers fear reprisal. Thus, they may try to hide adverse events and near misses rather than reporting the events to help improve the system. Unless management and system leaders are aware of such events, they can't even take steps towards reducing them.

Other high-risk industries, such as aviation and nuclear power, have become highly reliable and safe because they have moved away from this type of mentality. Instead, they use the systems approach to maximize their safety. The systems approach recognizes that all adverse events have multiple contributing factors, many of which are out of control of the individual. It is important that agency level QA/QI systems include a structure to review all aspects of near misses and adverse events so that some of these systems contributions can be identified. Once identified, steps can be made to change the latent hazard, and avoid repeats of the same event. For example, if a provider gave the wrong medication and the review revealed that part of the problem was that the vials looked similar and were kept next to each other in the drug box, then different vials could be obtained and/or they could be stored in different areas.

It is clearly counterproductive for a QA/QI system to be perceived as a punitive, "big brother is watching" program. Instead, the goal should be for the program to be a peer-review system, which allows providers, through peer feedback, to adapt to each other's best practices, and to recognize opportunities to improve our practice and to make improvements to the system that will prevent future similar events. However, EMS providers will approach QA/QI in this fashion only when they feel protected in the system. A QA/QI committee should involve peer reviewers, key leadership, and the medical director. It is better that the QA/QI system not be lead by supervisors with evaluation and hire/fire power, because this immediately defeats the purpose of a non-threatening, peer review environment.

In order for this system to work we need to ask our EMS providers to approach (and receive) QI activity with an open mind. As this is rolled out the providers should give the system a chance to show them that QI can be a positive, educational, and normal part of the medical profession. Every other medical field, from nurses to physicians to dentists, embrace QI as an important component of continuing education. EMS can do the same, but it takes buy-in from senior leadership to the street provider. This involves all administrative and operational personnel, including the Board of Directors, DO, ALS Director, Fire Chief, and Medical Director.

Aviation has become a model for safety among high-risk complex industries including EMS. The main reason for their success: they focus on system problems, not human error. Human error cannot be eliminated, since it is merely an inevitable part of life. So the only way to improve the safety and reliability of any system is to introduce system protections. For example, it is possible for an EMT to press the "power-off" button on an AED when they intend to push the "shock" button. This could be detrimental to the patient (due to the delay in shock), so the device design should prevent the possibility of powering down by the simple single push of a button. For example, it could display an "are you sure" message rather than immediately powering down.

3. JUST CULTURE:

Although we recognize the critical importance of a blame-free safety culture in EMS, it is also clear that in rare cases providers choose to engage in reckless behavior that puts patients at risk, and we must have a mechanism to address this. The MLREMS REMAC region has adapted a strategy called *just culture*, which was developed by safety scientists James Reason and David Marx. We recommend that agencies formally adopt this model as well, as it serves as a structure to classify events and guide the response. After a thorough review of the event, the provider's involvement can be classified into one of the three following behaviors (see figure below): normal error, at risk behavior, or reckless behavior. The latter category is considered unacceptable and, if a proper "systems approach" is undertaken in reviews, will be very rare. The other two types of events are treated in a non-punitive, educational, and protected manner. If a normal error has occurred, then the provider undoubtedly feels badly and should be supported, and latent hazards discovered in the review should be changed in ways such as system design. At risk behavior should be "coached," meaning peer reviewers or agency leadership reminds the provider that their practice might lead to an adverse event. It should also be recognized that often people take this route because the environment makes it easier, or the path of least resistance. For example, in the current infection control environment, it would be considered at-risk behavior if a provider failed to wash hands between patients, possibly putting the next patient at risk for pathogens such as MRSA. However, if no hand-washing stations are available to the EMS provider between calls, then the system is steering a well-meaning provider towards at-risk behavior. Fixing the system factor will likely change the provider behavior. Finally, it is worth noting that when a true culture of safety has been attained within an EMS agency, then coaching of at-risk behavior will occur between individuals, independent of the QA/QI system. For example, a if a BLS provider noticed that their paramedic partner skipped washing hands after a call, they would feel comfortable reminding them that it is expected that they wash hands after each patient.

