COUNTY OF EL DORADO

EMERGENCY MEDICAL SERVICES

2012 TRAUMA PLAN UPDATE

Submitted by

COUNTY OF EL DORADO
EMERGENCY MEDICAL SERVICES (EMS) AGENCY

July 2012

TABLE OF CONTENTS

AUTHORITY AND PURPOSE v

ACKNOWLEDGMENTS vi

SECTION I. PLAN SUMMARY 1

- A. Background 2
- B. Trauma System Design 3
- C. Needs Assessment 4
- D. Goal 4

SECTION II. ORGANIZATIONAL STRUCTURE 5

- A. County Structure 5
  1. Board of Supervisors 5
  2. Health and Human Services Agency (HHSA) 5
  3. Emergency Medical Services (EMS) Agency 5
- B. Committee Structure 6
  1. Medical Advisory Committee (MAC) 6
  2. Paramedic Advisory Committee (PAC) 7
  3. Trauma Operational Review Committees 7
  4. Trauma Review Committee 8
  5. Multi-Disciplinary Trauma Peer Review Committee 8
  6. Continuous Quality Improvement Committee (CQIC) 8
  7. Emergency Medical Care Committee (EMCC) 9
- C. Trauma System Organizational Structure 10

SECTION III. NEEDS ASSESSMENT 11

- A. Trauma Care Facilities 11
- B. Trauma System Evaluation 11
- C. Trauma System Cost-Effectiveness 11
- D. Injury Prevention, Public Awareness, and Information 11
- E. Pediatric Trauma 11

SECTION IV. TRAUMA SYSTEM DESIGN 13

- A. Trauma System Organization and Design 13
  1. Current Trauma System Design 13
  2. Trauma Center Designation Process 13
  3. Trauma Center Requirements 14
- B. Inclusive Trauma System Design 15
- C. Rationale for Trauma System Design 15
- D. Resource Availability 15
  1. Hospital Resources 15
  2. Prehospital Resources 16
- E. Transport Times 17
  1. Ground Ambulance Response Time Standards 17
  2. Air Ambulance Response Times 17
- F. Trauma Service Areas 18
- G. Coordination with Adjacent Trauma Systems 19
  1. Designated Trauma Centers in Contiguous Jurisdictions 19
  2. Integration of Pediatric Hospitals 19
  3. Tertiary Care Facilities 20
  4. Poison Control Center 20
  5. EMS and Trauma Care Coordination 20
- H. Prehospital Services 20

TABLE OF CONTENTS

1. Dispatch 20
2. Trauma System Communication 21
3. EMD CQI 21
4. Ground Transport of Trauma Patients 22
5. Air Transportation and Rescue Services 23

I. Hospital Services Delivery 24
1. Critical Care Capability 24
2. Medical Organization and Management 24
3. Continuous Quality Improvement 24

J. Hospital Diversion Status 24
1. Local Hospital Diversion 24
2. Out-of-County Hospital Diversion 25

SECTION V. INTERCOUNTY TRAUMA CENTER AGREEMENTS 27

A. Sacramento County EMS Agency 27
B. Sierra-Sacramento Valley EMS Agency 27

SECTION VI. OBJECTIVES 28

A. Objective 1 – Level III Trauma Center Designation 28
B. Objective 2 – Trauma System Evaluation 28
C. Objective 3 – Trauma System Cost-Effectiveness 28
D. Objective 4 – Public Awareness and Information 28
E. Objective 5 – Injury Prevention 29
F. Objective 6 – Pediatric Care 29
G. Objective 7 – Minimal Trauma Inclusion Criteria Policy 29

SECTION VII. IMPLEMENTATION SCHEDULE 30

A. Trauma Plan 30
B. Trauma Data Collection System 30
C. Objective 1 – Trauma Center Designation (Barton Memorial Hospital) 30
D. Objective 2 – Trauma System Evaluation 31
E. Objective 3 – Trauma System Cost-Effectiveness 31
F. Objective 4 – Public Awareness and Information 31
G. Objective 5 – Injury Prevention 31
H. Objective 6 – Pediatric Care 31
I. Objective 7 - Minimal Trauma Inclusion Criteria Policy 31

SECTION VIII. FISCAL IMPACT 32

A. Prehospital Trauma System Costs 32
B. Initial Level III Designation Costs 32
1. Designation Application Costs 32
2. One-time Initial Training Costs 33

C. Annual Level III Trauma Center Costs 33
1. Chief of Trauma 33
2. Trauma Coordinator Position 33
3. Registered Nurse Training Costs 33
4. Public Outreach and Education Costs 33
5. Trauma Center verification/Re-verification review 33

D. Annual Trauma Registry System Costs 34
1. Marshall Medical Center 34
2. Barton Memorial Hospital 34
3. County of El Dorado EMS Agency 34

SECTION IX. POLICY AND PLAN DEVELOPMENT PROCESS 35

TABLE OF CONTENTS

A. Planning Responsibility ... 35
B. 1997 Trauma Plan ... 35
C. 2005 Trauma Plan Revision ... 35
D. 2008 Plan Update ... 35
E. 2012 Plan Revision ... 35
F. Policy Development ... 35
1. General Policy Development Methodology ... 35
2. Trauma Policies, Procedures and Protocols ... 36

SECTION X. LOCAL TRAUMA PLAN APPROVAL ... 37
A. 1997 Trauma Plan ... 37
B. 2005 Revised Trauma Plan ... 37
C. 2008 Trauma Plan Update ... 37
D. 2012 Revised Trauma Plan ... 37

SECTION XI. DATA COLLECTION ... 38
A. Data Management System ... 38
B. Prehospital Data Elements ... 38
1. Standardized Data Collection Instrument ... 38
2. Prehospital Data Elements ... 38
C. Hospital and Trauma Center Data Elements ... 40
1. Standardized Data Collection Instrument ... 40
2. Hospital Data Elements ... 40

SECTION XII. TRAUMA SYSTEM EVALUATION ... 41
A. Process to Receive Trauma Information ... 41
1. Prehospital CQI Committee ... 41
2. Medical Advisory Committee ... 41
3. Trauma System Data Reports ... 41
B. Periodic Trauma System Performance Evaluation ... 42
C. Hospital Performance Evaluation ... 42
D. Hospital CQI Processes ... 43
1. Marshall Medical Center CQI ... 43
2. Barton Memorial Hospital CQI ... 44
F. Trauma Center CQI ... 45
G. Out-of-County CQI Participation ... 45
H. EMS Aircraft Evaluation and CQI ... 46
I. Prehospital Evaluation and CQI ... 46

SECTION XIII. APPENDICES ... 47
Appendix A-EMS Jurisdiction Letters of Agreement ... 48
Appendix B-Prehospital Trauma Triage Criteria ... 55
Appendix C-Prehospital Trauma Patient Transportation/Destination Policies ... 58
Appendix D-Emergency Medical Service Area Maps ... 63
Appendix E-Trauma Policies, Procedures and Protocols ... 69
Appendix F-Written Local Approval ... 73
Appendix G-Base Hospital Services Agreement – Barton ... 75
Appendix H-Base Hospital Services Agreement – Marshall ... 91
Appendix I-Level III Trauma Center Agreement ... 107
Appendix J-California Code of Regulations, Title 22, Division 9, Chapter 7 ... 137

AUTHORITY AND PURPOSE

The County of El Dorado Trauma Plan (Trauma Plan) was developed in compliance with the California Health and Safety Code, Division 2.5, Article 2.5; California Code of Regulations (CCR), Title 22, Division 9, Chapter 7; and the Emergency Medical Services Authority (EMSA) Trauma Plan Development Guidelines EMSA #151, January 2000.

The Trauma Plan outlines the structure and operations of the trauma care system in El Dorado County, including specific guidelines for regional participation with neighboring counties: Alpine, Amador, Placer and Sacramento in California, and Douglas and Washoe Counties in Nevada.

The purpose of this Trauma Plan is to promote an enhanced level of trauma care and continuous quality improvement activity while maintaining a cost-effective system.

The Trauma Plan establishes requirements for system operations that meet or exceed the minimum standards contained in California Code of Regulations, Title 22, Division 9, Chapter 7, Article 2, Section 100255 (Policy Development) and Section 100256 (Trauma Plan Development) (22 CCR §100255 and §100256).

ACKNOWLEDGMENTS

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COUNTY OF EL DORADO TRAUMA PLAN

SECTION I. PLAN SUMMARY

In 1997, the State of California Emergency Medical Services Authority (EMSA) approved the initial County of El Dorado Trauma Plan (Trauma Plan). The Trauma Plan was updated and revised in 2005, 2008 and again in 2012 to reflect current patterns of patient care and transport, changing demographics, current Level III Trauma Center status, the continued goal of reducing mortality and morbidity of injured patients in El Dorado County, and to provide an overview of the continuum of trauma care available to El Dorado County.

Improvements to the County of El Dorado trauma system since the 2005 Trauma Plan revision include:

1. Trauma Registry data is regularly reviewed by the EMS Agency Medical Director and is utilized to guide trauma Continuous Quality Improvement (CQI).
2. A Countywide CQI Committee actively evaluates significant trauma cases and all Multiple Casualty Incidents (MCI's) on a monthly basis.
3. All EMS trauma policies have been reviewed and reflect American College of Surgeons (ACS) guidelines and evidence-based medicine.
4. Equipment is updated to reflect industry standards in resuscitation equipment including biphasic defibrillators, Continuous Positive Airway Pressure (CPAP), pediatric traction splints, and intraosseous infusion for both adult and pediatric patients.

The purpose of the 2008 update of the Trauma Plan was to present a clear assessment of the County of El Dorado trauma system, correct any existing deficiencies, improve the level of trauma care and treatment, and ensure appropriate and efficient distribution and treatment of local and regional trauma patients.

The purpose of this 2012 Trauma Plan revision is to reflect several improvements and changes to the Trauma Plan since 2008. The significant changes are:

1. Marshall Medical Center received Level III Trauma Center designation in 2009.
2. Barton Memorial Hospital is actively seeking Level III Trauma Center designation. A verification review from the ACS is anticipated in 2013.
3. Conversion to Trauma One database software is planned in 2012 for both hospitals and the EMS Agency.

A. Background

El Dorado County has historically treated the majority of traumatic injuries at one of the two El Dorado County acute care hospitals: Marshall Medical Center in Placerville, and Barton Memorial Hospital in South Lake Tahoe. Each of these community hospitals are designated paramedic Base Hospitals, have mandatory on-call surgery, and have operating room and anesthesia coverage. The purpose of this Trauma Plan is to build and improve upon established levels of care, while adding essential quality improvement elements to improve local care, and to track outcomes of patients.

The County of El Dorado EMS trauma system seeks to provide efficient, effective, and coordinated medical response to all trauma victims. This effort includes future designation of an additional trauma center within The County of El Dorado and adequate training of prehospital personnel in trauma management and triage.

1. Geography and Demographics

El Dorado County is a popular outdoor recreation tourist destination for snow sports, rafting, hiking, camping, horseback riding, fishing and boating. The North Lake Tahoe Visitor's Bureau estimates that three million people visit the Lake Tahoe area annually.

El Dorado County is located in the Sierra-Nevada mountain range in the northeast area of California. The County has an estimated resident population of 181,058 in 2010. During the last decade, County population increased from 156,299 in 2000, a 16% increase in population, significantly higher than 10% the statewide population increase during the same period (U.S. Census Bureau, 2010 Census). El Dorado County encompasses 1,708 square miles of largely mountainous terrain, with a population density of approximately 106 persons per square mile. Elevations in the County range from 200 feet to more than 10,800 feet. The County consists primarily of rolling foothills and mountainous terrain and is separated into two geographical areas: the Lake Tahoe Basin in the northeast corner and the "West Slope" west of the Lake Tahoe Basin and Echo Summit. The County contains two municipalities: the City of South Lake Tahoe with a 2010 population of 21,403 and the City of Placerville on the West Slope with a 2010 population of 10,389 (U.S. Census Bureau, 2010 Census). The remainder of the County's residents live outside of these two incorporated areas.

U.S. Highway 50 runs between Sacramento and the City of South Lake Tahoe, and bisects the County west to east. El Dorado County is heavily impacted by tourism, particularly by rafters on the American River, hikers and campers in the National Forests, and skiers and gamblers in the Lake Tahoe area. These activities create a high-risk need for prehospital trauma care.

2. Transportation

The main vehicle access from western El Dorado County to the Lake Tahoe area is State Highway 50, a two-lane road with extreme curves and changes in elevation. Due to terrain and weather-related problems, this road may be closed or difficult to navigate for significant

periods. These conditions create extreme difficulties for ambulance and helicopter access, and sometimes result in long response and transport times.

In addition to accidents precipitated by extreme weather conditions and difficult terrain, many accidents occur due to the sheer volume of traffic passing through the County on the winding two-lane highway en route to the Lake Tahoe area and points east; many of these accidents are of significant magnitude and frequently result in multi-casualty incidents.

3. Regional Cooperation

Good working relationships have been established with out-of-County trauma centers, including University of California (UC) Davis Medical Center (Level I); Sutter-Roseville Medical Center (Level II); Mercy San Juan Medical Center (Level II); and Renown Regional Medical Center (Level II).

4. Prehospital Emergency Services

The County directly provides ambulance services with a Public Utility Model (PUM) EMS system consisting of two exclusive operating areas (EOA) and one non-exclusive operating area. Funding for ambulance services is derived from special taxes and benefit assessments as well as from fees for ambulance service. The County currently contracts for prehospital emergency ambulance transport services with two Joint Powers Authorities (JPA) and one out-of-county fire district. One air ambulance transport contractor is based at South Lake Tahoe airport, and several other helicopter contractors deliver air ambulance and rescue capability in El Dorado County.

B. Trauma System Design

The County of El Dorado EMS Agency seeks to improve trauma care for patients in its service areas through an inclusive trauma care system. The system design includes:

1. One Level III Trauma Center designated (2009) in Placerville

2. The acute care hospital located in South Lake Tahoe is actively seeking Level III Trauma Center designation. ACS is expected to conduct a verification review in 2013.

3. Both hospitals treat adult and pediatric trauma patients. Patients are transferred to designated trauma centers in adjacent counties when appropriate.

4. The Trauma Plan seeks: 1) to deliver an organized approach to trauma care in accordance with ACS standards; 2) to meet requirements for trauma care set forth in California Code of Regulations, Title 22, Division 9, Chapter 7 (22 CCR § 100236, et seq.); 3) to strengthen the existing network of trauma care within El Dorado County; and 4) to promote close cooperation with designated Level I and Level II Trauma Centers in contiguous jurisdictions.

5. Two Base Hospitals continue to deliver a high level of on-line medical control. On-line medical control is necessitated by access challenges created by the varied topography,

weather and traffic patterns within the County; both Base Hospitals also function as Disaster Control Facilities (DCF) under the Governor's Office of Emergency Services (OES) Region IV Multi-Casualty Plan.

6. The Trauma Plan and current Advanced Life Support (ALS) policies and procedures reflect both the latest ACS recommendations on trauma triage and the diversion status levels at trauma centers and receiving hospitals.

7. Marshall Medical Center has established a Trauma Operational Review Committee to review and oversee trauma treatment and care, continuous quality improvement, and community disaster resource development and planning. This committee shares information with Marshall Medical Center's physician Trauma Review Committee when appropriate.

8. Barton Hospital has established a Trauma Operational Review Committee and Trauma Peer Review Committee to evaluate trauma treatment, system issues, and strive towards continuous quality improvement. These two committees report to Barton Hospital's existing Quality Improvement Framework to ensure event resolution.

9. Trauma data is captured by Marshall and Barton hospitals in a trauma registry database and informs future improvements of the County of El Dorado Trauma System.

C. Needs Assessment

Section VI, Trauma System Design, outlines specific objectives and projected implementation dates for each objective. The following seven objectives are based upon recognized strengths and deficiencies in the current trauma system:

1. Barton Hospital is actively seeking designation as a Level III Trauma Center
    a. It is the position of the County of El Dorado EMS Agency that trauma care in The County of El Dorado will benefit from additional in-county trauma center capacity.
2. Trauma System evaluation
3. Trauma System Cost-Effectiveness
4. Public Awareness and Information
5. Injury Prevention
6. Pediatric Care
7. Minimal Trauma Care Inclusion Policy

D. Goal

The objective of this Trauma Plan is to improve the quality of trauma care at reasonable cost.

SECTION II. ORGANIZATIONAL STRUCTURE

This Section defines the roles and relationships of each of the components of the County of El Dorado trauma system.

The County of El Dorado Emergency Medical Services (EMS) Agency is responsible for overall supervision of the EMS system in El Dorado County. The County of El Dorado EMS Agency is responsible to the Board of Supervisors for ensuring that high quality trauma and emergency medical services are provided to the citizens and visitors of El Dorado County.

A. County Structure

1. Board of Supervisors

   The County of El Dorado is governed by the El Dorado County Board of Supervisors, which is composed of five voting members, one from each of the five supervisorial districts of El Dorado County. The Board of Supervisors is responsible for reviewing and approving the initial EMS Trauma Plan as well as significant changes to the Plan.

2. Health and Human Services Agency (HHSA)

   The El Dorado County Health and Human Services Agency's two Departments, Health Services and Human Services, serve El Dorado County. The Health Services Department consists of two Divisions: Mental Health and Public Health. The EMS Agency is in the Public Health Division. The Director of HHSA reports directly to the El Dorado County Board of Supervisors.

   The responsibilities of the Public Health Division include protecting the health of the public and enforcing public health statutes, regulations, and ordinances. The Public Health Division programs, including the EMS Agency, serve to prevent trauma and disease, prolong life, and promote optimum health for the residents of and visitors to El Dorado County.

   The Director of the Health and Human Services Agency serves as contract administrator for prehospital emergency medical services operational contracts in El Dorado County.

3. Emergency Medical Services (EMS) Agency

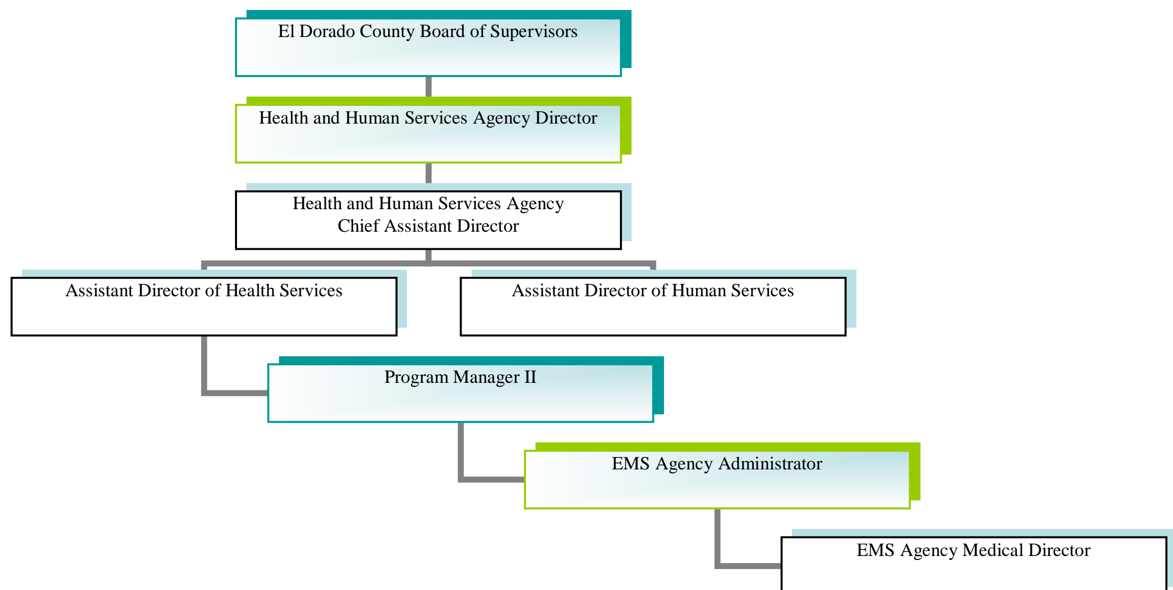
   The County of El Dorado EMS Agency is duly established by the Board of Supervisors, as authorized under Section 1797.200, California Health and Safety Code, Division 2.5. The County assumes all authority and responsibilities defined in Division 2.5 of the Health and Safety Code, and described in the California Code of Regulations, Title 22, Division 9.

   The County of El Dorado EMS Agency is responsible for planning, implementing and managing an inclusive trauma care system. The EMS Agency Medical Director reports to

the EMS Agency Administrator and oversees the medical aspects of the trauma system. The EMS Agency Administrator reports directly to the Public Health Program Manager.

The EMS Agency staff monitor the trauma care system, including system evaluation and problem solving. To assist with monitoring and evaluating trauma care at all levels, the EMS Agency facilitates close interaction among all stakeholders that participate in the provision of trauma care.

To ensure high quality training for prehospital trauma care staff in El Dorado County, all prehospital training programs delivered within the County must be reviewed and approved by the EMS Agency. Training includes continuing education, ALS, Basic Life Support (BLS), First Responder, and special skills such as Optional Scope of Practice for both ALS and BLS personnel.



B. Committee Structure

1. Medical Advisory Committee (MAC)

The Medical Advisory Committee is the primary forum in El Dorado County for dealing with problems and issues that arise with the provision of emergency medical services and serves as a venue to present new or innovative procedures or medications. MAC is an informal committee chaired by the EMS Agency Medical Director that includes representation from the following agencies:

a) Paramedics from each ambulance transport contractor
b) Base Hospital Medical Directors
c) Base Hospital Coordinators

d) JPA Executive Directors
e) First responder fire agencies
f) Air ambulance and rescue transport contractors
g) Dispatch agencies
h) Law enforcement
i) EMS Agency representatives

MAC receives quality improvement recommendations from the Continuous Quality Improvement Committee (CQIC) as part of regular monthly meetings. Quality Improvement proceedings are kept strictly confidential as specified by County of El Dorado EMS Agency policy and all laws governing patient confidentiality.

2. Paramedic Advisory Committee (PAC)

The Paramedic Advisory Committee was formed in 2008 at the direction of the EMS Agency Medical Director and the Medical Advisory Committee (MAC). The primary functions of PAC are:

a) Reviewing current protocols, procedures, and field operational policies and making updates and revisions based on current standard practices in the industry
b) Developing and implementing new protocols, procedures, and policies based on needs identified through the Continuous Quality Improvement (CQI) process
c) Developing training programs to implement new or revised protocols, procedures, or policies
d) Providing a venue for brainstorming of new ideas to make positive changes to the EMS system

PAC has been instrumental in keeping the County of El Dorado on the cutting edge of EMS. The PAC Mission Statement is “Improving patient care through diligent research and a thoughtful approach to the needs of our patients.”

3. Trauma Operational Review Committees

Marshall Medical Center’s Trauma Operational Review Committee reviews the provision of trauma care, and evaluates compliance with quality indicators and patient care. Specific opportunities to improve care are identified in these case review sessions, with specific recommendations developed and implemented. The Trauma Operational Review Committee may refer concerns to the physician Trauma Review Committee.

The Trauma Operational Review Committee is comprised of the Trauma Coordinator, the Trauma Registrar, the Radiology Operations Supervisor, the Clinical Laboratory Manager, Clinical Managers from Surgical Services, Medical/Surgical II, and the Surgical Case Manager. The County of El Dorado EMS Agency is invited to attend these meetings. Specific opportunities to improve trauma care are identified in these case review sessions, with specific recommendations developed and implemented. This Committee may refer concerns to the physician Trauma Peer Review Committee.

As part of Barton Hospital's preparation for trauma center designation, they have established a Trauma Operational Review Committee to routinely evaluate trauma treatment, system issues, and always strive towards continuous quality improvement. The committee is comprised of, but not limited to, the Trauma Medical Director, Trauma Program Coordinator, Trauma Registrar, physicians, departmental directors, mid-levels, RN's, therapists, techs, and aids. This committee meets quarterly and reports to Trauma Peer Review and to Barton Hospital's existing Quality Improvement Framework. This process must identify problems and must demonstrate problem resolutions (loop closure).

4. Trauma Review Committee

Marshall Medical Center has a physician Trauma Review Committee that may refer concerns to the Trauma Operational Review Committee. This Committee is composed of physicians representing orthopedics, general surgery and emergency services. Both the Trauma Operational Review Committee and Trauma Peer Review Committee are involved in the Trauma Performance Improvement Patient Safety Plan. The purpose of this plan is to monitor, evaluate, and improve the performance of the trauma system.

5. Multi-Disciplinary Trauma Peer Review Committee

Barton Memorial Hospital has established a Multi-Disciplinary Trauma Peer Review Committee, comprised of the Trauma Medical Director and physicians representing general surgery, orthopedics, Radiology, Emergency Department, and Anesthesia to evaluate trauma treatment, system issues at the physician level, selected deaths, complications, and sentinel events with the objectives of identification of issues and appropriate responses. The frequency of meeting is determined by the Trauma Medical Director. This committee reports to Barton Hospital's existing Quality Improvement Framework. This process must identify problems and must demonstrate problem resolutions (loop closure).

6. Continuous Quality Improvement Committee (CQIC)

CQIC is a peer-driven committee comprised of El Dorado County paramedics from each EMS transport contractor, each Base Hospital, the EMS Medical Director and representatives from each designated dispatch center. The Committee focus includes trauma case review and ongoing trauma system evaluation as a significant part of the CQI process. The CQIC meets monthly.

Each CQIC representative reviews and evaluates prehospital medical calls made by their agency, and then selects calls highlighting performance (poor and/or exemplary) to bring to the Committee for broader review. CQIC evaluates the selected calls and may recommend policy changes as well as corrective training for individuals or additional training for the entire system. This Committee generates commendation letters for outstanding field care in difficult or critical cases. Quality improvement proceedings are confidential as specified in County of El Dorado EMS Agency policy and all laws governing confidentiality.

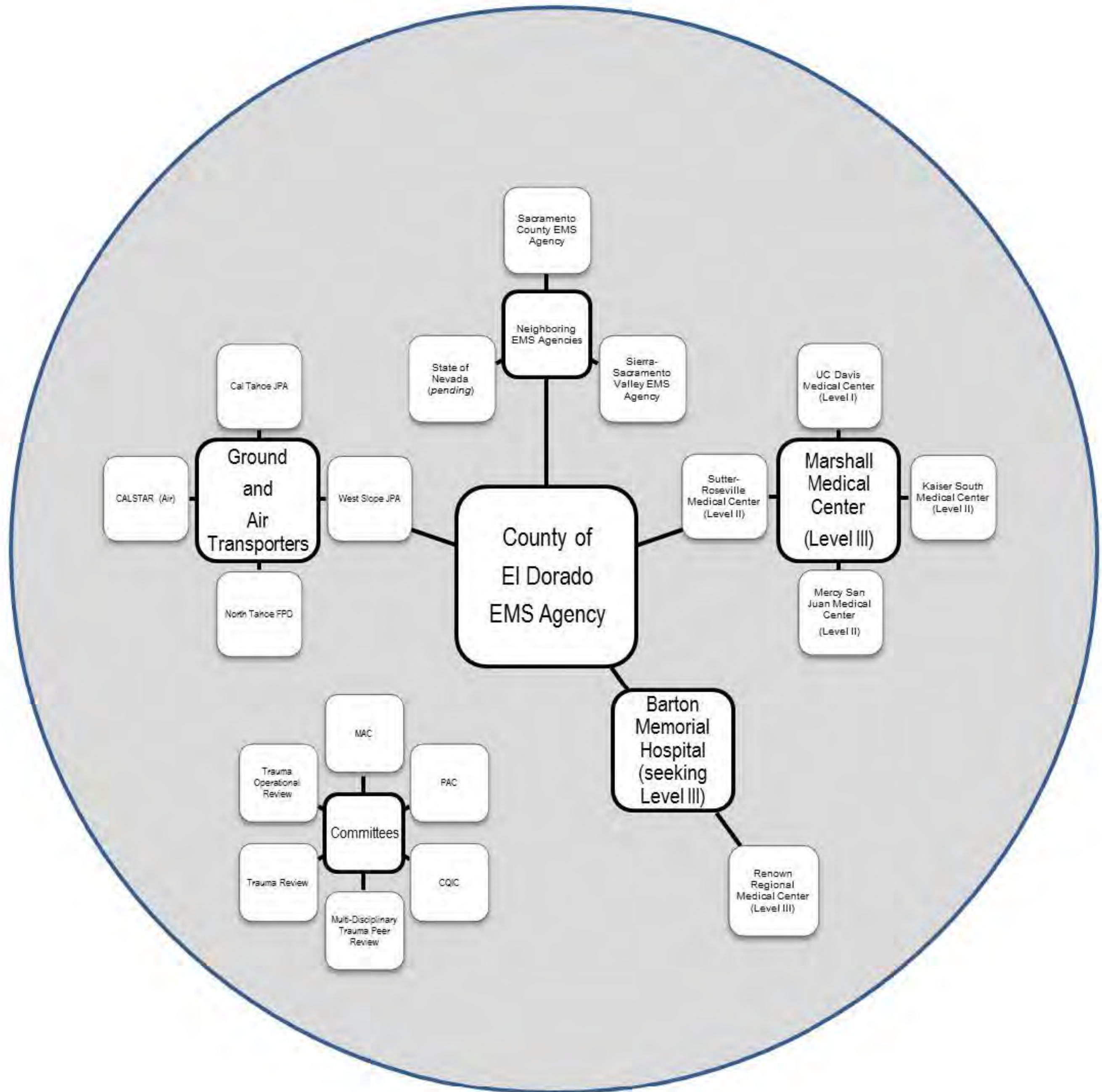
7. Emergency Medical Care Committee (EMCC)

El Dorado County does not currently have an active Emergency Medical Care Committee. The Committee was declared inactive in 1999 due to the inability to meet quorum requirements consistently. The Board of Supervisors may consider reactivating the EMCC at a future date.

