SAN JOAQUIN COUNTY EMERGENCY MEDICAL SERVICES

Continuous Quality Improvement Plan

March 25, 2010

Table of Contents

INTRODUCTION 1
SECTION I STRUCTURE AND ORGANIZATIONAL DESCRIPTION 3
SECTION II DATA COLLECTION AND REPORTING 7
SECTION III EVALUATION OF INDICATORS 9
SECTION IV ACTION TO IMPROVE 9
SECTION V TRAINING AND EDUCATION 10
SECTION VI ANNUAL UPDATE 12
APPENDICES 14

APPENDIX A EMS POLICY NO. 6620, CQI PROCESS 14
APPENDIX B EMS POLICY NO. 6630, CQI COUNCIL 22
APPENDIX C EMS POLICY NO. 6680, RESEARCH STUDIES 26
APPENDIX D ACKNOWLEDGEMENT OF CQI CONFIDENTIALITY 28
APPENDIX E BALDRIGE QUALITY VALUES 29
APPENDIX F 2010 CQI SYSTEM-WIDE PERFORMANCE INDICATORS 31
APPENDIX G EMS POLICY NO. 6101, SENTINEL EVENT REPORTING 34
APPENDIX H EMS POLICY NO. 6102, EMS SYSTEM ISSUE RESOLUTION PROCESS 37
APPENDIX I 2010 KEY PERFORMANCE INDICATOR REPORTING SHEET 38
APPENDIX J QUARTERLY REPORT TEMPLATE 39
APPENDIX K EMS POLICY NO. 6301, AMBULANCE DATA POLICY 40
APPENDIX L ALS AIRWAY MONTHLY SUMMARY MATRICES 42

INTRODUCTION

The San Joaquin County Emergency Medical Services (EMS) Agency is responsible for the regulatory oversight of all Emergency Medical Services in San Joaquin County. In part, that oversight is accomplished through the EMS Agency's Continuous Quality Improvement (CQI) program. The goal of the San Joaquin County Emergency Medical Services Continuous Quality Improvement Plan is to outline the process utilized for evaluating and improving the quality of prehospital care in San Joaquin County and ensure that the delivery of emergency medical services is consistent with the EMS Agency's mission, vision, and values.

Mission

The San Joaquin County EMS Agency's mission is to ensure the efficient and effective delivery of emergency medical services and disaster response for the citizens and visitors of San Joaquin County.

Vision

- To be recognized leaders in the EMS industry
- Ensure measurable, high quality care
- Have public/private partner integration
- Be models for government efficiency
- Have a seamless state of preparedness
- Ensure excellence in academic education

Values

Core values of the San Joaquin County Emergency Medical Services Agency include:

• Leadership • Accountability • High quality • Guidance

San Joaquin County EMS CQI Plan Purpose

The purpose of the EMS Continuous Quality Improvement plan is to establish a system wide process for evaluating and improving the quality of prehospital care in San Joaquin County.

The San Joaquin County EMS Agency CQI program employs a vertically integrated process, which incorporates all stakeholders within the EMS system. The EMS Agency in collaboration with the local prehospital provider agencies and community healthcare stakeholders develops and implements CQI activities. Reports of activities are required based on the frequency of monitoring identified and established by the EMS Agency (See Appendix A, EMS Policy No. 6620).

At the core of the San Joaquin County CQI program is the county CQI Council, a multidisciplinary group consisting of nurses, paramedics, provider agency representatives, and EMS Agency personnel. The CQI Council is responsible for reviewing monthly, quarterly and annual system data, which may include individual cases requiring peer review. The goal of this collaborative review process is to monitor performance, identify positive and negative trends, and seek solutions for system issues. To promote frank dialogue and an open reporting culture the proceedings of the CQI Council meetings are confidential. When it is deemed appropriate, aggregate data and system-wide reports may be released publicly for community analysis. See Appendix B, EMS Policy No. 6630 for a description of the CQI Council roles and responsibilities.

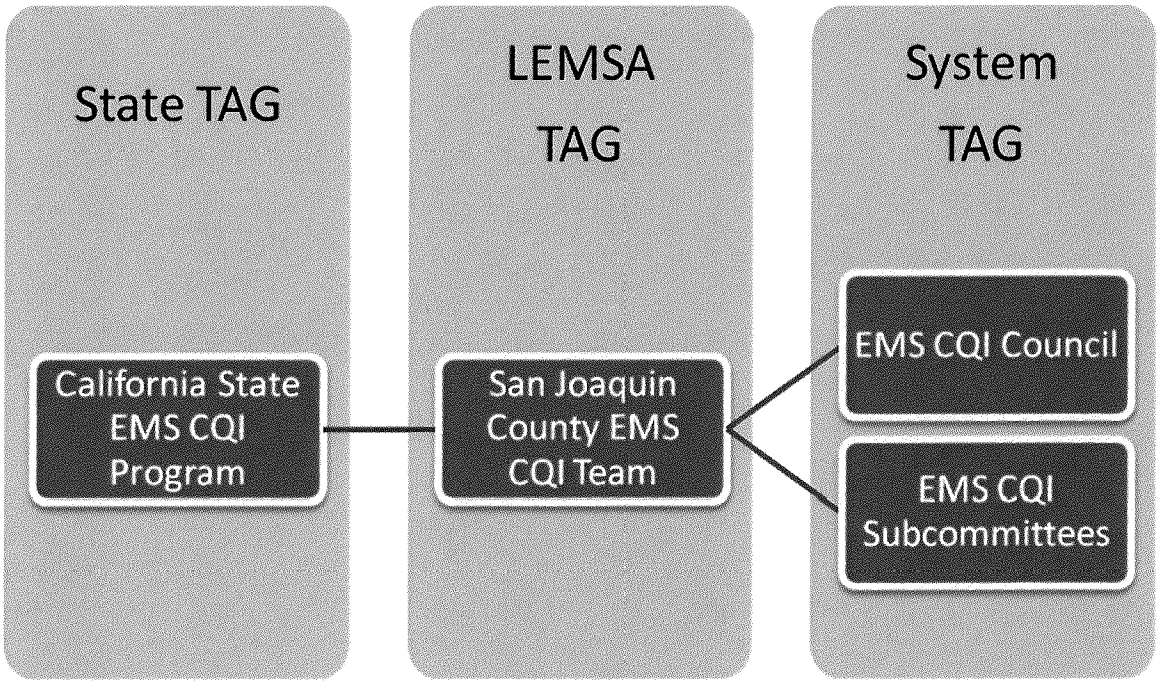
The San Joaquin County EMS Agency's CQI Plan has been written in accordance with the Emergency Medical Services System Quality Improvement Program Model Guidelines (Rev. 3/04). Included in the plan is a description of EMS Agency responsibilities, provider agency responsibilities, references to program related policies and examples of some of the relevant performance indicators that will be monitored during the 2010 calendar year.

SECTION I STRUCTURE AND ORGANIZATIONAL DESCRIPTION

San Joaquin County EMS Agency CQI Team

The EMS CQI team provides overall system leadership for the EMS CQI program. The CQI team includes, but is not limited to, the following representatives:

1. EMS Agency Medical Director
2. EMS Agency Administrator
3. EMS Agency Quality Improvement Coordinator



Responsibilities of the EMS CQI Team are detailed in EMS Policy No. 6620 and include:

- Cooperate with the State of California Emergency Medical Services Authority (EMSA) in carrying out the responsibilities of the statewide EMS CQI Program and participation in the EMSA Technical Advisory Group, if requested.
- Participate in the development, approval, and implementation of state required and optional EMS system indicators.
- Provide leadership and technical assistance for organizations participating in the San Joaquin County EMS System CQI Program.

- Facilitate regular CQI Council meetings.
- Provide initial and ongoing EMS CQI Program training and in-service education for EMS personnel under the statewide EMS CQI Program.
- Review and approve CQI Plans submitted by San Joaquin County EMS System providers and the designated base hospital.
- Seek and maintain relationships with all EMS participants including but not limited to the following entities, as appropriate for CQI activity:
  - State EMSA
  - Other Local EMS Agencies (LEMSAs)
  - EMS Service Providers
  - Local Department of Public Health
  - Specialty Care Centers
  - Law Enforcement
  - Public Safety Answering Points (PSAPs)
  - EMS Dispatch Center(s)
  - Constituent Stakeholder Groups

San Joaquin County EMS System CQI Council

The CQI Council serves as the technical advisory group (TAG) for the San Joaquin County EMS CQI program.