How does an agency put this philosophy into practice? When reviewing an adverse event, near miss or other issue raised in the system, ask "why" six times to discover some of the more subtle contributing factors. Develop an expectation that reviewers document at least three system factors (i.e. not human error) that contributed to the event, or created a set-up for error. Then look at each one of these individually to determine ways to improve the system. Actively classify the human component of the event into one of the three just culture categories, and strictly adhere to the type of agency response that is appropriate to each category (see table).

Normal Error (Human Error)	**At-Risk Behavior**	**Reckless Behavior**
Inadvertent action: slip, lapse or mistake <u>Manage through changes in:</u> • Processes • Procedures • Training • Design • Environment	A choice: Risk not recognized or believed justified <u>Manage through:</u> • Removing incentives for At-Risk Behaviors • Creating Incentives for healthy behaviors • Increasing situational awareness	Conscious disregard of unreasonable risk <u>Manage through:</u> • Remedial Action • Punitive Action
SUPPORT	**COACH**	**SANCTION**

Adapted from: David Marx, *Just Culture*. Outcome Engineering 208, www.JustCulture.org

4. PROGRAM OVERVIEW:

Current Quality Assurance practices in our agencies vary from simple resolution of complaints to structured reviews of clinical care and skills gleaned from PCRs. The new guidelines of the Department of Health prompt us to evaluate our QA/QI programs. A broader perspective to asses the systems issues of how we work, our equipment, our clinical training and the care we give is now required. The just culture described in the section above should be incorporated in how we act upon our staff related findings.

All Quality Assurance / Quality Improvement (QA/QI) programs should be designed to objectively, systematically and continuously monitor, assess and when indicated improve the quality of care provided by individual providers and the agencies themselves. All QA/QI programs should be set up as learning, non-punitive programs. The objectives should include the following,

- Strive to improve EMS with monitoring of care and overall ambulance operations so that outstanding care can be honored and challenges addressed.
- Provide a program for constructive feedback to EMS providers of all levels.
- Recognize trends in patient care that are in need of improvement and recommending and / or providing education to facilitate system and provider improvement.
- Recognition of outstanding care and operations.
- Focus on the process to improve outcomes, not the outcomes of individual calls themselves.

Any QA/QI Plan must have a variety of approaches in order to create a comprehensive net to improve the overall quality of services. EMS agencies have traditionally focused on the completeness and protocol adherence of the Patient Care Report (PCR). The new DOH guidelines prompt agencies to create a QA/QI plan which promotes continuous quality improvement with links between clinical, education, and supervisory activities.

The matrix found in Appendix 3 lists some common QA/QI related activities that can be mixed and matched to create a more comprehensive plan. Agencies should pursue activities which are required, such as PCR review, equipment maintenance, and credential monitoring. In addition, there should be topic specific initiatives to address identified weaknesses, changes in practice or system wide projects. Activities have been organized into three types of evaluation activities: prospective, concurrent, and retrospective.

5. STATE REQUIREMENTS FOR A QA / QI PROGRAM:

A Quality Assurance program is designed to measure the ability of the providers in a region to meet or exceed community standards for quality and safe patient care. Under Article 30 of the NYS Public Health Law, each REMAC is required to do QA/QI within their region. The REMAC in the Monroe-Livingston Regional delegates it's authority to oversee QA/QI to the QA/QI Subcommittee which addresses system issues in a confidential process through system improvements, provider education and provider remediation whenever possible. The REMAC QA/QI Subcommittee reviews cases referred by agencies, hospitals and individuals. Cases referred by the agencies are handled by the committee, as well as any significant concerns. Cases referred by individuals and hospitals are generally referred back to the agency for review and possible remediation at the agency level. At any time, if needed agencies are able to discuss concerns or ask for assistance from the Regional QA/QI Coordinator. The REMAC QA/QI Subcommittee Policy and Procedure document is intended to ensure a fair and equitable QA/QI system in the Monroe-Livingston Region for the purpose of facilitating high quality patient care throughout the region. A copy of this document is available at www.mlrems.org. The REMAC QA/QI Subcommittee does not review individual agency QA/QI plans.