Barton Memorial Hospital has an Emergency Management Community Committee. The committee meets every other month and consists of members of the county, public, and private groups, such as County of El Dorado EMS Agency, Environmental Management, El Dorado County Sheriff Office (EDSO), California Highway Patrol (CHP) and California Department of Transportation (Cal Trans).

C. Trauma System Organizational Structure

The chart below shows the relationship between the County of El Dorado EMS Agency and various elements of the County of El Dorado trauma system.



SECTION III. NEEDS ASSESSMENT

The fundamental objective of this Trauma Plan is to correct any existing deficiencies and to ensure appropriate and efficient distribution and treatment of local and regional trauma patients.

A. Trauma Care Facilities

El Dorado County currently seeks to improve care through the designation of trauma centers.

B. Trauma System Evaluation

The County of El Dorado trauma system strives to strengthen the CQI processes and further ensure objective evaluation of all trauma care through careful analysis of patient outcome data from local and regional hospitals. There is a need to expand objective and in-depth evaluation of the trauma care system in order to ensure optimal patient outcomes. As part of Barton Memorial Hospital's Level III Trauma Center designation process, a verification review by ACS will be conducted that will evaluate the trauma care currently being delivered.

Additionally, the EMS Agency intends to conduct a gap analysis by June 2013 to identify any gaps in the current system evaluation process and to identify any additional tools and/or methods that may effectively inform the evaluation process.

C. Trauma System Cost-Effectiveness

Trauma system costs are routinely evaluated by the EMS Agency to ensure cost and clinically effective trauma services. The intent is to accomplish this through careful analysis of patient outcome data from local and regional hospitals and through careful evaluation of costs and available funding.

Additionally, the EMS Agency intends to conduct an analysis by June 2013 to identify any gaps in the current evaluation process and to identify any additional tools and/or methods that may effectively inform the evaluation process.

D. Injury Prevention, Public Awareness, and Information

Trauma centers are sources of information, expertise, and public safety leadership in the treatment of major injury. Outreach programs are an integral part of trauma center services designed to help improve outcomes from trauma and prevent injury through the public and professional dissemination of information and by facilitating access to the clinical and educational resources of a trauma center. The components of an outreach program may include public awareness and injury-prevention education or professional education through course offerings, lectures, conferences, visitation programs, web sites, newsletters, and other means.

E. Pediatric Trauma

Pediatric Trauma care requires specific criteria based on age and development to ensure optimal care is delivered. A CQI review of all pediatric patients is conducted to evaluate the care received.

SECTION IV. TRAUMA SYSTEM DESIGN

A. Trauma System Organization and Design

The County of El Dorado EMS Agency employs an inclusive trauma system approach that is multi-disciplinary in nature, integrated with other health resources and requires careful coordination of all resources. The mission of the County of El Dorado EMS Agency is to ensure that the EMS system delivers the highest possible quality of prehospital emergency medical care to victims of illness and injury in the County of El Dorado. All practices and policies of the trauma care system reflect this philosophy.

1. Current Trauma System Design

   a) El Dorado County operates under a Public Utility Model (PUM). The County provides operational oversight and medical control. The County also administers funding subsidies, ambulance billing and provides financial oversight of ambulance services.

   b) There are two acute care hospitals located in El Dorado County. Due to geography, weather conditions, and population considerations, both hospitals serve as primary receiving facilities for trauma. Both hospitals currently maintain active trauma treatment programs and fully participate in trauma registry activities to ensure optimal patient care and treatment.

      (i) Marshall Medical Center – Acute care hospital in Placerville (West Slope), is designated as a Level III Trauma Center
      (ii) Barton Memorial Hospital – Acute care hospital in South Lake Tahoe, is actively seeking Level III Trauma Center designation

   c) Each hospital functions as a Base Hospital under applicable sections of Emergency Medical Technician (EMT)-Paramedic regulations as defined in California Code of Regulations, Title 22, Division 9, Chapter 4. El Dorado County currently functions under the Trauma Plan revised in 2005 and updated in 2008 and in 2012.

   d) The County of El Dorado requires the transport of critical trauma patients to the closest appropriate trauma center.

   e) Trauma care training for prehospital and hospital personnel is guided by recommendations resulting from the CQI process, including training on clinical treatment of trauma patients.

   f) The CQI, MAC and PAC routinely evaluate trauma care policies and procedures and make recommendations for approval to the EMS Medical Director.

2. Trauma Center Designation Process

Any designated Trauma Center in El Dorado County must meet the criteria for designation as required in California Code of Regulations Title 22, Chapter 7, Article 3.

a) The County of El Dorado EMS Agency uses an open application designation process. Any hospital seeking formal designation as a Trauma Center must submit a written application and proposal to the County of El Dorado EMS Agency. The County of El Dorado EMS Agency reviews applications for completeness and compliance with requirements. Any application that is incomplete or not fully compliant is returned to applicant. Once the application is deemed compliant, the EMS Agency requires the applying hospital to obtain an ACS verification review.

b) The ACS Verification Team shall be consistent with ACS standards. The team shall review the hospital pre-verification questionnaire and conduct a site review to determine ability to meet designation criteria and qualifications of the hospital and its personnel.

c) The team prepares a written report detailing its findings and recommendations. The Hospital delivers a copy of this report to the EMS Agency.

d) The County of El Dorado EMS Agency may execute a Trauma Center Agreement with a hospital based upon a concurring recommendation of the Verification Team. Thirty-six months following initial designation and every three years thereafter, an ACS re-verification is required. Trauma Center Agreements may be renewed for subsequent three-year periods if ACS re-verification is obtained.

e) The County of El Dorado EMS Agency may recover costs associated with initial and continuing Trauma Center designation. Cost recovery is approved by the El Dorado County Board of Supervisors. Designation as a Trauma Center is contingent upon payment of costs.

3. Trauma Center Requirements

Applicants for trauma center designation (or re-designation) must meet County of El Dorado EMS Agency requirements including those in California Code of Regulations, Title 22, Division 9, Chapter 7, Article 3, §100263, Article 4, §100265, and Article 5, §100266 (22 CCR §100263, §100265, and §100266) . Applicants must submit proof of ACS verification. If the County approves an application or request for re-designation, such designation or re-designation shall be made by written contract executed by the County and the applicant.

Applicants for trauma center designation are required to provide assurance that trauma team personnel availability is consistent with the level of designation being applied for, and that the facility is able to maintain the required level of staffing.

Designated trauma centers shall participate in continuous quality improvement as generally described in *Section XII, Item D. Hospital CQI Processes*, and as defined in *Section XII, Item F. Trauma Center CQI*.

Trauma centers are required to participate in the collection of data for the Trauma Registry system.

Designated trauma centers shall have:

a) A written policy of non-discrimination that requires that patients entering under the trauma triage criteria will not be denied care based on race, creed, color, national origin, sex, or the ability to pay for care.

b) Written transfer agreements with appropriate trauma centers of a higher level providing for the transfer of patients for specified medical conditions. All transfers shall be medically prudent as determined by the trauma center surgeon of record, and in accordance with local EMS Agency inter-facility transfer policies.

c) A drug-free workplace as designated in Government Code, Section 8355.

B. Inclusive Trauma System Design

In accordance with patient destination and trauma triage policies, transport contractors will transport patients to nearby trauma centers when appropriate. Letters of Agreement that sanction this practice have been executed with Sacramento County EMS Agency and Sierra-Sacramento Valley EMS Agency.

In the Lake Tahoe area, trauma patients may be sent to Renown Regional Medical Center, an ACS Verified Level II Trauma Center in Reno, Nevada or to trauma centers in Sacramento, CA. The State of Nevada does not require a written agreement regarding this practice. However, Barton Memorial Hospital and Renown Regional Medical Center are actively negotiating an agreement, which is expected to be in place prior to Barton Memorial Hospital's becoming designated as a Level III Trauma Center.

C. Rationale for Trauma System Design

El Dorado County has a population base of 181,058. The number of trauma patients in El Dorado County transferred to trauma centers averaged 434 annually between July 1, 2008 and June 30, 2011. There is a slight increasing trend as the number transferred ranged from 403 in State Fiscal Year (SFY) 2008-09 to 480 in SFY 2010-11[1] .

The County anticipates improving the needs assessment by conducting a gap analysis and utilizing the new trauma database.

D. Resource Availability

1. Hospital Resources

[1] 6/19/12 data from Wittman Enterprises

a) The County of El Dorado Trauma System utilizes verified Level I and Level II Trauma Centers in contiguous jurisdictions for care of acutely injured patients, pediatric trauma patients, and patients requiring such specialties as neurosurgery and burn care that are not available within the County.

b) The Trauma System utilizes the acute care hospital located in South Lake Tahoe to receive trauma patients from that area of the County. This facility has applied for and is actively seeking designation as a Level III Trauma Center.

c) The Trauma System utilizes the Level III Trauma Center located in Placerville to receive trauma patients from that area of the County.

2. Prehospital Resources

a) The County directly provides ambulance services with a Public Utility Model (PUM) EMS system consisting of two exclusive operating areas (EOA) and one non-exclusive operating area. Currently the County provides ground ambulance transportation by contracting with two JPAs and one fire protection district.

b) The 14 fire districts located in El Dorado County offer BLS, first responder, and rescue services. The El Dorado County Sheriff Department's Search and Rescue teams offer additional rescue services.

c) Emergency medical air transport and rescue services are performed by an air ambulance transport contractor based at South Lake Tahoe as well as other resources based outside the County.

d) Two ski resorts operate in El Dorado County. *Sierra-at-Tahoe* is located near Phillips, and *Heavenly* is located at South Lake Tahoe. Both ski resorts offer first aid and/or BLS services but no ambulance services. Urgent care and emergency stabilization for transfer to a hospital are available at both ski resorts. There is a physician and a registered nurse on duty at each resort.

e) El Dorado County mutual aid needs are facilitated through the OES Region IV Multi-Casualty Incident (MCI) Plan. The medical component of the MCI Plan provides the necessary structure for coordinating regional resources during significant medical incidents and periods of extraordinary system demand. The State EMS Authority has developed *Strike Teams* of regional ambulance, helicopter, and National Guard resources to respond during periods of extraordinary system demand.

f) In the Tahoe South Shore area, mutual aid ambulance units may be requested by Cal Tahoe JPA through the Lake Tahoe Regional Chiefs Mutual Aid Agreement.

g) In accordance with State EMS Authority Guidelines, the EMS Agency facilitates development of agreements for mutual aid and resource sharing with neighboring jurisdictions when appropriate.

E. Transport Times

There are significant challenges to the timely delivery of emergency medical care and rescue services to El Dorado County residents and visitors. These challenges are due to the combination of mountainous terrain, extreme weather conditions (the average annual snowfall for Lake Tahoe is approximately 190 inches or nearly 16 feet[2]), significant variations in seasonal population, and congested highways. Additionally, there are numerous isolated communities and mountainous wilderness areas north and south of Highway 50.

Transport times to and from these communities and wilderness areas may be delayed due to difficult access and winding mountain roads, resulting in ground ambulance response-time of 45 minutes or more in outlying areas of the County.

Injured patients are transported to the nearest appropriate hospital. Because of the geographic challenges of parts of El Dorado County, patients may be resuscitated and stabilized at a local hospital, then transferred to a higher level of care.

1. Ground Ambulance Response Time Standards

   Ambulance transporters are required to meet the response time standards for at least 90% of responses.

Area	Population Per Square Mile
Urban	1,000 or greater
Semi-Rural	100 to 999
Rural	10 to 99
Wilderness	Less than 10

Area	Response Time Standard	
	Tahoe Area	West Slope
Urban	10 minutes	11 minutes
Semi-Rural	20 minutes	16 minutes
Rural	20 minutes	24 minutes
Wilderness	90 minutes	90 minutes

2. Air Ambulance Response Times

   Air ambulance service is frequently utilized in order to shorten transport times, particularly in outlying areas and cases of severe trauma, and to transport trauma patients directly to the appropriate level trauma center. El Dorado County is well served by air ambulance transport contractors that are integral resources to the trauma system.

[2] Western Regional Climate Center http://www.wrcc.dri.edu/. Period of Record : 9/13/1903 to 5/31/2012

It is important to note the following considerations regarding air response times:

a) Lift-off times vary; generally five minutes can be added to the flight time for a total response time.

b) Weather can affect lift-off times considerably due to the necessity for regional weather checks; when an air ambulance is requested, local weather and visibility information at the scene may hasten this process; weather must be evaluated both to the scene and from the scene to the receiving hospital.

c) Once the air ambulance is en-route to the scene, the crew must report their Estimated Time of Arrival.

d) If an air transport contractor is unable to make it to the scene due to weather conditions and a second air ambulance is requested, it is critical that the weather information causing the cancellation is passed on to the second air ambulance.

Following are the air ambulance and rescue transport contractors listed by flight proximity to El Dorado County:

Air Ambulance < 30 Minutes from El Dorado County	
CALSTAR 3	Auburn
CALSTAR 6	South Lake Tahoe Airport
CALSTAR 70	Sacramento McClellan Airport (Fixed Wing)
REACH 2	Stockton Airport
REACH 7	Marysville Yuba County Airport
Care Flight 1	Reno, Nevada
Care Flight 2	Minden/Gardnerville, Nevada
Care Flight 3	Truckee Airport
PHI	Columbia Airport

Air Ambulance > 30 Minutes from El Dorado County	
Mercy Air	Modesto
PHI	Modesto

Air Rescue	
CHP H-20/H-24	(hoist-capable to skid)
Sac Metro FD	(hoist-capable into AC)
Cal Fire Vina	(fixed-line short haul)

F. Trauma Service Areas

Trauma destination decisions are based upon the following criteria:

1. Levels of El Dorado County trauma facilities and those in neighboring counties and states;

2. Most appropriate destination for the specific location;

3. Prehospital patient presentation and condition;

4. Any intervening weather or traffic considerations.

The closest appropriate trauma facility is based on actual transport time from the scene to an Emergency Department for patients with physiological and anatomical critical trauma criteria. The on-line Medical Control in communication with prehospital personnel at the scene shall determine the destination and method of transport.

Transport destinations are not determined by geopolitical or ambulance service areas. Every effort is made to deliver optimal care to each patient through coordination with facilities and agencies inside and outside of El Dorado County.

Ambulance Service Areas

El Dorado County is composed of two County Service Areas (CSA) with the dividing line being just west of the crest of the Sierra Nevada mountain range:

1. County Service Area No. 7 (West Slope)

2. County Service Area No. 3 (Lake Tahoe Basin)
   includes Tahoe West Shore (Meeks Bay) and South Shore Area (South Lake Tahoe)

G. Coordination with Adjacent Trauma Systems

1. Designated Trauma Centers in Contiguous Jurisdictions

   The trauma system utilizes designated Level I and Level II Trauma Centers that are located in contiguous jurisdictions for care of acutely injured patients.

   a) UC Davis Medical Center- *Level I Trauma Center in Sacramento*
   b) Sutter-Roseville Medical Center- *Level II Trauma Center in Rocklin/Roseville area*
   c) Mercy-San Juan Medical Center- *Level II Trauma Center in Carmichael*
   d) Kaiser–South Sacramento Medical Center- *Level II Trauma Center in South Sacramento*
   e) Renown Regional Medical Center- *Level II Trauma Center in Reno (Lake Tahoe area)*

2. Integration of Pediatric Hospitals

   For the purposes of this Plan, pediatric trauma patients are defined as any trauma patient fourteen years or less in age. Designated trauma centers within El Dorado County are required to establish and maintain transfer agreements for pediatric patients. UC Davis Medical Center serves as the primary destination for pediatric trauma that originates on the

West Slope of the County. This Level I Trauma Center maintains an active trauma program and pediatric intensive care unit. Renown Regional Medical Center serves as the primary destination for pediatric trauma that originates in the Lake Tahoe Basin. This Level II Trauma Center maintains an active trauma program and pediatric intensive care unit.

3. Tertiary Care Facilities

In addition to facilities located within El Dorado County, tertiary care facilities located in adjoining counties or states are utilized in caring for trauma patients injured in El Dorado County.

Such specialties as neurosurgery, burn care, and pediatric trauma are generally delivered by these tertiary care facilities.

4. Poison Control Center

The Sacramento Division of the California Poison Control System (CPCS) at UC Davis Medical Center is the closest Poison Control Center to El Dorado County. The UC Davis Medical Center serves as the primary resource for the management of individuals in El Dorado County who have, or may have, ingested or otherwise been exposed to poisonous or toxic substances. Access to the Poison Control System is available by phone 24 hours, 7 days per week to any health care professional as well as to members of the public.

5. EMS and Trauma Care Coordination

El Dorado County borders several EMS jurisdictions. Of these jurisdictions, Sacramento County EMS Agency, Placer County (part of the Sierra-Sacramento Valley EMS Agency); and, Alpine County and Amador County (both part of the Mountain Valley EMS Agency) have trauma plans. Nevada has a statewide program.

H. Prehospital Services

1. Dispatch

a) Dispatch Medical Supervision – The EMS Agency Medical Director provides medical supervision and sets the standards for the two Emergency Medical Dispatch (EMD) centers in El Dorado County.

b) Dispatch Policies – In addition to any policies developed by the designated dispatch centers and ground ambulance service transport contractors, the EMS Agency Medical Director approves and directs dispatch policies, training and continuous quality improvement.

c) Dispatch Training – County of El Dorado EMS dispatchers are trained in the use Medical Priority Dispatch System (MPDS). A component of the MPDS is the Emergency Medical Dispatch (EMD) protocols. Dispatchers are able to prioritize calls, deliver medical pre-arrival instruction, and request ground transportation, air ambulance, or air rescue support as described in this Trauma Plan.

2. Trauma System Communication

a) Dispatch Communication – The EMS communication system includes the dispatching of fire department first responder and ambulance resources through use of VHF radios and paging devices. Ambulance-to-hospital communication is delivered through UHF radio transmissions on Med Net Channels 1 through 10. Cellular telephones are also utilized for ambulance-to-hospital communication.

b) Base Hospital Communication – All ALS vehicles used to transport patients within the County are required to have two-way radios and utilize cell phones in addition to Med Net UHF radios. Existing EMS Agency policies and procedures provide for Base Hospital contact, standing orders and radio failure protocols that paramedics shall follow in the event of a communication failure.

c) Web-based Hospital Communications System (EMSystems) –
Both Marshall Medical Center and Barton Memorial Hospital participate in a web-based communications system that includes alerting and messaging functions called *"EMSystems"*. *EMSystems* is widely used by receiving hospitals, trauma centers, air ambulance services and others to report the up-to-date status of bed capacity, emergency department saturation or diversion, and for determination of patient destination during a Multiple Casualty Incident (MCI). This system has been adopted as a standard by the State's Region IV (includes El Dorado, Sacramento and surrounding counties) Disaster Medical Health System.

Through use of the *EMSystems*, the local Base Hospital can determine the most appropriate and available trauma center, and then direct patient transportation via ground or air ambulance to reduce time from injury to treatment.

3. EMD CQI

The EMS Agency requires that monthly EMS quality improvement reports be provided to the EMS Agency for review. Medical Priority's AQUA quality-improvement software program generates these reports. AQUA is a companion program to the Medical Priority ProQA emergency medical dispatch software program. Dispatch quality improvement is conducted through monthly participation in the El Dorado County prehospital CQI Committee.

a) The West Slope EMD program is monitored by dispatch supervisor(s) at Cal Fire's Emergency Command Center in Camino utilizing AQUA.

b) The South Shore Lake Tahoe area EMD program is monitored by dispatch supervisor(s) at the South Lake Tahoe Police Department utilizing AQUA.

c) The Tahoe West Shore Area EMD program is monitored by dispatch supervisor(s) at Cal Fire's Emergency Command Center in Grass Valley utilizing AQUA.

4. Ground Transport of Trauma Patients

The County provides prehospital trauma care utilizing paramedic-level service supported by simultaneous dispatch of first responder ALS personnel. Prehospital contractors are trained in trauma triage and principles of field resuscitation of injured patients, and meet or exceed all State requirements for training and education.

a) Ground Ambulance Transport contractors – Under the Public Utility Model, the EMS Agency contracts through the El Dorado County Health and Human Services Agency with two JPAs and one fire-protection district for ground ambulance transportation services.

i) West Slope ambulance service has been provided by the County of El Dorado since prior to January 1, 1981. The County contracts for ambulance transportation and dispatch services with the El Dorado County Emergency Services Authority (West Slope JPA), which was formed in 1996 by the fire districts which were contracted with the County of El Dorado since prior to January 1, 1981 to deliver services to the West Slope of the County. The JPA currently sub-contracts with five fire districts to serve ALS transport needs with eight (8) twenty-four-hour per day and one (1) twelve-hour per day ambulance units, each staffed with a minimum of one (1) paramedic and one (1) EMT.

ii) Tahoe South Shore area ambulance service has been provided by the County of El Dorado since prior to January 1, 1981. The County contracts for ambulance transportation and dispatch services with the California Tahoe Emergency Services Operations Authority (Cal Tahoe). Cal Tahoe was formed in 2001 to deliver ALS and transportation services to the Tahoe South Shore area of El Dorado County and portions of Alpine County. Cal Tahoe contracts with the El Dorado County Health and Human Services Agency to deliver ambulance and dispatch services. Cal Tahoe is comprised of two fire departments that supply three (3) twenty-four hour per day ambulance units staffed with a minimum of one (1) paramedic and one (1) EMT, and two (2) reserve units that are staffed during peak periods. Additional ambulance units may be called under mutual aid from Tahoe-Douglas Fire Protection District (FPD), which is located in adjacent Douglas County, Nevada.

iii) Tahoe West Shore area ambulance service is delivered by North Tahoe Fire Protection District. BLS services are delivered to this area by Meeks Bay Fire Protection District. North Tahoe FPD contracts with the El Dorado County Health and Human Services to deliver ambulance services. North

Tahoe FPD is located in Placer County and responds from a fire station located in Homewood. North Tahoe FPD supplies one (1) twenty-four hour per day ambulance unit staffed with a minimum of one (1) paramedic and one (1) EMT, with additional backup units available.

b) Special Events – Qualified ALS (non-ambulance) operators who obtain a contract, as identified in the County Emergency Medical Service and Medical Transportation Ordinance, may provide services for specific El Dorado County special events, such as the County Fair, sports and athletic events, and other entertainment venues.

c) Early Trauma Center Notification – Paramedics operate under standing orders in delivering patients who meet a predefined set of triage criteria (see Appendix B) to the most appropriate of several area trauma centers (see Appendix C). Prehospital contractors follow County of El Dorado EMS Agency policies to ensure early notification of trauma centers of impending arrival of trauma patients.

d) Prehospital Contractor Training – Multiple levels of training are delivered to prehospital care contractors in El Dorado County.

   i) Paramedic Prehospital Trauma Training is delivered for paramedic personnel as part of the Countywide ALS training program, including trauma triage and patient care methodology.

   ii) First Responder Trauma Training is conducted in-house by the base hospitals and fire districts as part of an established Countywide ALS training program.

   iii) Focus Studies – The County of El Dorado EMS Agency Medical Director requires that focus studies be conducted, as the Director deems necessary, as a part of prehospital Continuous Quality Improvement (CQI). The EMS Agency Medical Director acts as the CQI liaison with regional EMS agencies, and the Base Hospital Directors act as liaisons with their respective hospital CQI programs. Air ambulance transport contractors are invited to participate in prehospital CQI at the discretion of the EMS Agency Medical Director. Air ambulance and rescue helicopter transport contractors may be required to supply information related to focus studies as deemed necessary by the EMS Agency Medical Director.

5. Air Transportation and Rescue Services

Air ambulance service is available in El Dorado County. These contractors utilize registered nurses. The flight teams work under standardized policies and procedures developed and controlled by their respective medical directors. California Highway Patrol (CHP) has two ALS Rescue Helicopters with one (1) licensed paramedic on board each helicopter.

The EMS Agency contracts with an air ambulance transport contractor that is located in South Lake Tahoe.

I. Hospital Services Delivery

1. Critical Care Capability

   Specific training in the resuscitation and stabilization of adult and pediatric trauma patients is required of all emergency physicians who regularly staff a Level III Trauma Center in El Dorado County. Trauma Nurse Core Curriculum (TNCC) or similar training is required for all Registered Nurses regularly assigned to an Emergency Department. Instruction in County of El Dorado trauma triage criteria is presented through regular Base Hospital meetings.

2. Medical Organization and Management

   On-line medical control for trauma is delivered by two Base Hospitals. Medical control decisions reflect the latest American College of Surgeons (ACS) recommendations on trauma triage. The Base Hospitals also function as Disaster Control Facilities (DCFs) within the OES Region IV Disaster Plan.

   Designated trauma centers in El Dorado County are required to provide specific education and training on trauma triage and treatment criteria.

3. Continuous Quality Improvement

   a) As a condition of Trauma Center designation in El Dorado County and as required by California Code of Regulations, Title 22, §100265 (22 CCR §100265), Trauma Centers are required to establish and maintain an internal continuous quality improvement (CQI) program specific to trauma care for the purposes of quality control and system evaluation. The Trauma Program Medical Director (or designee) serves as the continuous quality improvement (CQI) liaison with other regional trauma centers.

   b) County of El Dorado EMS Agency, in association with any designated trauma center located in El Dorado County, coordinates an active program of trauma awareness and trauma prevention. EMS contractors and hospitals participate regularly in drug and alcohol avoidance programs that is directed at youth. EMS service transport contractors participate in a speaker's bureau to deliver additional awareness programs for various community organizations. Additional venues are sought to educate the public on trauma awareness and prevention.

J. Hospital Diversion Status

1. Local Hospital Diversion

   a) Marshall Medical Center – Marshall Medical Center is the sole provider of hospital services for a large portion of El Dorado County. Hospital diversion is initiated only in extreme emergencies; hospital diversion results in lengthy transport times to the next closest hospital. Marshall Medical Center only "closes" or declares hospital diversion

during an internal disaster situation; Marshall Medical Center immediately notifies the California Health and Human Services Agency (CHHSA) of any status change.

Marshall Medical Center occasionally declares a *"local traffic only advisory"* through use of the EMSystems. A *"local traffic only advisory"* indicates that the Center cannot absorb patients from outside the catchment area. This advisory is only initiated during periods of high census and/or acuity. The *"local traffic only advisory"* directs ambulances to transport non-acute patients to Mercy-Folsom Hospital (on west side of County) or Sutter-Auburn Faith Hospital (north side of County), even if these facilities are on hospital diversion. All acute emergency transports are directed to the closest appropriate facility.

During a "*local traffic only advisory"*, an Emergency Department physician may authorize an appropriate, stable patient to be transported to a hospital other than the closest if the patient's condition allows and it does not excessively prolong transport time; this would occur in the border region on the western and northern edges of the County.

The "*local traffic only advisory"* can last for a maximum of three hours during any six-hour period. A local traffic only advisory form is completed for each occurrence and submitted to the County of El Dorado EMS Agency. The EMS Agency will address issues arising from excessive use of the "*local traffic only advisory"*.

b) <u>Barton Memorial Hospital</u> – Barton Memorial Hospital is the sole provider of hospital services within the Lake Tahoe area. Hospital diversion is initiated only in extreme emergencies; hospital diversion results in lengthy transport times to the next closest hospital. Barton Memorial Hospital only "closes" or declares hospital diversion during an internal disaster situation. Barton Memorial Hospital immediately notifies the CHHSA of any status change.