CQI Council responsibilities include:

- Review/Monitor Data from EMS System;
- Select quality indicators, items for review and monitoring, create action plans, and monitor performance (i.e., scene time, patient satisfaction, workforce satisfaction, protocol compliance, and outcome data);
- After review by EMS Agency, serve as a forum to discuss issues/concerns brought to the attention of the EMS Agency by internal and external customers;
- Propose, review, and participate in EMS research (See Appendix D, EMS Policy No. 6680, Research Studies);

- Promote CQI training throughout the EMS System;
- Policy/Protocol Review – Selected policies reviewed with pre notification sent out to allow participant feedback. Initial review by EMS Agency personnel and proposed revisions discussed at CQI Council;
- Provide recommendations for EMS personnel training.

The CQI Council meets monthly and membership consists of the following quality improvement liaison personnel:

- EMS Medical Director
- EMS Quality Improvement Coordinator
- EMS Analyst
- EMS Prehospital Operations Coordinator
- Base Hospital Medical Director
- Base Hospital Liaison Nurse
- Receiving Hospital Liaison – (chosen by the receiving hospital nurse liaisons)
- One representative from each of the authorized advanced life support (ALS) emergency ambulance providers and first response agencies operating in San Joaquin County
- One representative from the County's designated EMS dispatch center.

Ex Officio Members of the CQI Council include:

- EMS Administrator
- Receiving Hospital Physician Liaisons
- Receiving Hospital Nurse Liaisons

Responsibilities of the CQI Council membership include:

- Regular attendance at CQI Council meetings. All members are required to have an alternate designated to represent them at meetings if they are unable to attend.
- Prepare and follow-up as appropriate for meetings.
- Participate in CQI Council discussions in a candid and professional manner.

- Promote collaborative sharing of information and the identification of opportunities for improvement by ensuring confidentiality of CQI Council discussions and peer review process.
- Maintain responsibility for monitoring and evaluating organizational quality indicators.
- Maintain responsibility for collecting data and reporting on organizational quality indicators.
- Participate in the development and selection of San Joaquin County EMS system quality improvement indicators.
- Participate on subcommittees as needed.

The EMS Medical Director or CQI Coordinator may approve the attendance of guests during regular or ad hoc meetings of the CQI Council. Occasionally ad hoc CQI meetings are scheduled with specific providers to address unusual occurrences, incidents, or performance issues. Prior to attending any CQI meeting, participants must sign an Acknowledgement of CQI Confidentiality form (See Appendix D).

CQI Program Philosophy and Goals

Based on EMS community collaboration and a shared commitment to excellence, CQI reveals potential areas for improvement of the EMS System, identifies training opportunities, highlights outstanding clinical performance, audits compliance with treatment protocols, and reviews specific illnesses or injuries along with their associated treatments. These efforts contribute to the continued success of our emergency medical services through a systematic process of review, analysis and improvement.

The goal of the San Joaquin County Emergency Medical Services Continuous Quality Improvement (CQI) program is to establish a system wide process for evaluating and improving the quality of prehospital care in San Joaquin County to ensure that the EMS Agency mission is achieved.

San Joaquin County EMS Agency and the CQI Council have embraced the Baldrige Health Care Criteria for Performance Excellence as the framework for CQI program management. The requirements of the Health Care Criteria for Performance Excellence are embodied in seven Categories, as follows:

- Leadership
- Strategic Planning
- Customer Focus
- Measurement, Analysis, and Knowledge Management
- Workforce Focus
- Process Management
- Results

A description of core values and concepts associated with this framework for performance management and continuous quality improvement is provided in Appendix E.

SECTION II DATA COLLECTION AND REPORTING

San Joaquin County EMS Agency collects performance indicator data monthly and quarterly. The reports are submitted to the EMS CQI Coordinator or EMS Analyst for review and analysis. The following categories are included in the data collection and reporting process:

1. Personnel
2. Equipment and Supplies
3. Documentation
4. Clinical Care and Patient Outcome
5. Skills Maintenance/Competency
6. Transportation/Facilities
7. Public Education and Prevention
8. Risk Management

Specific performance indicators are selected on an annual basis by the EMS Agency CQI Team in collaboration with the CQI Council. A description of the 2009/2010 performance indicators including the sources utilized for data collection is provided in Appendix F. Ad hoc indicators may be added during the calendar year based upon trend analysis or opportunities for improvement that present through the incident and sentinel event reporting process. Copies of the sentinel event and issue resolution reporting policies are included with this plan in Appendix G and H.

All system providers are required to utilize the standard forms or templates provided by the San Joaquin County EMS Agency for submitting their monthly and quarterly reports. Examples of reporting forms and templates are provided in Appendix I and Appendix J. Additionally, San Joaquin County EMS Agency requires EMS providers to utilize standardized computer aided dispatch and patient care record data fields. EMS Policy No. 6301 outlines these requirements and is included for review as Appendix K.

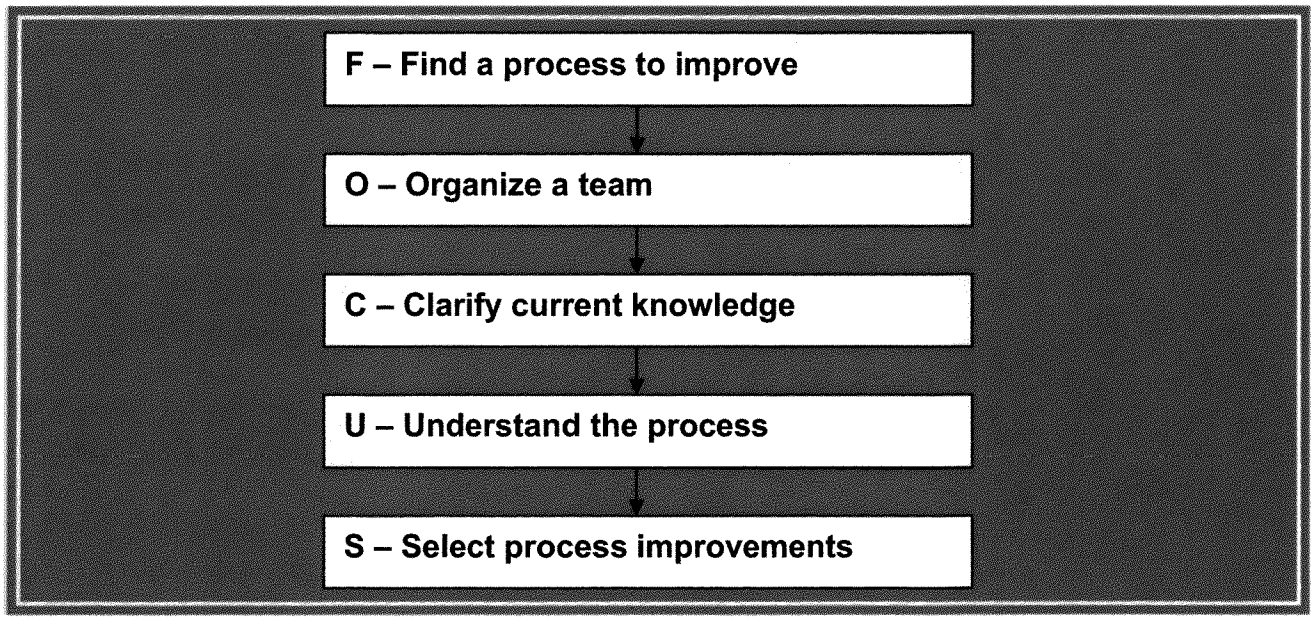
SECTION III EVALUATION OF INDICATORS

The EMS Quality Improvement Coordinator in collaboration with the EMS CQI Team analyzes performance indicator data on a monthly basis and when appropriate prepares a report for the CQI Council. Monthly and quarterly data may be reported in chart or report form depending on the type of data being reviewed. Generally this reporting will be done utilizing control charts and PDSA reports. An example of an actual report is included in Appendix L.

