Medic Ambulance — Excellence in EMS Since 1979	MEDIC AMBULANCE SERVICE, INC. SOLANO/SACRAMENTO POLICY & PROCEDURES	Policy #	201.06.01
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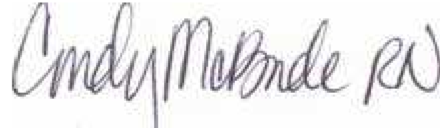
	Policy Section: **201 CLINICAL STANDARDS** Policy Title: **CLINICAL QUALITY ASSURANCE PROGRAM**	Draft Date:	N/A
		Effective:	12/09/2009
		Revised:	11/2018
		Review:	05/2020

Approved:

Medical Director



VP – Quality

I. PURPOSE:

A. To provide a detailed description of the agency's Quality Assurance program.

II. PROCEDURE:

A. Structure and Organizational Description:

1. It is the mission of Medic Ambulance Service Inc. to professionally and competently provide our customers and patients' excellence in emergency service, pre-hospital healthcare, and customer service. We expertly facilitate emergency and non-emergency medical transportation by employing the best strategies, technologies, and, most importantly, the best people to get our critical job done and exceed our clients' expectations.
2. Health Services Provided: Medic Ambulance Service Inc. provides emergency and non-emergency pre-hospital care, transportation and inter-facility transport services throughout Solano County and Sacramento County. The Company provides medical standby service to all served communities for various community events, e.g., football games, charity walks, etc. Additionally, the Company provides educational classes for EMT and EMT-P providers within the local fire departments, other first responder agencies, and the public.
3. EMS system collaboration: Medic Ambulance Service Inc., in Solano County, conducts business under the guidance of the Solano County Emergency Medical Services Cooperative and the Local Solano County EMS Authority. The Company supports the SCEMSC mission of, "Assuring a timely and effective system of pre-hospital emergency care to the victims of sudden illness and injury through a comprehensive coordinated arrangement of Health and Safety resources at a reasonable cost to the people of Solano County". In the Sacramento area, the Company supports and works under the auspices of Sacramento County EMS and Sierra-Sacramento Valley EMS.

B. Quality Department Structure and Organizational Description:

1. The Quality Assurance Program of Medic Ambulance Service Inc. is staffed by the Vice President of Quality, QA Manager, and QA Supervisor and is provided oversight by the Company Medical Director. Additionally, there is an active QA Committee that meets on a regular basis to review data, equipment, and care to provide input on improvements and corrective action.
   i. The Company Medical Director is a Board Certified Emergency Medicine Physician with vast experience in the emergency medicine field. He provides direct oversight of all aspects of the QA program and is an active member of the internal QA Committee. Additionally, he is an active member of the County EMS Physicians' Forum and an

active participant in these county QA committees: STEMI, TAC, PI/Field Ops and Physicians Forum.

ii. The VP of Quality is an FNP with background in Emergency Medicine and Quality Assurance Monitoring. She provides coordination of the department's efforts in developing, monitoring, maintaining, and improving Quality standards for the Company. She is the Co-Chair of the Company's QA Committee and is an active participant in these County EMS QA committees: STEMI, TAC, PI/Field Ops

iii. The Quality Assurance Manager is an EMT-P with extensive pre-hospital experience and proven leadership qualities. In conjunction with the VP of Quality she conducts the daily business of the department to include audits, employee counseling, and communication with crews and management staff regarding QA issues. She also is an active participant in the standing County EMS QA committees: STEMI, TAC and PI/Field Ops

iv. The Quality Assurance Supervisor is an EMT-P with extensive pre-hospital experience and proven leadership qualities. In conjunction with the QA Manger, he assists in the conduction of the daily business of the department including daily PCR review, employee counseling and communication with crews regarding QA issues. He is also an active participant in the standing County EMS QA committees: STEMI, TAC and PI/Field Ops

2. Company Quality Department Mission:
   i. The mission of the Medic Ambulance Service, Inc. Clinical Quality Assurance Program is to ensure delivery of optimal basic and advanced life support in the field with transportation, in a timely manner, to the most appropriate facility to render needed care. This is accomplished through various reviews, counseling, education, and training.
3. Company Quality Department Goals:
   i. Delivery of optimal prehospital care;
   ii. Ensure optimum clinical and field performance of caregivers;
   iii. Ensure prompt and appropriate transportation of patient to the most appropriate facility to render care.
4. Company Quality Department Objectives:
   i. Ensure provision of consistent high quality prehospital care;
   ii. Foster open dialogue among EMS providers, hospitals, and the County;
   iii. Ensure accurate data collection;
   iv. Create and maintain effective individual and system improvement plans;
   v. Ensure 100% compliance with licensure, accreditation, and certification requirements;
   vi. Promote customer focus;
   vii. Provide and promote relevant continuing education of quality.
5. Methodology:
   i. Assessment for quality improvement occurs at three levels:
      a. Prospective assessment: This type of assessment is meant to be preventative and incorporates system planning, policy and procedure development, training, and continuing education.