2. Out-of-County Hospital Diversion

All patients entered into the County of El Dorado trauma system under mandatory or discretionary criteria shall be transported as directed by the Base Hospital to designated Level I, II or III Trauma Center (See Appendix E, Field Policy, Patient Destination).

If the closest appropriate out-of-county hospital is on diversion and the patient is stable, the patient shall be transported to the next closest appropriate facility. Certain patients may be accepted by hospitals that are on diversion, such as labor and delivery cases. In these situations, the Base Hospital reports to the desired receiving facility and notifies the ambulance unit crew of the patient's transport disposition.

If the closest appropriate hospital is closed, the patient shall be transported to the next closest appropriate hospital as determined by the Base Hospital Medical Director.

If specialized care may be needed and is not available at the closest hospital (i.e., CT scan out-of-service), the ambulance crew consults the Base Hospital for patient destination decisions.

For any situation encountered that is not addressed by written policy, the ambulance unit crew must contact the Base Hospital physician for destination orders.

SECTION V. INTERCOUNTY TRAUMA CENTER AGREEMENTS

Letters of agreement have been developed with neighboring California EMS jurisdictions to which El Dorado County trauma patients are transported directly from the field. The intent of these "letters of agreement" is to provide for inter-county trauma coordination and to document that each party accepts the use of the specified trauma centers by the other party.

The "letters of agreement" provide for exchanges of information and data, and include provisions for cooperative trauma case review when appropriate.

A. Sacramento County EMS Agency

Letter of agreement is provided in Appendix A.

B. Sierra-Sacramento Valley EMS Agency

Letter of agreement is provided in Appendix A.

El Dorado County is in the process of obtaining a letter of agreement from the State of Nevada.

SECTION VI. OBJECTIVES

A. Objective 1 – Level III Trauma Center Designation

Designate Barton Memorial Hospital as a Level III Trauma Center:

1. Designate Level III Trauma Center status (if verified by ACS review);
2. Execute Trauma Center Contract for Level III Trauma Center designation.

B. Objective 2 – Trauma System Evaluation

a) Ensure objective evaluation of the trauma care system through careful analysis of patient outcome data from local and regional hospitals through the following committees and processes:
b) Marshall Medical Center Trauma Operational Review Committee;
c) Marshall Medical Center physician Trauma Review Committee;
d) Barton Memorial Hospital Trauma Operational Review Committee;
e) Barton Memorial Hospital Peer Review Committee;
f) Continuous Quality Improvement Committee (CQIC).
g) Conduct a gap analysis to identify if additional evaluation tools and/or methods would be effective to inform the evaluation process and implement new tools and/or methods if needed.

C. Objective 3 – Trauma System Cost-Effectiveness

1. Evaluate trauma system cost-effectiveness every two years.
2. Conduct an analysis to identify effective evaluation tools and/or methods to inform the evaluation process and implement new tools and/or methods if needed.

D. Objective 4 – Public Awareness and Information

Promote public awareness and information regarding trauma services:

1. The EMS Agency requires Level III Trauma Centers promote public awareness and understanding of available trauma services;
2. Level III Trauma Centers (currently Marshall Medical Center and anticipated in 2013 Barton Memorial Hospital), in conjunction with the EMS Agency, will provide

representation and support (example: Public Information Officer) to accomplish this objective.

E. Objective 5 – Injury Prevention

Encourage existing programs in El Dorado County to continue to deliver and expand public education to prevent injury:

1. Car seat use and installation;
2. Bicycle safety helmet use;
3. Alcohol and drug prevention training program;
4. Fire safety program;
5. Local Safety Fair.

F. Objective 6 – Pediatric Care

Enhance and improve the quality of pediatric trauma treatment provided in El Dorado County.

1. Ensure that all Level III Trauma Center contracts include requirements for pediatric specific trauma training for Level III Trauma Center staff and prehospital care contractors.
2. Monitor contractors to ensure that pediatric specific trauma trainings are delivered in accordance with contracts.

G. Objective 7 – Minimal Trauma Inclusion Criteria Policy

Monitor contractors to ensure adherence to current policy defining the minimum inclusion criteria for the trauma registry utilizing the State Minimum Trauma Registry Inclusion Criteria:

1. ICD-9 or successor code[3] (800-959.9); **and**
2. Admitted to/followed by trauma or burn service; **or**
3. Death in ED; **or**
4. Transfer for trauma services; **or**
5. Physically evaluated by trauma or burn surgeon in the ED or resuscitation area and discharged

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[3] ICD-10 code implementation is 10/1/2013 per Department of Health and Human Services Centers for Disease Control and Prevention (http://www.cdc.gov/nchs/icd/icd10cm.htm#10update)

SECTION VII. IMPLEMENTATION SCHEDULE

A. Trauma Plan

Task	Date
Develop initial Trauma Plan	1997
Obtain approvals for initial Trauma Plan	
1. Emergency Medical Care Committee (EMCC) adopted	Jul 1997
2. El Dorado County Board of Supervisors (BOS) adopted	Aug 1997
3. California State EMS Authority approved	Jul 1998
Implement initial Trauma Plan	1997 – 1998
Submit revised Trauma Plan to BOS for adoption	Aug 2005
Submit revised Trauma Plan to EMS Authority for approval	Aug 2005
Submit Trauma Plan Update to EMS Authority for approval	Jan 2008
Submit revised Trauma Plan to BOS for adoption	Jul 2012
Submit revised Trauma Plan to EMS Authority for approval	Jul 2012

B. Trauma Data Collection System

Task	Date
Trauma Registry data collection system purchased	Mar 1997
Trauma Registry training completed	Mar 1998
Trauma data input initiated	May 1998
Annual contract renewal with Digital Innovations for trauma registry	Feb 2008
Upgrade to Trauma One for both Hospitals and EMS Agency	Jul 2012

C. Objective 1 – Trauma Center Designation (Barton Memorial Hospital)

Task	Date
Complete initial ACS verification review	Feb 2013
Designate hospital as Level III Trauma Center	May 2013
Execute Trauma Center Agreement	May 2013

D. Objective 2 – Trauma System Evaluation

Conduct continuous quality improvement and system evaluation	Ongoing
Conduct a gap analysis to identify evaluation tools and/or methods	Jun 2013

E. Objective 3 – Trauma System Cost-Effectiveness

Analyze and evaluate trauma system cost-effectiveness	Jun 2013
Conduct an analysis to identify evaluation tools and/or methods	Jun 2013

F. Objective 4 – Public Awareness and Information

Promote public awareness and information regarding trauma services	Ongoing

G. Objective 5 – Injury Prevention

Encourage programs to deliver public education to prevent injury	Ongoing

H. Objective 6 – Pediatric Care

Enhance and improve quality of pediatric trauma treatment	Ongoing

I. Objective 7 - Minimal Trauma Inclusion Criteria Policy

Monitor contractors to ensure adherence to the minimum trauma inclusion criteria policy.	Ongoing

SECTION VIII. FISCAL IMPACT

The County of El Dorado seeks to promote enhanced levels of trauma care and continuous quality improvement activity while maintaining a cost-effective system. Trauma system operations costs (e.g. Level III designation costs, staffing, training, data entry, Trauma Registry software license and support, and public outreach) are paid by the hospitals. The Trauma Registry software license and support for the EMS Agency is funded with County General Fund.

A. Prehospital Trauma System Costs

Trauma System Orientation Costs

There is a cost attached to EMT-Paramedic trauma system orientation. Contractors estimate training costs for EMT-Paramedics based upon the following:

Ten (10) hours to complete trauma system orientation
Average new paramedic hourly rate of $20.00
Total cost of $200 per new paramedic
Average 26 new paramedics per year

Estimated annual Paramedic trauma system orientation cost:	$5,200

B. Initial Level III Designation Costs

The primary fiscal impact for implementation of the 2012 Trauma Plan revision is the cost for Barton Memorial Hospital to become designated as a Level III Trauma Center.

Current personnel levels at Barton Memorial Hospital and within other sectors of the County of El Dorado trauma system are adequate to maintain Level III Trauma Center designation. The intended result of this Trauma Plan is a streamlining of function and form to maintain a fiscally sound trauma system with no addition of personnel.

The following Barton Memorial Hospital trauma system costs are estimated.

1. Designation Application Costs

Costs for Level III Trauma Center designation:

Item	Cost
Initial application preparation for 80 hours at $55 per hour	$4,400
Equipment (carts, etc.)	$100,000
Site Visit for ACS Review Team (honorarium, travel, meals)	$14,000

2. One-time Initial Training Costs

Emergency Department Trauma Nurse Core Curriculum (TNCC) initial training certifications as currently mandated	
30 staff @16 hours @ $50 per hour	$24,000
Course fees for 30 staff @ $250 each	$7,500
Triage Course	$10,000
Total estimated initial Trauma Center designation costs:	$159,900

C. Annual Level III Trauma Center Costs

Barton Memorial Hospital

Estimated ongoing annual costs will be provided in a future update to the Trauma Plan after successful Level III designation.

Marshall Medical Center

1. Chief of Trauma

Chief of Trauma role is filled by a designated surgeon	$144,000

2. Trauma Coordinator Position

The Trauma Program Coordinator position (2 separate positions); annual cost is estimated to be 30 hrs. per week at $50 per hour	$78,000

3. Registered Nurse Training Costs

Annual cost for RN (including MICN) education and training:	
TNCC for 12 RN's for 16 hours at $50 per hour	$9,600
Course Fees: 12 at $250 each	$3,000
Conference and Travel	$2,000

4. Public Outreach and Education Costs

Annual public outreach and education associated with Trauma Center designation	$2,000

5. Trauma Center verification/Re-verification review

Estimated annualized cost for verification review by American College of Surgeons (ACS) every three years.	$4,000
Total annual estimated Trauma Center costs:	$242,600

D. Annual Trauma Registry System Costs

In 1997, a grant from the State EMS Authority of $35,000 was used for the purchase and installation of a trauma registry software system *(Collector)*. Availability of the grant funding resulted in no initial purchase cost to either of the two participating hospitals in El Dorado County.

In 2012 Marshall Medical Center, Barton Memorial Hospital, and the EMS Agency is migrating from Digital Innovations and Tri-Analytics to Trauma One. Both participating hospitals will fund their cost for annual trauma registry license fees, software support and program maintenance.

Estimated costs for clerical data-entry staff, software licensing and support are listed below.

1. Marshall Medical Center

Marshall Medical Center estimates 1,000 hours of input time at $34.00 per hour	$34,000
Annual software maintenance fee	$2,000

2. Barton Memorial Hospital

Barton Memorial Hospital estimates 800 hours of input time at $20.00 per hour	$16,000
Annual software maintenance fee	4,200

3. County of El Dorado EMS Agency

Trauma Registry software license and support	$1,500
Total annual Trauma Registry costs:	$57,700

SECTION IX. POLICY AND PLAN DEVELOPMENT PROCESS

A. Planning Responsibility

The EMS Agency is responsible for planning, implementing, managing and monitoring the trauma care system in El Dorado County. The EMS Agency assesses ongoing trauma system needs, ensures regional trauma system participation, establishes guidelines for hospital trauma center designations, develops and ensures compliance to policies, procedures and field treatment protocols, ensures that appropriate trauma data is collected, managed and dispersed, and initiates corrective action when indicated.

B. 1997 Trauma Plan

During 1997, the County of El Dorado EMS Agency Medical Director was primarily responsible for the development of the initial Trauma Plan. The State EMS Authority approved the initial Trauma Plan in September 1997.

C. 2005 Trauma Plan Revision

The 2005 Trauma Plan revision was developed by a Task Force that included representation from the County of El Dorado EMS Agency, Marshall Medical Center, Barton Memorial Hospital, ambulance service transport contractors, air ambulance transport contractors, and dispatch centers. The 2005 Plan was adopted by the Board of Supervisors in August 2005 and approved by the EMS Authority in February 2006.

D. 2008 Plan Update

The 2008 Trauma Plan update was developed by staff of the County of El Dorado EMS Agency in collaboration with the EMS Medical Director.

E. 2012 Plan Revision

The 2012 Trauma Plan revision was a collaborative effort by the County of El Dorado EMS Agency, Marshall Medical Center, Barton Memorial Hospital, and air ambulance transport contractors.

F. Policy Development

1. General Policy Development Methodology

   The following is a brief description of the County of El Dorado EMS Agency process for development of policies, procedures and field treatment protocols. All County of El Dorado EMS Agency policies, procedures and field treatment protocols are available on the County of El Dorado EMS Agency website at:

http://www.edcgov.us/Government/EMS/Policies___Procedures.aspx

Proposed new policies, or revisions to existing policies, are identified through various mechanisms, including: Continuous Quality Improvement (CQI) findings, industry-wide changes in practices, State mandated changes, customer complaints, and other sources.

Once a need for a proposed or revised policy is identified, EMS Agency staff develop a draft that is submitted to the Medical Advisory Committee (MAC) for review and discussion. The Committee provides recommendations to the EMS Agency. The EMS Agency Medical Director approves EMS policies.

The EMS Agency Medical Director may also revise an existing policy or approve a new one without MAC review. This may occur when an issue is so critical that it cannot be delayed for MAC review prior to implementation (i.e., changes in medical practice that could immediately benefit or harm patients, safety issues, product recalls, etc.). In these cases, policies are presented at the MAC meeting as *informational only*. The EMS Agency makes every effort to notify all EMS system participants of any such policy change well in advance of any mandated changes with particular regard to increased cost factors.

All new or revised policies are distributed to the EMS system by posting on the EMS Agency website. A periodic list of new policies or recent changes is distributed to each transport contractor in El Dorado County with instructions to either download the current policies from the EMS Agency web site, or request printed copies directly from the EMS Agency.

2. Trauma Policies, Procedures and Protocols

The County of El Dorado EMS Agency trauma policies, procedures and protocols include the minimum policies as required in California Code of Regulations, Title 22, Division 9, Chapter 7, §100255, §100265, and §100266 (22 CCR §100255, §100265, and §100266) . These trauma policies are appended to this Trauma Plan as Appendix E, and are subject to review and revision at any time. The policy revision process for trauma policies is the same as the EMS Agency policy process described above.

SECTION X. LOCAL TRAUMA PLAN APPROVAL

A. 1997 Trauma Plan

The El Dorado County Board of Supervisors adopted the original Trauma Plan in 1997, and the Trauma Plan was approved by the State EMS Authority in September 1997.

B. 2005 Revised Trauma Plan

Following acceptance of the revised Trauma Plan by the EMS Agency Medical Director, and with consensus of the Trauma Plan Task Force, the revised Trauma Plan was adopted by the El Dorado County Board of Supervisors in August 2005. Following Board of Supervisors adoption, pursuant to provisions of the California Health and Safety Code, Division 2.5, the revised Trauma Plan was submitted to the State EMS Authority for approval.

C. 2008 Trauma Plan Update

Due to the minor changes required for the 2008 Trauma Plan update, official action by the Board of Supervisors is not required. This update was submitted to the EMS Authority in January 2008.

D. 2012 Revised Trauma Plan

Following acceptance of the revised Trauma Plan by the EMS Agency Medical Director, the revised Trauma Plan was adopted by the El Dorado County Board of Supervisors in December 2012. Following Board of Supervisors adoption, pursuant to provisions of the California Health and safety Code, Division 2.5, the revised Trauma Plan was submitted to the State EMS Authority for approval.

SECTION XI. DATA COLLECTION

A. Data Management System

A data collection and management system for trauma care is essential for the provision of optimal care of the trauma patient as well as to establish an organized approach for the design and development of an integrated trauma system.

All El Dorado County acute care hospitals and/or designated trauma centers, and all tertiary care facilities in adjoining counties that receive trauma patients from El Dorado County, are required to enter prehospital patient data into the El Dorado County trauma registry system. Additional trauma registry activities may be required as directed by the County of El Dorado EMS Agency.

The trauma registry software system initially selected for use in El Dorado County was the Digital Innovations "Collector" product. The trauma registry includes prehospital and hospital patient data. Data is input into the "Collector" software system for every trauma patient. The trauma data is then submitted to Tri-Analytics, Inc., who compiles the data into a series of reports. The County of El Dorado EMS Agency receives the cumulative trauma data in report form on a quarterly basis. El Dorado County has been collecting trauma data since 1998. The County of El Dorado EMS Agency Medical Director reviews and evaluates the trauma data on a regular basis to determine training needs.

The County of El Dorado EMS Agency recently evaluated available software products, looking for a more robust reporting capability to inform the ongoing evaluation processes. Trauma One software was chosen. Trauma One delivers robust reporting capabilities that will allow both hospitals and the EMS Agency to generate more effective trauma reports. In 2012 Marshall Medical Center, Barton Memorial Hospital, and the EMS Agency are migrating from Digital Innovations and Tri-Analytics to Trauma One. Both participating hospitals will fund the cost for their annual trauma registry license fees, software support and program maintenance. The EMS Agency will fund the cost of software licensing and support for the EMS Agency.

B. Prehospital Data Elements

1. Standardized Data Collection Instrument

   El Dorado County utilizes a standardized *Prehospital Care Report* to capture those data elements required in Title 22, Chapter 4, §100169 [a(6)] and §100170. A Prehospital Care Report is completed for every patient contact. El Dorado County collects and stores the following data elements in hard copy only.

2. Prehospital Data Elements

(a) date and estimated time of incident*
(b) time of receipt of call*
(c) time of dispatch to scene*
(d) time of arrival at scene*
(e) location of incident*
(f) the patient's:*
  1) name*
  2) age/date of birth*
  3) gender*
  4) weight, if necessary for treatment*
  5) address*
  6) chief complaint*
  7) vital signs, including:*
    i. blood pressure
    ii. pulse
    iii. respiratory rate
    iv. total Glasgow Coma Score (GCS); and
    v. other clinical signs, as appropriate the injury severity
  8) past medical history (when possible)
  9) medications
  10) allergies
  11) medic unit ID
  12) service type
  13) location type
  14) 1st responder ID
  15) response code
(g) appropriate physical assessment*
(h) emergency care rendered and patient's response to treatment*
(i) patient disposition*
(j) time of departure from scene*
(k) arrival time at receiving hospital (if transported)*
(l) name of receiving facility (if transported)*
(m) transport code
(n) base hospital contact
  1) time
  2) base facility
  3) MICN or MD
  4) communication failure (if applicable)
(o) name/identifier number of primary paramedic*
(p) name/identifier number of secondary paramedic or EMT
(q) name/identifier of additional staff
(r) signature of paramedic*

*denotes items required by Title 22, Chapter 4, Article 8, §100170

C. Hospital and Trauma Center Data Elements

Elements of the uniform trauma registry that pertain to emergency department, in-patient, and specialty care are completed by every acute care hospital that receives patients in El Dorado County.

1. Standardized Data Collection Instrument

   El Dorado County utilizes the “Collector” system as a common trauma data collection instrument to uniformly capture data elements required in Title 22, Chapter 7, Article 2 §100257.

2. Hospital Data Elements

   a) time of arrival and patient treatment in:
      i) emergency department
      ii) receiving area
      iii) operating room

   b) dates for:
      i) initial admission
      ii) intensive care
      iii) discharge

   c) discharge date, including:
      i) total hospital charges (aggregate dollars only)
      ii) patient destination
      iii) discharge diagnoses
      iv) Emergency department diagnoses

   d) ICD-9 code (800-959.9)
      i) Physically evaluated by trauma or burn surgeon in ED or resuscitation area and discharged, or
      ii) Death in Emergency Department, or
      iii) Transfer for trauma services

SECTION XII. TRAUMA SYSTEM EVALUATION

The evaluation of the trauma system is ongoing and continuous. Issues of concern are addressed as they are identified by the EMS Agency through its Medical Director.

A. Process to Receive Trauma Information

Input on trauma care is received from EMS contractors and hospitals through the paramedic-level Continuous Quality Improvement (CQI) Committee, the Medical Advisory Committee and through the Trauma System data reports.

1. Prehospital CQI Committee

   In compliance with State Regulations, EMT clinical quality improvement has been incorporated into the current CQI Committee. This provides additional input on trauma care and issues. This is a countywide Committee and includes Base Hospital representation.

2. Medical Advisory Committee

   The Medical Advisory Committee (MAC) meets monthly and is a forum for input on trauma care. Membership includes representation from ALS ambulance service transport contractors, Base Hospital Medical Directors, Base Hospital Coordinators, Executive Directors from the two Joint Powers Authorities, first responder fire agencies, air ambulance and rescue transport contractors, designated dispatch centers, law enforcement, and EMS Agency representatives.

   MAC functions in an advisory capacity to the EMS Agency Medical Director in the development of prehospital policies, procedures and protocols, particularly as they relate to trauma treatment and care, and trauma triage criteria.

3. Trauma System Data Reports

   The EMS Agency Medical Director reviews and evaluates trauma system data reports provided by Tri-Analytics on a quarterly basis for appropriate parameters of trauma management. These reviews include response times, accuracy of triage, scene times, and patient outcomes, among many other data points. The quality of care provided to trauma patients is objectively measured by the elapsed time (minutes and seconds) from injury to receipt of specialized hospital services, and by analyzing the morbidity and mortality experience of specific injury types, e.g., fractures, blunt abdominal trauma, head injuries, etc.

B. Periodic Trauma System Performance Evaluation

Marshall Medical Center is evaluated every three years from the date of designation as a Level III Trauma Center. Results are provided to appropriate hospital staff.

Upon designation as a Level III Trauma Center, Barton Memorial Hospital will be evaluated every three years from the date of designation. Results are provided to appropriate hospital staff.

The County of El Dorado EMS Agency conducts a performance evaluation of the entire trauma system every two years as mandated by California Code of Regulations, Title 22, Division 9, Chapter 7, Article 2, §100258 (22 CCR §100258). Evaluation results are made available to system participants.

C. Hospital Performance Evaluation

The EMS Agency requires that any El Dorado County acute care hospital or trauma center shall maintain an internal continuous quality improvement program. The program shall include participation in the following activities:

1. Trauma data shall be input into the Trauma One software system, ensuring that data for each trauma patient is entered into that system;
2. Additional trauma registry activities may be required as directed by the County of El Dorado EMS Agency;
3. Copies of the accumulated data in report form must be provided to each participating facility for review and evaluation;
4. Medical staff shall routinely evaluate the care delivered to trauma patients utilizing American College of Surgeons quality indicators and other established evaluation criteria including the following:

    a) Prehospital times, including response times, on scene times, and transport times
    b) Appropriateness of receiving hospital selection and mode of transport
    c) Accuracy of triage
    d) Appropriateness of prehospital care
    e) Appropriateness of receiving hospital Trauma Team response
    f) Receiving hospital physician and surgeon response times
    g) Patient outcome

5. All trauma center or acute care hospitals in El Dorado County shall actively participate in prehospital continuous quality improvement programs and regional quality improvement programs as directed by the County of El Dorado EMS Agency.

D. Hospital CQI Processes

A trauma evaluation committee is critical to trauma system continuous quality improvement and system evaluation.

The County of El Dorado EMS Agency continues to encourage and support local and out-of-county trauma centers to work cooperatively to pursue state-of-the-art teaching and continuing education experiences. The regional educational leadership of UC Davis Medical Center, the University of California, Renown Regional Medical Center and other resources are utilized to ensure that all components of the hospital-based trauma program foster an environment of continuing personal and professional development independent of numerical trauma case volume.

1. Marshall Medical Center CQI

   a) Trauma Operational Review Committee

      Marshall Medical Center's Trauma Operational Review Committee reviews the provision of trauma care, and evaluates compliance with quality indicators and patient care. Specific opportunities to improve care are identified in these case review sessions, with specific recommendations developed and implemented. The Trauma Operational Review Committee may refer concerns to the physician Trauma Review Committee.

      The Trauma Operational Review Committee is comprised of the Trauma Coordinator, the Trauma Registrar, the Radiology Operations Supervisor, the Clinical Laboratory Manager, Clinical Managers from Surgical Services, Medical/Surgical II, and the Surgical Case Manager. The County of El Dorado EMS Agency is invited to attend these meetings. Specific opportunities to improve trauma care are identified in these case review sessions, with specific recommendations developed and implemented. This Committee may refer concerns to the physician Trauma Review Committee.

   b) Trauma Peer Review Committee

      Marshall Medical Center has a physician Trauma Review Committee that may refer concerns to the Trauma Operational Review Committee. This Committee is composed of physicians representing orthopedics, general surgery and emergency services.

   c) EMS Continuous Quality Improvement

      Marshall Medical Center participates in the EMS trauma system CQI process at multiple levels that include active participation in:

i) Providing paramedic trainings through Base Hospital meetings that focus on CQI issues and areas of concern;

ii) Providing annual paramedic skills renewal training with a focus on trauma care;

iii) Participation in the Continuous Quality Improvement Committee;

iv) Participation in the Medical Advisory Committee.

2. Barton Memorial Hospital CQI

While Barton Memorial Hospital routinely functions at Level III Trauma Center standards and receives trauma patients, Barton Memorial Hospital is actively seeking formal designation as a Level III Trauma Center.

a) Trauma Quality Improvement Process

As part of Barton Hospital's preparation for trauma center designation, they have established a Trauma Operational Review Committee to routinely evaluate trauma treatment, system issues, and always strive towards continuous quality improvement. The committee is comprised of, but not limited to, the Trauma Medical Director, Trauma Program Coordinator, Trauma Registrar, physicians, departmental directors, mid-levels, RN's, therapists, techs, and aids. This committee meets quarterly and reports to Trauma Peer Review and to Barton Hospital's existing Quality Improvement Framework. This process must identify problems and must demonstrate problem resolutions (loop closure).

Barton Memorial Hospital has an Emergency Management Community Committee. The committee meets every other month and consists of members of the county, public, and private groups such as, El Dorado County Health and Human Services, Environmental Management, EDSO, and California Department of Transportation (Cal Trans). This committee reports to the Trauma Operational Review Committee.

Additionally, Barton Hospital has established a Multi-Disciplinary Trauma Peer Review Committee, comprised of the Trauma Medical Director and physicians representing general surgery, orthopedics, Radiology, Emergency Department, and Anesthesia to evaluate trauma treatment, system issues at the physician level, selected deaths, complications, and sentinel events with the objectives of identification of issues and appropriate responses. The frequency of meeting is determined by the Trauma Medical Director. This committee reports to Barton Hospital's existing Quality Improvement Framework. This process must identify problems and must demonstrate problem resolutions (loop closure).

b) EMS Continuous Quality Improvement

Barton participates in the EMS trauma system continuous quality improvement process by:

i) Providing paramedic trainings through Base Station meetings that focus on CQI issues and areas of concern;
ii) Base Hospital Coordinator participates in prehospital CQI;
iii) Providing annual paramedic skills renewal training with a focus on trauma care;
iv) Participation in the CQI Committee;
v) Participation in the Medical Advisory Committee;
vi) Emergency Department physicians review selected trauma cases for review at quarterly group meetings.

F. Trauma Center CQI

The County of El Dorado EMS Agency requires that designated trauma centers located in El Dorado County maintain an internal continuous quality improvement program.

The EMS Agency requires designated trauma centers in El Dorado County to have a CQI process that includes structure, process, and outcome evaluations that focus on improvement efforts to identify root causes of problems, interventions to reduce or eliminate causes, and steps to correct processes. As part of the application process, the facility shall detail how they plan to accomplish the following:

1. Conduct detailed audits of all trauma-related deaths, major complications, and transfers;
2. Establish a multidisciplinary trauma peer review committee that includes all members of the trauma team;
3. Participate in trauma data management system;
4. Participate in any required EMS Agency trauma evaluation committee;
5. Have a written system in place for patients, parents of minor children who are patients, legal guardian(s) of children who are patients, and/or primary caretaker(s) of children who are patients, to provide input and feedback to hospital staff regarding the care delivered to the child;
6. Follow applicable provisions of Evidence Code Section 1157.7 to ensure patient record confidentiality.

G. Out-of-County CQI Participation

UC Davis Medical Center, Sutter-Roseville Memorial Medical Center, Kaiser South, and Mercy-San Juan Medical Center participate in the El Dorado County continuous quality improvement program by providing a copy of disposition and final diagnosis on each patient that is transported from El Dorado County to their facility.

The State of Nevada participates in El Dorado County CQI by providing a copy of disposition and final diagnosis on each patient that is transported to their facilities.

EMS aircraft transport contractors are invited to participate in prehospital CQI at the discretion of the EMS Agency Medical Director; air ambulance and rescue helicopter transport contractors may be required to provide information related to focus studies as deemed necessary by the EMS Agency Medical Director.