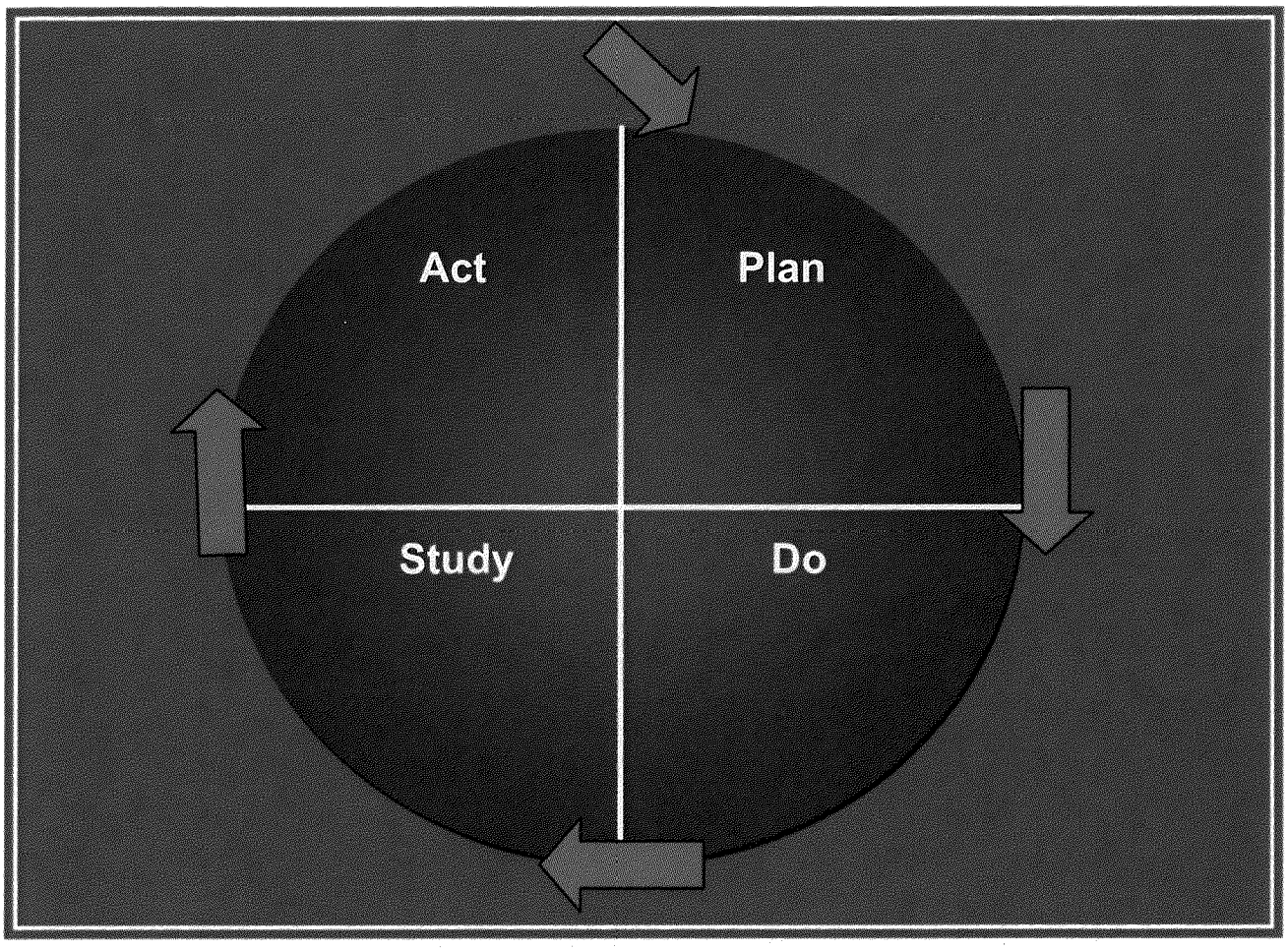
The CQI Council reviews individual and aggregate data on a monthly basis and provides recommendations for continuing, modifying, or closing CQI projects, and/or performance indicators.

SECTION IV ACTION TO IMPROVE

Continuous quality improvement projects are conducted utilizing the FOCUS-PDSA model as a guide for identifying and addressing opportunities for improvement. Based upon reports submitted to the EMS Agency or trends identified in the CQI review process the CQI Council or EMS QI Team utilizes the FOCUS model to select new CQI indicators or projects.



After a CQI project is identified the TAG utilizes Deming's PDSA cycle to plan, implement (do), evaluate (study), and intervene (act).



SECTION V TRAINING AND EDUCATION

Training and education are critical components that need to be addressed once the decision to take action or to solve a problem has occurred. Specific education needs will be identified at monthly CQI Council and CQI team meetings. The EMS Agency will make recommendations for educational offerings countywide including both individual provider and system training. At times this training may be mandatory for system participants.

Once a Performance Improvement Plan or project has been implemented, San Joaquin County EMS Agency will standardize the changes within the appropriate policies and

procedures. The EMS Specialist responsible for educational oversight maintains the Policy and Procedure Manual, which is updated annually. Changes recommended by the CQI Council or other system participants are implemented via new policies or with policy changes as indicated. The new policy or change in policy is presented at the San Joaquin County EMS Liaison meeting for discussion. The policy is also posted on the San Joaquin County EMS Agency's website at www.sjgov.org/ems for a 45 day public comment period. Final changes to the policy are made based on public comments received. The new or improved policy is then implemented. If additional training is required of system participants, time is allotted for that training prior to the implementation of the policy.

The EMS Specialist responsible for educational oversight ensures that providers submit documentation that all training requirements have been met by all EMS system participants annually and on an as-needed basis. This is accomplished via training memos, training program development, or by train-the-trainer programs. Providers are ultimately responsible for ensuring that staff is adequately trained. The rosters and records of training are required to be available to the EMS Agency upon request.

SECTION VI ANNUAL UPDATE

The Annual Update is a written account of the progress of an organization's activities as stated in the EMS CQI Plan. The CQI Coordinator will work in conjunction with the EMS Administrator responsible for updating the EMS Plan to ensure that both the CQI Plan and the EMS Plan are focusing on the same objectives. The San Joaquin County EMS Agency Administrator is responsible for annually updating the EMS Plan, in alignment with current EMS strategic goals. The Quality Improvement Coordinator will do an initial review of the CQI plan, identifying what did and did not work. Once both the CQI Plan and the EMS Plan have been reviewed, the Quality Improvement Coordinator will present annual findings to the CQI Team and CQI Council.

As part of the annual update, the CQI Coordinator, the CQI Council, and the CQI Team will offer recommendations for changes needed in the CQI plan for the coming year, including priority improvement goals/objectives, indicators monitored, improvement plans, how well goals/objectives were met, and whether follow-up is needed.

A current CQI Plan will be submitted to the State EMS Authority every five (5) years.

REFERENCES

California Emergency Medical Services Authority (2004). *Emergency Medical Services System quality improvement model guidelines.* Retrieved on April 1, 2009 from: http://www.emsa.ca.gov/pubs/pdf/emsa166.pdf

Institute of Medicine (2005). *Crossing the Quality Chasm*. Washington D.C.: National Academy Press.

Kelly, D. L. (2003). *Applying Quality Management in Healthcare*. Chicago: Health Administration Press.

National Highway Traffic Safety Administration (1997). *A leadership guide to quality improvement for emergency medical services systems.* Retrieved on July 23, 2009 from: http://www.nhtsa.dot.gov/people/injury/ems/leaderguide/index.html

APPENDICES

Appendix A EMS Policy No. 6620, CQI Process

PURPOSE:

The purpose of this policy is to establish a system wide Continuous Quality Improvement (CQI) Program to promote, enhance, and ensure the quality of prehospital emergency medical care in San Joaquin County.

AUTHORITY:

Health and Safety Code, Division 2.5, Section 1797.220; California Code of Regulations, Title 22, Division 9, Chapter 12.

