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Deaconess REGIONAL TRAUMA CENTER

Activation Process for Trauma Patients

Purpose: To provide a uniform definition of the type of patient for which the trauma team will be activated

Delineation: Deaconess Midtown Hospital's definition of a trauma patient is based on trauma activation criteria as outlined by the American College of Surgeons (ACS) Committee on Trauma (COT). In certain cases, the definition of trauma that is established by "mechanism" and "pre-existing condition" have been altered.

The Deaconess Regional Trauma Center at Deaconess Midtown Hospital is capable of providing Level II trauma care as defined by the ACS. Trauma care will be available for any injured patient, those at high risk of dying, those sustaining multiple or severe injuries, and those with isolated injuries.

Responsibilities: The Emergency Department (ED) physicians, staff, and EMS providers will have the authority to define patients that meet trauma activation/alert criteria. Consultation with the Trauma Surgeon is always available to help make this decision. Additionally, if the patient deteriorates en route or after arrival to the ED, the status can be upgraded at any time from a Category II activation by the ED physician, staff, Trauma Surgeon, or EMS provider. At no time can an activation be downgraded or cancelled for any reason.

Definitions:

A. Over Activation: A Category I activation that met Category II criteria or a Category II activation that met no criteria

B. Under Activation: A Category II activation that met Category I criteria or a patient who met Category I or Category II activation criteria but was not activated.

ED Procedures:

A. When the ED receives notification that a trauma patient is en route to the Hospital, the ED physician and staff will determine whether the patient meets the requirements for a Category I or Category II trauma activation.
   a. See Attachment A for activation criteria

B. Within 10 minutes of patient arrival, the patient should be determined to be a Category I trauma activation with appropriate stabilization and management, specialty consultation, and/or need for transfer identified and initiated.

C. If at any time the patient's status deteriorates, the patient should be upgraded to the appropriate level.

D. Trauma activations may not be cancelled or downgraded despite changes in patient assessment or findings.

E. If a Category II patient needs to be seen sooner than 6 hours, the ED physician is responsible for communicating this to the Trauma Surgeon.

F. Within 2 hours of patient arrival, the patient should be determined to be a Category II trauma activation.

G. Trauma Consults should be made within 2 hours of patient arrival to the ED.

H. If a pregnant patient with estimated gestation of $\geq$ 18 weeks needs fetal heart monitoring, call the OB ED physician directly at 812-842-4149
   a. If the OB ED physician does not respond within 5 minutes, call the OB ED directly at 812-842-4309

I. Any injured patient being admitted to the hospital who does not meet any trauma activation criteria should be discussed with the Trauma Surgeon to determine if a trauma surgery consult is necessary.

J. Patients do not have to be seen by a Trauma Surgeon if determination is made by the ED physician that a surgical service will admit for a single system injury.

K. Decision to transfer for a trauma patient being transferred out of the ED to a higher level of care should be made within 2 hours of patient arrival and documented.

L. ED is responsible for notifying patient's emergency contact that patient is being treated in the ED
   a. If the ED is unable to speak with the patient's emergency contact, this must be reported to the person/department to which the patient is transferred

Trauma Activation Process:

A. The ED staff will recognize trauma activation criteria via EMS/telephone report and will call the dedicated trauma activation line at extension 3700 to activate the system.

B. The following information is required to be given to the Call Center staff by the ED caller in order to appropriately activate the trauma system
   a. Level: Category I or Category II

b. Criteria: Specific activation criteria
c. Age: Patient's age in years
d. Sex
e. OB: ≥ 18 weeks gestation
f. Vital Signs: Stable or unstable
g. Injuries: Obvious patient injuries
h. ETA: Estimated time of patient arrival
i. From: Scene or name of referring hospital

C. If the Trauma Team does not respond via telephone within 3 minutes of the first activation
    a. Call the Call Center (ext. 3700) to have them repage the Trauma Surgeon paged a second time since (s)he has not responded.
        i. Document this time on the activation record
    b. If the Trauma Surgeon does not return the second call within 3 minutes, ED staff will attempt to contact the Trauma Surgeon via cell phone and/or Call Room phone number posted at ED secretary's desk.
    c. The Call Center is responsible for trouble-shooting the activation system to ensure all trauma pages are transmitted and received.
        i. In the event that the primary activation source is not operating, a secondary back-up system will be utilized by the Call Center.