H. EMS Aircraft Evaluation and CQI

All air ambulance transporters that contract with The County of El Dorado are required to provide patient data for calls made into the County, including the following agencies:

1. CALSTAR
2. CareFlight
3. REACH
4. California Highway Patrol

I. Prehospital Evaluation and CQI

The EMS Agency Medical Director acts as the EMS CQI liaison with regional EMS agencies, and the Base Hospital Directors act as liaisons with their respective hospital CQI programs.

The County of El Dorado EMS Agency requires that all EMS ambulance transport contractors maintain an internal system of continuous quality improvement. Each ambulance transport contractor shall appoint a representative to the El Dorado County Continuous Quality Improvement Committee (CQIC). Each representative shall review all trauma calls for their agency. Each contractor shall report all findings to the CQIC for further review. Review shall include but not be limited to:

1. Prehospital times, including response times, on-scene times, and transport times;
2. Appropriateness of receiving hospital selection and mode of transportation, including appropriateness of helicopter use;
3. Accuracy of triage;
4. Appropriateness of prehospital care provided;
5. Accurate completion of a Critical Trauma Criteria Report form;
6. Compliance with all El Dorado County policies, procedures and field treatment protocols.

The EMS Agency Medical Director requires that prehospital focus studies be conducted as deemed necessary as a part of prehospital CQI. Specific focus studies have been implemented to improve various components of trauma treatment and care.

SECTION XIII. APPENDICES

Appendix A	**EMS Jurisdiction Letters of Agreement**
Appendix B	**Prehospital Trauma Triage Criteria**
Appendix C	**Prehospital Trauma Patient Transportation/Destination Policies**
Appendix D	**Emergency Medical Service Area Maps**
Appendix E	**Trauma Policies, Procedures and Protocols**
Appendix F	**Written Local Approval**
Appendix G	**Base Hospital Services Agreement – Barton**
Appendix H	**Base Hospital Services Agreement – Marshall**
Appendix I	**Level III Trauma Center Agreement**
Appendix J	**California Code of Regulations, Title 22, Division 9, Chapter 7**

Appendix A-EMS Jurisdiction Letters of Agreement

APPENDIX A – EMS Jurisdiction Letters of Agreement

The following documents are jurisdictional letters of agreement between El Dorado County and the two contiguous California EMS jurisdictions.

- Sacramento County EMS Agency
- Sierra-Sacramento Valley EMS Agency

APPENDIX A

SIERRA-SACRAMENTO VALLEY EMERGENCY MEDICAL SERVICES AGENCY
5995 PACIFIC STREET
ROCKLIN, CA 95677
PHONE (916) 625-1701
FAX (916) 625-1730

NEVADA CO.
PLACER CO.
SUTTER CO.
YOLO CO.
YUBA CO.
BUTTE CO.
COLUSA CO.
TEHAMA CO.
SHASTA CO.
SISKIYOU

March 5, 2012

Richard W. Todd
EMS Administrator
El Dorado County, Health and Human Services Agency
415 Placerville Dr., Suite J
Placerville CA 95677

Dear Richard:

As Director of the Sierra-Sacramento Valley EMS Agency, I have reviewed El Dorado County's EMS Agency's field policy *Trauma Triage*. This policy allows for major trauma victims from El Dorado County EMS Agency to be transported directly from the field to Sutter Roseville Medical Center.

Sutter Roseville Medical Center currently accepts these patients from the field and via inter-facility transfer. As long as they are willing to continue this practice, Sierra-Sacramento Valley EMS Agency agrees that this practice is acceptable.

Sincerely,

Victoria Pinette

Regional Executive Director

Countywide Services Agency

Health and Human Services

Primary Health
Deputy Director
Sandy Damiano

County of Sacramento

APPENDIX A

County Executive
Bradley J. Hudson

Chief Deputy County Executive
Bruce Wagstaff

Department Director
Ann Edwards

RECEIVED
MAR 0 9 2012
EMERGENCY MEDICAL SERVICES AGENCY

March 6, 2012

Richard W. Todd
Emergency Medical Services (EMS) Administrator
El Dorado County Health and Human Services
415 Placerville Drive, Suite J
Placerville CA 95667-4066

Dear Mr. Todd:

I have reviewed El Dorado County's trauma triage and patient destination policies (attached). These policies allow for critical trauma patients from El Dorado County to be transported directly from the field to trauma facilities in Sacramento County.

The University of California Davis, Mercy San Juan and Kaiser Permanente South Sacramento Medical Centers currently accept field patients from El Dorado County and, as long as each is willing to do so, Sacramento County agrees that this is acceptable.

Sacramento County EMS will regularly invite El Dorado County EMS and surgical representatives from Marshal Hospital to participate in regional trauma case review meetings in Sacramento. If invited, Sacramento County EMS staff will attempt to attend trauma case review meetings in El Dorado County.

If you have any questions, contact me.

Bruce Wagner
EMS Administrator
County of Sacramento

Attachments (2)

9616 Micron Ave, Ste 960 • Sacramento CA 95827 • phone (916) 875-9753 • fax (916) 363-8168 • www.dhhs.saccounty.net/pri/ems

APPENDIX A

TRAUMA TRIAGE CRITERIA

Physiological Criteria:

- GCS: Less than 14 **or**
- Systolic BP: Less than 90 mmHg **or**
- Respiratory Rate/Min: <10 or >29 (<20 for infants less than 1 year)

Anatomical Criteria:

- Penetrating injury of head, neck, torso, groin and extremities proximal to the elbow or knee
- Flail chest
- Spinal cord injury with paralysis
- Two or more fractured proximal long bones
- Amputation proximal to wrist or ankle
- Pelvic fractures
- Open or depressed skull fractures

Mechanism of Injury:

- Falls: Adults > 20 ft, Children > 10 ft or 2-3 times height of child
- Motor vehicle crash with > 12 inches intrusion in occupant site or 18 inches, any site
- Ejection (partial or complete) from a vehicle
- Death in same passenger compartment
- Vehicle telemetry data consistent with high risk of injury; i.e. rollover
- Motorcycle crash > 20mph
- Auto vs. pedestrian or bicycle thrown, run over or with significant (> 20mph) impact
- Equestrian accidents sustaining significant impact

Co-morbid Factors:

- Age-
  - Older Adults: Risk of injury/death increases after age 55
  - Children (14 or under): Should be transported preferentially to pediatric trauma facility
- Anticoagulation and bleeding disorders
- Severe burns-
  - Without other trauma mechanism: Triage to closest appropriate hospital or burn center
  - With trauma mechanism: Triage to trauma center
- Time sensitive extremity injury
- End stage renal disease requiring dialysis
- Pregnancy >20 weeks
- Paramedic judgment

APPENDIX A

GENERAL

All Patient destination and mode of transport decisions will be made in collaboration with the base station hospital. In circumstances where base contact is not made due to communication breakdown or time constraints the paramedic will determine destination and mode of transport. Base Station Contact will then be made as soon as possible.

Completed copies of the PCR and the Critical Trauma Report Form shall be left with or faxed to the Trauma Coordinator at the paramedic's respective base hospital within twenty-four (24) hours for all patients entered into the trauma system.

Physiologic and Anatomic trauma criteria attempt to identify the most seriously injured patients in the field. These patients should be transported preferentially to the highest level of care within the trauma system. Consider an air ambulance for patients meeting these criteria if ground transport time is greater than 30 minutes.

Mechanism, Co-Morbid Conditions, and Paramedic Judgment criteria should be transported to the nearest appropriate trauma facility and need not be the highest level trauma center.

All patients entered into the trauma system shall be transported directly to the nearest most appropriate level I, II or III trauma center or a trauma receiving hospital unless otherwise advised by the base station or under the following circumstances:

- If unable to establish and maintain an airway, the patient will be transported to the nearest hospital, for definitive airway management
- Patients in cardiac arrest will be transported code 3 to the nearest hospital

The base station may override these guidelines when:

- A hospital is unable to meet resource standards
- There are multiple patients involved
- The patient needs specialty care or application of these standards would unnecessarily delay definitive medical or surgical treatment

In the event of a multiple patient/mass casualty/disaster situation where a specific management plan exists, and is implemented, the guidelines established by such a management plan shall take precedence over these guidelines.

In County Service Area 7, UC Davis Medical Center is the level I trauma center, Sutter Roseville, and Mercy San Juan, are level II centers and Marshall is a level III center. In County Service Area 3, Renown Medical Center is the level II trauma center These facilities will accept direct trauma patient transports. The MICN will alert the receiving facility of the transport. The transporting paramedic will provide a patient report directly to the receiving facility not less than 10 minutes out. The patient report

will consist of, at a minimum, ETA, patient age, chief complaint, vital signs, significant findings and current treatments.

PATIENT IDENTIFICATION
Trauma Triage Policy

The primary goal of trauma triage criteria is the rapid and accurate identification of victims who are at risk for life threatening injuries.

The decision to triage a patient to a trauma facility is based on the presence of physiologic, anatomic, mechanism of injury, co-morbid conditions criteria and/or judgment of the paramedic.

Assess vital signs, level of consciousness and injury.

Physiologic and Anatomic trauma criteria attempt to identify the most seriously injured patients in the field. These patients should be transported preferentially to the highest level of care within the trauma system. Consider an air ambulance for patients meeting these criteria if ground transport time is greater than 30 minutes.

Assess mechanism of injury and evidence of high-energy impact.

Mechanism, Co-Morbid Conditions and Paramedic Judgment criteria should be transported to the nearest appropriate trauma facility and need not be the highest level trauma center.

Patients meeting trauma triage criteria will be entered into the trauma system by direct base contact and transported as per the guidelines established in the patient destination policy.

Appendix B-Prehospital Trauma Triage Criteria

APPENDIX B- Prehospital Trauma Triage Criteria

EL DORADO COUNTY EMS AGENCY
FIELD POLICIES

EMS Agency Medical Director

Supersedes: Policy dated July 1, 2008
Effective: July 1, 2009
Reviewed: N/A
Scope: BLS and ALS Personnel

TRAUMA TRIAGE

PURPOSE:
The primary goal of trauma triage criteria is the rapid and accurate identification of victims who are at risk for life threatening injuries.

The decision to triage a patient to a trauma facility is based on the presence of physiologic, anatomic, mechanism of injury, co-morbid conditions criteria and/or judgment of the paramedic.

POLICY:
Assess vital signs, level of consciousness and injury.

Physiologic and Anatomic trauma criteria attempt to identify the most seriously injured patients in the field. These patients should be transported preferentially to the highest level of care within the trauma system. Consider an air ambulance for patients meeting these criteria if ground transport time is greater than 30 minutes.

Assess mechanism of injury and evidence of high-energy impact.

Mechanism, Co-Morbid Conditions and Paramedic Judgment criteria should be transported to the nearest appropriate trauma facility and need not be the highest level trauma center.

Patients meeting trauma triage criteria will be entered into the trauma system by direct base contact and transported as per the guidelines established in the patient destination policy.

Completed copies of the PCR and the Critical Trauma Report Form shall be left with or faxed to the EMS Coordinator at the paramedic's respective base hospital within twenty-four (24) hours for all patients entered into the trauma system.

TRAUMA TRIAGE CRITERIA

Physiological Criteria:

- GCS: Less than 14 **or**
- Systolic BP: Less than 90 mmHg **or**
- Respiratory Rate/Min: <10 or >29 (<20 for infants less than 1 year)

Anatomical Criteria:

- Penetrating injury of head, neck, torso, groin and extremities proximal to the elbow or knee
- Flail chest
- Spinal cord injury with paralysis
- Two or more fractured proximal long bones
- Amputation proximal to wrist or ankle
- Pelvic fractures
- Open or depressed skull fractures

Mechanism of Injury:

- Falls: Adults > 20 ft, Children > 10 ft or 2-3 times height of child
- Motor vehicle crash with > 12 inches intrusion in occupant site or 18 inches, any site
- Ejection (partial or complete) from a vehicle
- Death in same passenger compartment
- Vehicle telemetry data consistent with high risk of injury; i.e. rollover
- Motorcycle crash > 20mph
- Auto vs. pedestrian or bicycle thrown, run over or with significant (> 20mph) impact
- Equestrian accidents sustaining significant impact

Co-morbid Factors:

- Age-
  - Older Adults: Risk of injury/death increases after age 55
  - Children (14 or under): Should be transported preferentially to pediatric trauma facility
- Anticoagulation and bleeding disorders
- Severe burns-
  - Without other trauma mechanism: Triage to closest appropriate hospital or burn center
  - With trauma mechanism: Triage to trauma center
- Time sensitive extremity injury
- End stage renal disease requiring dialysis
- Pregnancy >20 weeks
- Paramedic judgment

Cross Reference: Patient Destination Policy, Prehospital Protocols

Appendix C-Prehospital Trauma Patient Transportation/Destination Policies

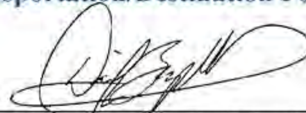
(Updated effective 7/1/2012)

Appendix C-Prehospital Trauma Patient Transportation/Destination Policy

EL DORADO COUNTY EMS AGENCY

FIELD POLICIES

Supersedes: Policy dated July 1, 2009
Effective: July 1, 2012
Reviewed: March 2012
Scope: BLS/ALS – Adult and Pediatric



EMS Agency Medical Director

PATIENT DESTINATION

PURPOSE:
This policy is intended to assist the paramedic and the base station in selecting the appropriate patient destination and mode of transportation. It is divided into two sections: Trauma and Non Trauma.

DEFINITIONS:
Nearest Hospital – Means the nearest receiving hospital (in minutes) as estimated by the paramedic crew, taking into consideration factors such as traffic and/or road conditions that may affect transport time.

Nearest Most Appropriate Hospital – Means the facility that has the best capabilities for a particular patient. (E.g., burns, pediatrics, trauma, PCI, etc.). Bypassing the closest hospital requires base station contact.

Trauma Patient –Means any patient that meets established trauma criteria as defined in this Policy.

Non-Trauma Patient –Means any patient with a medically based complaint or injury that does not meet the established trauma triage criteria.

POLICY:

TRAUMA PATIENTS:
All Patient destination and mode of transport decisions will be made in collaboration with the base station hospital. In circumstances where base contact is not made due to communication breakdown or time constraints the paramedic will determine destination and mode of transport. Base Station Contact will then be made as soon as possible.

Completed copies of the PCR and the Critical Trauma Report Form shall be emailed or faxed to the Trauma Coordinator at the paramedic's respective base hospital within twenty-four (24) hours for all patients entered into the trauma system.

Physiologic and Anatomic criteria attempt to identify the most seriously injured patients in the field. These patients should be transported preferentially to the highest level of care within the trauma system. Consider an air ambulance for patients meeting these criteria if ground transport time is greater than 30 minutes.

Mechanism, Co-Morbid Conditions, and Paramedic Judgment criteria should be transported to the nearest appropriate trauma facility and need not be the highest level trauma center.
All patients entered into the trauma system shall be transported directly to the nearest most appropriate level I, II or III trauma center or a trauma receiving hospital unless otherwise advised by the base station or under the following circumstances:

- If unable to establish and maintain an airway, the patient will be transported to the nearest hospital for definitive airway management
- Patients in cardiac arrest will be transported code 3 to the nearest most appropriate hospital

The base station may override these guidelines when:

- A hospital is unable to meet resource standards
- There are multiple patients involved
- The patient needs specialty care or application of these standards would unnecessarily delay definitive medical or surgical treatment

In the event of a multiple patient/mass casualty/disaster situation where a specific management plan exists, and is implemented, the guidelines established by such a management plan shall take precedence over these guidelines.

Trauma Centers:

In County Service Area 7:	**In County Service Area 3:**
Level 1 UC Davis Medical Center **Level 2** Sutter Roseville Medical Center Mercy San Juan Medical Center Kaiser South Hospital **Level 3** Marshall Medical Center	**Level 1** UC Davis Medical Center **Level 2** Renown Medical Center **Level 3** Barton Memorial Hospital (Acting as L3 TC)

These facilities will accept direct trauma patient transports. The MICN will alert the receiving facility of the transport. The transporting unit will provide a patient report directly to the receiving facility not less than 10 minutes out. The patient report will consist of, at a minimum, ETA, patient age, chief complaint, vital signs, significant findings and current treatments.

NON-TRAUMA PATIENTS:

El Dorado County EMS Agency policy is to transport to the nearest hospital. Contact base station for patients that desire transport to another facility of their choice.

Exceptions:

- If the nearest hospital is on diversion and the patient is **stable**, the patient shall be transported to the next nearest hospital
- Certain patients may be accepted by hospitals that are on diversion, such as labor and delivery cases. In these situations, the base station will notify the desired receiving facility and the medic unit crew of the patients transport disposition
- If the nearest hospital is closed due to an internal disaster the patient shall be transported to the next nearest hospital
- If specialized care may be needed and is not available at the nearest hospital (e.g., CT scan out of service) consult the base station

Consult the base station for **stable** patients that may require evaluation by El Dorado County psychiatric personnel (i.e., Patients under a 5150 hold) or for patients that are in custody of law enforcement. **Unstable** patients shall be transported to the nearest appropriate hospital.

The Transporting medic unit will provide a patient report directly to the receiving facility that consists of, at a minimum, ETA, patient age, chief complaint, vital signs, significant findings and current treatments.

Base contact will be made for non-trauma patients in need of treatments requiring base station orders or for any situations where base station consultation may be beneficial.

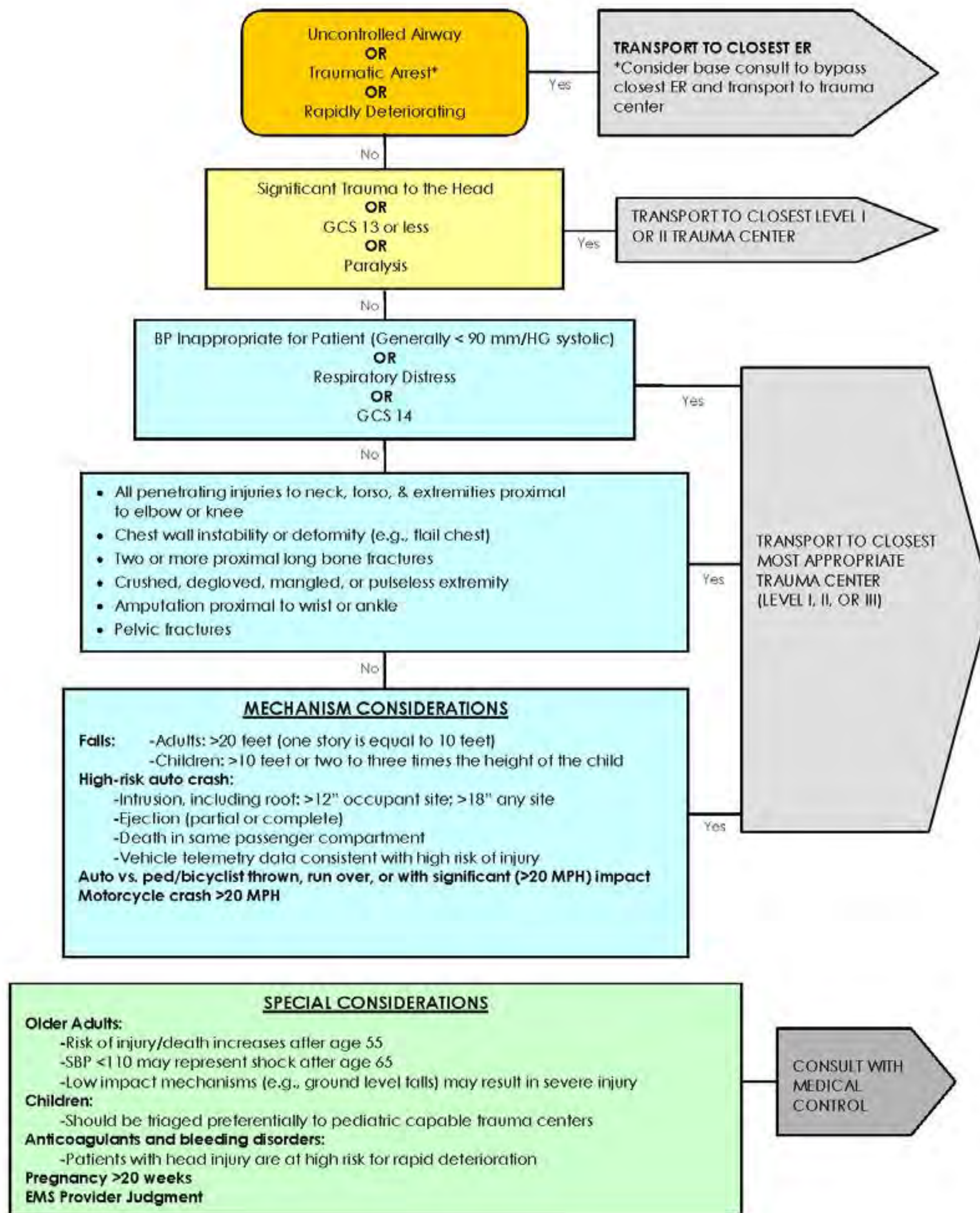
In circumstances where base contact (when required) is not made due to communication breakdown or time constraints, the paramedic may proceed down the protocol in use and contact base as soon as possible. In the event that base station contact (when required) is not utilized, the paramedic will complete an EMS Event Analysis Form and forward with a copy of the Patient Care Report (PCR) to the EMS Agency Medical Director within 24-hours of the incident. The EMS Agency Medical Director shall forward a copy of this report to the Base Hospital Medical Director within 24 hours of the call.

In situations where transport to a facility other than the base hospital is indicated and base contact is not required, the paramedic unit must communicate directly with the receiving hospital. This brief radio report shall include your ETA, and the patient's: age, status, and chief complaint. Base orders can only be issued by your designated base hospital.

Contact the base station for any situations encountered that are not addressed in this policy.

ATTACHMENT:
Trauma Triage Decision Scheme

TRAUMA TRIAGE DECISION SCHEME



Appendix D-Emergency Medical Service Area Maps

APPENDIX D – Emergency Medical Service Area Maps
El Dorado County EMS Agency

El Dorado County is divided into three County service areas for the purposes of emergency medical services as shown on the maps on the following pages.

1. **COUNTY SERVICE AREA NO. 3 - South Shore**

   Map on Page D-2

2. **COUNTY SERVICE AREA NO. 3 – Tahoe West Shore Area**

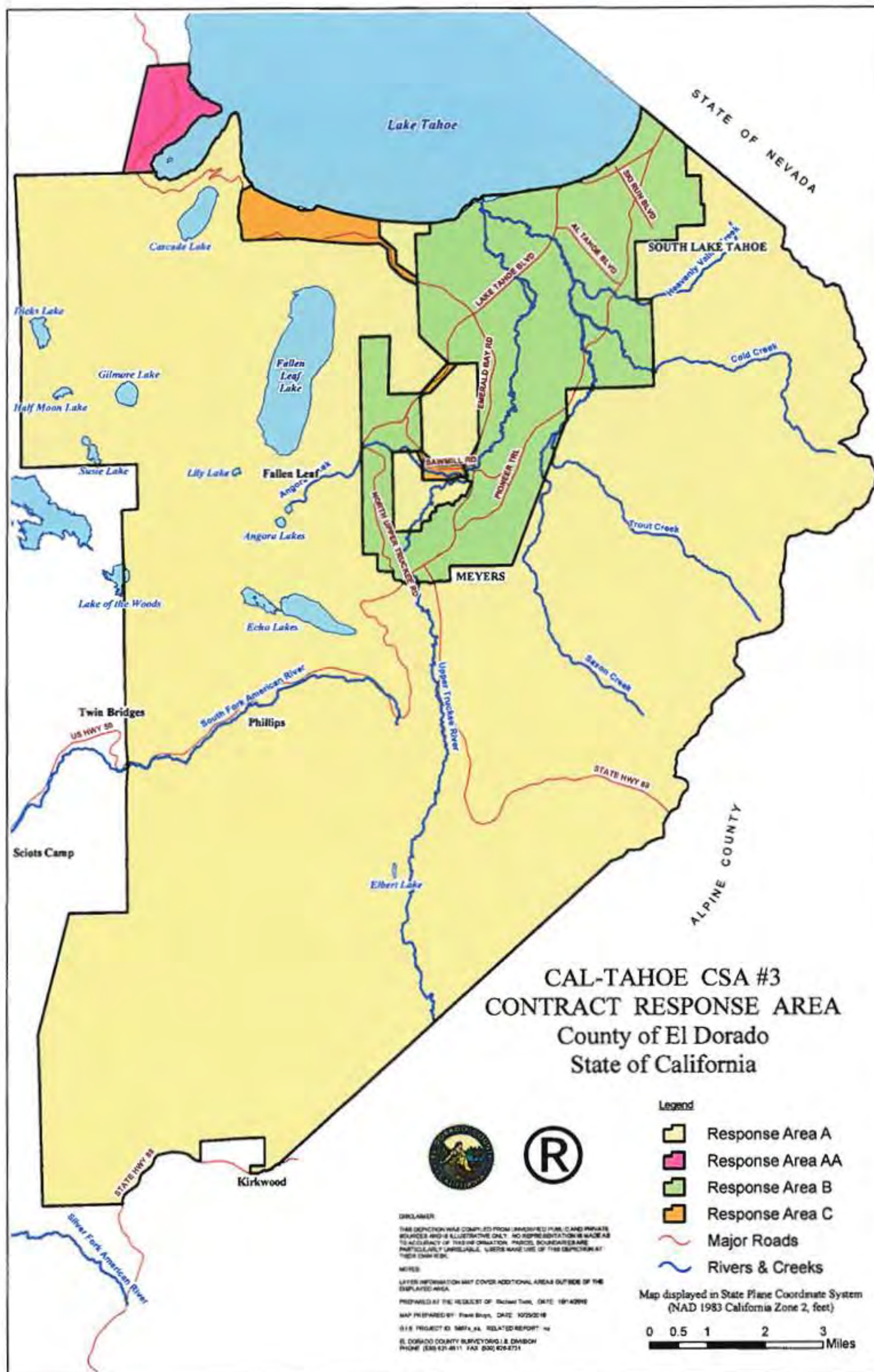
   Map on Page D-3

3. **COUNTY SERVICE AREA NO. 7 - West Slope Area**

   Map on Page D-4

4. **ALPINE COUNTY WILDERNESS RESPONSE AREA**

   Map on Page D-5



D-2

D-3

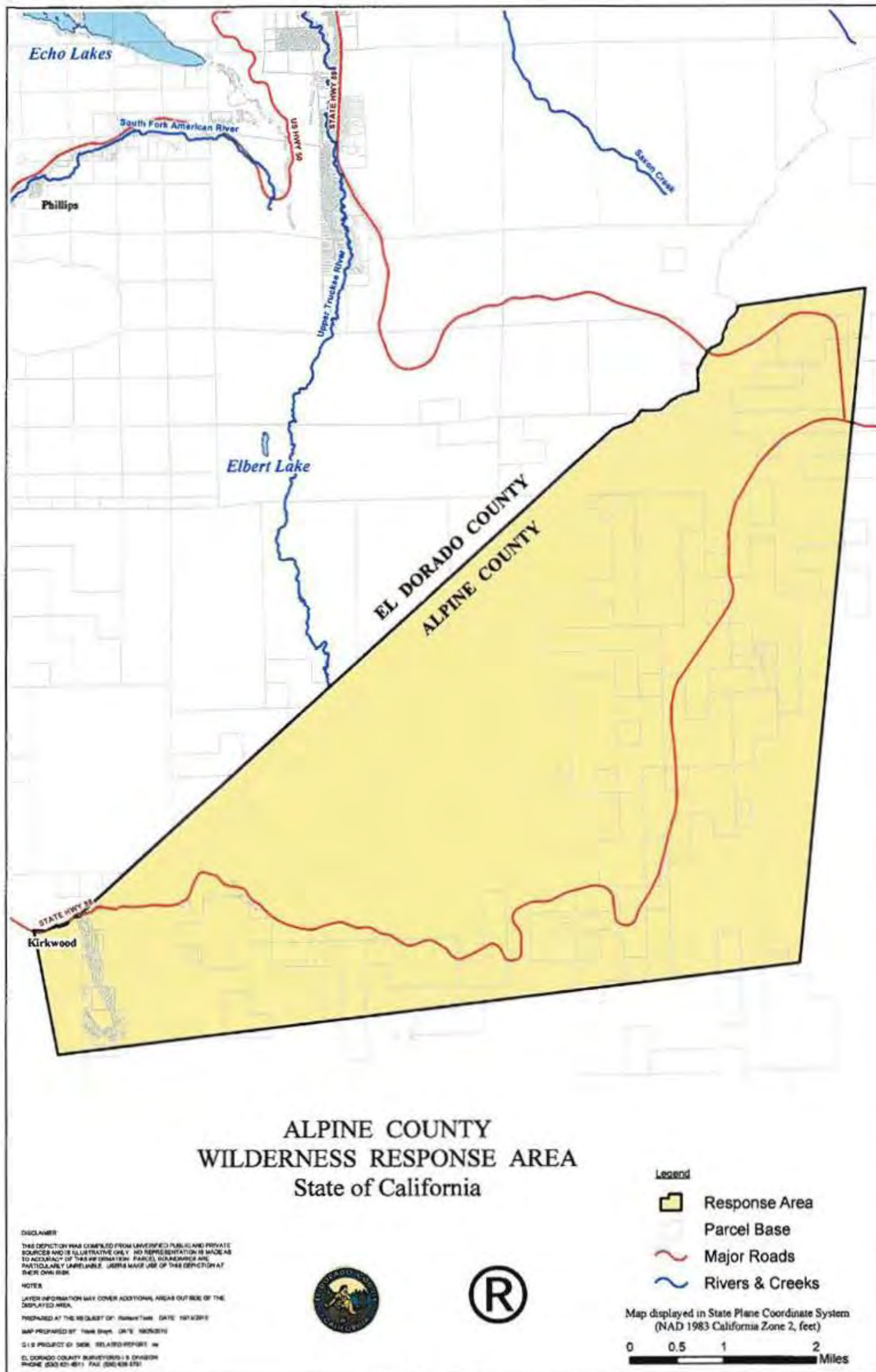
CSA #7

West Slope

Primary Response Area – Map and Description

Description

County Service Area 7 served under this contract includes all of El Dorado County west of the Great Basin & Pacific Watershed Divide Line. Due to practical considerations regarding access and unit deployment, ambulances from CSA 7 will typically respond east on Highway 50 to Twin Bridges and into western portions of the Desolation Wilderness.



