Purpose:
The Sacramento County Emergency Medical Services (SCEMS) system and its participants require objective feedback about performance that can be used internally to support quality improvement efforts and externally to demonstrate accountability to the public governing boards and other stakeholders. The primary goal of the Sacramento County Emergency Medical Services Agency (SCEMSA) Quality Improvement Program (QIP) is to ensure continued high quality of patient care.

Authority:
A. California Health and Safety Code, Division 2.5
B. California Code of Regulations, Title 22, Division 9

Organizational Chart:
Quality Improvement Program:

A. SCEMSA has established a system-wide QIP to continuously monitor, review, evaluate and improve the delivery of prehospital medical and trauma care services. QIP comprises participants from all system partners and includes the following activities:
   1. Prospective – prevent potential problems
   2. Concurrent – identify problems or potential problems during patient care
   3. Retrospective – identify potential or known problems and prevent their reoccurrence
   4. Reporting/Feedback – QIP activities will be reported to SCEMSA and may result in system design changes

B. Relationship with participating providers:
   1. Each participating provider submits a QIP Plan to SCEMSA annually
   2. Timeline for submitting QIPs are determined mutually by each agency and SCEMSA
   3. SCEMSA evaluates the implementation of each provider’s QIP Plan and requests revisions as needed

C. As noted in Title 22, Div.9 Chap 12, SCEMSA shall “Develop, in cooperation with appropriate personnel/agencies, a performance action plan when the EMS QI Program identifies a need for improvement.” QI Issues related to individual pre-hospital care providers, EMS service provider agencies, or base hospitals, shall be addressed directly by SCEMSA QI Program staff. As per Title 22, Div. 9, Chap. 12, “If the area identified as needing improvement includes system clinical issues, collaboration is required with the local EMS agency medical director.” System wide QI issues will be addressed at the level of the SCEMSA Technical Advisory Group (TAG) (see descriptions below).

D. All proceedings, documents and discussions of the Quality Improvement Program, are confidential and are covered under Sections 1040 and 1157.7 of the Evidence Code of the State of California. The prohibition relating to discovery of testimony provided to SCEMSA QI Committees will be applicable to all proceedings and records of these committees, which are established by a local government agency to monitor, evaluate, and report on the necessity, quality, and the level of specialty health services, including pre-hospital medical and trauma care. Issues requiring system input may be sent in total to the SCEMSA for input. Guests may be invited to discuss specific cases and issues in order to assist the committee in making final case or issue determinations. Guests may only be present for the portions of the meetings they have been requested to review and comment about. All members will sign a confidentiality agreement not to divulge or discuss information that would have been obtained solely through Sacramento County QIP Committee or TAG Committee membership. The Chairperson is responsible for explaining, and obtaining, a signed confidentiality agreement from invited guest(s) prior to their participation in the meeting.

SCEMSA Quality Improvement Committee (QIC):

SCEMSA maintains a Quality Improvement Committee. SCEMSA members of this Committee consist of: Medical Director, EMS administrator, and QIP Coordinator. QIC activities include:

A. Reviews QI Plans from each participant submitted annually and provide feedback or recommendations to SCEMSA as indicated
B. Holds monthly meetings to review and monitor participating agencies QI Plans
C. Operates subcommittees, including the following Committees: Trauma Review, Sacramento Technical Advisory Group (TAG), Advanced Life Support (ALS), Service Provider Peer Review and Ad Hoc QI Committees as needed  
D. Emergency Medical Services (EMS) Patient/System Data transmitted or conveyed to SCEMSA from EMS providers is for the express purpose of analysis by members of the SCEMSA QIP Committee  
E. No copies of EMS Patient/System Data records shall leave SCEMSA custody, and all unessential copies shall be destroyed by paper shredder  
F. All correspondence addressed to the SCEMSA QIP Committee will be stamped "Confidential," remain unopened and personally handed to the addressee  
G. Any outgoing SCEMSA QIP correspondence will be stamped "Confidential"  
H. All SCEMSA QIP records shall be stored in a locked cabinet at SCEMSA offices, and dedicated for SCEMSA QIP Committee use  
I. All SCEMSA Data System files will be encrypted and/or protected by user access code. Only SCEMS employees will be assigned user access code(s), and issuance of access codes shall be limited to a need-to-know basis and  
J. A Confidentiality Statement/Agreement shall be signed by all SCEMSA employees granted access to EMS Patient/System Data  