Every ambulance and advanced life support service is expected to have an established QA/QI program or should be participating in a quality improvement program with other agencies. The REMAC QA/QI Subcommittee does not fulfill the NYS requirement of an agency level QA/QI program. The agency QA/QI plan should be an ongoing system to monitor and evaluate the quality and appropriateness of the medical care provided by the ambulance service or advanced life support first response service. Individual agencies are able to interact with the REMAC QA/QI Subcommittee and its members.

The quality improvement program may be conducted independently or in collaboration with other services, with the appropriate regional council, with an EMS program agency, with a hospital, or with another appropriate organization approved by the department

The Agency QA/QI committee should be made up of at least five members, at least three of whom do not participate in the provision of care by that service. At least one member must be a physician, and the others must be nurses, emergency medical technicians, advanced emergency medical technicians, or other appropriately qualified allied health personnel (such as a 911 Dispatcher, a police officer or someone from another medical field.)

6. ROLE OF THE MEDICAL DIRECTOR:

In general, the Agency Medical Director (AMD) has three main functions within an agency:

- To support EMS crews: The AMD can be a resource to crews in many ways. They can be there to discuss a call—maybe one that was particularly difficult, or one that left the provider feeling unsure of the choices they made in care, or one in which they just need reassurance.
- To protect the company from liability: This is accomplished by advising agency leadership in policy development, QA/QI, and provider education.
- To ensure quality care to patients: The AMD can do this in several ways, and the main conduits are usually continuing education and the QA/QI system. A good QA/QI system is one of peer review, with AMD consultation when necessary. It is intended to be a system that allows us all to learn from each other, not an oversight system, so the agency medical director will generally not be the primary reviewer of calls. The system expects that people learn from previous cases, and it is set up to spot trends.

In order to maximize the AMD's role in QA/QI, it is suggested that the following role is formally arranged (and should be clarified individually with each AMD):

- Involve the AMD in the QA/QI Committee
- Make the AMD aware of any significant concerns regarding patient care immediately.
- Notify the AMD immediately if a patient dies, is injured, or otherwise possibly harmed due to actions of commission or omission by a member of the agency
- Notify the AMD if patient care equipment fails while in use, potentially causing patient harm
- Notify the AMD if significant complaints against members alleging improper medical care are generated by hospital staff, outside agencies, a patient or family members.
- Notify the AMD if a provider is suspended or terminated for any medical care reasons
- Provide the AMD with semi-annual reports to keep them engaged and involved in agency QA/QI activity, including:
  - Controlled substance report (if applicable)
  - Agency QA/QI policy and procedure document updates
  - Complete list of agency members and providers
  - List of providers enrolled in CME recertification (it is recommended that the AMD be involved in approving providers for involvement in this process).
  - Agency Statistics (Call volume, response times, staffing issues/concerns)
  - QA/QI Reviews, Concerns and Trends Training (Needs, Upcoming classes)

In Appendix 5 is a copy of the AMD Expectations from the Medical Directors from the Division of Prehospital Medicine at the University of Rochester.

7. THE FEEDBACK LOOP

The **Feedback Loop** is a vital and integral portion of any agency's QA/QI Process and should be included in an agency's written QA/QI Plan. Key principles of the feedback loop should be focused around how the process should be educational and non-punitive in nature whenever possible. In fact, positive feedback is an essential part of the process and the process should never be restricted solely to negative feedback. Ultimately, the goal of a successful QA/QI program is to ensure the highest quality patient care and guiding change must be a principal activity of a QA/QI Program, of which positive feedback is an essential part of the process.