POLICY: In compliance with state regulations, the San Joaquin County EMS Agency and all system participants shall implement a Continuous Quality Improvement (CQI) Program and shall participate in system-wide CQI activities.

I. The EMS Agency will establish and facilitate a system-wide Continuous Quality Improvement Program to monitor, review, evaluate, and improve the delivery of prehospital care services. The program will involve all system participants and will include, but not be limited by the following activities:
   - A. Prospective: designed to prevent prospective problems. The EMS Agency strives to provide training and policy guidance to prevent potential problems with prehospital care delivery.
   - B. Concurrent: designed to identify problems or potential problems during patient care. San Joaquin County EMS Agency considers direct medical oversight to be an important element of the CQI process.
   - C. Retrospective: The EMS Agency utilizes retrospective review to identify potential or known problems and prevent their reoccurrence.
   - D. Reporting/Feedback: all CQI activities will be reported to the EMS Agency. Because of CQI activities, changes in system design may be made.

II. Each Provider Agency will submit a written Quality Improvement Plan to the EMS Agency for approval.
   - A. Each written plan shall include , at a minimum, the following components:
     1. Statement of CQI program goals and objectives.
     2. A description of how CQI is integrated into the organization.
     3. Description of how the CQI program is aligned with the San Joaquin County EMS system CQI plan.
     4. Description of the process or methodology used in conducting CQI activities including how CQI activities are documented and reported to the EMS agency.
     5. Identification of important aspects of service delivery and performance standards/indicators related to those identified focus areas.

6. A description of how the provider will collect, analyze, and report data related to identified performance indicators.
7. A summary of how opportunities for improvement are identified including threshold evaluation.
8. Process utilized for improving practices based upon CQI activities.
9. CQI committee participation and reporting structure.

III. Each Provider Agency will conduct an annual review of the CQI program and submit any changes to the EMS Agency for approval.

IV. The EMS Agency will evaluate the implementation of each Provider's CQI plan biannually and request revisions as needed.

V. Quality Improvement Responsibilities – General Guidelines

A. EMS Agency Responsibilities

1. Prospective
   a. Comply with all pertinent of Federal, State and County rules, regulations, laws and codes that are applicable to EMS agency.
   b. Certify and/or authorize first responders, EMT-Is, EMT-IIs, paramedic, and MICNs to practice in San Joaquin County.
   c. Coordinate prehospital quality improvement committees.
   d. Develop and assist CQI program participants in the development of performance standards and indicators.
   e. Implement basic, limited advanced life support, and advanced life support systems.
   f. Approve and monitor prehospital training programs.
   g. Certify/authorize prehospital personnel.
   h. Establish policies and procedures to assure medical control, which may include dispatch, basic life support, advanced life support, patient destination, patient care guidelines and quality improvement requirements.
   i. Facilitate system wide compliance and implementation of required quality improvement plans.

2. Concurrent
   a. Serve as a resource for CQI program participants.
   b. Conduct analysis of data received from system participants.
   c. Conduct site visits to monitor and evaluate system components.
   d. Participate in direct medical oversight activities including direct field observation.
   e. Communicate CQI activities and findings to system participants.
   f. Provide on call availability for unusual occurrences,

including, but not limited to:
i. Multicasualty Incidents (MCI)
ii. Ambulance Diversion
iii. "Parking" of ambulance patients in receiving hospitals.

3. Retrospective
   a. Evaluate the process developed by system participants for retrospective analysis of prehospital care.
   b. Evaluate identified trends in the quality of prehospital care delivered in the system.
   c. Monitor and evaluate the unusual occurrence review process.
   d. Take appropriate action with first responder, BLS providers, ALS providers, receiving hospitals, base hospitals and medical dispatch centers that do not meet established thresholds for service quality.

4. Reporting/Feedback
   a. Evaluate submitted reports from system participants and make changes in system design as necessary.
   b. Provide feedback to system participants when applicable or when requested on Quality Improvement issues.
   c. Design prehospital research and efficacy studies regarding prehospital care including but not limited to medication administration, treatment and interventions, equipment, prehospital personnel skill performance, and patient care outcomes.
   d. Update policies and procedures to reflect best practices in prehospital care based upon reliable, current research based evidence.
   e. Recognize and reinforce exemplary performance by prehospital care providers.

B. Dispatch Responsibilities
1. Prospective
   a. Participate on quality improvement committees as specified by the EMS Agency
   b. Provide education for dispatch personnel to include:
      i. Orientation to EMS system
      ii. Continuing education activities to further the knowledge of the dispatcher including tape review, discussion of specific calls, and educational programs based upon trend analysis.
      iii. Establish procedures for updating personnel when there are system changes.
   c. Develop criteria for evaluation of individual Emergency

Medical Dispatchers (EMD).

d. Ensure that all EMD personnel acquire initial certification and maintain recertification.

2. Concurrent
   a. Establish procedures for evaluating EMD performance through direct observation/supervision.
3. Retrospective
   a. Develop a process for retrospective analysis of dispatched calls, utilizing audio tape and dispatcher report forms.
   b. Develop performance standards for evaluating the quality of services provided by EMD personnel utilizing retrospective analysis.
   c. Comply with reporting and other quality improvements requirements as specified by the EMS agency.
   d. Participate in prehospital research and efficacy studies as requested by the EMS Agency and/or the Quality Improvement Committee.
4. Reporting/Feedback
   a. Develop a process for identifying trends in quality of dispatch services and report findings to the EMS Agency as requested.

C. BLS Provider Responsibilities
1. Prospective
   a. Participation on CQI committees as requested by the EMS Agency.
   b. Education
      i. Provide employee orientation to the EMS System.
      ii. Provide employee orientation to the provider agency.
      iii. Participation in continuing education opportunities.
   c. Performance Evaluation
      i. Peer Review
      ii. Initial evaluation of new employees and ongoing routine evaluation of established employee performance.
      iii. Develop corrective actions plans for individual deficiencies
      iv. Certification – Establish policies and procedures for initial employee certification, re-certification, and other training as required by the EMS Agency.
2. Concurrent
   a. Establish a procedure for the evaluation of prehospital care employees utilizing direct observation of performance standards.
   b. Appoint a quality improvement liaison who is available to consult with the EMS Agency as requested.

3. Retrospective
   a. Develop performance standards for evaluating the quality of care provided by prehospital personnel through retrospective analysis.
   b. Comply with reporting and other quality improvement activities as specified by the EMS Agency.
   c. Participate in prehospital research as requested by the EMS Agency.
4. Reporting/Feedback
   a. Submit reports as specified by the EMS Agency.
   b. Develop and participate in educational programs based on problem identification and trend analysis.
   c. Make changes to internal policies and procedures as needed based upon quality improvement activities.

D. ALS Provider Responsibilities
1. Prospective
   a. Participate on CQI committees as requested by the EMS Agency.
   b. Education
      i. Provide EMS and provider specific orientation to new personnel.
      ii. Ensure personnel are meeting San Joaquin County EMS training requirements.
      iii. Conduct field care audits to identify and mitigate potential patient care issues.
      iv. Participate in continuing education courses and the ongoing training of prehospital personnel.
      v. Provide proactive educational opportunities based upon prospective CQI activities.
   c. Evaluation
      i. Conduct initial evaluation of new employees and ongoing routine evaluation of established employee performance.
      ii. Develop clearly defined performance standards for evaluating the quality of care delivered by prehospital care providers.
   d. Accreditation
      i. Establish policies and procedures for initial accreditation and reaccreditation of prehospital personnel.
      ii. Ensure employee compliance with county EMS Agency position specific certification requirements.
2. Concurrent
   a. Establish a procedure for the evaluation of paramedics utilizing performance standards through direct

observation/supervision.

b. Appoint a quality improvement liaison to carry out CQI activities.

3. Retrospective
   a. Develop a process for retrospective analysis of field care, utilizing PCRs, radio tapes, or other relevant documentation. Analysis should include, but not be limited to: high risk, low volume, problem-oriented calls or those types of calls specifically requested by the EMS Agency.
   b. Comply with reporting and other quality improvement activities as specified by the EMS Agency.
   c. Participate in prehospital research as requested by the EMS Agency.
4. Reporting/Feedback
   a. Develop a process for identifying trends in the quality of prehospital care services provided.
   b. Submit reports as specified by the EMS Agency.
   c. Develop and participate in educational programs based upon problem identification and trend analysis.
   d. Make changes to internal policies and procedures as needed based upon findings from CQI activities.