Trauma Surgeon Responsibilities:

A. The Trauma Surgeon is responsible for calling the ED within 3 minutes of activation.

B. For a Category I activation, the Trauma Surgeon should be present in the ED upon patient arrival with proper field notification or within 15 minutes after the Category I is activated.

C. For a Category II activation, the Trauma Surgeon should respond within 6 hours of ED physician notification.
    a. If the patient needs to be seen sooner than 6 hours, the ED physician is responsible for communicating this to the Trauma Surgeon.

D. The Trauma Surgeon should respond to trauma consults within 6 hours of ED physician notification.

E. Decision to transfer for a trauma patient being transferred out of the ED to a higher level of care should be made within 2 hours and documented.

Under and Over Activations

A. Under activation and Over activation/triage process will be monitored on a daily basis by the Trauma Performance Improvement RN and the Trauma Data Quality Coding Coordinator.

B. Any variances in this process will be reviewed by the multidisciplinary Trauma Operational Committee

C. Performance Improvement letters will be sent to the responsible ED physician and/or ED staff for education.

D. This information is tracked in the trauma registry as an ongoing performance improvement indicator and reported monthly at the multidisciplinary Trauma Operational Committee.

E. Trauma Service's benchmark for undertriage is 10%, while overtriage is 50%. This is calculated and evaluated on a quarterly basis.

References:

- Trauma Services Department Guideline "Definition of a Trauma Patient"
- Trauma Services Department Guideline "Trauma Team Roles and Responsibilities"

Category I Activation Criteria

Activated prior to or within 10 minutes of patient arrival

Airway/Breathing

- Respiratory Compromise
    - Intubated, need emergent airway, or with respiratory compromise

Circulation

- Confirmed* systolic blood pressure < 90 at any time in adults and children > 10 years of age
    - Confirmed means more than 1 reading
- Age-specific confirmed* hypotension for children up to 10 years of age
    - Birth to 6 months: SBP < 60
    - Infant (6 to 12 months): SBP < 70
    - Toddler, Pre-, or School age (1 to 10 years): SBP < 80
- Trauma patients in cardiac arrest
- Trauma patients who required or continue to require blood transfusion at any time (from scene, outside hospital, or ED)

Disability

- GCS < 9 with a mechanism of injury associated with trauma
- Paralysis or suspected spinal cord injury

Anatomic

- Gunshot wound to any area proximal to the elbow or knee
- Penetrating wounds (non-GSW) with confirmed* hypotension (age appropriate as noted above) or respiratory distress
- Crushed, degloved, pulseless, mangled, or amputated extremity proximal to the wrist or ankle
- > 20% TBSA burn with high suspicion for concomitant injuries, needing evaluation by surgeon prior to transfer out
- 2 or more long bone fractures
    - Long bone defined as femur, humerus, or tibia
- Emergency Physician's discretion

*** confirmed means more than one reading**

Category II Activation Criteria

Activated within 2 hours of patient arrival

Airway/Breathing

- Chest wall instability or deformity (i.e. flail chest)

Circulation

- Elderly patient (≥ 65 years) with significant traumatic mechanism of injury (excludes ground level fall) and ONE (1) of the following
  - Confirmed* SPB < 100
  - On anticoagulant

Disability

- GCS 9 – 12 with GCS Motor Score ≤ 5 at any time

Anatomic

- Penetrating wounds to the head, neck, chest, abdomen, or groin without hypotension or respiratory distress
- Falls
  - Adult (≥ 15 years): > 20 feet
  - Children (≤14 years): > 10 feet or 2 times their height
- Ejection from automobile
- Separation from motorized device (e.g. scooter, motorcycle, ATV) traveling > 10 mph
- Death of an occupant in the same vehicle
- Open or depressed skull fracture
- Pregnancy ≥ 18 weeks with significant traumatic mechanism. (Notify OB ED MD at 812-842-4149. If no call back after 5 minutes, call 812-842-4309)
- Transfer from referring hospital with diagnosed traumatic injury requiring admission to a trauma surgeon
- Trauma Surgeon needed: sub-specialist unable/unwilling to admit or wants trauma surgeon to examine patient and provide direction on ED disposition
- Emergency Physician's discretion

*** confirmed means more than one reading**