Below are several suggested actions to undertake as part of the feedback process:

- Identify areas of excellence and reinforce positive behavior in an attempt to encourage continued excellence
- Rationalize proper behavior in an attempt to effect change through the educational process

Below are several suggested programs that agencies are encouraged to develop to facilitate behavioral change:

- Develop skills remediation labs that will allow for supervised reinforcement in the clinical setting
- Develop a mentoring program utilizing previously identified preceptors within each agency
- Develop a series of didactic workshops to rationalize appropriate actions

Below are several suggested criteria that are key to a quality medical record

- Provide timely documentation- remember that the PCR is part of the handover of care, and an important communication tool. Inadequate handovers are considered threats to patient safety.
- Paint a clear picture of the call so that anyone reviewing the documentation, possible years from now, can understand the thought process and actions that occurred during the call
- Include a thorough assessment, including serial vital signs
- Pay special attention to documentation of all patient refusals, including use of the appropriate Refusal Forms, and document each component of the capacity assessment.

Audit results should be recorded on a data collection tool where pre-determined questions can be answered by generating reports in order to analyze findings. Part of this process should include feedback, at both the provider and agency level, the acknowledgement of a job well done or the development of a corrective action plan as indicated. The process should conclude with a re-audit at some point in the future to assure that the desired outcome is either maintained or achieved.

Essentially, the feedback loop cycle consists of:

- Collecting and organizing data
- Identifying areas of excellence
- Identifying deficiencies
- Defining the magnitude and scope of problem
- Evaluating care/service provided
- Developing a plan for corrective action
- Providing feedback
- Implementing the corrective action
- Reevaluating after specified period of time
- Communicating relevant information and trends to responsible persons
- Retraining as needed
- Re-visiting in future
- Sharing information with REMAC QA/QI Committee (as appropriate)

Feedback to the provider is always necessary. Negative feedback should be given during appropriate times and never in front of the patient or other providers. Telling the provider that they are wrong without investigation will damage the relationship between the provider and supervisor.

Providers look for consistency in their supervisor. Showing favoritism to some providers causes abhorrence and animosity from the workforce. It is difficult to have a functional workforce driven to provide excellent patient care and customer service when the provider themselves do not feel that they themselves are treated well.

All providers need to make development one of their responsibilities. Not all want to develop, but every effort should be made to have development sessions available, such as during regular agency meetings. Most CME is structured around patient care, not people care. Emphasis should be placed on the whole, not just the part.

It is equally important to establish a recognition process in order to highlight outstanding customer service activity. This recognition is important to tell everyone that it is not just okay to have a customer service initiative but it is in your mission to meet that objective. One example would be to post any thank you notes received from patients on a bulletin board at your agency's work area and highlight them during agency meetings.

Appendix 1: ADVERSE EVENT AND NEAR MISS REPORTING

In 1974, a United Airlines flight was on approach to Dulles Airport in Virginia in broad daylight in good weather (so the pilots could easily see the ground), and a series of errors in communication with air traffic control, and with interpretation of instruments led to a near miss. The United Airlines pilots realized that had they not been able to see the ground (i.e. night time or cloudy weather), they would have hit the side of a mountain. In response to this, they told airline officials and all the United Airline pilots were immediately warned of this danger.

Two months later, in December 1974, TWA Flight 514 crashed into the side of a mountain 25 miles from Dulles Airport killing all 92 people on board. The investigation found the same sequence of events had occurred in this cockpit as had occurred in the United Airlines cockpit two months earlier. The FAA reacted quickly and developed the Aviation Safety Reporting System (ASRS), a database of aviation near misses and adverse events (see http://asrs.arc.nasa.gov) intended to allow sharing of information throughout the industry. There were several keys to the success of this system, which was introduced into an industry that otherwise had incentive to hide their errors (the FAA could be an aggressive enforcer). Why would pilots want to report an error or dangerous condition that they might be blamed for? First, reports went to NASA, not the FAA, and the data was maintained in a completely anonymous fashion. Second, the FAA provides immunity from any adverse action to any person who reports the event within a few days. This system has become part of the aviation culture and has lead to hundreds of system improvements and lives saved.