**SCEMSA QIC Responsibilities:**  
A. Prospective:  
   a. Comply with all rules, regulations, laws and codes of Federal, State, and County applicable to Emergency Medical Services  
   b. Coordinate countywide Quality Improvement activities, including QIP TAG and subcommittees  
   c. Evaluate and help plan the EMS system including public and private agreements and operational procedures  
   d. Monitor prehospital EMS training programs  
   e. Establish policies and procedures to assure medical control, which may include ALS, patient destination, patient care standards, and quality recommendation guidelines in response to identified QI issues  
   f. Design system-wide reports for monitoring identified problems and/or trends analysis  
   g. Participate in prehospital research and efficacy studies regarding the prehospital use of any drug, device, or treatment procedure where applicable  
   h. Cooperate with the EMSA in carrying out the responsibilities of statewide EMS QI Program and participate in the Emergency Medical Services Authority (EMSA) Technical Advisory Group  
   i. Cooperate with the EMSA in the development, approval, and implementation of state required EMS system indicators  
   j. Cooperate with the EMSA in the development, approval, and implementation of state optional EMS system indicators  
   k. Monitor other county QI systems for trends and plans  
   l. Facilitate meetings and presentations on SCEMSA indicators  
   m. Review or participate in the development of performance improvement action plans for EMS providers and EMS provider agencies for individual or organizational QI issues as defined by Title 22  
   n. Assure reasonable availability of EMS QI Program training and in-service education for EMS personnel under the statewide EMS QI Program
o. Provide technical assistance for facilitating the EMS QI Programs of all organizations participating in the SCEMSA QIP Plan
p. Annual review of the SCEMSA QIP Plan

B. Concurrent:
   a. Conduct site visits to monitor and evaluate system components;
      i. Emergency Operation Center (EOC) activations
      ii. Medical facility evacuations/diversions

C. Retrospective:
   a. Evaluate the process developed by system participants for retrospective analysis of pre-hospital care
   b. Evaluate identified trends in the quality of prehospital care delivered in the system
   c. Establish procedures for implementing the Incident Review Process for pre-hospital emergency medical personnel
   d. Monitor and evaluate the Incident Review Process

D. Reporting/Feedback:
   a. Evaluate submitted reports from system participants and make changes in system design as necessary
   b. Provide QI feedback to system participants when applicable or when requested
   c. An on-line calendar will be created, showing all relevant meetings, and a section to post annual SCEMSA QI reports and general distribution statements and policies to address specific issues as they arise

TAG:

The Technical Advisory Group is the main advisory committee to the QIP Committee. Its members are represented by individuals from each area of service within Sacramento County. Refer to Program Document 7601.01.

Public Safety / Emergency Medical Technician (EMT) Automatic External Defibrillation (AED) Provider Responsibilities:

A. Prospective
   1. Participate in committees as specified by SCEMSA and
   2. Provide and/or participate in education, including but not limited to:
      a. Participate in initial training and periodic proficiency demonstration sessions
      b. Offer educational activities based on problem identification and trend analysis
      c. Establish procedures for informing all automatic external defibrillation personnel of changes in SCEMSA policies and procedures and
      d. Design standardized educational plans for AED personnel with identified performance deficiencies, including failure to attend periodic skills demonstration sessions
B. Retrospective:
   1. Develop a process for retrospective review and analysis utilizing the evaluation form, audio tape, memory module and patient follow-up, to include:
      a. All witnessed arrests
      b. All patients who were defibrillated
      c. Problem oriented
      d. Calls requested to be reviewed by SCEMSA or another appropriate agency and
      e. Specific audit topics as requested by SCEMSA
   2. Assist SCEMSA in developing and implementing a procedure for ensuring that patient follow-up is obtained from the receiving hospitals on all patients who were defibrillated by AED personnel
   3. Develop performance standards for evaluating the quality of care delivered by AED personnel
   4. Participate in the incident review process
   5. Comply with reporting and other quality assessment requirements as specified by SCEMSA
   6. Participate in prehospital research and efficacy studies requested by the SCEMSA or quality assessment committees