E. Base Hospital Responsibilities
1. Prospective
   a. Participate on CQI committees as specified by the EMS Agency.
   b. Education
      i. Participate in certification courses, field care audits, and educational opportunities to further the knowledge of prehospital and base hospital care providers.
      ii. Offer educational programs and training to address CQI activity findings.
      iii. Establish procedures for informing Base Hospital personnel of system changes.
      iv. Establish criteria for offering supervised clinical experience to accredited prehospital care personnel.
   c. Evaluation
      i. Develop criteria for the evaluation of individual Base Hospital personnel including, but not limited to:
         - Base Hospital documentation and tape review.
         - Evaluation of new employees and ongoing routine evaluation of continued base hospital personnel.
         - Compliance with routine base hospital procedures as outlined by facility specific and

county EMS Agency policies.

d. Authorization
   i. Establish procedures, in compliance with San Joaquin County policies, for Mobile Intensive Care Nurse and Base Hospital Physician initial and ongoing authorization.

2. Concurrent
   a. Provide online medical control for paramedics.
   b. Develop procedures for identifying problem calls.
   c. Develop internal procedures regarding base hospital physician involvement in Medical Control according to San Joaquin County EMS policy and procedures.
   d. Develop a procedure for obtaining patient follow up on all base directed calls.
   e. Appoint a quality improvement liaison to carry out CQI activities.

3. Retrospective
   a. Develop a process for retrospective analysis of field care and base direction utilizing audio-tape, PCR, and patient follow up to include, but not limited to:
      i. High risk
      ii. Low Volume
      iii. Problem oriented calls
      iv. Those calls requested to be reviewed by the EMS Agency.
   b. Perform ALS base contact call audits.
   c. Establish a procedure for ensuring that patient follow-up has been obtained from the receiving hospital on all patients where base contact was made.
   d. Develop performance standards for evaluating the quality of medical direction delivered by both MICN staff and base hospital physicians through retrospective analysis.
   e. Comply with reporting and other CQI requirements as specified by the EMS Agency.
   f. Participate in prehospital research and efficacy studies as requested by the EMS Agency.

4. Reporting/Feedback
   a. Develop a process for identifying trends in the quality of medical control delivered by the base hospital.
   b. Submit reports as specified by the EMS Agency.
   c. Develop and participate in educational programs based on problem identification and trend analysis.
   d. Make approved changes to internal policies and procedures based upon performance improvement activities.

F. Trauma Care System Participant Responsibilities

1. To be developed

VI. Continuous Quality Improvement Committee Responsibilities

A. Purpose:

1. This committee coordinates and monitors the quality of prehospital care and overall prehospital quality improvement activities for San Joaquin County including, but not limited to:
   a. Provides guidance and support for CQI activities within the local EMS System.
   b. Identifies quality improvement educational needs.
   c. Facilitates and/or provides education.

B. Scheduled meetings of the CQI Committee will be held bimonthly.

C. Membership:

1. This committee is comprised of EMS staff, EMS Medical Director, EMS representatives from all provider agencies (including First Responders, ALS, and Base Hospitals).
2. The committee is chaired by the EMS Quality Improvement Coordinator or designee.

VII. Quality Improvement Standard Compliance

A. The following process will be followed to ensure active participation of all system participants in the County CQI program.

1. The EMS QI Coordinator will notify the EMS Medical Director when a prehospital care provider is not meeting compliance standards prior to issuing a noncompliance notice.
2. First notice of non-participation is sent by the EMS QI Coordinator. The provider has five business days to comply with the request.
3. Second notice – Written letter to provider representative by the EMS QI Coordinator and/or Medical Director stating the deficiency and required corrective actions. The Provider Agency has five business days to respond in writing and comply with the request.
4. Final Notice – Written letter to the Head of the Provider Agency by Medical Director stating intent to revoke provider status if non-compliance continues. Provider agency has five business days to respond in writing and comply with the actions needed to correct CQI deficiencies.
5. If the provider agency continues to fail to meet participation requirements as outlined in this policy, the EMS Agency may revoke provider status. At this point, the provider agency will be required to comply with EMS Agency requests for CQI participation and re-apply to regain provider status.

Appendix B EMS Policy No. 6630, CQI Council

PURPOSE: The purpose of this policy is to describe the roles and responsibilities of all San Joaquin County EMS System participants in the provision of the Continuous Quality Improvement (CQI) meetings.

AUTHORITY: Health and Safety Code, Division 2.5, Section 1797.220, Title 22, Division 9 and Section 1157.7 of Evidence Code.

DEFINITIONS:

A. "Continuous Quality Improvement" or "CQI" means methods of evaluation that are composed of structure, process, and outcome evaluations which focus on improvement efforts to identify root causes of problems, intervene to reduce or eliminate these causes, and take steps to correct the process.

POLICY:

I. The San Joaquin County Emergency Medical Services (EMS) Agency is responsible for the oversight and supervision of the EMS CQI process and communicating with all involved participants.

A. EMS Agency CQI Coordinator responsibilities include:

1. Implement, monitor and evaluate the CQI System, including CQI requirements as described EMS Policy No. 6620, Continuing Quality Improvement Process.
2. Assist the EMS Medical Director in providing oversight of the CQI Council.
3. Provide regular CQI reports to EMS Liaison Council, EMSCC, CQI Council and EMS Staff meetings.
4. Review individual QI Reports and take appropriate action.
5. Provide an access point for Internal/External Customers as identified in Section III.F.
6. Monitor quality indicators via database analysis as identified.
7. Review and participate in research generated by the CQI process.
8. Forward CQI Council recommendations to EMS Quality Improvement Liaisons.
9. Manage system-wide EMS database to assure quality and completeness of databases.

B. All proceedings of the CQI Council are confidential and protected under Section 1157.7 of Evidence Code: "The prohibition relating to discovery or testimony provided in Section 1157 shall be applicable to proceedings and

records of any Council established by a local governmental agency to monitor, evaluate, and report on the necessity, quality, and level of specialty health services including, but not limited to trauma care services, provided by a general acute care hospital which has been designated or organized by that governmental agency as qualified to render specialty health care services."

C. CQI Council responsibilities include:

1. Review/Monitor Data from EMS System (III.C).
2. Select quality indicators, items for review and monitoring, create action plans, and monitor performance (i.e., scene time, patient satisfaction, workforce satisfaction, protocol compliance, and outcome data).
3. After review by EMS Agency, serve as a forum to discuss issues/concerns brought to the attention of the EMS Agency by internal and external customers (III. F.).
4. Propose, review, and participate in EMS research.
5. Promote CQI training throughout the EMS System.
6. Policy/Protocol Review – Selected policies reviewed with pre notification sent out to allow participant feedback. Initial review by EMS Agency personnel and proposed revisions discussed at CQI Council.
7. Provide recommendations for EMS personnel training.
8. CQI Council Members
   a. EMS Medical Director
   b. EMS CQI/Trauma Coordinator
   c. EMS Prehospital Operations Coordinator
   d. Base Hospital Medical Director
   e. Base Hospital Liaison Nurse
   e. Receiving Hospital Liaison – (chosen by the receiving hospital nurse liaisons)
   f. One representative from each of the authorized advanced life support (ALS) emergency ambulance providers and first response agencies operating in San Joaquin County
   g. One representative from the County's designated EMS dispatch center.

9. CQI Council Ex-Officio Members
   a. EMS Administrator
   b. Receiving Hospital Physician Liaisons
   c. Receiving Hospital Liaison Nurse

10. CQI Council Guests

The EMS Medical Director or CQI Coordinator may approve the attendance of guests during regular or ad hoc meetings of the CQI Council.