Medical Error Prevention and Error Reporting System (MEPARS) is the first national adverse event reporting system for EMS. This system, which was started by a company in Ohio owned by Dr. Robert Gwinn, Medical Director of Med Flight of Ohio, was further developed with the help of a grant from the National Institutes of Health which facilitated expansion of the program to cities in other states. Agencies participating in the program will benefit from monthly alerts and safety updates based on the entire database.

The MEPARS system is modeled after the ASRS system. EMS providers in participating agencies complete a reporting form which can be downloaded from the website, then submit it to MEPARS in Ohio. The reporting form initially contains identifying information so the reviewer can contact the reporter to clarify any questions they may have. As soon as they have made this contact the reporter's identification is physically removed from the report and mailed back to the reporter to confirm that the data has become completely anonymous. In addition, the paragraph describing the event is then electronically typed into a database and then the reporting form is destroyed. This prevents the data from ever being identified by hand writing. The "sterile reports" are then forwarded to expert reviewers. These expert reviewers are all EMS experienced providers including EMS physicians. The reviewers assess the primary causes of the problem, classify the type of problem, and then add the information to the database. The reviewers also periodically review the database to spot trends and publish a monthly newsletter to all participating agencies to describe trends and reasons to be cautious. For this reason, the MEPARS reporting system serves to provide warning and information about ongoing problems in EMS. Similar to the NASA system, MEPARS requires that agencies provide immunity from adverse action to providers who have reported events, provided that there has been no criminal activity, deliberate malice, or substance abuse, and the report is submitted within five days of the event. Some agencies have elected to limit the opportunity to exercise this immunity to once per year per providers. We encourage all EMS agencies in the MLREMS region to participate in a near miss reporting system. If you want to learn more about the MEPARS system, check out the website www.EMSsafePatient.com.

Appendix 2: GLOSSARY

Adverse Event
An event in which injury to the patient results from the medical care or intervention

Appropriateness Monitor
Types of measurable outcome to ensure compliance with protocol policy or procedure, such as: PCR completion reports; RMA review; time reports; protocol-appropriate treatment; policy-appropriate action; and diagnosis comparison.

Benchmark
A scientifically-validated, regionally-accepted, or nationally recognized endpoint

Benchmarking
On-going and systemic process for measuring and comparing the work process of one organization to those of another, by bringing an external focus to internal activities functions or operations

Concurrent analysis
Real-time review of processes through on-line medical control, ED observation, comparison of diagnoses, field observation, etc

Continuous Quality Improvement
CQI is the sum of activities undertaken by the service to provide confidence to its patients and to maintain a standard of excellence. It is dynamic process based on multiple activities to maintain the ultimate goal of the Emergency Medical Service System: the provision of timely, efficient and effective prehospital care to all those who need it.

HIPAA
Health Insurance Portability and Accountability Act, promulgated in 1996 Designed to simplify the administration of the health insurance industry by setting national standards fro transfer of protected health information, confidentiality of protected health information, and the management of health care financing

Indicators
Any of a group of predetermined values that are of high risk to the provider or service that should be periodically reviewed to reduce risk. They can be either high or low volume.

Medical Error Prevention and Reporting System (MEPARS)
An anonymous no fault EMS patient safety system patterned after the FAA (ASRS) system designed to improve EMS patient safety. Patient Safety can be improved by identifying adverse events and near misses that occur and by discussing them in an environment safe from disciplinary action or fear of malpractice litigation

MLREMS - Monroe-Livingston Regional EMS Council
The agency that is responsible to NYS for ensuring certain deliverables are completed. MLREMS oversees committees to help ensure these deliverables are met.

Near Miss
Occurrence of an error or hazard that could have resulted in an adverse event but did not because of intervention or change (also called a potential adverse event)

Outcome Evaluation
Deals with the results of care provided. This deals with stabilization and survival through to recovery and hospital discharge.

Outlier
Case that falls out of acceptable standards, accompanied by documented reason for the anomaly.