C. Reporting/Feedback:
   Participate in the process of identifying trends in the quality of field care delivered by the AED personnel and engage in the following task:
   1. Submit Annual QIP Update reports by March 1st or, as specified by SCEMSA
   2. Design and participate in educational offerings based on problem identification and trend analysis and
   3. Make changes in internal policies and procedures based on trend analysis to reflect SCEMSA policies and procedures

Advanced Life Support Provider (ALS) Responsibilities:

A. Prospective
   1. Participate on committee(s) as requested by SCEMSA
   2. Provide and/or participate in education:
      a. Orientation to the EMS System
      b. Field Care Audits
      c. Participate in continuing education courses and training of prehospital care providers
      d. Offer educational opportunities based on problem identification, job scope and trend analysis and
      e. Establish procedures for informing all field personnel of system changes
   3. Engage in evaluation – develop criteria for evaluation of individual paramedics including:
      a. Review Patient Care Reports (PCR) and electronic Patient Care Reports (ePCR), tape or other documentation as available
      b. Direct observation
      c. Evaluation of new employees
      d. Routine evaluation
      e. Problem-oriented and
      f. Design educational plans for individual paramedic deficiencies
4. Accreditation – Establish policies and procedures, based on SCEMSA policies:
   a. Initial accreditation
   b. Recertification
   c. Other training as specified by SCEMSA through either policy or contractual obligation

B. Concurrent
   1. Establish a procedure for the evaluation of paramedics utilizing performance standards through direct observation and
   2. Provide availability of field supervisors and/or quality assessment personnel for consultation/assistance

C. Retrospective
   1. Develop a process for retrospective analysis of field care, utilizing PCRs/ePCRs, audio tapes, or other applicable documentation to include:
      a. High-risk
      b. High-volume
      c. Problem-oriented
      d. Those calls requesting to be reviewed by SCEMSA or another appropriate agency and
      e. Specified audit topics established through SCEMSA or SCEMSA quality improvement committees
   2. Develop performance standards for evaluating the quality of care delivered by field personnel through retrospective analysis
   3. Participate in the incident review process, prehospital research and efficacy studies requested by SCEMSA or other quality recommendations as specified by SCEMSA
   4. Comply with reporting and other quality recommendations as specified by SCEMSA

D. Reporting/Feedback
   1. Develop a process for identifying trends in the quality of field care
   2. Submit reports annually by March 1st or, as specified by SCEMSA
   3. Design and participate in educational offerings based on problem identification and trend analysis and
   4. Make changes in internal policies and procedures based on trend analysis to reflect SCEMSA policies and procedures

Base Hospital / Trauma Center Responsibilities

A. Prospective
   1. Participate on committees as specified by SCEMSA
   2. Provide and/or Participate in education
      a. Field care audits
      b. Continuing education activities to further the knowledge base of the field and base hospital personnel
      c. Offer educational programs based on problem identification, job scope and trend analysis
      d. Participate in certification courses and the training of prehospital care providers
      e. Establish procedures for informing all base hospital personnel of system changes and
      f. Establish criteria for offering supervised student clinical experience to field personnel
3. Evaluation - Develop criteria for evaluation of individual base hospital personnel to include, but not limited to:
   a. Base hospital run sheets/tape review
   b. Evaluation of new employees
   c. Routine evaluation
   d. Problem oriented
   e. Design corrective action plans for individual MICN or base hospital physician deficiencies
4. Authorization – Establish procedures, based on SCEMSA policies, for Mobile Intensive Care Nurses (MICNs) regarding:
   a. Initial certification
   b. Maintaining certification and
   c. Recertification

B. Concurrent
   1. Provide on-line medical control for field personnel within the SCEMSA approved scope of practice
   2. Develop a procedure for identifying problem calls
   3. Develop internal policies regarding base hospital physician involvement in medical control according to SCEMSA policies and procedures
   4. Develop a procedure for obtaining patient follow-up when requested by SCEMSA
   5. Develop performance standards for evaluating the quality of on-line medical control delivered by MICNs and base hospital physicians through direct observation by the base hospital liaison personnel