D. Data/System Review:

Various databases currently exist which contain data relevant to Continuous Quality Improvement (CQI) in EMS (see list below). These databases must be searched to:

1. Prospectively identify areas of potential improvement.
2. Answer questions about the EMS System.
3. Monitor changes once improvement plans are implemented.
4. Provide accurate information enabling data driven decisions.
5. Monitor individual performance within the EMS System.
6. Support research that will improve our system and potentially broaden EMS knowledge through publication.
7. The involved databases include:
   a. Dispatch Databases
   b. EMS Data Pro
   c. PCR Databases
   d. Hospital Databases
   e. QI Databases
   f. Trauma Registry
   g. County Coroner's Reports

E. Individual Quality Improvement Reports
Individual quality improvement reports are generated by anyone in the EMS System and are reviewed at the Base Hospital Physician level as well as by the EMS Agency.

F. EMS Research

Any parties interested in EMS research may participate. Leadership is expected from EMS Medical Directors and Senior EMS Personnel with EMS Division Manager and Medical Control Council approval.

G. Internal/External Customers

Various entities interact with the EMS System. In order to allow input from these sources, the CQI process may be accessed via the EMS Agency who will determine if the issue raised will be put on the CQI Council Agenda.

1. <u>Internal Customers</u>
   Paramedics/EMT-IIs/EMT-Is/First Responders

MICNs/Flight Nurses
Dispatch Personnel
EMS Students and Interns
Ambulance Providers
EMS Councils
Hospitals
State/Regional EMS Personnel
Base Hospital Physicians

2. External Customers
   Patients
   Families of patients
   Community/Public
   Third Party Payors (Insurance Companies, HMOs)
   Government Agencies (e.g. Public Health)
   Nursing Homes
   Private Physicians

Appendix C EMS Policy No. 6680, Research Studies

PURPOSE:

To ensure that all public and non-profit private entities, scientific institutions, and individuals engaged in conducting patient care related EMS research within the San Joaquin County Emergency Medical Services (EMS) system adhere to a standardized procedure and review process.

AUTHORITY:

California Code of Regulations, Title 22, Division 9, Sections 10064.1 and California Health and Safety Code, Division 2.5, Section 1797.221

POLICY:

I. Approval

A. All patient care related EMS research conducted in the San Joaquin County EMS System must be approved by the EMS Medical Director.

B. The principal investigator of an EMS study shall submit a copy of the study protocol to the EMS Medical Director prior to the initiation of the study. The study protocol shall consist of the following elements:

1. Background/Study Significance
2. Methods
3. Study Subjects
4. Data Collection and Analysis
5. Consent Process
6. Risks/Benefits
7. Confidentiality
8. References

II. Institutional Review Board (IRB) Approval

A. The principal investigator shall submit a copy of the IRB approval or exemption and the IRB approved study protocol to the EMS Medical Director prior to initiation of the study.

B. The study protocol of an EMS study in San Joaquin County must comply with the following:

1. All federal requirements for the protection of human subjects in research (45 CFR 46 and 21 CFR 56).
2. Procedures for application to and review by the sponsoring institution's IRB.
3. The requirements set by the State of California Emergency Medical Services Authority (EMSA) (CCR, Title 22, Section 100144, subsection (b) (14)), if intending to perform any prehospital emergency medical treatment or procedure which is additional to the Paramedic Scope of Practice.

III. Study Implementation

A. For studies that involve patient interventions by prehospital personnel, the principal investigator must ensure the following:

1. A certified EMT, licensed and accredited paramedic, and/or authorized MICN is a study investigator, coordinator, or liaison to provide input on the study protocol.
2. A regular review of study progress with the prehospital personnel through quarterly reports and direct feedback or meetings.

IV. Patient Rights Violations

A. The EMS Medical Director may revoke approval of any research study for violations of patient rights or for activities not specified in the written and approved proposal.

V. Data Collection and Release of Medical Records

A. Ambulance Providers: The principal investigator shall develop the mechanism for obtaining data from the ambulance providers.

B. Base Hospitals: The principal investigator shall identify a process for collecting data from the Base Hospital.

C. Receiving Hospitals

1. The study protocol will address the specific mechanisms for obtaining patient consent and for maintaining patient confidentiality.
2. A copy of the study protocol will be included with the letter to hospitals requesting participation in the research study.
3. If the hospital consents to participate in an EMS research study, a hospital liaison will facilitate medical records retrieval according to the hospital's internal procedures and policies.

VI. Study Results

A. Quarterly written reports will be presented to the EMS Medical Director or designee.

B. The principal investigator shall submit a final written report to the EMS Medical Director at the conclusion of the study. A copy of the manuscript for publication may be submitted in lieu of a final report.

Appendix D Acknowledgement of CQI Confidentiality

Following is the form that is required to be signed by members or guests attending any meeting of the CQI Council:

As a participant in the San Joaquin County CQI program involved in the evaluation and improvement of the quality of care rendered to patients in the field and in San Joaquin County hospitals, I recognize that confidentiality is vital to the candid discussions that are necessary for effective system quality improvement activities. Therefore, I shall respect and maintain the confidentiality of all discussions, deliberations, records and other information generated in connection with these activities, and agree to make no disclosures of such information except to persons authorized to receive it in the conduct of the EMS System as required by Sections 1040 and 1157.7 of the Evidence Code of the State of California.

Furthermore, my participation in the CQI activities is in reliance on my belief that every other member of the CQI team will similarly preserve the confidentiality of these activities. I understand that all affected persons and agencies are entitled to undertake such action as is deemed appropriate to ensure that this confidentiality is maintained, including action necessitated by any breach or threatened breach thereof.

DATE: _____ SIGNED: _____

PRINT NAME/TITLE: _____

Appendix E Baldrige Quality Values

Baldrige Quality Core Values & Concepts
1. **Leadership:** Leadership is responsible for the creation of strategies, systems, and methods for achieving excellence in health care, stimulating innovation, and building knowledge and capabilities. 2. **Patient Focused:** • Quality and performance are the key components in determining patient satisfaction. A patient's relationship with the provider of care, ancillary staff, cost, responsiveness, continuing care and attention factor into a patient's satisfaction. • The delivery of patient care must be system focused and by its nature will then become patient oriented. • In the context of EMS system performance, this would include the patient's perception of the continuum of care from the prehospital to the hospital. • A smooth transition of care will instill confidence in the patient and their family members. 3. **Organizational and Personal Learning:** • Organizational learning refers to continuous improvement of existing approaches and processes and adaptation to change, leading to new goals and/or approaches. • Personal learning through education, training, and opportunities of continuing growth allows individuals to adjust to a changing health care environment and enhance knowledge of measurement systems that influence the outcomes of assessments and patient care and operational guidelines. • Learning is directed not only toward better EMS delivery, but also toward being more responsive, adaptive and efficient. 4. **Staff and Partners:** • An organization should be committed to their staff's satisfaction, development and well being. • Partners should include stakeholders – patients, prehospital and hospital providers, and regulatory agencies. 5. **Flexibility:** Faster and more flexible response to patients and other EMS partners is necessary in today's fast moving health care environment. 6. **Planning for the Future:** An organization should anticipate changes in EMS health care delivery, resource availability, patient expectations, technological developments, and evolving regulatory requirements. 7. **Managing for Innovation:** Organizations should be structured in such a way that

innovation becomes part of the culture and daily work.

8. **Management by Evidence:**
   - An effective EMS system depends upon the measurement and analysis of performance.
   - Critical data and information about key processes, outputs and results are a key component.
   - Performance measurement areas may include patient outcomes, patient care and operational guidelines, staff, cost, and customer satisfaction and others.
   - Analysis of data along with knowledge and input from experts supports decision-making and operational improvement.
   - Data and its analysis support the review of overall field performance, improving outcomes, improving operations and comparing process with similar organizations, with performance "best practice" benchmarks or comparison of the agency performance with itself and its own past practice.
   - A major consideration in performance improvement involves the selection and use of performance measures or indicators.

9. **Public Responsibility and Community Health:**
   - EMS system participants should not only meet all federal, state, local laws and regulations and local requirements, they should treat all of these and related requirements as opportunities for continuous improvement beyond mere compliance.
   - The EMS system has a responsibility to the public it serves to foster improved community health.
   - Basic expectations of an organization include ethical practice and protection of public health, safety, and the environment
   - EMS system participants should share in efforts in community wellness and injury prevention.