Patient Outcome Monitors
Types of measurable outcome to gauge effectiveness of prehospital interventions, such as: difficulty breathing rating pre/post treatment; correlation of return of spontaneous circulation (ROSC) to time of defibrillation/presenting arrhythmia; hospital disposition for patients receiving ALS care; and correlation between survivability and cumulative prehospital care options.

Pertinence Negatives
Questions that are asked to help rule out injuries. An example would be – the absence of pain in an extremity to help rule out fractures and dislocations.

Glossary, continued

Process Evaluation
Deals with the use of resources and appropriateness of such utilization. This deals with patient processing, triage, utilization of available resources, etc.

Program Outcome Monitors
Types of measurable outcome to gauge effectiveness of the organization, such as: performance consistent with medically accepted standards; adequacy of resource allocation; resource management; vehicle maintenance/preventive maintenance; and training program.

Prospective Analysis
Measuring future evens against predetermined standards. This is accomplished through standardized protocols, establishment of time standards, etc.

Protected Health Information
Individually identifiable information, linking a person's health information to their identity

Red-Flag Monitor
Types of measurable episodes of actual or potential harm to patients or EMS providers, a serious misapplication of procedure or protocol, such as: deviations from protocol/procedure/untoward events; citizen or response agency complaints; technical malfunction or equipment, etc.

REMAC - Regional Emergency Medical Advisory Committee
A group of physicians, providers and allied health professionals that are responsible for ensuring quality care for the region, they oversee the QA/QI Committee, ALS Committee and the Protocol Committee.

Remediation Process
The scope of resolution to identified results, including efforts to foster a partnership between prehospital EMS providers, provider agencies, and those individuals and agencies responsible for medical oversight in the region. Guiding change is a principal activity of the QI program, and positive feedback is an essential part of the process.

Reportable Event
Title 10 of the New York State Codes, Rules and Regulations (10NYCRR), Part 800.21(q) and (r) delineate the specific circumstances which require an EMS agency to immediately report to the Department of Health, Bureau of Emergency Medical Services. Examples of a reportable event may include, but not be limited to, a defibrillator failing to analyze and/or shock or an ambulance stretcher toppling over from its highest position and injuring a patient.

Retrospective Analysis
Review of system processes after they occur. This is accomplished through PCR review, critique sessions, patient complaints, etc.

Statistical Monitor
Types of measurable outcome to ensure compliance with pre-established benchmarks, such as: cardiac arrest outcome; time of dispatch to arrival of ambulance; technician skills report; and treatment appropriate to patient condition and technician availability.

Structural Evaluation
Deals with the presence of mandated resources and includes standard setting for non-personnel issues. This includes evaluating physical facilities, equipment stocking and control procedures, etc.

Strategic planning
Development of effective strategies to cope with changing circumstances- A set of concepts, procedures and tools designed to assist leaders and managers with a variety of tasks. Disciplined effort to produce fundamental decisions and actions that guide what on organization is, what it does, and how it does it

System
A complex unity formed of many often diverse parts subject to a common plan or serving a common purpose

Appendix 3: EXAMPLES OF PROSPECTIVE, CONCURRENT AND RETROSPECTIVE QA/QI

	Prospective	**Concurrent**	**Retrospective**
Education	Skills Drill		Feedback loop between QA/QI process and in-service planning
	In-service sessions		Continuing education programs
	Protocol review/postings		
	Review of preceptor role		
Clinical	Identified topics materials	On-scene observation by supervisors	PCR review (% or set #) including completeness and comprehensiveness
	Remediation on selected topics	Call/event debriefing	Mandatory review
		Medical Control/Receiving Hospital feedback	Crew based call review/debriefing
Supervisory	Preplanning surveys for MCI, map books		Complex call review (MCI, multi-agency etc)
	Standards for preceptors, train the trainer programs		Customer satisfaction surveys (patient/family)
Personnel	Credential monitoring		Stakeholder feedback
	Staffing level planning		
	Equipment/supplies stocking		911 Center, hospital staff, FD
Facilities/equipment	Facilities planning	Preventive maintenance (facilities and equipment)	
	Equipment selection, testing and maintenance		Equipment malfunction review
Call Data			Trend review of practice
			Response times
			Adherence to protocols
			Individual and level practice profiles

Appendix 4: CHARACTERISTICS OF A QUALITY EMS MEDICAL RECORD:

Documentation in an EMS medical record is a critical but often underemphasized component of every EMS call. Ensuring the quality of an EMS medical record is an important component of any quality assurance process. However, identifying what makes a quality EMS medical record is very difficult.