D-5

Appendix E-Trauma Policies, Procedures and Protocols

APPENDIX E

El Dorado County Emergency Medical Services Agency

JULY 2012 TRAUMA POLICIES, PROCEDURES AND PROTOCOLS

The following list of El Dorado County EMS Agency trauma policies includes the minimum required policies, procedures and field treatment protocols in California Code of Regulations, Title 22, Division 9, Chapter 7, §100255, §100265 - Quality Improvement, and §100266 - Transfer of Trauma Patients. The most current versions of these policies, procedures and protocols can be found at the website link provided.

Field Procedures:
http://www.edcgov.us/Government/EMS/Policies_and_Procedures/Field_Procedures.aspx

Endotracheal Intubation
Nasotracheal Intubation
King Airway
Esophageal Tracheal Airway Device (ETAD)
CPAP
Stomal Intubation
ETC02
Needle Cricothyroidotomy
Needle Chest Decompression
Gastric Intubation
12 Lead EKG
Automatic External Defibrillator (AED)
External Cardiac Pacing
Intraosseous Infusion
Preexisting Vascular Access Devices (PVAD)
Pain Management
Intranasal Medication Administration
Therapeutic Hypothermia
Tourniquet for Hemorrhage Control (New 7/12)

Field Policies:
http://www.edcgov.us/Government/EMS/Policies_and_Procedures

Routine Medical Care
Verification of Advanced Airway Placement
Refusal of Care and/or Transportation (Revised 7/12)
Physician at Scene
Patient Destination (Revised 7/12)
SIDS Response
Determination of Death (Revised 7/12)

Do Not Resuscitate (DNR)
BLS Medication Administration
Ventricular Assist Device (VAD)
STEMI Destination
Malfunctioning ICD
Management of Preexisting Medical Interventions
Highest Medical Authority on Scene
Spinal Precautions
EMS Aircraft (Revised 7/12)
Multi Casualty Incident Response
Inter-County EMT Paramedic Response and Transport
Patients under a 5150 Hold (Revised 7/12)
Physical Restraint (Revised 7/12)
Management of Taser/Stun Device Patients
Guidelines for Interfacility Transfer of 5150 Patients (Revised 7/12)
Controlled Substance
Safely Surrendered Baby
On-Scene Photography
Nerve Agent Exposure
Pandemic Influenza
Exposure Determination, Treatment, and Reporting
Reporting of Suspected Abuse
ALS Unit Minimum Equipment Inventories (Revised 7/12)
Air Ambulance Minimum Equipment Inventory

Prehospital Protocols:
http://www.edcgov.us/Government/EMS/Policies_and_Procedures/Prehospital_Protocols.aspx

Preface
Cardiac
- Chest Pain/Acute Coronary Syndrome (ACS)
- Bradycardia
- Narrow Complex Tachycardia
- Ventricular Tachycardia
- Pulseless Arrest
- CHF/Pulmonary Edema

Medical
- Allergic Reaction
- Dystonic (Extrapyramidal) Reactions
- Poisoning/Overdose
- Asthma
- COPD/Emphysema
- Altered Level of Consciousness

- Hyperglycemia
- Seizures
- Severely Agitated Patient
- Stroke (Revised 7/12)
- Cold Exposures
- Heat Exposures
- Drowning
- Snakebite

OB/GYN/Pediatric
- Childbirth
- Neonatal Resuscitation
- Apparent Life Threatening Event (ALTE)

General
- Shock
- Nausea/Vomiting

Trauma
- Burns
- General Trauma
- Head Trauma
- Crush Syndrome (New 7/12)

Documentation:
http://www.edcgov.us/Government/EMS/Policies_and_Procedures/Documentation.aspx

- Medic Unit Prehospital Care Report Form
- ALS First Responder Prehospital Care Report Form
- BLS First Responder Prehospital Care Report Form
- El Dorado County Approved Abbreviations
- Medic Unit PCR Instructions
- Medic Unit Billing Form Instructions
- First Responder PCR Instructions
- AED Utilization Report Form Instructions
- HIPAA

Tactical Medic (TEMS) Policies:
http://www.edcgov.us/Government/EMS/Policies_and_Procedures/Tactical_Medic_Policies.aspx

- Tactical Medic (TEMS) Policy
- TEMS Equipment Inventory
- TEMS Tourniquet Procedure
- TEMS Hemostatic Agent Procedure

Appendix F-Written Local Approval

Placeholder for 2012 Board Resolution

Appendix G-Base Hospital Services Agreement – Barton

AGREEMENT FOR SERVICES #009-111-P-N2010
Barton Healthcare System - Base Hospital Agreement

THIS AGREEMENT made and entered into by and between the County of El Dorado, a political subdivision of the State of California (hereinafter referred to as "COUNTY") and Barton Healthcare System, a licensed acute care hospital, whose principal place of business is 2170 South Avenue, South Lake Tahoe, CA 96510(hereinafter referred to as "CONTRACTOR");

RECITALS

WHEREAS, COUNTY has established an Emergency Medical Services (EMS) System pursuant to Division 2.5 of the California Health and Safety Code and has designated El Dorado County EMS Agency as the Emergency Medical Services Agency, pursuant to Health and Safety Code Division 2.5 § 1797.220; and

WHEREAS, COUNTY has established an Advanced Life Support (ALS) program, as defined in Health and Safety Code Division 2.5 § 1797.52; and

WHEREAS, Health and Safety Code Division 2.5, § 1797.52 requires that an ALS program have a base hospital for the provision of medical direction and supervision of Emergency Medical Technician Paramedic (EMT-P) personnel; and

WHEREAS, CONTRACTOR has represented to COUNTY that it is specially trained, experienced, expert and competent to perform the special services required hereunder and COUNTY has determined to rely upon such representations; and

WHEREAS, it is the intent of the parties hereto that such services be in conformity with all applicable federal, state and local laws; and

NOW, THEREFORE, COUNTY and CONTRACTOR mutually agree as follows:

Article I. DEFINITIONS

Section 1.01 The following definitions shall apply throughout this Agreement:

(a) Advanced Life Support (ALS)

Special services designed to provide definitive pre-hospital emergency medical care, including, but not limited to: (1) cardiopulmonary resuscitation, (2) cardiac monitoring, (3) cardiac defibrillation, (4) advanced airway management, (5) intravenous therapy, (6) administration of specified drugs and other medicinal preparations, and other specified techniques and procedures administered by authorized personnel under the direct supervision of the EMS Agency Medical Director or a Base Hospital physician as part of the County of El Dorado (EDC) EMS System at the scene of an emergency, during transport to an acute care hospital, during interfacility transfer, and while in the emergency department of an acute care hospital until responsibility for patient care is assumed by hospital medical staff (Reference: Health and Safety Code § 1797.52).

(b) Agent

For purposes of this Agreement, an agent shall include those contractors or subcontractors providing services under this Agreement; for example, the *base hospital physician.*

(c) ALS Service Provider

A public agency, private corporation, or other business entity which has met all criteria for approval and has been approved by the EMS Agency in accordance with Title 22 California Code of Regulations (CCR) Division 9, Chapter 4, § 100167 to provide ALS services to a designated geographic area with a designated number of EMT-P units. This definition shall include all authorized air ambulances servicing the COUNTY.

(d) Base Hospital

An acute care hospital responsible for providing on-line (active communication via radio, telephone or other electronic telephonic communication device) and off-line (discussion at Continuous Quality Improvement or peer review meetings) medical direction/control to COUNTY accredited EMT-Ps, pursuant to a written agreement with the COUNTY in accordance with Title 22 CCR Division 9, Chapter 4, § 100168

(e) Base Hospital Physician

A physician and/or surgeon who is currently licensed in California; who is assigned to the emergency department of a Base Hospital; who has been trained to issue advice and instructions to emergency medical care personnel consistent with guidelines and standards established by the EMS Agency Medical Director and in accordance with Title 22 CCR Division 9, Chapter 4, § 100168; and who may be a subcontractor performing services for the base hospital under this Agreement.

(f) Base Hospital Medical Director

The physician elected by CONTRACTOR shall be submitted to the EMS Agency Medical Director for approval and shall be certified, or eligible for certification, by the American Board of Emergency Medicine or the American Board of Osteopathic Emergency Medicine, who shall be responsible for medical oversight of all Base Hospital activities

(g) California Code of Regulations (CCR)

Regulations that have been formally adopted by the State agency that have been reviewed, approved, and made available to the public by the California Office of

Administrative Law and may be viewed at
http://ccr.oal.ca.gov/linkedslice/default.asp?SP=CCR-1000&Action=Welcome

(h) Continuous Quality Improvement Program (CQI)
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.

(i) Emergency Department
A department or separate area within a hospital that is staffed and equipped to provide emergency medical care to the sick or injured on a continuous 24-hour basis. At a minimum, the hospital shall be permitted to provide basic emergency medical services as designated by Title 22 CCR Division 5, §§ 70411 – 70419, and § 70451.

(j) EMS Agency
The County of El Dorado Emergency Medical Services Agency.

(k) Emergency Medical Technician Paramedic (EMT-P)
An individual who is educated and trained in all elements of prehospital advanced life support; whose scope of practice to provide advanced life support is in accordance with the standards prescribed by Title 22 CCR Division 9, Chapter 4, and who has a valid license issued pursuant to this Chapter. (Reference: 22 CCR § 100139)

(l) EMS Agency Medical Director
Pursuant to Health and Safety Code Division 2.5, § 1797.202, the EMS Agency Medical Director is a licensed physician and/or surgeon duly appointed by COUNTY who has substantial experience in the practice of emergency medicine. The Medical Director shall be responsible for providing medical control and assuring medical accountability throughout the planning, implementation, and evaluation of the EMS system.

(m) EMS Service Provider
"EMS Service Provider" means an organization employing certified EMT-I, certified EMT-II or licensed paramedic personnel for the delivery of emergency medical care to the sick and injured at the scene of an emergency, during transport, or during interfacility transfer. (Reference Title 22 CCR § 100401)

(n) Emergency Medical Services (EMS) System
Emergency Medical Services (EMS) include that system of services organized to provide rapid response to serious medical emergencies, including immediate medical care and patient transport to definitive care in an appropriate hospital setting. An effective EMS System involves a variety of agencies and organizations working together to accomplish the goal of providing rapid emergency medical response and treatment. While most EMS responses are day-to-day emergencies, EMS agencies also plan and prepare for disaster medical response.

(o) EMSystems®
The EMSystems® software provides a comprehensive web-based healthcare information management solution that optimizes real-time communications, inventory resource allocation, volunteer registry management, and patient and evacuee tracking to enhance emergency preparedness and response to medical emergencies, mass casualty events, and public health incidents.

(p) MedNet Radio
A specific radio frequency that supports medical communications between emergency pre-hospital personnel and base or receiving hospitals.

(q) Mobile Intensive Care Nurse (MICN)
A Registered Nurse as defined in Health and Safety Code Division 2.5 § 1797.56 who has been certified by the EMS Agency Medical Director in accordance with criteria and standards approved by the EMS Agency.

(r) Pre-Hospital Care Provider
Any transporting or non-transporting Basic Life Support (BLS) or Advanced Life Support (ALS) unit dispatched to the scene of a medical emergency to provide immediate patient care.

(s) Subcontractor
A person or entity employed by CONTRACTOR to perform work as part of this overall Agreement.

(t) Trauma Registry
A collection of data on patients who receive hospital care for certain types of injuries. Such data are primarily designed to ensure quality trauma care and outcomes in individual institutions and trauma systems, but have the secondary purpose of providing useful data for the surveillance of injury morbidity and mortality.

Article II. SCOPE OF SERVICES:

Section 2.01 CONTRACTOR shall provide all services necessary for the operation of a Base Hospital, including on-line medical direction/control for any COUNTY-accredited EMT-P contacting it for medical direction. In the performance of this Agreement, CONTRACTOR agrees to:

(a) Meet the criteria and abide by all requirements prescribed in:
  (i) Health and Safety Code, Division 2.5, Emergency Medical Services, §§ 1798 – 1798.104; and §§ 1798.160 – 1798.175;
  (ii) Health and Safety Code, Division 2, § 1300;
  (iii) Title 22 CCR Division 9, Chapter 4;
  (iv) Title 22 CCR Division 5, Chapter 1, Article 6, §§70411 – 70419, 70451 and 70453;
  (v) Applicable EMS Agency Policies and Procedures.

(b) Provide a Base Hospital Medical Director who is certified, or eligible for certification, by the American Board of Emergency Medicine or the American Board of Osteopathic Emergency Medicine, who shall be responsible for medical oversight of all Base Hospital activities. The EMS Agency Medical Director may waive the requirement for board certification if he/she determines that an individual with these qualifications is not available. All waivers shall be documented in writing and filed with the EMS Agency and the CONTRACTOR.

(c) Appoint a Registered Nurse with sufficient emergency department and EMS experience as Base Hospital Coordinator, who shall be responsible for assisting the Base Hospital Medical Director with coordination and oversight of Base Hospital activities.

(d) Have available a qualified MICN or Base Hospital Physician to provide prompt on-line medical direction/control to paramedic units. The only exception shall be due to

emergency situations preventing such coverage. Such exceptions shall be documented and forwarded to the EMS Agency.

(e) Provide adequate office space and resources for performance of duties described herein.

(f) Provide personnel for the CQI, medical advisory, training and other committees designated by the EMS Agency.

Section 2.02 COUNTY shall:

(a) Assume responsibility for investigation, follow up and closure of all complaints referred from CONTRACTOR where remediation is requested or counseling sessions with ALS provider staff are not successfully resolved.

(b) Provide staff and resources to assist CONTRACTOR in addressing EMS System issues or problems identified from retrospective audit and review of EMS medical care.

(c) COUNTY shall provide CONTRACTOR with a copy of any and all policies, procedures, and protocols referred to herein, and any changes or modifications or supplements thereto in a timely manner.

(d) Comply with requirements for EMS medical control as specified by Health and Safety Code, Division 2.5, § 1798; and Title 22 CCR, Division 9, Chapter 4, § 100144.

(e) Monitor CONTRACTOR'S compliance with this Agreement, COUNTY EMS Agency applicable policies and procedures, and regulations including but not limited to Title 22 CCR Division 9, Chapter 4 §1000168. The COUNTY may at any time deny, suspend or revoke approval, in the sole discretion of the COUNTY, of CONTRACTOR as a Base Hospital for noncompliance.

Article III. TERM

This Agreement shall become effective upon signature by the parties hereto and shall cover the term August 17, 2010 through August 16, 2013 unless earlier terminated pursuant to the provisions under Article X herein.

Article IV. COMPENSATION FOR SERVICES

There will be no remuneration provided by COUNTY to CONTRACTOR for the services described herein. COUNTY shall not be liable for any costs incurred by CONTRACTOR as a result of this Agreement, including but not limited to: the cost of patient care; the cost of training, staffing, equipping, supplying, or otherwise operating as a Base Hospital.

Article V. PERFORMANCE PROVISIONS

Section 5.01 Communications Equipment

(a) CONTRACTOR agrees to utilize two-way radio communications equipment (i.e., MedNet radio) for direct two-way voice communication with the pre-hospital care providers in their assigned service area. This requirement may be supplemented by the use of cellular telephones by ALS providers and telephones at the base hospital, subject to compliance with Section 5.01(c).

(b) CONTRACTOR will provide and maintain at CONTRACTOR'S expense a minimum of two (2) dedicated telephone lines for ALS communication with pre-hospital care providers located directly adjacent to the existing MedNet radio.

(c) CONTRACTOR will ensure that every ALS call conducted by radio or dedicated telephone line is recorded using a voice-activated recording system. Recordings shall be maintained for a minimum of ninety (90) days to be used strictly for the purpose of education, audit, and case reviews, or to be made available upon request to the EMS Agency Medical Director for CQI activities. Recordings of medical communication are part of the CQI process, and are not considered part of an individual patient's medical record.

(d) CONTRACTOR will provide, and maintain, at CONTRACTOR'S expense all hardware and Internet access required for an Internet-based hospital communication system (currently EMSystems®) within the Emergency Department.

(e) CONTRACTOR will provide timely reports of any recurring radio, telephone, or Internet problems to the appropriate maintenance contractor and provide written notice to the EMS Agency.

Section 5.02 Statistical Data for Monitoring and System Evaluation

(a) CONTRACTOR agrees to cooperate with the EMS agency in gathering and providing statistics and information for monitoring and evaluating ALS programs, in accordance with the requirements of applicable privacy law.

(b) CONTRACTOR agrees to participate in the CQI process, in accordance with the policies and procedures adopted by the COUNTY EMS Agency and shall at all times ensure they are in compliance with the then current version of the Emergency Medical Services System Quality Improvement Program Model Guidelines, available at http://www.emsa.ca.gov/pubs/pdf/emsa166.pdf or by contacting the County of El Dorado Emergency Services Agency.

Section 5.03 Education

(a) CONTRACTOR shall provide, or cause to be provided, EMS pre-hospital personnel training and continuing education in accordance with the policies and procedures of the EMS Agency (reference Health and Safety Code § 1798.104).

(b) CONTRACTOR will ensure that all Emergency Department employees, agents and/or subcontractors receive orientation to the Base Hospital role and relevant EMS Agency policies and procedures.

(c) Pursuant to Health and Safety Code Division 2.5, § 1798.102 & 1798.104, CONTRACTOR shall provide, to the greatest extent possible, clinical experience with supervision for EMT-P students, and EMT-P personnel, both during initial training and for the purpose of continuing education.

(d) CONTRACTOR will provide for continuing education programs for EMT-P personnel, Base Hospital Physicians and Emergency Department Nurses, on current topics of interest in emergency pre-hospital care.

(e) CONTRACTOR will provide access for ALS Service Provider employees, agents and/or subcontractors to other relevant continuing education programs provided for CONTRACTOR staff.

Section 5.04 Record Keeping

(a) CONTRACTOR agrees to maintain at the aforementioned principal place of business, and release to the EMS Agency upon request, all relevant records for program monitoring and evaluation of the ALS system, subject to applicable privacy laws.

(b) Document the annual additional operating costs and revenues specific to the provision of base hospital services.

(c) Provide emergency department diagnosis on all patients transported to the facility by ambulances based in COUNTY.

(d) COUNTY is aware that CONTRACTOR has subcontracted physician services provided in the Emergency Room. The obligations set forth herein apply also to any and all subcontracting entities which perform emergency room duties for CONTRACTOR, which shall maintain any and all records in accordance with all California laws, statutes, or regulations, and with all provisions contained in this Agreement, if such records are separately maintained by the subcontracting entity. In addition, should COUNTY consent, in writing, to the subcontracting of services, CONTRACTOR shall include in all subcontracts entered into with third parties to facilitate the provision of Services hereunder, the following clause:

> "(Name of vendor or subcontractor) agrees to maintain and preserve, until ten (10) years after termination of CONTRACTOR's agreement with the County of El Dorado, pertinent books, documents, papers and records of (name of vendor or subcontractor) related to this (purchase order or subcontract) and to permit the COUNTY to have access to, to examine and to audit any of such pertinent records."

Section 5.05 Trauma Registry

CONTRACTOR agrees to participate in the collection and entry of patient data into the Trauma Registry.

Section 5.06 Compliance with Laws and Policies.

(a) All services provided by CONTRACTOR pursuant to this Agreement shall be in strict compliance with applicable Federal, State and County laws and regulations; and shall comply with applicable procedures established by the EMS Agency available by contacting the County of El Dorado EMS Agency.

(b) During the performance of this Agreement CONTRACTOR and, in the event COUNTY agrees in writing to use of subcontractors pursuant to Article VIII, its subcontractors shall not unlawfully , harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition such as cancer, age (over 40 years), marital status, or family care leave.

(c) During the performance of this Agreement CONTRACTOR and any subcontractors, pursuant to Article VIII, shall:
   (i) Comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12990 (a-f) and the applicable regulations promulgated thereunder (Title 2, California Code of Regulations Section 7285);
   (ii) Comply with the applicable regulations of the Fair Employment and Housing Commission, implementing Government Code Section 12990 (a-f), set forth in Title 2 CCR Division 4 Chapter 5, incorporated by reference as if fully set forth herein; and
   (iii) Give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement.

(d) CONTRACTOR agrees to assist, cooperate with, or participate in any investigation by the COUNTY for the purpose of monitoring and evaluating the quality of CONTRACTOR'S medical direction of ALS services.

Article VI. WAIVER
The failure of either party hereto to insist upon strict performance of any of the terms, covenants, or conditions of this Agreement in any one or more instances shall not be construed as a waiver or relinquishment for the future of any such terms, covenants or conditions, but all of the same shall be and remain in full force and effect.

Article VII. CHANGES TO AGREEMENT
This Agreement may be amended by mutual consent of the parties hereto. Said amendments shall become effective only when in writing and fully executed by duly authorized officers of the parties hereto.

Article VIII. ASSIGNMENT AND DELEGATION
CONTRACTOR is engaged by COUNTY for its unique qualifications and skills as well as those of its personnel, contract physicians and contract physician groups. CONTRACTOR shall agree that all such personnel, contract physicians, subcontractors and subcontract groups shall require that all subcontractors comply with all terms and conditions of this Agreement, and all pertinent federal and State statutes and regulations.

CONTRACTOR shall not subcontract, delegate or assign services to be provided other than set forth above, in whole or in part, to any other person or entity without prior written consent of COUNTY.

Article IX. INDEPENDENT CONTRACTOR/LIABILITY
CONTRACTOR is, and shall be at all times, deemed independent and shall be wholly responsible for the manner in which it performs services required by terms of this Agreement. CONTRACTOR exclusively assumes responsibility for acts of its employees, associates, agents

and/or subcontractors, if any are authorized herein, as they relate to services to be provided under this Agreement during the course and scope of their employment.

CONTRACTOR shall be responsible for performing the work under this Agreement in a safe, professional, skillful and workmanlike manner and shall be liable for its own negligence and negligent acts of its employees. COUNTY shall have no right of control over the manner in which work is to be done and shall, therefore, not be charged with responsibility of preventing risk to CONTRACTOR or its employees.

Article X. DEFAULT, TERMINATION, AND CANCELLATION

Section 10.01 Default

Upon the occurrence of any default of the provisions of this Agreement, a party shall give written notice of said default to the party in default (notice). If the party in default does not cure the default within ten (10) days of the date of notice (time to cure), then such party shall be in default. The time to cure may be extended at the discretion of the party giving notice. Any extension of time to cure must be in writing, prepared by the party in default for signature by the party giving notice and must specify the reason(s) for the extension and the date on which the extension of time to cure expires.

Notice given under this section shall specify the alleged default and the applicable Agreement provision and shall demand that the party in default perform the provisions of this Agreement within the applicable period of time. No such notice shall be deemed a termination of this Agreement unless the party giving notice so elects in the notice, or the party giving notice so elects in a subsequent written notice after the time to cure has expired. In the event of termination for default, COUNTY reserves the right to take over and complete the work by contract or by any other means.

Section 10.02 Bankruptcy

This Agreement, at the option of the COUNTY, shall be terminable in the case of bankruptcy, voluntary or involuntary, or insolvency of CONTRACTOR.

Section 10.03 Ceasing Performance

COUNTY may terminate this Agreement in the event CONTRACTOR ceases to operate as a business, or otherwise becomes unable to substantially perform any term or condition of this Agreement.

Section 10.04 Termination or Cancellation without Cause

Either party hereto may terminate this Agreement in whole or in part upon one hundred twenty (120) days written notice to the other without cause.

Article XI. NOTICE TO PARTIES
All notices to be given by the parties hereto shall be in writing and served by depositing same in the United States Post Office, postage prepaid and return receipt requested.

Notices to COUNTY shall be addressed as follows:

COUNTY OF EL DORADO
HEALTH SERVICES DEPARTMENT
931 SPRING STREET
PLACERVILLE, CA 95667
ATTN: NEDA WEST, DIRECTOR

or to such other location as the COUNTY directs.

Notices to CONTRACTOR shall be addressed as follows:

BARTON HEALTHCARE SYSTEM
2170 SOUTH AVENUE
SOUTH LAKE TAHOE, CA 96150
ATTN: CONTRACTS

or to such other location as CONTRACTOR directs.

Article XII. INDEMNITY
CONTRACTOR shall indemnify, defend and hold harmless COUNTY, its officers, agents, employees and representatives from and against any and all claims, losses, liabilities or damages, demands and actions including payment of reasonable attorney's fees, arising out of or resulting from the performance of this Agreement, caused in whole or in part by any negligent or willful act or omission of CONTRACTOR, its officers, agents, employees, subcontractors, or anyone directly or indirectly employed by any of them regardless of whether caused in part by a party indemnified hereunder.

COUNTY shall indemnify, defend and hold harmless CONTRACTOR, its officers, agents, employees and representatives from and against any and all claims, losses, liabilities or damages, demands and actions including payment of reasonable attorney's fees, arising out of or resulting from the performance of this Agreement, caused in whole or in part by any negligent or willful act or omission of COUNTY, its officers, agents, employees, subcontractors, or anyone directly or indirectly employed by any of them regardless of whether caused in part by a party indemnified hereunder.

Article XIII. INSURANCE

Section 13.01 CONTRACTOR has notified COUNTY that physician services in the Emergency Room are provided by Tahoe Emergency Physicians (TEP). At the time of this Agreement, TEP maintains medical malpractice through MedAmerica Mutual Policy #TEPMC-3-2010 with limits of $1,000,000 and $5,000,000. CONTRACTOR shall provide COUNTY evidence of this policy upon final execution of this Agreement and shall notify COUNTY in writing within thirty (30) days of any changes thereto.

Section 13.02 CONTRACTOR shall provide proof of a policy of insurance satisfactory to the COUNTY Risk Manager and documentation evidencing that CONTRACTOR, any agents, and/or subcontractors providing services under this Agreement maintain insurance that meets the following requirements:

(a) Full Workers' Compensation and Employers' Liability Insurance covering all employees of CONTRACTOR as required by law in the State of California.
(b) Commercial General Liability Insurance of not less than $5,000,000 combined single limit per occurrence for bodily injury and property damage.
(c) Automobile Liability Insurance of not less than $1,000,000 is required in the event motor vehicles are used by the CONTRACTOR in the performance of the Agreement.
(d) In the event CONTRACTOR is a licensed professional performing professional service under this Agreement, professional liability (for example, malpractice insurance) is required with a limit of liability of not less than $5,000,000 per occurrence.
(e) In the event CONTRACTOR or any subcontractors providing services under this Agreement change insurance carriers during the term of this Agreement, CONTRACTOR and/or subcontractors thereto shall purchase "tail" coverage for the period of one year following the term of this Agreement. CONTRACTOR shall provide proof of "tail" coverage satisfactory to the COUNTY Risk Manager.