b. Concurrent assessment: This type of assessment occurs in "real time" and can identify issues that can be remedied in "real time" and followed up with remedial training and/or education.

c. Retrospective assessment: This type of assessment consists of reviews "after the fact" of documentation and performance and is most useful in identifying positive trends that are communicated and reinforced and negative trends that are communicated and corrected through counseling and/or education and training.

ii. Rapid cycle Improvement Methodology:

a. Medic Ambulance Service Inc. employs the "Rapid Cycle Improvement" methodology which is based on Deming's traditional "Plan-Do-Act" model (Appendix A).

C. Data Collection and Reporting:

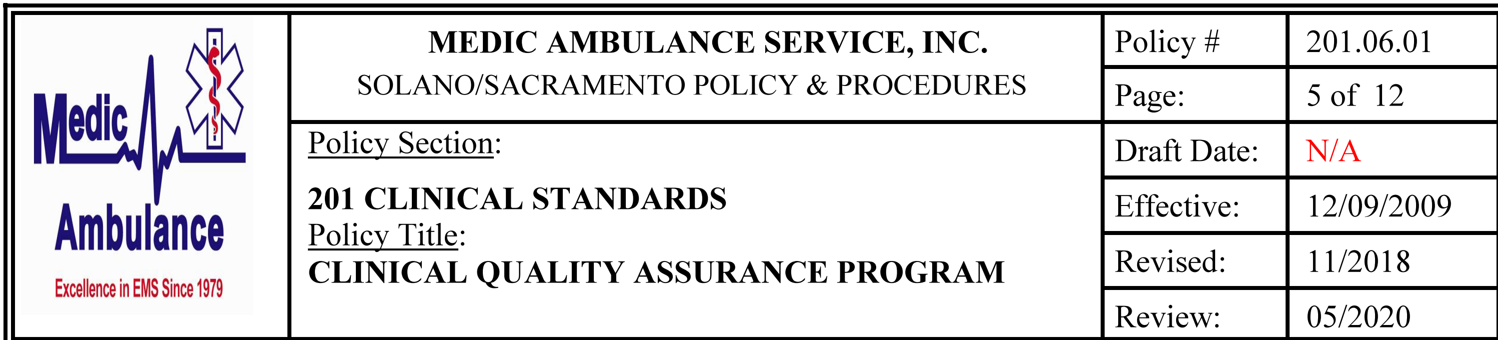
1. Structure for Data Collection and Reporting:
   - i. QA Committee:
   - ii. STAT Team Meeting:
2. Key Performance Indicators currently being measured by the Company:
   - i. Documentation (Appendix B);
   - ii. Clinical Care and Patient Outcome (Appendix B);
   - iii. Skills Maintenance/Competency (Appendix B):
     - a. IV success rates; and
     - b. IO success rates.
   - iv. Reviews required by LEMSA:
     - a. Calls with EMT/EMT-P assessment and no transport;
     - b. Calls resulting in air transport;
     - c. Calls resulting in code 3 transport from the prehospital setting;
     - d. Mass casualty and hazardous materials calls;
     - e. Calls with deviation from protocol for pulseless and apneic patients;
     - f. Calls with unexpected deterioration of patient while in route;
     - g. Calls utilizing special procedures;
     - h. Calls with prolonged scene and transport times; and
     - i. Calls requested for review by the Local EMS Agency, hospital, or provider.
3. Process of selection for KPIs:
   - i. Brainstorming sessions are held quarterly at the Company QA Meeting and the System Tracking Audit Trending (STAT) Meeting to collect input on questions about the system the group would like answered.
   - ii. Questions are categorized and prioritized based on the group's determination of level of importance.
   - iii. Questions are then researched to determine feasibility of quantifying and reported back to the STAT Team.
   - iv. The refined list of questions is reviewed in the committee format and further broken down into steps and activities that lead to outcome that will be measured.
   - v. Initial quality indicators are developed from this input by the QA department and presented to the STAT Team for review, refinement, and adoption.