It needs to be understood why we complete an EMS medical record. The first, and most important, relates to patient care. The medical record provides all future caregivers significant information regarding the presentation of the patient, interventions given to the patient, and reasons for those interventions. A second reason for the documentation is protection from legal claims. While this is less of an issue for any quality assurance document, it is equally important for the EMS professional.

One important component of a quality EMS medical record is timely documentation. The record must be completed *immediately* after the call in order to provide a smooth transition of care. A secondary reason for the immediate completion of the record is to create a record of actions and reasons for those actions before any outcome information is obtained. For instance, if a patient refuses care, the EMS provider wants to document the refusal, reasons for refusal, attempts made to convince the patient to accept transport, and decision making capacity before the patient requests EMS a second time for a complication. Otherwise, questions regarding the EMS provider's actions may arise.

When completing a report, the complete story of the call must be told so as to provide the reader with a clear picture of the call. The EMS professional should be as specific as possible, including everything that they saw, heard, touched or smelled. Both positives and pertinent negatives should be documented..

On any EMS medical record, information about the reason why EMS was called should be included and using the patients own words is beneficial. A subjective assessment should include further information regarding what was gathered by the EMS professional. The vital signs, as the name implies, are vital. They should be taken on initial contact and frequently, not only following the protocol but additionally as needed based on the patient presentation and interventions that were provided. For instance, a quality EMS medical record would potentially show the patients initial vital signs, repeat heart rate after the patient received treatment for the chest pain, the repeat blood pressure after nitroglycerin was given, repeat vital signs after a narcotic was administered, etcetera.

All documentation of interventions should be specific. If oxygen is administered document the method of delivery. If a medication is administered, describe the dose, the route, and the response to the medication. If multiple agencies are involved in the care of the patient, document what was done by your agency. Documentation of care by another agency should be limited.

At the end of the EMS medical record, a summary statement should be included to describe the patient's status upon arriving at the hospital and transfer to ED staff. As an example – a summary statement for a patient complaining of chest pain might state "after above mentioned treatments were completed, the patient was pain free and continued to be stable throughout transport and upon transition of care to the emergency department."

A well documented PCR provide an excellent sense of what occurred during the call and provides sufficient justification for the actions that were taken and those that were not taken.

Appendix 5: AGENCY MEDICAL DIRECTOR EXPECTATION DOCUMENT-SAMPLE DOCUMENT

Agency Medical Director Expectations
Division of Prehospital Medicine
University of Rochester

The physicians of the University of Rochester, Division of Prehospital Medicine (DPM) appreciate the opportunity to serve agencies in the MLREMS region as an Agency Medical Director (AMD). Some agencies contract with the DPM for AMD services including a consistent level of physician involvement in agency affairs such as quality assurance and improvement, education, and guidance based on contracted deliverables. While a contracted AMD is ideal, the DPM also volunteers limited services as AMD's to ensure that each agency in our region is provided quality medical direction.

This document summarizes *minimum* expectations for each agency for whom the DPM provides AMD, whether contracted or volunteer. They may be modified based on agency needs or regional system changes. This document does not represent a contract between the agency and medical director; it is intended to clarify expectations and facilitate communication.

Some portions of this list may not be applicable to all agencies, and it is recognized that it will take some time to achieve all of these expectations. All sections, including the timeline for achieving, should be reviewed by the agency and discussed with the AMD.

Regulatory

- Each agency must comply with Regional Policies and Procedures and New York State Laws, specifically, Title 10, Part 10, 18, 80 and 800 and Article 30.