C. Retrospective
   1. Develop a process for retrospective analysis of field care and base direction utilizing the base hospital work sheet, audio tape, PCR/ePCR and patient follow-up, to include but not limited to:
      a. High risk
      b. High volume
      c. Problem-oriented
      d. Those calls requested to be reviewed by SCEMSA or other appropriate agency
      e. Specific audit topics established through SCEMSA or other quality assessment committees and
      f. Review of ALS non-transport with base hospital contact
   2. Develop performance standards for evaluating the quality of medical control delivered by the MICNs and base hospital physicians through retrospective analysis.
   3. Evaluate medical care delivered by prehospital care providers based on performance standards through retrospective analysis.
   4. Perform audits on calls as required by Title 22, California Code of Regulations and SCEMSA policy
   5. Participate in the incident review process;
   6. Comply with reporting and other quality assurance requirements as specified by SCEMSA
   7. Participate in prehospital research and efficacy studies requested by SCEMSA or other quality assessment committees.
D. Reporting/Feedback

1. Develop a process for identifying trends in the quality of medical control delivered by base hospital MICNs and base hospital physicians:
   a. Submit reports annually by March 1st or, as specified by SCEMSA
   b. Design and participate in educational offerings based on problem identification, scope of practice and trend analysis
   c. Make changes in internal policies and procedures based on trend analysis to reflect SCEMSA policies and procedures

2. Participate in the process of identifying trends in the quality of field care delivered by EMS personnel

Incident Review Process

Incident Levels are defined as a guide to assist participating agency QI Programs in determining which incidents are to be reported to the SCEMSA Medical Director and QIP Committee. Only incidents related to the prehospital care patient(s) need to be referred to QIP Committee. When questions arise, case may be discussed with the SCEMSA QIP Coordinator to determine appropriate management for the incident review.

[Note: In addition to QI review of medical care, any incident necessitating disciplinary review will also undergo this process by the responsible organization with participation of SCEMSA and the SCEMSA Medical Director as indicated by California Health and Safety Code 1798].

A. Definitions of Incident Levels (SCEMSA can upgrade or downgrade)

1. Level 1
   a. Policy compliance or system issues that do not directly impact patient care
   b. Disrupted communication with treatment in compliance with protocol
   c. Examples include, but not limited to:
      i. Destination facility not in compliance with destination policy (which does not impact patient care)
      ii. Communication or transport issues between responding agencies
      iii. Documentation issues with a single or multiple responding medics

2. Level 2
   a. Recurrent (more than 2) Level 1 incidents
   b. Non-compliance with treatment protocols or policies with minimal potential for patient harm and
   c. Examples include, but not limited to:
      i. Failure to give Aspirin (ASA) for chest pain
      ii. Giving Intravenous (IV fluids) when not indicated by protocol and
      iii. Failure to treat for pain

3. Level 3
   a. Recurrent (more than 2) Level 2 incidents
   b. Non-compliance with treatment protocols or policies with potential for patient harm
   c. Care rendered or ordered outside scope of practices as defined by SCEMSA policies and procedures
   d. Examples include, but not limited to
      i. Failure to take Stroke, STEMI, Trauma, or Burn patient to appropriate designated hospital
      ii. Giving incorrect medication or incorrect dose of medication and
iii. Failure to immobilize spine when indicated by protocol

4. Level 4
   a. Any incident which qualifies for review under California Health and Safety Code 1798

B. Incident Review
   a. Any individual or organization may refer an incident for QI review
   b. Responsible organization must review each referred incident through their QI program as directed by the organization’s QI Policy, and implement a Performance Improvement Action Plan (PIP) when indicated by review
   c. Responsible organization must provide feedback to referring party and involved individual(s) at the end of the QI review
   d. Disposition of QI review by Level:
      i. Level 1:
         1. Maintain record within organization’s QI Program
      ii. Level 2:
         1. Maintain record within organization’s QI Program
         2. Provide blinded quarterly aggregate data to SCEMSA QI Committee on number of cases and PIPs generated by review
      iii. Level 3:
         1. Maintain record within organization’s QI Program
         2. Notify SCEMSA QIP Committee within three (3) working days of the initial referral
         3. Submit completed review to SCEMSA QIP Committee for review and approval
      iv. Level 4:
         1. Maintain record within organization’s QIP Program
         2. Follow employer review and action, with notification and involvement of SCEMSA and the SCEMSA Medical Director, as indicated by Code 1798
         3. Any patient care which may have occurred during the incident must also undergo QA/QI review and be reported to SCEMSA

Related Policies:
Certification Review Process: See PD # 4050
Trauma Review Committee: See PD # 2026
Technical Advisory Group: See PD# 7601