Section 13.03 CONTRACTOR shall furnish a certificate of insurance satisfactory to the COUNTY Risk Manager for every CONTRACTOR and subcontractor providing services under this Agreement, as evidence that the insurance required above is being maintained.

Section 13.04 The insurance will be issued by an insurance company acceptable to COUNTY Risk Management, or be provided through partial or total self-insurance likewise acceptable to COUNTY Risk Management.

Section 13.05 CONTRACTOR, agents and/or subcontractors agree that the insurance required above shall be in effect at all times during the term of this Agreement. In the event said insurance coverage expires at any time or times during the term of this Agreement, CONTRACTOR agents and/or subcontractors agree to provide at least thirty (30) days prior to said expiration date, a new certificate of insurance evidencing insurance coverage as provided for herein for not less than the remainder of the term of the Agreement, or for a period of not less than one (1) year. New certificates of insurance are subject to the approval of Risk Management and CONTRACTOR agents and/or subcontractors agree that no work or services shall be performed prior to the giving

of such approval. In the event the CONTRACTOR, agents and/or subcontractors fail to keep in effect at all times insurance coverage as herein provided, COUNTY may, in addition to any other remedies it may have, terminate this Agreement upon the occurrence of such event.

Section 13.06 Each certificate of insurance, including those provided by any agents or subcontractors providing services under this Agreement, must include the following provisions stating that:

(a) The insurer will not cancel the insured's coverage without thirty (30) days prior written notice to COUNTY, and;

(b) The County of El Dorado, its officers, officials, employees, and volunteers are included as additional insured, but only insofar as the operations under this Agreement are concerned. This provision shall apply to the general liability policy.

Section 13.07 CONTRACTOR insurance coverage shall be primary insurance as respects the COUNTY, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the COUNTY, its officers, officials, employees or volunteers shall be excess of the CONTRACTOR insurance and shall not contribute with it.

Section 13.08 Any deductibles or self-insured retentions must be declared to and approved by the COUNTY, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the COUNTY, its officers, officials, employees, and volunteers; or the CONTRACTOR shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

Section 13.09 Any failure to comply with the reporting provisions of the policies shall not affect coverage provided to the COUNTY, its officers, officials, employees or volunteers.

Section 13.10 The insurance companies shall have no recourse against the COUNTY, its officers and employees or any of them for payment of any premiums or assessments under any policy issued by any insurance company.

Section 13.11 CONTRACTOR'S, agent's and/or subcontractor's obligations shall not be limited by the foregoing insurance requirements and shall survive expiration of this Agreement.

Section 13.12 In the event CONTRACTOR, agents and/or subcontractors cannot provide an occurrence policy, CONTRACTOR agents and/or subcontractors shall provide insurance covering claims made as a result of performance of this Agreement for not less than three (3) years following completion of performance of this Agreement.

Section 13.13 Certificate of insurance shall meet such additional standards as may be determined by the contracting County Department either independently or in consultation with COUNTY Risk Management, as essential for the protection of the COUNTY.

Article XIV. INTEREST OF PUBLIC OFFICIAL
No official or employee of COUNTY who exercises any functions or responsibilities in review or approval of services to be provided by CONTRACTOR under this Agreement shall participate in or attempt to influence any decision relating to this Agreement which affects personal interest or interest of any corporation, partnership, or association in which he/she is directly or indirectly interested; nor shall any such official or employee of COUNTY have any interest, direct or indirect, in this Agreement or the proceeds thereof.

Article XV. INTEREST OF CONTRACTOR
CONTRACTOR covenants that CONTRACTOR presently has no personal interest or financial interest, and shall not acquire same in any manner or degree in either: 1) any other contract connected with or directly affected by the services to be performed by this Agreement; or, 2) any other entities connected with or directly affected by the services to be performed by this Agreement. CONTRACTOR further covenants that in the performance of this Agreement no person having any such interest shall be employed by CONTRACTOR.

Article XVI. CONFLICT OF INTEREST
The parties to this Agreement have read and are aware of the provisions of Government Code Section 1090 et seq. and Section 87100 relating to conflict of interest of public officers and employees. CONTRACTOR attests that it has no current business or financial relationship with any COUNTY employee(s) that would constitute a conflict of interest with provision of services under this contract and will not enter into any such business or financial relationship with any such employee(s) during the term of this Agreement. COUNTY represents that it is unaware of any financial or economic interest of any public officer or employee of CONTRACTOR relating to this Agreement. It is further understood and agreed that if such a financial interest does exist at the inception of this Agreement either party may immediately terminate this Agreement by giving written notice as detailed in the Article in the Agreement titled, "Default, Termination and Cancellation".

Article XVII. CALIFORNIA RESIDENCY (FORM 590)
All independent contractors providing services to the COUNTY must file a State of California Form 590, certifying their California residency or, in the case of a corporation, certifying that they have a permanent place of business in California. CONTRACTOR will be required to submit a Form 590 prior to execution of an Agreement or COUNTY shall withhold seven (7) percent of each payment made to the CONTRACTOR during term of the Agreement. This requirement applies to any agreement/contract exceeding $1,500.00.

Article XVIII. TAXPAYER IDENTIFICATION NUMBER (FORM W-9)

All independent contractors or corporations providing services to the COUNTY must file a Department of the Treasury Internal Revenue Service Form W-9, certifying their Taxpayer Identification Number.

Article XIX. COUNTY BUSINESS LICENSE

It is unlawful for any person to furnish supplies or services, or transact any kind of business in the unincorporated territory of COUNTY without possessing a County business license unless exempt under County Code Section 5.08.070.

Article XX. ADMINISTRATOR

The COUNTY Officer or employee with responsibility for administering this Agreement is Richard Todd, EMS Agency Administrator, or successor.

Article XXI. AUTHORIZED SIGNATURES

The parties to this Agreement represent that the undersigned individuals executing this Agreement on their respective behalf are fully authorized to do so by law or other appropriate instrument and to bind upon said parties to the obligations set forth herein.

Article XXII. PARTIAL INVALIDITY

If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will continue in full force and effect without being impaired or invalidated in any way.

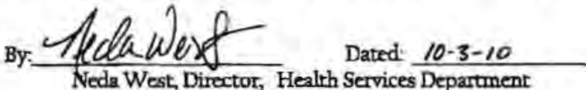
Article XXIII. VENUE

Any dispute resolution action arising out of this Agreement, including, but not limited to, litigation, mediation, or arbitration, shall be brought in El Dorado County, California, and shall be resolved in accordance with the laws of the State of California.

Article XXIV. ENTIRE AGREEMENT

This document and the documents referred to herein or exhibits hereto are the entire Agreement between the parties and they incorporate or supersede all prior written or oral Agreements or understandings.

REQUESTING DEPARTMENT HEAD CONCURRENCE:



By: ______________________ Dated: 10-3-10

Neda West, Director, Health Services Department

009-111-P-N2010

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates indicated below.

--COUNTY OF EL DORADO--

By: [signature] Dated: 12/7/10
Norma Santiago, Chair
Board of Supervisors
"COUNTY"

ATTEST:
Suzanne Allen de Sanchez
Clerk of the Board of Supervisors

By: [signature] Dated: 12/7/10
Deputy Clerk

--CONTRACTOR--

BARTON HEALTHCARE SYSTEM

By: [signature] Dated: 11/9/10
John Williams, CEO
"CONTRACTOR"

By: [signature] Dated: 11/9/2010
Richard Derby, CFO
"CONTRACTOR"

Appendix H-Base Hospital Services Agreement – Marshall

ORIGINAL

216-S1010

AGREEMENT FOR SERVICES #897-PHD1009
Marshall Medical Center - Base Hospital Agreement

THIS AGREEMENT made and entered into by and between the County of El Dorado, a political subdivision of the State of California (hereinafter referred to as COUNTY) and Marshall Medical Center, a licensed acute care hospital, whose principal place of business is 1100 Marshall Way, Placerville, CA 95667 (hereinafter referred to as CONTRACTOR);

RECITALS

WHEREAS, COUNTY has established an Emergency Medical Services (EMS) System pursuant to Division 2.5 of the California Health and Safety Code and has designated El Dorado County EMS Agency as the Emergency Medical Services Agency, pursuant to Health and Safety Code Division 2.5 § 1797.220; and

WHEREAS, COUNTY has established an Advanced Life Support (ALS) program, as defined in Health and Safety Code Division 2.5 § 1797.52; and

WHEREAS, Health and Safety Code Division 2.5, § 1797.52 requires that an ALS program have a base hospital for the provision of medical direction and supervision of Emergency Medical Technician Paramedic (EMT-P) personnel; and

WHEREAS, CONTRACTOR has represented to COUNTY that it is specially trained, experienced, expert and competent to perform the special services required hereunder and COUNTY has determined to rely upon such representations; and

WHEREAS, it is the intent of the parties hereto that such services be in conformity with all applicable Federal, State and local laws; and

NOW, THEREFORE, COUNTY and CONTRACTOR mutually agree as follows:

Article I. **DEFINITIONS**

Section 1.01 The following definitions shall apply throughout this Agreement:

(a) Advanced Life Support (ALS)

Special services designed to provide definitive pre-hospital emergency medical care, including, but not limited to: (1) cardiopulmonary resuscitation, (2) cardiac monitoring, (3) cardiac defibrillation, (4) advanced airway management, (5) intravenous therapy, (6) administration of specified drugs and other medicinal preparations, and other specified techniques and procedures administered by authorized personnel under the direct supervision of the EMS Agency Medical Director or a Base Hospital physician as part of the County of El Dorado (EDC) EMS System at the scene of an emergency, during transport to an acute care hospital, during interfacility transfer, and while in the emergency department of an acute care hospital until responsibility for patient care is assumed by hospital medical staff (Reference: Health and Safety Code § 1797.52).

(b) Agent

For purposes of this Agreement, an agent shall include those contractors or subcontractors providing services under this Agreement; for example, the *base hospital physician*.

(c) ALS Service Agency

A public agency, private corporation, or other business entity which has 1) met all criteria for approval and has been approved by the EMS Agency in accordance with Title 22 California Code of Regulations (CCR) Division 9, Chapter 4, § 100167 to provide ALS services to a designated geographic area with a designated number of EMT-P units and 2) employees certified EMT-1, certified EMT-2 or licensed paramedic personnel for the delivery of emergency medical care to the sick and injured at the scene of an emergency, during transport, or during interfacility transfer (Reference Title 22 CCR § 100401). This definition shall include all authorized air ambulances servicing the COUNTY.

(d) Base Hospital

An acute care hospital responsible for providing on-line (active communication via radio, telephone or other electronic telephonic communication device) and off-line (discussion at Continuous Quality Improvement or peer review meetings) medical direction/control to COUNTY accredited EMT-Ps, pursuant to a written agreement with the COUNTY in accordance with Title 22 CCR Division 9, Chapter 4, § 100168

(e) Base Hospital Physician

A physician and/or surgeon who is currently licensed in California; who is assigned to the emergency department of a Base Hospital; who has been trained to issue advice and instructions to emergency medical care personnel consistent with guidelines and standards established by the EMS Agency Medical Director and in accordance with Title 22 CCR Division 9, Chapter 4, § 100168; and who may be a subcontractor performing services for the base hospital under this Agreement.

(f) Base Hospital Medical Director

The physician designated by CONTRACTOR shall be submitted to the EMS Agency Medical Director for approval and shall be certified, or eligible for certification, by the American Board of Emergency Medicine or the American Board of Osteopathic Emergency Medicine, who shall be responsible for medical oversight of all Base Hospital activities.

(g) California Code of Regulations (CCR)
Regulations that have been formally adopted by the State agency that have been reviewed, approved, and made available to the public by the California Office of Administrative Law and may be viewed at
http://ccr.oal.ca.gov/linkedslice/default.asp?SP-CCR-1000&Action-Welcome

(h) Continuous Quality Improvement Program (CQI)
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.

(i) Emergency Department
A department or separate area within a hospital that is staffed and equipped to provide emergency medical care to the sick or injured on a continuous 24-hour basis. At a minimum, the hospital shall be permitted to provide basic emergency medical services as designated by Title 22 CCR Division 5, §§ 70411 – 70419.

(j) EMS Agency
The County of El Dorado Emergency Medical Services Agency.

(k) Emergency Medical Technician Paramedic (EMT-P)
An individual who is educated and trained in all elements of prehospital advanced life support; whose scope of practice to provide advanced life support is in accordance with the standards prescribed by Title 22 CCR Division 9, Chapter 4, and who has a valid license issued pursuant to this Chapter. (Reference: 22 CCR § 100139)

(l) EMS Agency Medical Director
Pursuant to Health and Safety Code Division 2.5, § 1797.202, the EMS Agency Medical Director is a licensed physician and/or surgeon duly appointed by COUNTY who has substantial experience in the practice of emergency medicine. The Medical Director shall be responsible for providing medical control and assuring medical accountability throughout the planning, implementation, and evaluation of the EMS system.

(m) Emergency Medical Services (EMS) System
Emergency Medical Services (EMS) include that system of services organized to provide rapid response to serious medical emergencies, including immediate medical care and patient transport to definitive care in an appropriate hospital setting. An effective EMS System involves a variety of agencies and organizations working together to accomplish the goal of providing rapid emergency medical response and treatment. While most EMS responses are day-to-day emergencies, EMS agencies also plan and prepare for disaster medical response.

(n) EMSystems®
The EMSystems® software provides a comprehensive web-based healthcare information management solution that optimizes real-time communications, inventory resource allocation, volunteer registry management, and patient and evacuee tracking to enhance emergency preparedness and response to medical emergencies, mass casualty events, and public health incidents.

(o) MedNet Radio
A specific radio frequency that supports medical communications between emergency pre-hospital personnel and base or receiving hospitals.

(p) Mobile Intensive Care Nurse (MICN)
A Registered Nurse as defined in Health and Safety Code Division 2.5 § 1797.56 who has been certified by the EMS Agency Medical Director in accordance with criteria and standards approved by the EMS Agency.

(q) Pre-Hospital Care Personnel
Any transporting or non-transporting Basic Life Support (BLS) or Advanced Life Support (ALS) unit dispatched to the scene of a medical emergency to provide immediate patient care.

(r) Subcontractor
A person or entity employed by CONTRACTOR to perform work as part of this overall Agreement.

(s) Trauma Registry
A collection of data on patients who receive hospital care for certain types of injuries. Such data are primarily designed to ensure quality trauma care and outcomes in individual institutions and trauma systems, but have the secondary purpose of providing useful data for the surveillance of injury morbidity and mortality.

Article II. SCOPE OF SERVICES:

Section 2.01 CONTRACTOR shall provide all services necessary for the operation of a Base Hospital, including on-line medical direction/control for any COUNTY-accredited EMT-P contacting it for medical direction. In the performance of this Agreement, CONTRACTOR agrees to:

(a) Meet the criteria and abide by all requirements prescribed in:
   (i) Health and Safety Code, Division 2.5, Emergency Medical Services, §§ 1798. – 1798.104; and §§ 1798.160 – 1798.175;
   (ii) Health and Safety Code, Division 2, § 1300;
   (iii) Title 22 CCR Division 9, Chapter 4, § 100168;
   (iv) Title 22 CCR Division 5, Chapter 1, Article 6, §§70411 – 70419; and
   (v) Applicable EMS Agency Policies and Procedures.

(b) Provide a Base Hospital Medical Director who is certified, or eligible for certification, by the American Board of Emergency Medicine or the American Board of Osteopathic Emergency Medicine, who shall be responsible for medical oversight of all Base Hospital activities. The EMS Agency Medical Director may waive the requirement for board certification if he/she determines that an individual with these qualifications is not available. All waivers shall be documented in writing and filed with the EMS Agency and the CONTRACTOR.

(c) Appoint a Registered Nurse with sufficient emergency department and EMS experience as Base Hospital Coordinator, who shall be responsible for assisting the Base Hospital Medical Director with coordination and oversight of Base Hospital activities.

(d) Have available a qualified MICN or Base Hospital Physician to provide prompt on-line medical direction/control to paramedic units. The only exception shall be due to situations

preventing such coverage as determined by the Base Hospital Medical Director; such exceptions shall be documented and forwarded to the EMS Agency.

(e) Provide adequate office space and resources for performance of EMT-P duties described herein as determined by CONTRACTOR's reasonable discretion.

(f) Provide personnel for the CQI, medical advisory, training and other committees designated by the EMS Agency.

Section 2.02 COUNTY shall:

(a) Assume responsibility for investigation, follow up and closure of all complaints referred from CONTRACTOR where remediation is requested or counseling sessions with ALS Service Agency staff are not successfully resolved.

(b) Provide staff and resources to assist CONTRACTOR in addressing EMS System issues or problems identified from retrospective audit and review of EMS medical care.

(c) COUNTY shall provide CONTRACTOR with a copy of any and all policies, procedures, and protocols referred to herein, and any changes or modifications or supplements thereto in a timely manner.

(d) Comply with requirements for EMS medical control as specified by Health and Safety Code, Division 2.5, § 1798; and Title 22 CCR, Division 9, Chapter 4, § 100144, Chapter 6 and Chapter 12.

(e) Monitor CONTRACTOR'S compliance with this Agreement, COUNTY EMS Agency applicable policies and procedures, and regulations including but not limited to Title 22 CCR Division 9, Chapter 4 §100168, Chapter 6, and Chapter 12. The COUNTY may at any time deny, suspend or revoke approval, in the sole discretion of the COUNTY, of CONTRACTOR as a Base Hospital for noncompliance.

Article III. TERM

This Agreement shall become effective upon signature by the parties hereto and shall cover the term August 17, 2010 through August 16, 2013 unless earlier terminated pursuant to the provisions under Article X herein.

Article IV. COMPENSATION FOR SERVICES

There will be no remuneration provided by COUNTY to CONTRACTOR for the services described herein. COUNTY shall not be liable for any costs incurred by CONTRACTOR as a result of this Agreement, including but not limited to: the cost of patient care; the cost of training, staffing, equipping, supplying, or otherwise operating as a Base Hospital.

Article V. PERFORMANCE PROVISIONS

Section 5.01 Communications Equipment

(a) CONTRACTOR agrees to utilize two-way radio communications equipment for direct two-way voice communication utilizing MedNet pursuant to Section 1.01 (p), with the pre-hospital care personnel in their assigned service area. This requirement may be supplemented by the use of cellular telephones and telephones at the base hospital, subject to compliance with Section 5.01(c).

(b) CONTRACTOR will provide and maintain at CONTRACTOR'S expense a minimum of two (2) dedicated telephone lines for ALS communication with pre-hospital care personnel located directly adjacent to the existing MedNet radio.

(c) CONTRACTOR will ensure that every ALS call conducted by radio or dedicated telephone line is recorded using a voice-activated recording system. Recordings shall be maintained for a minimum of ninety (90) days to be used strictly for the purpose of education, audit, and case reviews, or to be made available upon request to the EMS Agency Medical Director for CQI activities. Recordings of medical communication are part of the CQI process, and are not considered part of an individual patient's medical record.

(d) CONTRACTOR will provide, and maintain, at CONTRACTOR'S expense all hardware and Internet access required for an Internet-based hospital communication system (currently EMSystems®) within the Emergency Department.

(e) CONTRACTOR will provide timely reports of any recurring radio, telephone, or Internet problems to the appropriate maintenance contractor and provide written notice to the EMS Agency.

Section 5.02 Statistical Data for Monitoring and System Evaluation

(a) CONTRACTOR agrees to cooperate with the EMS agency in gathering and providing statistics and information for monitoring and evaluating ALS programs, in accordance with the requirements of applicable privacy law.

(b) CONTRACTOR agrees to participate in the CQI process, in accordance with the policies and procedures adopted by the COUNTY EMS Agency and shall at all times ensure they are in compliance with the then current version of the Emergency Medical Services System Quality Improvement Program Model Guidelines, available at http://www.emsa.ca.gov/pubs/pdf/emsa166.pdf or by contacting the County of El Dorado Emergency Medical Services Agency.

Section 5.03 Education

(a) CONTRACTOR shall provide, or cause to be provided, EMS pre-hospital personnel training and continuing education in accordance with the policies and procedures of the EMS Agency (reference Health and Safety Code § 1798.104).

(b) CONTRACTOR will ensure that all licensed Emergency Department employees, agents and/or subcontractors receive orientation to the Base Hospital role and relevant EMS Agency policies and procedures.

(c) Pursuant to Health and Safety Code Division 2.5, § 1798.102 & 1798.104, CONTRACTOR shall provide, to the greatest extent possible, clinical experience with supervision for EMT-P students, and EMT-P personnel, both during initial training and for the purpose of continuing education.

(d) CONTRACTOR will provide for continuing education programs for EMT-P personnel, Base Hospital Physicians and Emergency Department Nurses, on current topics of interest in emergency pre-hospital care.

(c) CONTRACTOR will provide access for ALS Service Agency employees, agents and/or subcontractors to other relevant continuing education programs provided for CONTRACTOR staff.

Section 5.04 Record Keeping

(a) CONTRACTOR agrees to maintain at the aforementioned principal place of business, and release to the EMS Agency upon request, all relevant records for program monitoring and evaluation of the ALS system, subject to applicable privacy laws.

(b) Provide Emergency Department impression on all patients transported to the facility by ambulances based in COUNTY.

(c) COUNTY is aware that CONTRACTOR has subcontracted physician services provided in the Emergency Department. The obligations set forth herein apply also to any and all subcontracting entities which perform emergency department duties for CONTRACTOR, which shall maintain any and all records in accordance with all California laws, statutes, or regulations, and with all provisions contained in this Agreement, if such records are separately maintained by the subcontracting entity. In addition, should COUNTY consent, in writing, to the subcontracting of services, CONTRACTOR shall include in all subcontracts entered into with third parties to facilitate the provision of Services hereunder, the following clause:

> "(Name of vendor or subcontractor) agrees to maintain and preserve, until ten (10) years after termination of CONTRACTOR's agreement with the County of El Dorado, pertinent books, documents, papers and records of (name of vendor or subcontractor) related to this (purchase order or subcontract) and to permit the COUNTY to have access to, to examine and to audit any of such pertinent records."

Section 5.05 Trauma Registry

CONTRACTOR agrees to participate in the collection and entry of patient data into the Trauma Registry system in accordance with Title 22 California Code of Regulations (CCR) § 100265.

Section 5.06 Compliance with Laws and Policies.

(a) All services provided by CONTRACTOR pursuant to this Agreement shall be in strict compliance with applicable Federal, State and County laws and regulations; and shall comply with applicable procedures established by the EMS Agency available by contacting the County of El Dorado EMS Agency.

(b) During the performance of this Agreement CONTRACTOR and, in the event COUNTY agrees in writing to use of subcontractors pursuant to Article VIII, its subcontractors shall not unlawfully harass, or allow harassment against, any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition such as cancer, age (over 40 years), marital status, or family care leave.

(c) During the performance of this Agreement CONTRACTOR and any subcontractors, pursuant to Article VIII, shall:

(i) Comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12990 (a-f) and the applicable regulations promulgated thereunder (Title 2, California Code of Regulations Section 7285);

(ii) Comply with the applicable regulations of the Fair Employment and Housing Commission, implementing Government Code Section 12990 (a-f), set forth in Title 2 CCR Division 4 Chapter 5, incorporated by reference as if fully set forth herein; and

(iii) Give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement.

(d) CONTRACTOR agrees to assist, cooperate with, or participate in any investigation by the COUNTY for the purpose of monitoring and evaluating the quality of CONTRACTOR'S medical direction of ALS services.

Article VI. WAIVER

The failure of either party hereto to insist upon strict performance of any of the terms, covenants, or conditions of this Agreement in any one or more instances shall not be construed as a waiver or relinquishment for the future of any such terms, covenants or conditions, but all of the same shall be and remain in full force and effect.

Article VII. CHANGES TO AGREEMENT

This Agreement may be amended by mutual consent of the parties hereto. Said amendments shall become effective only when in writing and fully executed by duly authorized officers of the parties hereto.

Article VIII. ASSIGNMENT AND DELEGATION

CONTRACTOR is engaged by COUNTY for its unique qualifications and skills as well as those of its personnel, contract physicians and contract physician groups. CONTRACTOR shall agree that all such personnel, contract physicians, subcontractors and subcontract groups shall require that all subcontractors comply with all terms and conditions of this Agreement, and all pertinent Federal and State statutes and regulations.

CONTRACTOR shall not subcontract, delegate or assign services to be provided other than set forth above, in whole or in part, to any other person or entity without prior written consent of COUNTY.

Article IX. INDEPENDENT CONTRACTOR/LIABILITY

CONTRACTOR is, and shall be at all times, deemed independent and shall be wholly responsible for the manner in which it performs services required by terms of this Agreement. CONTRACTOR exclusively assumes responsibility for acts of its employees, associates, agents and/or subcontractors, if any are authorized herein, as they relate to services to be provided under this Agreement during the course and scope of their employment.

CONTRACTOR shall be responsible for performing the work under this Agreement in a safe, professional, skillful and workmanlike manner and shall be liable for its own negligence and negligent acts of its employees. COUNTY shall have no right of control over the manner in which work is to be performed.

Article X. DEFAULT, TERMINATION, AND CANCELLATION

Section 10.01 Default
Upon the occurrence of any default of the provisions of this Agreement, a party shall give written notice of said default to the party in default (notice). If the party in default does not cure the default within ten (10) business days of the date of notice (time to cure), then such party shall be in default. The time to cure may be extended at the discretion of the party giving notice. Any extension of time to cure must be in writing, prepared by the party in default for signature by the party giving notice and must specify the reason(s) for the extension and the date on which the extension of time to cure expires.

Notice given under this section shall specify the alleged default and the applicable Agreement provision and shall demand that the party in default perform the provisions of this Agreement within the applicable period of time. No such notice shall be deemed a termination of this Agreement unless the party giving notice so elects in the notice, or the party giving notice so elects in a subsequent written notice after the time to cure has expired. In the event of termination for default, COUNTY reserves the right to take over and complete the work by contract or by any other means.

Section 10.02 Bankruptcy
This Agreement, at the option of the COUNTY, shall be terminable in the case of bankruptcy, voluntary or involuntary, or insolvency of CONTRACTOR.

Section 10.03 Ceasing Performance
COUNTY may terminate this Agreement in the event CONTRACTOR ceases to operate as a business, or otherwise becomes unable to substantially perform any term or condition of this Agreement.

Section 10.04 Termination or Cancellation without Cause
Either party hereto may terminate this Agreement in whole or in part upon one hundred twenty (120) days written notice to the other without cause.

Article XI. NOTICE TO PARTIES

All notices to be given by the parties hereto shall be in writing and served by depositing same in the United States Post Office, postage prepaid and return receipt requested.

Notices to COUNTY shall be addressed as follows:

COUNTY OF EL DORADO
HEALTH SERVICES DEPARTMENT
931 SPRING STREET
PLACERVILLE, CA 95667
ATTN: NEDA WEST, DIRECTOR

or to such other location as the COUNTY directs.

Notices to CONTRACTOR shall be addressed as follows:

MARSHALL MEDICAL CENTER
1100 MARSHALL WAY
PLACERVILLE, CA 95667
ATTN: BASE HOSPITAL COORDINATOR

or to such other location as CONTRACTOR directs.

Article XII. INDEMNITY
CONTRACTOR shall indemnify, defend and hold harmless COUNTY, its officers, agents, employees and representatives from and against any and all claims, losses, liabilities or damages, demands and actions including payment of reasonable attorney's fees, arising out of or resulting from the performance of this Agreement, caused in whole or in part by any negligent or willful act or omission of CONTRACTOR, its officers, agents, employees, subcontractors, or anyone directly or indirectly employed by any of them regardless of whether caused in part by a party indemnified hereunder.

COUNTY shall indemnify, defend and hold harmless CONTRACTOR, its officers, agents, employees and representatives from and against any and all claims, losses, liabilities or damages, demands and actions including payment of reasonable attorney's fees, arising out of or resulting from the performance of this Agreement, caused in whole or in part by any negligent or willful act or omission of COUNTY, its officers, agents, employees, subcontractors, or anyone directly or indirectly employed by any of them regardless of whether caused in part by a party indemnified hereunder.

Article XIII. INSURANCE
Section 13.01 CONTRACTOR has notified COUNTY that physician services in the Emergency Department are provided by Emergency Physicians Medical Group, Inc. dba Emergency Medicine Physicians (EMP Management Group, Ltd.). At the time of this Agreement, Emergency Medicine Physicians maintains medical malpractice through Physicians Specialty Ltd., RRG Policy # PL1010-ep with limits of $1,000,000 and $3,000,000. CONTRACTOR shall provide COUNTY evidence of this policy pursuant to Section 13.03 and shall notify COUNTY in writing within thirty (30) days of any changes thereto.