Scope of Practice

- EMT-I / CC / P / CCEMT-P
  -Intubations must be always confirmed with waveform capnography.

Equipment

- Consult agency medical director if considering introducing new medical devices or changing existing ones (e.g. AEDs, monitors)
- Require a Bougie and alternative airway devices (prefer the King Airway)
- Require alternative IV access device for all age groups (prefer EZ-IO)
- Require capnography for all ALS/ILS units
- CPAP (any device) strongly encouraged for all ALS units

Clearance of Providers

- Must have an internal clearance process policy in writing (ALS and BLS)
- Must document completion of the internship before providers are allowed to assume primary responsibility for patient care
- Must follow REMAC procedures for ALS internship and clearance
- Must notify AMD of all advanced providers (EMT-I, EMT-CC, EMT-P, CCEMT-P) as they are cleared

Quality Assurance

- Must have a QA/QI system process in place with an emphasis on peer review and educational solutions.
- Must have QA/QI policies and procedures established in writing
- Must maintain a QA/QI Committee to oversee the QA/QI program, as per NYS requirements, or participate in a multi-agency/regional group that meets the requirements
- Must make the AMD aware of any significant concerns regarding patient care immediately. Examples are circumstances where the QA/QI Director, BLS/ALS Chief, Director of Operations, or other agency leader feels that there is:
  - A significant protocol violation
  - Harm to the patient (inadvertently or knowingly)
  - A concern regarding the provider's ability to provide competent EMS care
  - An outside agency or hospital brings forth a clinical care concern
  - A need for a QA/QI Referral to the REMAC QA/QI Committee or the Regional Medical Director
  - A provider is suspended or terminated from the agency for medical care issues (Requires immediate notification)
- QA/QI committee should meet and communicate regularly with AMD

Agency Medical Director Sample document, continued

CME Based Recertification Program

- Must obtain AMD support of the CME Based Recertification Program for the agency prior to offering such a program to the agency membership
- AMD must approve providers participating in the program every 6 months and at the start of affiliation with the agency
- AMD must approve agency-taught classes, as well as the instructor, or approve an individual who will oversee the education and instructors
- AMD must oversee the skills verification, or approve a skills verification designee

Required Immediate Agency Medical Director Notification

- A patient dies, is injured, or otherwise possibly harmed due to actions of commission or omission by a member of the ambulance service
- An EMS response vehicle operated by the service is involved in a motor vehicle crash in which a patient, member of the crew, or other person is killed or injured to the extent requiring hospitalization or care by a physician
- Any member of the ambulance service, while on duty, is killed or injured to the extent requiring hospitalization or care by a physician
- Patient care equipment fails while in use, potentially causing patient harm
- It is alleged that any member of the ambulance service has responded to an incident or treated a patient while under the influence of alcohol or drugs
- Any alleged inappropriate actions associated with medications (controlled substances or otherwise) by any member of the service or involving service medications
- Significant complaints against members alleging improper medical care
- A provider is suspended or terminated for any medical care reasons
- A Regional Disaster Plan is activated
- The CISM team is activated for an agency issue
- Anything that a reasonable person should expect the AMD should be immediately aware

Agency Reporting Provided on a Semi-Annual Basis

- The agency must provide the AMD with the following semi-annually (January 1 and July 1)
  - Controlled substance usage report
  - Agency policy and procedure document updates (must be reviewed annually)
  - Complete list of agency members and providers
  - List of providers enrolled in CME recertification

Annual Meetings

The agency leadership must meet with the AMD at least annually. It is the responsibility of the agency to arrange these meetings. The agenda of these meetings should include the following, as applicable:

- Agency Statistics (Call volume, response times, staffing issues/concerns)
- QA/QI Reviews, Concerns and Trends
- Controlled Substance Review
- Training (Needs, Upcoming classes)

TAG Members

Rick Race (Chair)
Josh Frankel (Co-Chair)
Sheri Adam
Liz Caldwell
Terry Fairbanks
LaShay Harris
Jan Lloyd
Manish Shah
Bill Sheahan
Lucas VanDervort