10. **Focus on Results:** Performance measurements need to focus on essential results that create the value of EMS to the community served.

11. **Systems Perspective:**
    - Focus on what is important to the whole system, as well as its components to achieve performance improvement.
    - Monitor, respond to, and build on performance results.
    - Plans should seek to prevent problems, provide a forthright response if problems occur, and make available information and support needed to maintain public awareness, safety and confidence.

There must be a continued investment to produce a high quality product. It is not enough to develop new programs and techniques of measurement and control. The stakeholders must commit to a course of constant evaluation and improvement that is non-punitive, valued, and continuous.

2010 CQI System-Wide Performance Indicators

	Reporting Frequency	Responsible for reporting	Data Source	Comments
rospective review of l airway skills	Quarterly	ALS Providers Ground only*	PCRs, AAR	Submit completed advanced airway report summaries to SJCEMS. Providers keep individual airway reports with PCR numbers for reference and audit.
rospective review of onal scope advanced rt skills.	Quarterly	ALS Providers	PCRs, MEDS	Include on quarterly report
rospective review of air ce transports originating scene of an emergency aquin County.	Monthly	Air Ambulance	PCRs	All PCRs submitted to SJCEMS for review. Air ambulances are exempt from advanced airway reporting due to 100% retrospective review of all calls. Data is included in system airway stats.*
nt analysis of cy medical dispatch GIS res and wrong address	Monthly	Dispatch	CAD	All occurrences reported at LifeCom CQI monthly meeting. Note: All sentinel events are required by policy to be reported immediately.

	Reporting Frequency	Responsible for reporting	Data Source	Comments
etrospective analysis of cy medical dispatch nce indicators as y the National es of Emergency	Quarterly	Dispatch	EMD Q Data EMD calls	Submit quarterly spreadsheet with explanation of trends noted
retrospective review of ualty incidents.	Quarterly	Base Hospital	MCI calls PCRs	Submit with quarterly report to include: • Pre Alert received • Random review of calls (10%) • Appropriate destination • Air utilization evaluation
etrospective review of m utilization.	Monthly	Base Hospital	MCI paperwork	Trends reasons for blast telephone usage.
etrospective review of olumes.	Monthly	Receiving Hospital	Internal Database	Submit monthly report to include: • Monthly emergency department patient volume to include # of

	Reporting Frequency	Responsible for reporting	Data Source	Comments
				EMS and total monthly percentage of patients admitted to the hospital via the emergency department.
eceiving hospital review transfers.	Monthly	Receiving Hospital	Internal Database Patient Records	Submit monthly report to include total number of trauma patients that are transferred out of the ED to another facility for higher level of care management.
summary of public and prevention	Quarterly	ALS Providers Base Hospital Dispatch	N/A	Include on quarterly report

Appendix G EMS Policy No. 6101, Sentinel Event Reporting

PURPOSE:

The purpose of this policy is to outline requirements for reporting sentinel events within the San Joaquin County EMS System to the EMS Agency.

AUTHORITY:

Health and Safety Code, Division 2.5 Section 1797.220 and 1798 et seq.

DEFINITIONS:

A. "EMS Provider" means ambulance providers, first response providers, and any other entity employing, paid or volunteer, prehospital emergency medical care personnel.
B. "Prehospital Emergency Medical Care Personnel" means those persons who have been certified or licensed as qualified to provide prehospital emergency medical care pursuant to the provisions of Health and Safety Code, Division 2.5.
C. "Receiving Hospital" means an acute care hospital approved by the San Joaquin County EMS Agency to receive pre-hospital patients.
D. "Sentinel event" means an unexpected occurrence involving death or serious physical or psychological injury or the risk thereof. Serious physical injury includes, but is not limited to, loss of limb or function. The phrase "or the risk thereof" includes any process variation for which a recurrence of the variation or event carries a significant chance of morbidity, or mortality, or other serious adverse outcome.

POLICY:

I. EMS providers, receiving hospitals and pre-hospital emergency medical care personnel shall report the occurrence or suspected occurrence of a sentinel event to the EMS Agency Duty Officer upon discovery; however, notification shall not exceed eight (8) hours after becoming aware of the sentinel event.

II. A sentinel event may include continuous actions such as the use of defective equipment that causes an ongoing but urgent or emergent threat to the welfare, health, or safety of patients or personnel. Such actions should be reported to the EMS Agency Duty Officer upon discovery; however, notification shall not exceed eight (8) hours after discovery.

III. After notifying the EMS Agency Duty Officer, the reporting party shall complete and submit a Sentinel Event Investigation Report (Form 6101A) to the EMS Agency within 24 hours of the event. This time frame may be extended to the next business day with the approval of the EMS Duty Officer.

IV. A sentinel event may be identified and reported to the EMS Agency by anyone within the EMS system or by a member of the general public.

V. The failure of an EMS provider or receiving hospital to notify the EMS Agency of a sentinel event may result in disciplinary action being taken against all parties with knowledge of the event.

VI. Specific examples of reportable sentinel events include:

A. The refusal and/or failure of prehospital EMS personnel to implement a Base Hospital order.
B. Any deviation from an EMS treatment protocol with significant potential for serious patient harm.
C. Medication or procedural errors with significant potential for serious patient harm.
D. Any significant EMS related event reported to the reporting party's risk management department, or Continuous Quality Improvement (CQI) Coordinator.
E. Any significant EMS related event reported to another regulatory agency including, but not limited to, the EMS Authority, Occupational Safety and Health Administration, and the Department of Public Health.
F. Any of the occurrences defined as a threat to the public health and safety cited in Health and Safety Code § 1798.200(c):
   (1) Fraud in the procurement of any certificate or license.
   (2) Gross negligence.
   (3) Repeated negligent acts.
   (4) Incompetence.
   (5) The commission of any fraudulent, dishonest, or corrupt act which is substantially related to the qualifications, functions, and duties of prehospital personnel.
   (6) Conviction of any crime which is substantially related to the qualifications, functions, and duties of prehospital personnel. The record of conviction or certified copy of the record shall be conclusive evidence of the conviction.
   (7) Violating or attempting to violate directly or indirectly, or assisting in or abetting the violation of, or conspiring to violate, any provision of this division or the regulations adopted by the authority pertaining to prehospital personnel.
   (8) Violating or attempting to violate any federal or state statute or regulation which regulates narcotics, dangerous drugs, or controlled substances.
   (9) Addiction to the excessive use of, or the misuse of, alcoholic beverages, narcotics, dangerous drugs, or controlled substances.
   (10) Functioning outside the supervision of medical control in the field care system operating at the local level, except as authorized by any other license or certification.

(11) Demonstration of irrational behavior or occurrence of a physical disability to the extent that a reasonable and prudent person would have reasonable cause to believe that the ability to perform the duties normally expected may be impaired.

(12) Unprofessional conduct exhibited by any of the following:

a. The mistreatment or physical abuse of any patient resulting from force in excess of what a reasonable and prudent person trained and acting in a similar capacity while engaged in the performance of his or her duties would use if confronted with a similar circumstance.

b. The failure to maintain confidentiality of patient medical information, except as disclosure is otherwise permitted or required by law in Sections 56 to 56.6, inclusive, of the Civil Code.

(13) The commission of any sexually related offense specified under Section 290 of the Penal Code.

VII. Upon receipt of a sentinel event report the EMS Agency shall take the following actions:

A. Confirm receipt of the sentinel event report with the reporting party.

B. Evaluate the report to determine if an investigation of the sentinel event is warranted. When deemed appropriate, the EMS Agency may address the event in accordance with EMS Policy No. 6102, EMS System Issue Resolution Process.

VIII. Sentinel event investigations are part of the CQI process and all documents, reports, and information are confidential and protected by § 1040 of the Evidence Code.

