



A DIVISION OF
HEALTH CARE SERVICES
AGENCY

San Joaquin County Emergency Medical Services Agency



<http://www.sjgov.org/ems>

Mailing Address
PO Box 220
French Camp, CA 95231

Health Care Services Complex
Benton Hall
500 W. Hospital Rd.
French Camp, CA 95231

Phone Number
(209) 468-6818

Memorandum

To: Prehospital Service Providers
SJGH Base Hospital
SJGH Trauma Services
Interested Parties

From: Dan Burch, EMS Administrator

Date: June 26, 2018

Subj. EMS Policy No. 4709, Trauma Center Service Areas; and
EMS Policy No. 5215, Trauma Patient Destination

Earlier this spring the San Joaquin County EMS Agency (SJCEMSA) conducted a public comment process on proposed revisions to EMS Policy No. 5215, Trauma Patient Destination. SJCEMSA was seeking comments on proposed revisions directing pediatric major trauma patients in the northern catchment area to be transported to San Joaquin General Hospital (SJGH) and pediatric major trauma patients in the southern catchment area transported to either Doctors Medical Center Modesto or Memorial Medical Center Modesto. Following the conclusion of the public comment period SJCEMSA made the decision to eliminate the northern and southern catchment areas making SJGH the primary trauma center for all adult and pediatric major trauma patients. After the final policy was published several prehospital service providers have expressed concern regarding the elimination of the southern catchment area.

Dr. Shafer, Assistant EMS Medical Director and Dan Burch, EMS Administrator addressed these concerns and answered CQI Council members questions during an ALS policy review meeting held on June 21, 2018. Following is a summary of the answers provided by the SJCEMSA at the meeting on June 21, 2018.

It is a settled argument in the medical literature that severely injured patients do better when treated within an organized trauma system that transports patients without delay to trauma surgeons with immediate access to specialized trauma surgical services. It is with this understanding that SJCEMSA developed the SJC trauma system in 2012.

Since 2013, with the designation of SJGH as a level III trauma center SJCEMSA has conducted reviews of all major trauma patient deaths, inter-facility transfers, pediatrics, and other identified complications through the San Joaquin County Trauma Audit Committee (SJCTAC) chaired by Dave Shatz, M.D. Dr. Shatz is a board certified trauma/critical care surgeon at UCDCM and a member of the American College of Surgeons Committee on Trauma.

In 2017, SJCEMSA initiated an in depth review on the effect of air ambulances on major trauma patients with a special emphasis on pediatric trauma patients. This review was two-fold. First, SJCEMSA undertook a review of overall air ambulance utilization comparing transport times from scene to trauma centers (e.g. SJGH and UCDCM). Second, through the SJCTAC process, every pediatric case was reviewed to determine outcomes. SJCTAC found that severely injured pediatric patients had an increased likelihood of survival when pediatric patients were: 1) transported by ground ambulance without delay; and 2) transported to the closest trauma center regardless of level of designation (I, II, III or type, adult v pediatric). SJCTAC determined that severely injured pediatric patients in San Joaquin County benefit from rapid access to trauma surgeons and operating suites over any other factor. As a result of this determination, SJCEMSA drafted changes to the trauma destination policy to direct all pediatric patients to SJGH in the northern catchment area or DMC/MMC in the southern catchment area.

In extensive discussion with Dr. Kennedy, Trauma Medical Director and his colleagues at SJGH the following courses of action were identified for the management of major pediatric trauma patients: 1) If the pediatric patient requires immediate surgery they go directly to the OR for life-saving intervention, and are then transferred from the post anesthesia care unit (PACU) by Critical Care Transport (ground or air) to UCDCM for admission to the pediatric intensive care unit (PICU); 2) If the pediatric patient does not require surgery but requires admission then the patient is stabilized in the emergency department and then transferred to UCDCM; 3) if the pediatric patient does not require admission then the patient is treated and discharged home with no advanced pediatric trauma service being needed.

As stated earlier, SJCEMSA had intended to have pediatric trauma patients in the former southern catchment area (south of Highway 120 in the Escalon and Ripon ambulance service areas) transported and treated at Stanislaus County trauma centers. Dr. Shafer met with the members of the Stanislaus TAC to discuss this change in SJCEMSA policy. The Stanislaus County TAC disagreed with SJC's changes in trauma destinations stating that no pediatric patients would be accepted by Stanislaus County trauma centers. SJCEMSA found that the opinions of the Stanislaus County TAC and the refusal to cooperate with SJCEMSA policy to accept pediatric trauma patients from the field as incompatible with a trauma patient's best interest based on the available medical evidence.

SJCEMSA made the decision to eliminate the southern catchment area for both pediatric and adult patients after consulting with the Mountain Valley EMS Agency. The primary reason SJCEMSA made the decision to eliminate the southern catchment area is to prevent confusion on where severely injured patients should be transported and ultimately reduce the potential for life threatening transport delays.

Nonetheless, SJCEMSA is continuing to study this issue including researching actual ambulance transport times using data from the VRECC CAD and GIS computer based mapping algorithms for both San Joaquin County and Stanislaus County. Based on preliminary data there appears to be only a small portion of San Joaquin County (south of River Road and east of McHenry Avenue) where ambulance transport to MMC or DMC may be faster than transport to SJGH. This area is much smaller than the former southern catchment area.

SJCEMSA is considering modifying policy to have adult (not pediatric) major trauma patients from the area south of River Road and east of McHenry Avenue transported to MMC or DMC. However, transport time (i.e. drive time) is only one factor that is being considered that strongly favors a decision to transport major trauma patients preferentially to SJGH. For example SJGH is required to have at least one trauma surgeon available immediately in house 24 hours per day while MMC and DMC do not. In addition, when the in house SJGH trauma surgeon becomes encumbered SJGH is required to have the on-call back up trauma surgeon physically report to the hospital to be available. MMC and DMC do not have this requirement. For these reasons among other factors even though it may be quicker to drive to MMC or DMC from the area south of River Road and east of McHenry Avenue such transport may actually delay trauma patients from receiving life-saving surgery by a trauma surgeon.

As required by SJCEMSA policy and consistent with national and state standards, SJGH maintains a comprehensive trauma registry and multidisciplinary trauma service Program Improvement and Patient Safety (PIPS) program. Trauma surgeon response and operating suite availability are key performance indicators (KPI) regularly evaluated by SJGH and SJCEMSA. SJGH's trauma surgeons and operating suite availability consistently meet established standards. Despite continued efforts, SJCEMSA has been unsuccessful in receiving the cooperation of the MVEMSA to have access to Stanislaus County trauma registry data. Without this information, the SJCEMSA cannot meet its responsibility to ensure that patients directed to specialty care centers outside of San Joaquin County receive appropriate services.

At this time EMS Policy No. 4709, Trauma Center Service Areas; and EMS Policy No. 5215, Trauma Patient Destination remain in effect as published with SJGH being the primary trauma center for all adult and pediatric major trauma patients.