4. Data collection:
   i. QA department completes an initial audit as a baseline and presents to the STAT Team.
   ii. STAT Team Meeting Members discuss and respond to the initial audit and revise and refine the indicator as appropriate.
   iii. STAT Team determines periodicity with which indicator is to be measured.
   iv. Final approved indicator and frequency of review determined is communicated to the internal QA Committee Meeting and dispersed to all staff.

D. Analysis of Indicators:
1. Adopted indicators are audited and analyzed by the STAT Team according to the schedule agreed upon.
2. Results are reported in committee and to all staff (when appropriate) through designated QA week training.
3. An End of year quality improvement report will be provided by the QA department and presented to the STAT team for review by January 31st for the preceding year. This report will include yearly average results of KPI data as well as any Rapid Cycle Improvement studies implemented.

E. Brainstorming Changes:
1. Discussion of audit results is conducted at the STAT Team Meeting. Determination is made as to whether it is a documentation problem, a performance problem, or a systems' problem.
2. Recommendations for correction are collected from the committees and brought to the STAT Team Meeting for determination of action plan.
   i. County systems issues are brought to the appropriate County EMS committee for further action.
   ii. Company based issues are reviewed by the STAT Team Meeting for determination of appropriate action for improvement.
   iii. Individual provider issues are discussed with a QA representative, the individual, and his or her supervisor and action plans for improvement are determined and implemented.

F. Implementing Changes:
1. Recommended changes referred to the County are discussed at the County PCC/QA Committee or the County Physicians Forum, as appropriate. The committees determine appropriate changes to implement and communicate those back to the agencies for implementation.
2. Once recommendations made by the QA Committee are referred to the STAT Team Meeting, the STAT Team determines which recommendations to implement. Those recommendations are communicated to all staff via Ninth Brain Suite and/or Company email as well as reviewed during designated QA week training. If classes are indicated, the information is communicated to the education and training department to schedule.
3. Individual provider recommendations are communicated and monitored by the QA Manager according to the QA level system. (Appendix D)



Appendix A

Rapid Cycle Improvement

-Design a KPI
-Define KPIs
-Set Parameters for Study

Collect Data

Analyze data

Brainstorm changes

Implement changes

Report Findings

Appendix B
Clinical KPIs

CARDIAC KPIs

CAR-1	Scene Time - STEMI Activations
KPI	Percent of calls where time on scene meets standard
Definition	Time on scene ≤15 minutes
Goal	≥90% & ≤15 min avg.
Source	ZOLL CAD/ePCR

CAR-2	Time to First 12 Lead EKG - STEMI
KPI	Average time to 12 EKG
Definition	Time interval from patient contact to first 12 lead
Goal	≥90% & ≤7 min avg.
Source	ZOLL CAD/ePCR

CAR-3	Protocol Compliance - ACS
KPI	Percent of compliance with Cardiac Protocols
Definition	Compliance with C10 and C14 protocols
Goal	100%
Source	ePCR

CAR-4	***W/CP Complaint*** Time to First 12 lead EKG - STEMI
KPI	Average time to 12 EKG
Definition	Time interval from patient contact to first 12 lead
Goal	≥90% & ≤7 min avg.
Source	ePCR

CAR-5	***w/ CP Complaint*** Scene Time - STEMI Activations
KPI	% of calls where time on scene meets standard
Definition	Time on scene ≤15 minutes
Goal	≥90% & ≤15 min avg.
Source	ZOLL CAD/ePCR

CAR-6	Under Triage - STEMI patients
KPI	Number of STEMI patients that are under triaged
Definition	% of overall STEMI patients that are taken to a non PCI center
Goal	0%
Source	ZOLL CAD/ePCR

CVA/STROKE KPIs

CVA-1	Scene Time - Stroke - Acute
KPI	Percent of calls where time on scene meets standard
Definition	Time on scene ≤ 15 minutes, acute symptoms
Goal	≥90% & ≤15 min avg.
Source	ZOLL Cad/ePCR

CVA-2	Compliance - Stroke Documentation
KPI	Percent compliance of stroke scale documentation
Definition	Compliance with documentation of all aspects of the Stroke Scale Assessment Intervention on all N4 patients
Goal	100%
Source	ePCR

CVA-3	Scene Time - All Strokes
KPI	Percent of calls where time on scene meets standard
Definition	Time on scene ≤ 15 minutes
Goal	≥90% & ≤15 min avg.
Source	ZOLL Cad/ePCR

NARCOTIC/ PAIN DOCUMENTATION KPIs

MED-1	Protocol Compliance - Pain Documentation
KPI	Percent compliance with pain documentation
Definition	Compliance with documentation of pain assessment when narcotics are given.
Goal	≥96%
Source	ePCR