Section 13.02 Within five (5) business days of execution by both parties to this Agreement, CONTRACTOR shall provide COUNTY with a Certificate of Insurance naming COUNTY as "additional insured," along with the Endorsement for the "additional insured" language, pursuant to Section 13.07 (b) under this Agreement.

Section 13.03 CONTRACTOR shall provide proof of a policy of insurance satisfactory to the COUNTY Risk Manager and documentation evidencing that CONTRACTOR, any agents, and/or subcontractors providing services under this Agreement maintain insurance that meets the following requirements:

(a) Full Workers' Compensation and Employers' Liability Insurance covering all employees of CONTRACTOR as required by law in the State of California.
(b) Commercial General Liability Insurance of not less than $1,000,000 combined single limit per occurrence for bodily injury and property damage.
(c) Automobile Liability Insurance of not less than $1,000,000 is required in the event motor vehicles are used by the CONTRACTOR in the performance of the Agreement.
(d) In the event CONTRACTOR is a licensed professional performing professional service under this Agreement, professional liability (for example, malpractice insurance) is required with a limit of liability of not less than $1,000,000 per occurrence.
(e) In the event CONTRACTOR or any subcontractors providing services under this Agreement change insurance carriers during the term of this Agreement, CONTRACTOR and/or subcontractors thereto shall purchase "tail" coverage for the period of one year following the term of this Agreement. CONTRACTOR shall provide proof of "tail" coverage satisfactory to the COUNTY Risk Manager.

Section 13.04 CONTRACTOR shall furnish a certificate of insurance satisfactory to the COUNTY Risk Manager for every CONTRACTOR and subcontractor providing services under this Agreement, as evidence that the insurance required above is being maintained within five (5) business days of execution by both parties to this contract.

Section 13.05 The insurance will be issued by an insurance company acceptable to COUNTY Risk Management, or be provided through partial or total self-insurance likewise acceptable to COUNTY Risk Management.

Section 13.06 CONTRACTOR, agents and/or subcontractors agree that the insurance required above shall be in effect at all times during the term of this Agreement. In the event said insurance coverage expires at any time or times during the term of this Agreement, CONTRACTOR agents and/or subcontractors agree to provide at least thirty (30) days prior to said expiration date, a new certificate of insurance evidencing insurance coverage as provided for herein for not less than the remainder of the term of the Agreement, or for a period of not less than one (1) year. New certificates of insurance are subject to the approval of Risk Management and CONTRACTOR agents and/or subcontractors agree that no work or services shall be performed prior to the giving of such approval. In the event the CONTRACTOR, agents and/or

subcontractors fail to keep in effect at all times insurance coverage as herein provided, COUNTY may, in addition to any other remedies it may have, terminate this Agreement upon the occurrence of such event.

Section 13.07 Each certificate of insurance, including those provided by any agents or subcontractors other than Emergency Medicine Physicians providing services under this Agreement, must include the following provisions stating that:

(a) The insurer will not cancel the insured's coverage without thirty (30) days prior written notice to COUNTY, and;
(b) The County of El Dorado, its officers, officials, employees, and volunteers are included as additional insured, but only insofar as the operations under this Agreement are concerned. This provision shall apply to the general liability policy.

Section 13.08 CONTRACTOR's insurance coverage shall be the primary insurance with respect to any losses, claims and/or damages arising out of or related to this Agreement to the County, its officers, officials, employees, and volunteers.

Section 13.09 Any deductibles or self-insured retentions must be declared to and approved by the COUNTY, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the COUNTY, its officers, officials, employees, and volunteers; or the CONTRACTOR shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

Section 13.10 Any failure to comply with the reporting provisions of the policies shall not affect coverage provided to the COUNTY, its officers, officials, employees or volunteers.

Section 13.11 The insurance companies shall have no recourse against the COUNTY, its officers and employees or any of them for payment of any premiums or assessments under any policy issued by any insurance company.

Section 13.12 CONTRACTOR'S, agent's and/or subcontractor's obligations shall not be limited by the foregoing insurance requirements and shall survive expiration of this Agreement.

Section 13.13 In the event CONTRACTOR, agents and/or subcontractors cannot provide an occurrence policy, CONTRACTOR agents and/or subcontractors shall provide insurance covering claims made as a result of performance of this Agreement for not less than three (3) years following completion of performance of this Agreement.

Section 13.14 Certificate of insurance shall meet such additional standards as may be determined by the contracting County Department either independently or in consultation with COUNTY Risk Management, as essential for the protection of the COUNTY.

Article XIV. INTEREST OF PUBLIC OFFICIAL
No official or employee of COUNTY who exercises any functions or responsibilities in review or approval of services to be provided by CONTRACTOR under this Agreement shall participate in or attempt to influence any decision relating to this Agreement which affects personal interest or interest of any corporation, partnership, or association in which he/she is directly or indirectly interested; nor shall any such official or employee of COUNTY have any interest, direct or indirect, in this Agreement or the proceeds thereof.

Article XV. INTEREST OF CONTRACTOR
CONTRACTOR covenants that CONTRACTOR presently has no personal interest or financial interest, and shall not acquire same in any manner or degree in either: 1) any other contract connected with or directly affected by the services to be performed by this Agreement; or, 2) any other entities connected with or directly affected by the services to be performed by this Agreement. CONTRACTOR further covenants that in the performance of this Agreement no person having any such interest shall be employed by CONTRACTOR.

Article XVI. CONFLICT OF INTEREST
The parties to this Agreement have read and are aware of the provisions of Government Code Section 1090 et seq. and Section 87100 relating to conflict of interest of public officers and employees. CONTRACTOR attests that it has no current business or financial relationship with any COUNTY employee(s) that would constitute a conflict of interest with provision of services under this contract and will not enter into any such business or financial relationship with any such employee(s) during the term of this Agreement. COUNTY represents that it is unaware of any financial or economic interest of any public officer or employee of CONTRACTOR relating to this Agreement. It is further understood and agreed that if such a financial interest does exist at the inception of this Agreement either party may immediately terminate this Agreement by giving written notice as detailed in the Article in the Agreement titled, "Default, Termination and Cancellation".

Article XVII. CALIFORNIA RESIDENCY (FORM 590)
All independent contractors providing services to the COUNTY must file a State of California Form 590, certifying their California residency or, in the case of a corporation, certifying that they have a permanent place of business in California. CONTRACTOR will be required to submit a Form 590 prior to execution of an Agreement or COUNTY shall withhold seven (7) percent of each payment made to the CONTRACTOR during term of the Agreement. This requirement applies to any agreement/contract exceeding $1,500.00.

Article XVIII. TAXPAYER IDENTIFICATION NUMBER (FORM W-9)
All independent contractors or corporations providing services to the COUNTY must file a Department of the Treasury Internal Revenue Service Form W-9, certifying their Taxpayer Identification Number.

Article XIX. COUNTY BUSINESS LICENSE
It is unlawful for any person to furnish supplies or services, or transact any kind of business in the unincorporated territory of COUNTY without possessing a County business license unless exempt under County Code Section 5.08.070.

Article XX. ADMINISTRATOR
The COUNTY Officer or employee with responsibility for administering this Agreement is Richard Todd, EMS Agency Administrator, or successor.

Article XXI. AUTHORIZED SIGNATURES
The parties to this Agreement represent that the undersigned individuals executing this Agreement on their respective behalf are fully authorized to do so by law or other appropriate instrument and to bind upon said parties to the obligations set forth herein.

Article XXII. PARTIAL INVALIDITY
If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will continue in full force and effect without being impaired or invalidated in any way.

Article XXIII. VENUE
Any dispute resolution action arising out of this Agreement, including, but not limited to, litigation, mediation, or arbitration, shall be brought in El Dorado County, California, and shall be resolved in accordance with the laws of the State of California.

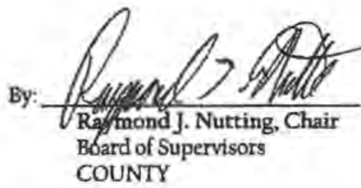
Article XXIV. ENTIRE AGREEMENT
This document and the documents referred to herein or exhibits hereto are the entire Agreement between the parties and they incorporate or supersede all prior written or oral Agreements or understandings.

REQUESTING DEPARTMENT HEAD CONCURRENCE:

By: ______________________ Dated: 5-31-11
Neda West, Director, Health Services Department

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates indicated below.

--COUNTY OF EL DORADO--



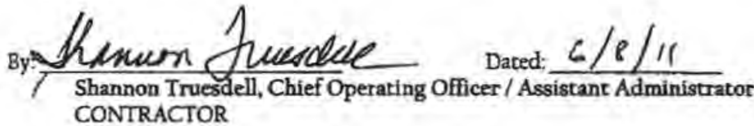
By: ______________________ Dated: 7/19/11

Raymond J. Nutting, Chair
Board of Supervisors
COUNTY

ATTEST:
Suzanne Allen de Sanchez
Clerk of the Board of Supervisors

By: ______________________ Dated: 7/19/11
Deputy Clerk

--MARSHALL MEDICAL CENTER--



By: ______________________ Dated: 6/8/11
Shannon Truesdell, Chief Operating Officer / Assistant Administrator
CONTRACTOR

Appendix I-Level III Trauma Center Agreement

ORIGINAL

483-O0910

MEMORANDUM OF UNDERSTANDING 801-PHD1008
AMENDMENT I
Level III Trauma Designation – Marshall Medical Center

This Amendment I to that Memorandum of Understanding (MOU) 801-PHD1008, made and entered into by and between the County of El Dorado, a political subdivision of the State of California (hereinafter referred to as COUNTY) and Marshall Medical Center, a non-profit general acute care hospital, whose principal place of business is 1100 Marshall Way, Placerville, CA 95667, (hereinafter referred to as CONTRACTOR).

RECITALS

WHEREAS, CONTRACTOR has been designated a Level III Trauma Center, in accordance with MOU 801-PHD1008, dated July 28, 2009, incorporated herein and made by reference a part hereof; and

WHEREAS, the parties hereto have mutually agreed to extend the term of this MOU, thereby amending **Article III – Term**; and

WHEREAS, the parties hereto have mutually agreed to modify language pertaining to the timing of verification by an independent source, thereby amending **Article IV – Level III Trauma Designation**;

NOW THEREFORE, the parties do hereby agree that Memorandum of Understanding 801-PHD1008 shall be amended a first time as follows:

1) Article III shall be amended in its entirety to read as follows:

Article III. Term

This Trauma Designation MOU shall be effective when signed by both parties hereto and shall remain in effect from July 28, 2009 through May 3, 2012, unless earlier terminated pursuant to the terms of this MOU.

2) Article IV, Sections 4.01 and 4.02 shall be amended in their entirety to read as follows:

Section 4.01. County, through its EMS Agency, hereby designates Contractor as a Level III Trauma Facility, subject to the conditions set forth in Exhibit A, for the term of this Trauma

Designation MOU as amended hereinabove ("Initial Designation Term").

Section 4.02. If Contractor desires to continue its Level III Trauma Center designation after the expiration of the term of this MOU, as amended herein, or seeks re-designation at any time, a prerequisite to continuing or re-designation shall be both (i) the successful completion of an on-site focus review by American College of Surgeons (ACS) prior to May 3, 2012, and (ii) receipt of a certificate of verification showing current Level III Trauma Center Verification by ACS certifying that Contractor meets the minimum acceptable standard criteria of a Level III Trauma Center as established by the ACS. In the event that Contractor does not obtain both prerequisites stated above prior to the expiration of this MOU, the Contractor's Level III Trauma Center designation by County shall immediately terminate. If the prerequisites are met and County approves continuing the designation or approves an application or request for re-designation, such continuing designation or re-designation shall be made by written agreement executed by both parties in the form of an amendment to this MOU or a subsequent MOU.

Except as herein amended, all other parts and sections of that MOU 801-PHD1008 shall remain unchanged and in full force and effect.

REQUESTING DEPARTMENT HEAD CONCURRENCE:

By: Dated: 7-20-11

Neda West, Director
Health Services Department

IN WITNESS WHEREOF, the parties hereto have executed this first Amendment to that Memorandum of Understanding 801-PHD1008 on the dates indicated below.

--COUNTY OF EL DORADO--

By: [signature] Dated: 7/26/11
Raymond J. Nutting, Chair
Board of Supervisors
COUNTY

Attest: Suzanne Allen de Sanchez
Clerk of the Board of Supervisors

[signature] Date: 7/26/11
Deputy

--MARSHALL MEDICAL CENTER--

By: [signature] Dated: 7-21-11
James Whipple, Chief Executive Officer
CONTRACTOR

By: [signature] Dated: 7-21-11
Laurie Eldridge, Chief Financial Officer
CONTRACTOR

RESOLUTION No. 177-2009

OF THE BOARD OF SUPERVISORS OF THE COUNTY OF EL DORADO

RESOLUTION REGARDING TRAUMA CENTER DESIGNATION FEE

WHEREAS, on July 17, 2007, the El Dorado County Board of Supervisors adopted Resolution No. 189-2007 establishing a "Trauma Designation Fee" to be assessed bi-annually to reimburse the County for all costs associated with trauma center review and designation, including but not limited to costs for a site review team and expenditures by the EMS Agency to complete the review and designation process; and

WHEREAS, the EMS Agency has received and processed an application completed by Marshall Medical Center ("Marshall") for designation as a Level III Trauma Center, which included a site review performed by the American College of Surgeons ("ACS") that was independently obtained by Marshall; and

WHEREAS, Marshall paid the Trauma Designation Fee required by Resolution No. 189-2007 to the County and was subsequently reimbursed by the County for the portion of the Fee equal to the direct costs incurred by Marshall to obtain the ACS site review; and

WHEREAS, in the process of conducting the trauma designation for Marshall, the EMS Agency determined that it would be more efficient for trauma center applicants to independently obtain a site review performed by ACS and pay any costs associated with the review directly to ACS; and

WHEREAS, California Health and Safety Code section 1798.164 provides that the EMS Agency may charge a fee to cover the costs directly related to the initial or continuing designation of trauma facilities pursuant to section 1798.165 and to the development of a trauma plan prepared pursuant to section 1797.257 and to updating the trauma plan annually pursuant to section 1797.258; and

WHEREAS, the County EMS Agency may incur direct and indirect costs directly related to conducting future trauma designations, continuing designations or re-designations, and developing and updating the County's Trauma Plan, which costs may or may not include a site review of the facility seeking the trauma designation obtained at the expense of the County; this resolution is intended to authorize the prospective recovery of said costs pursuant to Health and Safety Code section 1798.164 and to supersede Resolution No. 189-2007.

RESOLUTION No. 177-2009

NOW THEREFORE, BE IT RESOLVED that the Board of Supervisors does hereby authorize the EMS Agency to charge a "Trauma Center Designation Fee" in connection with any application for a trauma designation as allowed by law. Resolution No. 189-2007 is hereby superseded and of no further force and effect.

PASSED AND ADOPTED by the Board of Supervisors of the County of El Dorado at a regular meeting of said Board, held on the 7/28/09, by the following vote of said Board:

Ayes: Sweeney, Knight, Nutting, Briggs, Santiago

Noes: none

Absent: none

ATTEST

Suzanne Allen de Sanchez
Clerk of the Board of Supervisors

By:
Deputy Clerk

Ron Briggs, Chairman
Board of Supervisors

THE ATTACHED INSTRUMENT IS A CORRECT COPY OF THE ORIGINAL ON FILE IN THIS OFFICE.

DATE 7-30-09

ATTEST: SUZANNE ALLEN de SANCHEZ, Clerk of the Board of Supervisors of the County of El Dorado, State of California.

By

Page 2 of 2

-7

ORIGINAL

483-O0910

MEMORANDUM OF UNDERSTANDING
#801-PHD1008

THIS MEMORANDUM OF UNDERSTANDING for Level III Trauma Designation (hereinafter "Trauma Designation MOU" or "MOU") is made and entered into by and between the County of El Dorado, a political subdivision of the State of California (hereinafter referred to as "County") and Marshall Medical Center, a non-profit general acute care hospital, duly qualified to conduct business in the State of California, whose principal place of business is 1100 Marshall Way, Placerville, CA 95667 (hereinafter referred to as "Contractor");

WITNESSETH

WHEREAS, on August 16, 2005, the El Dorado County Board of Supervisors approved a revised Trauma Plan, pursuant to Health and Safety Code Sections 1798.163 and 1798.166, and;

WHEREAS, County has established an Emergency Medical Services Agency and implemented an Emergency Medical Services (EMS) System consisting of an advanced life support (paramedic) system and a regional Trauma System as part thereof, pursuant to applicable Health and Safety Code sections; and

WHEREAS, County, through its Emergency Medical Services Agency, may designate trauma facilities as part of its regional Trauma System, pursuant to Health and Safety Code section 1798.165; and California Code of Regulations, Title 22, Division 9, Chapter 7; and

WHEREAS, County and Contractor have worked together to develop and operate a regional Trauma System, and desire to collaborate in the future to ensure that the County's Trauma System may serve as a model for other jurisdictions to emulate; and

WHEREAS, Contractor represents that it possesses those performance characteristics, personnel, and equipment required in the County's Trauma Standards attached hereto as Exhibit A, and incorporated herein by this reference, and that it meets or exceeds the requirements for a Level III Trauma Center set forth under the applicable regulations, including but not limited to the criteria identified in Exhibit A attached hereto; and

WHEREAS, Contractor has been examined on site by the American College of Surgeons ("ACS") Verification Review Committee, whose findings are attached hereto as Exhibit B and incorporated herein by this reference; and

WHEREAS, Contractor represents that it has addressed and corrected all of the deficiencies identified in the ACS Site Review Report attached hereto as Exhibit B; and

WHEREAS, it is the intent of the parties hereto that such services be in conformity with all applicable federal, state and local laws, including but not limited to the County Trauma Standards attached hereto as Exhibit A, the County's EMS System Policy, Procedures and Protocol, and California Code of Regulations, Title 22, Division 9, Chapter 7; and

WHEREAS, County has determined that the provision of these services provided by Contractor is in the public's best interest, and that these services are more economically and feasibly performed by outside independent Contractors as authorized by El Dorado County Charter, Section 210 (b) (6) and/or Government Code 31000;

NOW, THEREFORE, County and Contractor mutually agree as follows:

Article I. Definitions

- "ACS" means American College of Surgeons.
- "Base Hospital" means Contractor's general acute care facility which is designated by the County as part of the County's EMS System providing medical direction for advanced life support system and pre-hospital care system assigned to it by the County.
- "Catchment Area" means the geographic area assigned to the Contractor by the County.
- "CCR" means the California Code of Regulations
- "EMS Agency" means the El Dorado County Emergency Medical Services Agency.
- "EMS Agency Administrator" means the person responsible for directing, managing and supervising the activities, policy development and policy implementation of the EMS Agency.
- "ER" means Emergency Room
- "ICU" means intensive care unit.
- "OR" means Operating Room.
- "Trauma Center" means Contractor's general acute care facility providing medical services which is designated as part of the County's Trauma System Plan.
- "Trauma Victim" means trauma center candidate as defined by the triage protocol developed by the County pursuant to the Trauma Plan.
- "Trauma Plan" means the protocols, policies and procedures adopted by the County which governs the County's Trauma System.

Article II. Scope of Services
Section 2.01 <u>Responsibilities of County</u>:

(a) Trauma Plan – To provide management direction to, and review components of, the County's Trauma Plan.

(b) EMS System Policy, Procedures & Protocol – Evaluate protocols, policies, and procedures for the County's EMS System in compliance with applicable chapters of the California Code of Regulations, Title 22, Division 9, conduct periodic performance evaluations of the County's EMS System, and make appropriate changes as necessary. County shall notify Contractor when it desires to adopt, change or modify the protocols, policies and procedures which make up the Trauma Plan. County and Contractor shall cooperate to strengthen the Trauma System. Prior to adopting the protocols, policies, and/or procedures (or amendments to same) County shall meet and confer with the Contractor with final drafts. The parties will implement the policies and procedures, or protocols subsequent to review by Contractor, unless otherwise required by law.

(c) Trauma Victim use of Contractor Facilities.

1) County makes no guarantee that trauma victims will be delivered to Contractor for care, and County cannot ensure that any minimum number of trauma victims will be delivered to Contractor during the term of this Trauma Designation MOU. However, County agrees to make best effort to cause other participants in the County EMS System to follow transfer guidelines regarding catchment area boundaries in determining transfer of trauma victims to Contractor.

(d) Trauma Registry – Maintain the trauma registry data collection system for the purpose of evaluating and monitoring the County's Trauma Plan. Any change to, or modification of, the Trauma Registry Data Collection System should be processed in accordance with the procedure outlined in Article II, §2.01 (b).

(e) Contract Performance

1) Maintain a committee to monitor, evaluate and report on the necessity, quality and level of trauma care services, hereinafter referred to as the "Regional Trauma Continuous Quality Improvement Committee" (hereinafter "TQIC") and afford Contractor medical representation on such committee.

2) Perform one or more periodic announced and unannounced site visits to the Contractor's facility annually for the purpose of monitoring contract performance and compliance.

3) Ensure advances in the profession, availability of special facilities, equipment and specialists, the prevailing national or local standard, and all other relevant

information are considered by the County in evaluating Contractor's competence and performance.

Section 2.02 Responsibilities of Contractor:

(a) Service to Trauma Victims

1) Provide Trauma Center services to trauma victims delivered from within Contractor's catchment area pursuant to the County's Trauma Plan and EMS System, subject to applicable statutes concerning the provision of emergency medical services.

2) Provide care that is legally required, and ensure prompt transfer of patients when medically indicated. This Trauma Designation MOU does not affect the Contractor's duties and obligations as a hospital with a licensed basic emergency department.

3) Provide medical services as indicated, regardless of the Trauma Victim's ability to pay for any services provided.

4) Provide appropriate pre-hospital destination direction or prompt transfer of a trauma patient to another trauma center when the Contractor does not have appropriate resources immediately available to care for the trauma patient.

a) Diversion Status – Immediately notify the County of any Trauma Center diversion or closure. Notification shall consist of the date, time and reason for diversion/closure. The County shall be notified when the trauma center has reopened. Notification shall consist of the date and time of reopening. Every effort shall be made by the Contractor to limit trauma center diversion and to report as soon as possible.

5) Compliance with County's Level III Trauma Standards – At all times during the term of the Level III Trauma Designation granted hereunder, Contractor shall meet or exceed all of the requirements of a Level III Trauma Center under the applicable laws and regulations, and the County's Level III Trauma Standards attached hereto as Exhibit A and incorporated herein by this reference, as may be modified or updated from time to time in accordance with the law or Article II, §2.01 (b) herein.

(b) Quality Assurance

1) Contractor shall develop and maintain a quality improvement process (referred to herein as Contractor's "Level III Trauma Quality Assurance Program or Plan") in accordance with the requirements of California Code of Regulations, Title 22,

Division 9, Chapter 7, Article 4. Contractor's Level III Trauma Quality Assurance Program or Plan shall include the development of its own written standards for quality assurance meeting, at a minimum, the County's Trauma Standards attached hereto as Exhibit A, and including expectations of timely performance from all ancillary and surgical units of the Trauma Center, diligence in the care and management of trauma victims and the provision of medically appropriate follow up of patient outcome. Contractor's Level III Trauma Quality Assurance Program or Plan shall include, at minimum, written policies for (a) problem identification, (b) development of a corrective action plan, (c) implementation of a corrective action plan and (d) follow up.

2) Contractor shall routinely monitor its compliance with Contractor's Level III Trauma Quality Assurance Program or Plan. Contactor shall monitor, maintain and upgrade if necessary, the care, skill and diligence provided to patients pursuant to this Trauma Designation MOU to ensure that the degree of care and skill that Contractor, physicians and other professional staff exercise in providing service is that which is expected of reasonably competent trauma/base hospital facility physicians, nurses and other personnel in the same or similar circumstances. Contractor agrees to implement quality assurance activities required herein and initiate appropriate corrective action as necessary. Advances in the profession, availability of special facilities, equipment and specialists, the prevailing national or local standard, and all other relevant information shall be considered by Contractor in evaluating its own competence and performance. Documentation of Contractor's Level III Trauma Quality Assurance Program or Plan and its implementation shall be available to the County upon request, and must reflect a current, complete, regular and ongoing monitoring of Contractor's performance.

(c) Accreditation and Standards – Maintain current Joint Commission on Accreditation of Healthcare Organizations (JCAHO) accreditation. Should Contractor lose accreditation, the County may act to terminate this Trauma Designation MOU with cause.

(d) Community Education

1) Provide EMS pre-hospital personnel continuing medical education in trauma care meeting the standards set forth in the County's Level III Trauma Standards, attached hereto as Exhibit A, as may be modified or updated from time to time in accordance with the law or Article II, §2.01 (b) herein.

2) Conduct public education activities meeting the standards set forth in the County's Level III Trauma Standards, attached hereto as Exhibit A, as may be modified or updated from time to time in accordance with the law or Article II, §2.01 (b) herein.

3) Develop and maintain telephone or on-site consultations for community physicians and providers regarding the immediate management of trauma victims' care and the pre-hospital management of emergency patients' care. The procedure for obtaining telephone and on-site consultation must be outlined and distributed by Contractor to all healthcare facilities in the Trauma Center's catchment area.

(e) Base Hospital Designation – Maintain designation as a Base Hospital; should Contractor lose such designation, this MOU shall automatically terminate.

(f) ACS Review – Upon request by the County, Contractor shall provide documentation to County that all aspects of the recommendations of the ACS Verification Review Committee identified in the Site Review Report attached hereto as Exhibit B have been addressed to County satisfaction.

Article III. Term

This Trauma Designation MOU shall be effective when signed by both parties hereto and shall remain in effect for a period of two (2) years from the last date of execution by all the parties hereto, unless earlier terminated pursuant to the terms of this MOU.

Article IV. Level III Trauma Designation

Section 4.01 County, through its EMS Agency, hereby designates Contractor as a Level III Trauma Facility, subject to the conditions set forth in Exhibit A, for the term of this Trauma Designation MOU ("Initial Designation Term").

Section 4.02 If Contractor desires to continue its Level III Trauma Center designation after the Initial Designation Term, or seeks re-designation at any time, a prerequisite to continuing or re-designation shall be a certificate showing current Level III Trauma Center Verification by an independent source approved by the County certifying that Contractor meets the minimum acceptable standard criteria of a Level III Trauma Center as established by the ACS. If the County approves continuing the designation or approves an application or request for re-designation, such continuing designation or re-designation shall be made by written agreement executed by both parties in the form of an amendment to this MOU or a subsequent MOU.

Section 4.03 Contractor is responsible for all costs associated with obtaining and maintaining its Level III Trauma designation, including but not limited to, the cost of acquiring an ACS certification. Contractor agrees to compensate County for all costs allowed to be charged by law for conferring and administering the trauma designation and for developing and maintaining the County's trauma plan. County may invoice Contractor annually, semi-annually, or more frequently as costs are incurred in accordance with the rate schedule attached hereto as Exhibit C. Contractor agrees to pay County within thirty (30) days of receipt of an invoice from County pursuant to this section.

Total compensation from Contractor to County shall not exceed $4,000.00 for the Initial Designation term of this Agreement.

Article V. Changes to Trauma Designation MOU
This Trauma Designation MOU may be amended by mutual consent of the parties hereto. Said amendments shall become effective only when in writing and fully executed by duly authorized officers of the parties hereto.

Article VI. Contractor to County
It is understood that the services provided under this Trauma Designation MOU shall be prepared in and with cooperation from County and its staff. It is further agreed that in all matters pertaining to this MOU, Contractor shall act as Contractor only to County and shall not act as Contractor to any other individual or entity affected by this MOU nor provide information in any manner to any party outside of this MOU that would conflict with Contractor's responsibilities to County during term hereof.

Article VII. Assignment and Delegation
Contractor is engaged by County for its unique qualifications and skills as well as those of its personnel. Contractor shall not subcontract, delegate or assign services to be provided, in whole or in part, to any other person or entity without prior written consent of County.

Article VIII. Independent Contractor/Liability:
Contractor is, and shall be at all times, deemed independent and shall be wholly responsible for the manner in which it performs services required by terms of this Trauma Designation MOU. Contractor exclusively assumes responsibility for acts of its employees, associates, and subcontractors, if any are authorized herein, as they relate to services to be provided under this MOU during the course and scope of their employment.