Appendix H EMS Policy No. 6102, EMS System Issue Resolution Process

(Under Development)

Appendix I 2010 Key Performance Indicator Reporting Sheet

Total Forms Scanned For Quarter	Key Performance Indicators Quarterly Report *									
Total Adult Calls										
	Total # Pt Attempts	Total # of Skills Attempts	Average Attempts per PT	Successful After:			Unable After			Success Rate By Pt
Clinical Skills:	Ratio	Ratio		One	Two	Three+	One	Two	Three+	Ratio
Pleural Decompression	0	0	0.0	0	0	0	0	0	0	0
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%
Cricothyrotomy	0	0	0.0	0	0	0	0	0	0	0
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%
IV Peripheral Lines**	0	0	0.0	0	0	0				0
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%
Intraosseous Lines	0	0	0.0	0	0	0	0	0	0	0
				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%
Cardioversion	0	0								
Pacing	0	0								
Full Arrests (CPR)	0	0								
Rtn of Spont. Circulation	0	0								

report includes a combination of some (but not all) infrequently used skills and frequently used skills. Providers should consider including cases of infrequently used skills in a qualitative manner in their general quarterly report.

* Advanced Airway Skills not found herein are captured in a separate report summary document.

** The definition of an IV peripheral line attempt is: "breaking the skin with intent to insert peripheral IV access."

Appendix J Quarterly Report Template

I. PROGRAM SUMMARY/CHANGES

II. CALL STATISTICS

III. COMPLAINT, INVESTIGATIONS & IRs:

(List PCR #, Medic Crew, Summarize Issue and Resolution)

IV. PERFORMANCE IMPROVEMENT PLANS

(Summarize Issue, Crewmember(s), and PIP)

V. CLINICAL REVIEW (Examples in italics below)

ADVANCED AIRWAY ISSUES:

- *Airway 1st Attempt Success Percentage:*
- *Number of calls (provider name) employees performed an intubation:*
  - *Number of calls where treatment did not meet protocol. (explain under Investigations)*

ALS WITHOUT BASE CONTACT SUMMARY:

MEDICATIONS AUDIT & TRAINING by QUARTER:

During the 4th quarter, clinical audit and tracking will occur on the six medications that were reviewed during the 3rd quarter.

VI. OUTSTANDING CLINICAL PERFORMANCE RECOGNITION

VII. INTERNAL OPTIONAL CURRENT PROJECTS, CLINICAL TRIALS & STUDIES

VIII. KEY PERFORMANCE INDICATORS (KPI) REPORT

IX. ADVANCED AIRWAY SUMMARY REPORT

X. PUBLIC EDUCATION & PREVENTION

Appendix K EMS Policy No. 6301, Ambulance Data Policy

PURPOSE: The purpose of this policy is to establish the required data fields and structures for computer aided dispatch and patient care records maintained by ambulance providers and submitted to the EMS Agency.

AUTHORITY: Health and Safety Code, Division 2.5, Section 1797.220; San Joaquin County Ordinance No. 4231, Title 4, Division 7.

DEFINITIONS:

A. "Ambulance Provider" means a person, firm, partnership, corporation or other organization, which furnishes or offers to furnish ambulance services.
B. "Emergency Ambulance Provider" means an entity properly permitted to operate an emergency advanced life support ambulance service in San Joaquin County.

POLICY:

I. Emergency Ambulance Providers shall submit computer aided dispatch data to the San Joaquin County EMS Agency, in an electronic format acceptable to the County, on a monthly basis. Computer aided dispatch data shall include records for all emergency and non-emergency ambulance requests received at the ambulance provider's dispatch center. Each computer dispatch record submitted to the County shall contain the following fields, as a minimum:

A. Call Date.
B. Incident Number.
C. Scene County.
D. Call Type (e.g. scene, inter-facility transfer).
E. Emergency Medical Dispatch (EMD) Patient Type.
F. Code of Response.
G. Updated Code of Response.
H. Code of Transport.
I. Updated Code of Transport.
J. Time Public Service Answering Point (PSAP) 1 or 2 as appropriate.
K. Ambulance Provider.
L. Vehicle ID Number.
M. Time Call Entered.
N. Time Dispatched.
O. Time En Route.
P. Time Arrived Scene.
Q. Time Departed Scene.
R. Time Arrived Destination.
S. Time canceled (if applicable.)
T. Scene Map Zone.
U. Scene X, Y or other coordinate system accepted by County for GIS

purposes.

V. Call Disposition (i.e. final result of the call for this vehicle.)

II. Ambulance Providers shall submit patient care record (PCR) data to the San Joaquin County EMS Agency, in an electronic format acceptable to the County, on a monthly basis. Patient care record data shall include records for all emergency and non-emergency patients regardless of call disposition. PCR data shall contain

A. A unique identifier for each patient (e.g. PCR number.)
B. Automated dispatch information for the response (e.g. times, location)
C. Patient name.
D. Patient address.
E. Patient insurance type (e.g. commercial, Medicare, Medi-Cal, self-pay.)
F. Patient history.
G. Patient assessment.
H. Patient treatment.
I. Patient disposition (e.g. transport to emergency department.)

III. Ambulance Providers and employees shall comply with patient care record documentation requirements included in County policy.

IV. Ambulance Providers shall utilize an EMS data system that includes all fields listed in Appendix A, "EMS Data Pro version 9.0 Table Structure and Field Definitions," that are identified with an "A" in the Recommended Data Sets column.

V. Ambulance Providers shall use an EMS data system approved by the San Joaquin County EMS Agency with respect to data structures, code sets (i.e. pick list values), and data export capabilities.

VI. Ambulance Providers shall maintain current records related to pre-hospital and dispatch personnel certification, licensing and continuing education. Ambulance providers are required to maintain a current roster of personnel on file with the EMS agency and shall submit information necessary to keep the roster current on a monthly basis.

Appendix L ALS Airway Monthly Summary Matrices

ALS Airway Monthly Summary Matrix - Adult Oral Intubation 2010

Calendar Day	Primary Clinical Impression (e.g. Traumatic Full Arrest)	Intubation Pt. Count	# of Laryngoscopy Insertions with Intent to Intubate	One Pass Successful	ETTI Used	Bi Manual Laryngoscopy Used	Two Passes Successful	ETTI Used	Bi Manual Laryngoscopy Used	EDTLA Device Successful	Did the pt. end up with an ALS Airway ?	Cormack and Lehan Grades 1 - 4	Cormack and Lehan Score Explanation/or what was done in response to difficult airway challenge?
		0	0	0	0	0	0	0	0	0	0		

Number of Diff Airway Patients 0
Total Number of Patients 0

% ETI Successful 1st attempt ####
% ETI Successful 2nd attempt ####
Total % ETI Successful After 2nd Attempt: ####
% Successful ALS Airway ####
% where ETTI Used on all Intubation Attempts ####
% where BML used on all Intubation Attempts ####
Provider:
Month and
Year:

DIRECTIONS:

If the Medic describes the Cormack and Lehan grade difficulty as a 3 or 4 insert "A" under "Intubation Pt Count." For Grades of 1 or 2 place a "1" under "Intubation Pt Count." (Column "C") (See Example)

1 = "Yes" in all fields except "# of Laryngoscopies," "Pt. Count," and Cormack & Lehan Grade.

Leave cell blank if answer is "No" or "NA"

ALS Airway Monthly Summary Matrix - Nasal Tracheal Intubation

Calendar Day	Primary Clinical Impression (e.g. Traumatic Full Arrest)	Pt. Count	# of Laryngoscopies	One Pass Successful	Two Passes Successful	Unsuccessful	Did the pt. end up with an ALS Airway?	Notes	Please Audit
		0	0	0	0	0	0		

% Successful 1st attempt ######
% Successful 2nd attempt ######
Total Successful After 2nd Attempt: ######
% Successful ALS Airway ######

ALS Airway Monthly Summary Matrix - Pediatric Oral Intubation

Calendar Day	Primary Clinical Impression (e.g. Traumatic Full Arrest)	Pt. Count	# of Laryngoscopies	One Pass Successful	Two Passes Successful	Unsuccessful	Did the pt. end up with an ALS Airway?	Notes	Please Audit
		0	0	0	0	0	0		

% Successful 1st attempt #DIV/0!
% Successful 2nd attempt #DIV/0!
Total Successful After 2nd Attempt: #DIV/0!
% Successful ALS Airway #DIV/0!