MED-2	Compliance - Narcotic Log Documentation
KPI	Percent compliance with narcotic documentation
Definition	Compliance with documentation of disposition and amount administered
Goal	100%
Source	Narcotic Log

ROAD SAFETY/VEHICLE OPERATION STANDARDS KPIs

SAF-1	Compliance - Employee Road Safety
KPI	Percent of compliance of all employees driving within company Road Safety Standards
Definition	Operation of Road Safety Standards at level 7 driving, ≥32 ABC miles
Goal	≥ 90%
Source	ZOLL Road Safety

SAF-2-A	Compliance - Company Road Safety
KPI	Company compliance of total miles driven within Road Safety Standards
Definition	Maintain companywide compliance above Road Safety Standards
Goal	≥7, 32 ABC miles with minimum of 100 miles driven
Source	ZOLL Road Safety

SAF-2-B	Compliance - Solano Division Road Safety
KPI	Solano compliance of total miles driven within Road Safety Standards
Definition	Maintain companywide compliance above Road Safety Standards
Goal	≥7, 32 ABC miles with minimum of 100 miles driven
Source	ZOLL Road Safety

SAF-2-C	Compliance - Sacramento Division Road Safety
KPI	Sacramento compliance of total miles driven within Road Safety Standards
Definition	Maintain companywide compliance above Road Safety Standards
Goal	≥7, 32 ABC miles with minimum of 100 miles driven
Source	ZOLL Road Safety

PARAMEDIC SKILL KPIs

SKI-1	Paramedic Skills - IV
KPI	Percent of successful IV starts
Definition	Successful IV starts, minimum of 10 attempts
Goal	≥75%
Source	ePCR

SKI-2	Paramedic Skills - Intubation
KPI	Percent of successful intubations
Definition	Successful intubation - minimum of 10 attempts
Goal	≥90%
Source	ePCR

SKI-3	Paramedic Skills - King Tube
KPI	Percent of successful King Tube
Definition	Successful King tube
Goal	≥90%
Source	ePCR

SKI-4	Paramedic Skills - IO
KPI	Percent of successful IO starts
Definition	Successful IO starts
Goal	≥90%
Source	ePCR

SKI-5	Paramedic Skills - Critical Patient Airway
KPI	Percent of successful advanced Airway in critical patients
Definition	Successful advanced airway placement
Goal	≥95%
Source	ePCR

SKI-6	Paramedic Skills - Critical Patient IV/IO Access
KPI	Percent of successful IV/IO access in critical patients
Definition	Successful IV/IO placement
Goal	≥ 80%
Source	ePCR

TRAUMA COMPLIANCE KPIs

TRA-1	Scene Time - Trauma
KPI	Percent of calls where time on scene meets standard
Definition	Time on scene ≤15 minutes, all activated trauma
Goal	≥90% & ≤15 min avg.
Exclusion	Transfers & Extrication
Source	ZOLL Cad / ePCR

TRA-2	Protocol Compliance - Trauma Activations
KPI	Percent of cases in compliance with protocol
Definition	Compliance with Trauma Triage Algorithm
Goal	100%
Source	ePCR

Appendix (D)

The QA department has implemented a five level employee notification process for any QA issues that arise. The five levels are identified as following:

1. Run Review: Verbal Counsel:

This level consists of the employee being informed of an issue that has been flagged by the QA department. This level would indicate that the incident for the most part was run at an acceptable level, but a minor documentation error occurred and the employee needs to be informed.

2. Level 1: Verbal Counsel:

This level consists of the employee being informed of an issue that has been flagged by the QA department. Some examples may include minor protocol issues, as in, not putting patient on pulse ox monitoring with the use of B1 protocol. The employee will be spoken to regarding the specific issue, and informed of the QA notice.

3. Level 2: Verbal Counsel/QA Audit:

This level consists of a continuing protocol failure issue for the same employee or a more serious first time protocol deviation. This level on a first time protocol failure is determined on a case-by-case basis and the employee will be placed on a company standard six month audit to ensure protocols are being followed appropriately.

4. Level 3: QA Audit/Administrative Forward:

This level consists of protocol deviation during a current audit period and/or a severe protocol deviation that can or could have been harmful to the patient. This consists of the company standard six month PCR audit, reeducation with the Education and Training Coordinator and the case will be forwarded to Administration for review and further action.

5. Level 4: QA Audit/Administrative Forward:

This level consists of a final notification and includes, but not limited to, all Company Standards included in a level 3 Notice.

Level designation depends on the employee’s past QA history and/or the severity of the QA issue. All levels, per company standard, are considered QA consult/discipline and will be placed in the employee’s file indefinitely.