Contractor shall be responsible for performing the work under this Trauma Designation MOU in a safe, professional, skillful and workmanlike manner and shall be liable for its own negligence and negligent acts of its employees. County shall have no right of control over the manner in which work is to be done and shall, therefore, not be charged with responsibility of preventing risk to Contractor or its employees.

Article IX. Default, Termination, and Cancellation
Section 9.01 Termination with Cause: County may immediately terminate this Trauma Designation MOU if Contractor's license to operate as a general acute care hospital or basic emergency facility is revoked or suspended. For other causes, County may terminate this MOU if the cause is not cured within sixty (60) days after a written notice specifying the cause is delivered to Contractor. Cause may include, but shall not be limited to: (A) failure to comply with material terms and conditions of this MOU; (B) failure to make available sufficient personnel and hospital resources needed to provide the trauma care services as required by Exhibit A; (C) gross misrepresentation or fraud; (D) substantial failure to

cooperate with County's monitoring of Trauma Center services and (E) substantial failure or refusal to cooperate with quality assurance and audit findings and recommendations within a specified time period.

Should the Contractor wish to terminate this Trauma Designation MOU based on policy changes as outlined in Article II, §2.01 (b) (ii), Contractor shall have the right to deliver to County, within thirty (30) days after adoption, written notice of termination of this MOU; such termination shall be effective thirty (30) days following receipt of notice by County, unless a later date is specified in the notice.

Section 9.02 Default: Upon the occurrence of any default of the provisions of this Trauma Designation MOU, a party shall give written notice of said default to the party in default (notice). If the party in default does not cure the default within sixty (60) days of the date of notice (time to cure), then such party shall be in default. The time to cure may be extended at the discretion of the party giving notice. Any extension of time to cure must be in writing, prepared by the party in default for signature by the party giving notice and must specify the reason(s) for the extension and the date on which the extension of time to cure expires.

Notice given under this section shall specify the alleged default and the applicable MOU provision and shall demand that the party in default perform the provisions of this MOU within the applicable period of time. No such notice shall be deemed a termination of this MOU unless the party giving notice so elects in this notice, or the party giving notice so elects in a subsequent written notice after the time to cure has expired. In the event of termination for default, County reserves the right to take over and complete the work by contract or by any other means.

Section 9.03 Bankruptcy: This Trauma Designation MOU, at the option of the County, shall be terminable in the case of bankruptcy, voluntary or involuntary, or insolvency of Contractor.

Section 9.04 Ceasing Performance: County may immediately terminate this Trauma Designation MOU without prior notice or an opportunity to cure if Contractor ceases to operate as a business, Contractor's license to operate as a general acute care hospital or basic emergency facility is revoked or suspended, or Contractor otherwise becomes unable to substantially perform trauma care services as required by Exhibit "A".

Section 9.05 Termination or Cancellation without Cause: County may terminate this Trauma Designation MOU in whole or in part upon sixty (60) calendar days written notice by County without cause. Upon receipt of a Notice of Termination, Contractor shall promptly discontinue all services affected, as of the effective date of termination set forth in such Notice of Termination, unless the notice directs otherwise.

Article X. Bypass

Notwithstanding County's rights to terminate this Trauma Designation MOU as noted in

Article IX, County may in addition to, or in lieu of, initiating termination of this MOU, institute bypass procedures whereby Contractor will not be utilized as a Trauma Center for intervals when it is not in compliance with the County's Level III Trauma Standards, attached hereto as Exhibit A, as may be modified or updated from time to time in accordance with the law or Article II, §2.01 (b) herein. County may initiate this procedure at the request or with the consent of, Contractor, or on its own initiative when it determines that the integrity of the Trauma System or the quality of patient care is not in compliance with the requirements of Exhibit A.

Article XI. Notice to Parties:

All notices to be given by the parties hereto shall be in writing and served by depositing same in the United States Post Office, with postage prepaid. Notices to County shall be addressed as follows:

COUNTY OF EL DORADO
HEALTH SERVICES DEPARTMENT – PUBLIC HEALTH DIVISION
931 SPRING STREET
PLACERVILLE, CA 95667
ATTN: NEDA WEST, DIRECTOR

or to such other location as the County directs.

Notices to Contractor shall be addressed as follows:

MARSHALL MEDICAL CENTER
1100 MARSHALL WAY
PLACERVILLE, CA 95667
ATTN: LAURIE ELDRIDGE, CHIEF FINANCIAL OFFICER

or to such other location as the Contractor directs.

Article XII. Indemnity

The Contractor shall defend, indemnify, and hold the County harmless against and from any and all claims, suits, losses, damages and liability for damages of every name, kind and description, including attorneys fees and costs incurred, brought for, or on account of, injuries to or death of any person, including but not limited to workers, County employees, and the public, or damage to property, or any economic or consequential losses, which are claimed to or in any way arise out of or are connected with the Contractor's services, operations, or performance hereunder, regardless of the existence or degree of fault or negligence on the part of the County, the Contractor, subcontractor(s) and employee(s) of any of these, except to the extent caused by the active negligence or willful misconduct of the County, its officers and employees, or as expressly prescribed by statute. This duty of Contractor to indemnify and save County harmless includes the duties to defend set forth in California Civil Code Section 2778.

Article XIII. Insurance
Contractor shall provide proof of a policy of insurance satisfactory to the El Dorado County Risk Manager and documentation evidencing that Contractor maintains insurance that meets the following requirements:

Section 13.01 Full Workers' Compensation and Employers' Liability Insurance covering all employees of Contractor as required by law in the State of California.

Section 13.02 Commercial General Liability Insurance of not less than $1,000,000.00 combined single limit per occurrence for bodily injury and property damage.

Section 13.03 Automobile Liability Insurance of not less than $1,000,000.00 is required in the event motor vehicles are used by the Contractor in the performance of the Trauma Designation MOU.

Section 13.04 Professional liability insurance, including but not limited to coverage for medical malpractice, is required with a limit of liability of not less than $1,000,000.00 per occurrence.

Section 13.05 Contractor shall furnish a certificate of insurance satisfactory to the El Dorado County Risk Manager as evidence that the insurance required above is being maintained.

Section 13.06 The insurance will be issued by an insurance company acceptable to Risk Management, or be provided through partial or total self-insurance likewise acceptable to Risk Management.

Section 13.07 Contractor agrees that the insurance required above shall be in effect at all times during the term of this Trauma Designation MOU. In the event said insurance coverage expires at any time or times during the term of this MOU, Contractor agrees to provide at least thirty (30) days prior to said expiration date, a new certificate of insurance evidencing insurance coverage as provided for herein for not less than the remainder of the term of the MOU, or for a period of not less than one (1) year. New certificates of insurance are subject to the approval of Risk Management and Contractor agrees that no work or services shall be performed prior to the giving of such approval. In the event the Contractor fails to keep in effect at all times insurance coverage as herein provided, County may, in addition to any other remedies it may have, terminate this MOU upon the occurrence of such event.

Section 13.08 The certificate of insurance must include the following provisions stating that:

(a) The insurer will not cancel the insured's coverage without thirty (30) days prior written notice to County, and;

(b) The County of El Dorado, its officers, officials, employees, and volunteers are included as additional insured, but only insofar as the operations under this Trauma Designation MOU are concerned. This provision shall apply to the general liability policy.

(c) The Contractor's insurance coverage shall be primary insurance as respects the County, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the County, its officers, officials, employees or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
(d) Any deductibles or self-insured retentions must be declared to and approved by the County, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the County, its officers, officials, employees, and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

(e) Any failure to comply with the reporting provisions of the policies shall not affect coverage provided to the County, its officers, officials, employees or volunteers.

(f) The insurance companies shall have no recourse against the County of El Dorado, its officers and employees or any of them for payment of any premiums or assessments under any policy issued by any insurance company.

(g) Contractor's obligations shall not be limited by the foregoing insurance requirements and shall survive expiration of this Trauma Designation MOU.

(h) In the event Contractor cannot provide an occurrence policy, Contractor shall provide insurance covering claims made as a result of performance of this Trauma Designation MOU for not less than three (3) years following completion of performance of this MOU.

(i) Certificate of insurance shall meet such additional standards as may be determined by the contracting County Department either independently or in consultation with Risk Management, as essential for the protection of the County.

Article XIV. Interest of Public Official
No official or employee of County who exercises any functions or responsibilities in review or approval of services to be provided by Contractor under this Trauma Designation MOU shall participate in or attempt to influence any decision relating to this MOU which affects personal interest or interest of any corporation, partnership, or association in which he/she is directly or indirectly interested; nor shall any such official or employee of County have any interest, direct or indirect, in this MOU or the proceeds thereof.

Article XV. Interest of Contractor
Contractor covenants that Contractor presently has no personal interest or financial interest, and shall not acquire same in any manner or degree in either: 1) any other contract connected

with or directly affected by the services to be performed by this Trauma Designation MOU; or, 2) any other entities connected with or directly affected by the services to be performed by this MOU. Contractor further covenants that in the performance of this MOU no person having any such interest shall be employed by Contractor.

Article XVI. Conflict of Interest

The parties to this Trauma Designation MOU have read and are aware of the provisions of Government Code Section 1090 et seq. and Section 87100 relating to conflict of interest of public officers and employees. Contractor attests that it has no current business or financial relationship with any County employee(s) that would constitute a conflict of interest with provision of services under this contract and will not enter into any such business or financial relationship with any such employee(s) during the term of this MOU. County represents that it is unaware of any financial or economic interest of any public officer or employee of Contractor relating to this MOU. It is further understood and agreed that if such a financial interest does exist at the inception of this MOU either party may immediately terminate this MOU by giving written notice as detailed in the Article in this MOU titled, "Default, Termination and Cancellation".

Article XVII. California Residency (Form 590)

All independent Contractors providing services to the County must file a State of California Form 590, certifying their California residency or, in the case of a corporation, certifying that they have a permanent place of business in California. The Contractor will be required to submit a Form 590 prior to execution of the Trauma Designation MOU.

Article XVIII. Taxpayer Identification Number (Form W-9)

All independent Contractors or corporations providing services to the County must file a Department of the Treasury Internal Revenue Service Form W-9, certifying their Taxpayer Identification Number.

Article XIX. County Business License

It is unlawful for any person to furnish supplies or services, or transact any kind of business in the unincorporated territory of El Dorado County without possessing a County business license unless exempt under County Code Section 5.08.070.

Article XX. Administrator

The County Officer or employee with responsibility for administering this Trauma Designation MOU is Richard Todd, Agency Administrator, EMS Agency, Health Services Department – Public Health Division, or successor.

Article XXI. Authorized Signatures

The parties to this Trauma Designation MOU represent that the undersigned individuals executing this MOU on their respective behalf are fully authorized to do so by law or other appropriate instrument and to bind upon said parties to the obligations set forth herein.

Article XXII. Partial Invalidity
If any provision of this Trauma Designation MOU is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will continue in full force and effect without being impaired or invalidated in any way.

Article XXIII. Venue
Any dispute resolution action arising out of this Trauma Designation MOU, including, but not limited to, litigation, mediation, or arbitration, shall be brought in El Dorado County, California, and shall be resolved in accordance with the laws of the State of California.

Article XXIV. Entire Agreement
This document and the documents referred to herein or exhibits hereto are the entire agreement between the parties and they incorporate or supersede all prior written or oral agreements, MOUs or understandings.

REQUESTING DEPARTMENT HEAD CONCURRENCE:

By: Neda West Dated: 6-22-09
Neda West, Director
Health Services Department

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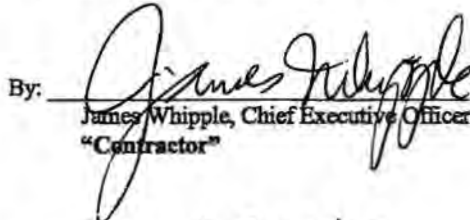
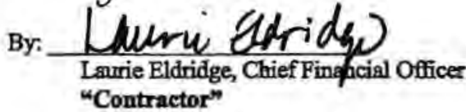
IN WITNESS WHEREOF, the parties hereto have executed this Trauma Designation MOU on the dates indicated below, the latest of which shall be deemed to be the effective date of this MOU.

- CONTRACTOR -

MARSHALL MEDICAL CENTER



By: ______________________ Dated: 6-24-09
James Whipple, Chief Executive Officer
"Contractor"



By: ______________________ Dated: 6-24-09
Laurie Eldridge, Chief Financial Officer
"Contractor"

- COUNTY OF EL DORADO -

By: ______________________ Dated: 7-28-09
Ron Briggs, Chairman
El Dorado County Board of Supervisors
"County"

ATTEST:
Suzanne Allen de Sanchez, Clerk
of the Board of Supervisors

By: ______________________ Date: 7-28-09
Deputy Clerk

Exhibit A
LEVEL III TRAUMA STANDARDS

The designation of a hospital as a Trauma Center for purposes of the Emergency Medical Services (EMS) System of El Dorado County confers upon the facility the recognition that it has the commitment, personnel and resources necessary to provide optimum medical care and transfer for the trauma patient. Contractor shall meet the criteria set forth herein and demonstrate a continuous ability and commitment to comply with policies and procedures developed by the County.

I. Contractor shall implement the following programs or where applicable, complete the following actions, within ninety (90) days of execution of the Trauma Designation MOU unless otherwise agreed in writing by the parties:

- Trauma Registry audit filter identification by the Trauma Nurse Coordinator to be reviewed with the Trauma Medical Director and reported to the Regional Trauma Continuous Quality Improvement Committee (hereinafter "TQIC"). The Trauma Registry and the direction provided by the TQIC shall drive Contractor's quality improvement process.

- Provide education for the Trauma Nurse Coordinator and Trauma Registrar by the American Trauma Society or equivalent program regarding use and function of the Trauma Registry and ICD-9 (or latest version) coding classes.

- Encourage participation in Emergency Nurses Association Trauma Nurse Core Curriculum (TNCC) training (provider-level) for all Intensive Care Unit (ICU) and Operating Room (OR) nursing staff.

- Develop and implement a plan for the response of ICU and OR nursing staff to emergency department trauma activations.

- Identify cases and individuals that require performance improvement action, and prepare documentation, including reports of follow-up and closure activities, for each case. Specific performance improvement identification shall be included as a regular component of Contractor's Level III Trauma Quality Assurance Program or Plan.

- Audits of time of arrival of the surgeon, the OR team, radiologists, anesthesiologist and the Computerized Tomography (CT) technicians must be conducted and documented at least quarterly.

- Contractor's Trauma Committee shall include a pre-hospital care provider representative.

- Emergency room and trauma staff shall utilize a pre-hospital care form that contains at a minimum the information described under 22 CCR § 100257(b) or is otherwise authorized or designated by the Local EMS Agency for use within the County's EMS System.

- Provide and participate in continuing education in trauma care for EMS System personnel.

- Contractor shall use audit filters established by a national specialty organization recognized as a leader for setting industry standards for the evaluation of trauma services, i.e., American College of Surgeons (ACS), to conduct concurrent and retrospective review of trauma patient care provided to patients received by Contractor.

- Contractor shall report all findings from trauma patient care rounds and chart review to Contractor's Trauma Committee on a quarterly basis.

- Emergency department physicians must successfully pass and maintain Advanced Trauma Life Support (ATLS) training verified by the American College of Surgeons at least once or be certified by the American Board of Emergency Medicine.

II. At all times during its designation as a Level III Trauma Center, Contractor shall meet or exceed the requirements set out in California Code of Regulations (CCR), Title 22, Division 9, Chapter 7, Section 100263, including any amendments, modifications or updates effective during the period of designation..

A. In addition to any requirements applicable to a Level III Trauma Center by law, Contractor shall:

1. Ensure that nursing personnel (permanent or temporary) who care for trauma patients have training in the care of trauma patients and ensure that all personnel providing trauma services meet all minimum qualifications for the care or treatment they are providing.
2. Ensure that where specific individuals have been identified to assume responsibility for a component of the Trauma Center's performance they are authorized and accountable to carry out those activities.
3. Be licensed by the State of California as an acute care facility and hold a current accreditation by the Joint Commission on Accreditation of Health Care Organizations (JCAHCO) at all times during Contractor's designation as a Level III Trauma Center.

B. At all times during its designation as a Level III Trauma Center, Contractor shall maintain:

1. A trauma program medical director who is a qualified surgical specialist, whose responsibilities include, but are not limited to, factors that affect all aspects of trauma care such as:

a) Recommending trauma team physician privileges;

b) Working with nursing administration to support the nursing needs of trauma patients;

c) Developing trauma treatment protocols;

d) Having authority and accountability for the quality improvement peer review process;

e) Correcting deficiencies in trauma care or excluding from trauma call those trauma team members who no longer meet the standards of the quality improvement program; and

f) Assisting in the coordination of budgetary process for the trauma program.

2. A trauma nurse coordinator/manager who is a registered nurse with qualifications including evidence of educational preparation and clinical experience in the care of adult and/or pediatric trauma patients, administrative ability, and responsibilities that include, but are not limited to:

a) Organizing services and systems necessary for the multidisciplinary approach to the care of the injured patient;

b) Coordinating day-to-day clinical process and performance improvement as pertains to nursing and ancillary personnel, and

c) Collaborating with the trauma program medical director in carrying out the educational, clinical, research, administrative and outreach activities of the trauma program.

3. A trauma service which can provide for the implementation of the requirements specified in this section and provide for the coordination with the local EMS Agency.

4. The capability of providing prompt assessment, resuscitation and stabilization to trauma patients.

5. The ability to provide treatment or arrange for transportation to a higher level trauma center as appropriate.

6. An emergency department staffed so that trauma patients are assured of immediate and appropriate initial care.

7. Intensive Care Services:

a) Intensive Care Unit (ICU) shall have appropriate equipment and supplies as determined by the physician responsible for the intensive care service and the trauma program medical director;

b) ICU shall have a qualified specialist promptly available to care for trauma patients in the intensive care unit. The qualified specialist may be a resident with two (2) years of training who is supervised by the staff intensivist or attending surgeon who participates in all critical decision making; and

c) The qualified specialist in (2) above shall be a member of the trauma team;

8. A multidisciplinary trauma team, which will be responsible for the initial resuscitation and management of the trauma patient.

9. Qualified surgical specialist(s) who shall be promptly available:

a) General;

b) Orthopedic; and

c) Neurosurgery (can be provided through a transfer agreement)

10. Qualified non-surgical specialist(s) or specialty availability, which shall be available as follows:

a) Emergency medicine, in-house and immediately available; and

b) Anesthesiology, on-call and promptly available with a mechanism established to ensure that the anesthesiologist is in the operating room

when the patient arrives. This requirement may be fulfilled by certified registered nurse anesthetists who are capable of assessing emergent situations in trauma patients and of providing any indicated emergent anesthesia treatment and are supervised by the staff anesthesiologist. In such cases, the staff anesthesiologist on-call shall be advised about the patient, be promptly available at all times, and be present for all operations.

c) The following services shall be available in-house or may be provided through a written transfer agreement:

(1) Burn care.

(2) Pediatric care.

(3) Rehabilitation services.

11. The following service capabilities:

a) Radiology. The radiological service shall have a radiological technician promptly available.

b) Clinical laboratory. A clinical laboratory service shall have:

(1) A comprehensive blood bank or access to a community central blood bank; and

(2) Clinical laboratory services promptly available.

c) Surgery. A surgical service shall have an operating suite that is available or being utilized for trauma patients and that has:

(1) Operating staff who are promptly available; and

(2) Appropriate surgical equipment and supplies requirements which have been approved by the local EMS agency.

12. Written transfer agreements with Level I or II trauma centers, Level I or II pediatric trauma centers, or other specialty care centers, for the immediate transfer of those patients for whom the most appropriate medical care requires additional resources.

13. An outreach program, to include:

a) Capability to provide both telephone and on-site consultations with physicians in the community and outlying areas; and

b) Trauma prevention for the general public.

14. Continuing education. Continuing education in trauma care shall be provided for:

a) Staff physicians;

b) Staff nurses;

c) Staff allied health personnel;

d) EMS personnel; and

e) Other community physicians and health care personnel.

III. At all times during its designation as a Level III Trauma Center, Contractor shall meet or exceed the requirements set out in California Code of Regulations (CCR), Title 22, Division 9, Chapter 7, Section 100265, including any amendments, modifications or updates effective during the period of designation, and shall maintain:

A. A detailed audit of all trauma-related deaths, major complications and transfers (including inter-facility transfers).
B. A multidisciplinary trauma peer review committee that includes all members of the trauma review team.
C. Participation in the trauma system data management system.
D. Participation in the local EMS agency trauma evaluation committee.
E. A written system in place for patient, parents of minor children who are patients, legal guardian(s) of children who are patients, and/or primary caretaker(s) of children who are patients to provide input and feedback to the hospital staff regarding the care provided to the child.
F. Compliance with applicable provisions of Evidence Code Section 1157.7 to ensure confidentiality.

IV. Any terms within this Exhibit A, Level III Trauma Standards that are defined under 22 CCR §§ 100236-100252 shall have the meaning provided by those sections.

NOTE:
Reference: 22 CCR §100236-100252,100257, 100263, & 100265.

483-O0910

May 23, 2008

James Whipple
Chief Executive Officer and Hospital Administrator
Marshall Medical Center
1100 Marshall Way
Placerville, CA 95667

Dear Mr. Whipple;

The Verification Review Committee, a subcommittee of the American College of Surgeons Committee on Trauma, has carefully reviewed the **Level III Trauma Center Verification** report written by Drs. Chris Cribari (lead reviewer) and R. Stephen Smith after the site visit conducted on April 17 and 18, 2008.

The Verification Review Committee (VRC) agrees with the report as it is written and notes the list of deficiencies, weaknesses and recommendations.

Before a certificate of verification can be issued, the hospital will need to undergo an on-site focus review to establish that all deficiencies have been corrected. This must be done 6 to 12 months from the date of this letter.

Thank you for your continued participation and support of the Consultation/Verification Program of the Committee on Trauma of the American College of Surgeons. We look forward to working with your trauma center in the future.

Sincerely,

Frank L. Mitchell, III, MD, MHA, FACS
Chair, Verification Review Committee

cc: Craig R. Thayer, MD FACS
Michele Williams, RN ✓
El Dorado County EMS Agency

American College of Surgeons • TRAUMA • 633 N. Saint Clair St. • Chicago, IL 60611-3211
312/202-5456 • FAX: 312/202-5005 • e-mail: mlozada@facs.org

Marshall Medical Center
Placerville, CA
April 17-18, 2008
Verification, Level III
Site Visit Report

EXECUTIVE SUMMARY

Marshall Medical Center in Placerville, California was reviewed on April 17-18, 2008, by Drs. Chris Cribari and R. Stephen Smith for verification as a Level III trauma center. This hospital provides trauma care for adults only. The findings of the reviewers are as follows:

Deficiencies:

1. (6.1) The trauma medical director lacks authority to ensure compliance with verification requirements.
2. (2.4) The trauma director does not have the authority for determining each general surgeon's ability to participate on the trauma panel through the trauma PIPS program and hospital policy.
3. (5.4) The multidisciplinary trauma program does not continuously evaluate its processes and outcomes to ensure optimal and timely care.
4. (5.9) The trauma director does not have the authority to correct deficiencies in trauma care or exclude from trauma call the trauma team members who do not meet specified criteria.
5. (5.15) The structure of the trauma program does not allow the trauma director to have oversight authority for the care of injured patients who may be admitted to individual surgeons.
6. (15.3) The trauma center does not use the registry to support the PIPS program.
7. (15.6) There are no strategies for monitoring data validity for the trauma registry.
8. (16.1) The trauma center does not demonstrate a clearly defined PIPS program for the trauma population.
9. (16.2) The PIPS program is not supported by a reliable method of data collection that consistently gathers valid and objective information necessary to identify opportunities for improvement.
10. (16.3) The program is not able to demonstrate that the trauma registry supports the PIPS process.
11. (16.6) The results of analysis do not define corrective strategies.
12. (16.8) The trauma program is not empowered to address issues that involve multiple disciplines.
13. (16.9) The trauma program has neither adequate administrative support nor defined lines of authority that ensure comprehensive evaluation of all aspects of trauma care.
14. (16.14) The trauma center is not able to separately identify the trauma patient population for review.
15. (16.18) The process does not demonstrate problem resolution (loop closure).
16. (6.11) All general surgeons on the trauma team have not successfully completed the ATLS course at least once.
17. (2.13) Well-defined transfer plans are not present. Specifically there are no guidelines to determine which neurotrauma, pediatric, or orthopaedic patients should be transferred and which may be admitted and under what circumstance. The appropriate method of transfer is not defined.

18. (2.7) The 80% compliance of the surgeon's presence in the emergency department is not confirmed or monitored by PIPS; 30 minutes for Level III.
19. (8.4) There is no PIPS review of all neurotrauma patients who are not transferred.
20. (8.6) There is no trauma director-approved plan that determines which types and severity of neurologic injury patients should remain at the facility.
21. (8.7) There is no performance improvement program that convincingly demonstrates appropriate care of neurotrauma patients that are admitted.
22. (11.62) There is no intracranial pressure monitoring equipment in the Level III center that admits neurotrauma patients despite not having a neurosurgeon on staff.
23. (9.10) The PIPS process does not review the appropriateness of the decision to transfer or retain major orthopaedic trauma.
24. (20.2) A trauma panel surgeon is not a member of the hospital's disaster committee.
25. (5.11) Programs that admit more than 10% of injured patients to nonsurgical services do not demonstrate the appropriateness of that practice through the PIPS process.
26. (5.16) There is no method to identify injured patients monitor the provision of health care services make periodic rounds and hold formal and informal discussions with individual practitioners.
27. (16.21) (6.10) Adequate (at least 50%) attendance by general surgery (core group) at the multidisciplinary peer review committee is not documented.
28. (13.2) The PIPS process does not demonstrate the appropriate care or response by providers.

Strengths:

1. Hospital administrations enthusiasm and support to become a verified Level III trauma center.
2. Doctor Craig Thayer, Trauma Medical Director
3. Anesthesia support for the trauma program.
4. Radiology support for the trauma program.
5. Plans for construction of the new ED.
6. ED nursing narrative documentation.

Weaknesses:

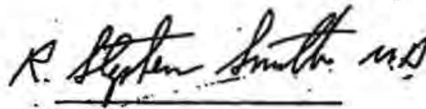
1. The trauma flow sheet needs to be updated to include space to record the different levels of trauma team activations and the response times of the surgeons and other consultants.
2. No grading of solid organ injuries

Recommendations:

1. Clarify the registry inclusion criteria to include all trauma team activations and patients with ICD codes of 800-959.9, excluding 905-909.9, 910-924.9, and 930-939.9 that are admitted, transferred, or die.
2. Consider sending the trauma registrar to a national trauma registrar's course.
3. Obtain additional registry training and support from the vendor.
4. Consider adding additional FTE support for the TPM and registrar positions in order to dedicate more time and effort into the trauma registry.
5. Use the trauma registry data to drive and support the PIPS process.
6. Continue to define and develop the PIPS process.
7. Add a physician member to the trauma operations committee.
8. Revise and update the massive transfusion protocol.

9. Consider adding at least one dose of recombinant activated factor VII to the formulary.
10. Have the radiologists and surgeons use the AAST injury scale scoring for all solid organ injuries.
11. Develop transfer guidelines and establish formal transfer agreements.
12. Update the trauma flow sheet to ensure that the trauma surgeon's response time is easily noted for registry input, and that the type of trauma team activated is noted.
13. Contact the coroner's office to dispose of the fee being charged for the peer review committee to get a copy of the coroner's report.
14. Inform all core trauma surgeons that they are required to attend at least 50% of all trauma peer review committee meetings.
15. Consider changing the reporting structure to have the TPM report to the TMD in addition to nursing administration.
16. Empower the TMD to have the needed authority to run the trauma program.
17. Provide the trauma surgeons an opportunity to obtain training in FAST.
18. The trauma surgeon's involvement with modified trauma alerts should be clearly defined.
19. A trauma surgeon should be appointed to the hospital disaster committee.
20. ICU and PACU nurses should be encouraged to participate in a TNCC course.

Chris Cribari, MD FACS



R. Stephen Smith, MD FACS

Exhibit C
Rate Schedule

Activities related to administering the trauma designation, and developing and maintaining the County Trauma Plan.

Position	**Rate per Hour of Activity**
EMS Medical Director	$97.00
EMS Administrator	$48.00

Appendix J-California Code of Regulations, Title 22, Division 9, Chapter 7

For the most current version of these regulations, go to:

http://www.emsa.ca.gov/laws/files/regs7.pdf