Trauma Code Evaluation

Q What methods have been used to evaluate a trauma code team's performance and what are some of the changes that have resulted from such methods?

A A common method to evaluate each trauma code is the use of a critique form. Several examples are provided, along with comments from the trauma coordinator.

SALEM HOSPITAL, SALEM, OREGON

Salem Hospital is a 450-bed, level 3 trauma center located in Salem, Oregon. The critique form (Figure 1) used by the staff is completed by the trauma nurse after each trauma resuscitation. It is periodically revised if specific additional data are sought, such as criteria used to clear the cervical spine, or for a quality assurance project.

The trauma nurse seeks input from all members of the trauma team, including the surgeon, the emergency department physician, the anesthesiologist, the chaplain, laboratory and imaging personnel, emergency department staff, the respiratory therapist, security personnel, the admitting clerk, and the nursing supervisor. The completed critique goes to the trauma coordinator for review and any indicated follow-up.

—Rhonda Wood, RN, Trauma Coordinator

OTTAWA GENERAL HOSPITAL, OTTAWA, ONTARIO, CANADA

Ottawa General Hospital, a 458-bed Lead Trauma Hospital (equivalent to a level 1), serves the Ottawa region in Ontario, Canada. The trauma staff considered various forms of evaluating the resuscitation phase of trauma care. This has been a challenge because trauma resuscitations involve a multidisciplinary team working together to rapidly diagnose and treat severely injured patients. The time spent in the emergency department is short.

The audit tool used by Ottawa General (Figure 2) identifies 21 elements used to evaluate the resuscitation process. Some elements are clearly defined with a specific time frame (e.g., blood for crossmatch sent to blood bank within 10 minutes of code activation). Other elements leave room for interpretation by the staff (e.g., trauma team collaborated well together). All questions were worded to allow staff to respond with *yes, no,* or *not applicable.*

Initially two forms were completed, one by the nursing staff and the other by the medical staff. After the tool became more widely accepted, the staff worked together to complete just one form per resuscitation. To ensure compliance, the users and related departments were involved in the development phase; a collaborative approach to completing the tool was promoted; it was referred to as a "debriefing" tool, a nonthreatening term; all users were educated to its use before implementation; and feedback regarding the data collected was provided to all staff involved in the process. Positive feedback obtained from the data was shared with the staff in various departments to recognize their efficiencies. When problems were identified, specific data were collected and a plan to resolve the issue was developed.

—John Trickett, RN, Trauma Coordinator

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SALEM HOSPITAL
TRAUMA CRITIQUE

Patient Name:	M.R.#
Mechanism of Injury:	
1. What is criteria?	
2. Who was the Charge Nurse:	
3. Did the Charge Nurse activate properly?	☐ YES ☐ NO
4. Who was the Emergency Department physician?	
5. Switchboard time of activation/alert:	AM / PM
6. Are surgeon and anesthesiology response times documented?	☐ YES ☐ NO
7. Patient sent to: ☐ OR ☐ ICU ☐ Floor ☐ Home ☐ Other	Time sent: AM / PM
8. Was a BA drawn? If yes, what was the result?	☐ YES ☐ NO
9. Was this patient a driver in a MVC?	☐ YES ☐ NO
10. Did you report (if applicable) the intoxicated driver to law enforcement? If no, why?	☐ YES ☐ NO
11. Was the ED length of stay > 4 hours If yes, why?	☐ YES ☐ NO
12. Primary Nurse was _____ Did she/he practice within their designated role throughout the trauma resuscitation?	☐ YES ☐ NO
13. Procedure Nurse was _____ Did she/he pracice within their designated role throughout the trauma resuscitation?	☐ YES ☐ NO
14. All equipment available and in working order?	☐ YES ☐ NO
15. Photos taken in the Emergency Department?	☐ YES ☐ NO
16. Is picture of MVA scene with sticker placed on progress sheet?	☐ YES ☐ NO
17. Phlebotomy available without delay?	☐ YES ☐ NO
18. Lab results returned in prompt fashion?	☐ YES ☐ NO
19. Operating room available without delay?	☐ YES ☐ NO
20. Radiology available without delay?	☐ YES ☐ NO
21. Intake and output recorded on Trauma Flowsheet?	☐ YES ☐ NO
22. Time of consult service arrival documented on Trauma Flowsheet?	☐ YES ☐ NO
23. How could this trauma resuscitation have been improved?	

COMMENTS:

Figure 1. Trauma code evaluation form used by Salem Hospital, Salem, Oregon. General comments can be placed on back of form.

Post Trauma Code Debriefing Tool

Form is to be completed by Trauma Team Leader (or delegate) and Trauma Nurse 1(or delgate) **as soon as practical after each trauma code.** Form to be returned to Dr A. Cwinn's mailbox in Emergency once completed.

Date of Trauma Code: **Chart #**

Physician:_____ Nurse:_____	YES	NO	N/A
Team assembled in ≤ 30mins from code activation (TTL & Snr surg<20mins)			
Resuscitation equipment readily available when required			
Airway secured & controlled in a timely manner			
Patient log rolled and posterior surface examined (within 30 mins for blunt trauma and 10 mins in penetrating trauma).			
Cervical spine stabilization maintained throughout resuscitation			
Adequate intravenous access secured within 15 minutes of patient arrival			
Blood for X match sent to blood bank within 10 mins of code activation			
Chest , Cervical spine and pelvic X rays *taken* within 25 minutes of code activation.			
Initial portable films returned to E.D. within 10 minutes of having been taken.			
Intravenous fluids administered without problems			
Blood received from blood bank within 10 mins of order for uncrossed type specific.			
Urinary catheter inserted within 30 minutes of code activation			
Invasive procedures completed within expected timeframe (chest tubes, DPL,central line,NG tube) Use your own judgement re "expected"			
E.C.G. performed within 15 minutes of being ordered			
Family brought to visit patient as soon as appropriate			
Adequate analgesia administered to patient			
Universal precautions observed by all staff in direct contact with patient			
Trauma Team collaborated well together			
Medical orders communicated effectively to team members			
All medical orders completed within expected timeframe			
Consistent and effective communication with patient during resuscitation			

PLEASE COMMENT ON ALL "NO" RESPONSES OVERLEAF **SEE OVER.....**

Figure 2. Trauma code critique form used by Ottawa General Hospital, Ottawa, Ontario, Canada. Back of form provides space for general comments.