TRAUMA SYSTEM QUALITY IMPROVEMENT

Effective: September 12, 2014
Replaces: January 22, 2007
Review: November 12, 2017

Resources:
None

I. Purpose

The Purpose of this policy is to outline the quality improvement process employed by the Trauma System in Santa Clara County.

II. Trauma System Quality Improvement

A. Trauma System Quality Improvement is defined and implemented in accordance with the “Santa Clara County EMS Agency Quality Improvement Plan for the Trauma System.”

B. Essential components shall include:

1. Internal Trauma Center Quality Improvement:

   a. Each trauma center must have a formal and fully functional internal medical quality improvement program for its trauma service.

   b. Responsibility for the trauma care at each institution, as well as compliance with the County Trauma Center Standards, is that of the Director of the Trauma Service at each of the Trauma Centers.

   c. Each trauma center will perform its own case review using the following audit filters:

      1) Lack of definitive airway with a GSC less than 9
      2) 9016 Delay to OR, laparotomy (within 1 hour of arrival in ED)
      3) 9017 Delay to OR, craniotomy (x4 hours after arrival at Emergency Department excluding those performed for ICP monitoring)
4) 9018 Delay to OR, Open long bone fracture, interval of >8 hours between arrival and the initiation of debridement of an open long bone fracture
5) 9020 Initial Surgical intervention>24 hours, initial abdominal, thoracic, vascular or cranial surgery performed>24 hours after arrival (Excluding patients already identified in 9016, 9017 or 9018
6) 8506 Unexpected return to the OR-after the initial surgery
7) 8507 Unexpected readmission for complications related to prior admission
8) 8515 Referring Facility Complication-identified by Trauma Medical Director
9) The Trauma Medical Directors will identify all trauma cases that meet County minimum medical audit criteria (including trauma related deaths). These cases should be subject to the Trauma Service medical quality improvement process at the individual Trauma Centers and the County Trauma Care System Quality Improvement Committee.
d. The following audit filters are used to determine which cases will be brought forward for discussion at the Trauma Executive group prior to the Trauma Care System Quality Improvement Committee:
1) Trauma Related Deaths
   a) Trauma patients with Ps >.50
   b) Multiple system trauma patient with uncalculated Ps>
   c) Trauma patients with unusual circumstances or of educational benefit
d) Patients that are single systems high mortality injuries but have Ps >.50 will be excluded
2) Interfacility transfers (IFT):
   a) IFT patients with hospital stay at non-trauma facility of greater than 6 hours
   b) IFT patients that involve a systems issue
3) Complications
   a) Care related (or Process measures)
   b) Error in judgment
   c) Error in technique
4) Systems related issues:
   a) Inappropriate/Under triage
   b) Airway Management
c) Prolonged Scene time (>20 minutes)
d) Prehospital care issue

2. External System-Wide Quality Improvement:

   a. The Trauma Audit Process shall be based on the review of cases that meet criteria as selected by members of the trauma and medical communities. Cases shall be selected by the Trauma Executive Committee using the quality improvement standards, are reviewed by the Trauma Audit Committee, and may include trauma cases from throughout the EMS system.

   b. The cases selected to be presented at the Trauma Care System Quality Improvement Committee are evaluated by the members of the committee and graded according to the following scale:

      1) For all trauma deaths:

         a) Mortality without opportunity for improvement
         b) Anticipated mortality with opportunities for improvement
         c) Unanticipated mortality with opportunity for improvement.
         d) Additionally the membership determines if the care was appropriate and the PI Sufficient.

      2) For cases in which the patient survived however there were issues with the care rendered:

         a) Care was appropriate
         b) Opportunities for improvement exist
         c) PI Component was sufficient
         d) PI Component was insufficient.

   c. The membership submits forms at the end of the meeting with the grades, which are aggregated and sent to the trauma program managers and medical directors for review with the internal QI/PI program.

   d. The EMS Agency shall perform Periodic Audits of each Trauma Center. This audit may include random chart reviews, Trauma Registry data, and other records and documents.

   C. The Agency shall assure that Periodic System Site Visits by trauma specialists from outside the county allow for an independent evaluation to take place. The frequency of these visits is determined by the Agency and will occur at least every two (2) years.