Performance Improvement Process

A trauma facility should provide safe, efficient and effective care to the injured patient. Continuous performance improvement (PI) is required to achieve measureable improvements in efficiency, effectiveness, and performance, accountability and patient outcomes. Use the following checklist to ensure the facility has addressed performance improvement.

- Facility’s trauma performance improvement plan
- Trauma Medical Director’s (TMD) annual evaluation of general surgeons and advanced practice nurses on the trauma team panel
- Any training/education of prehospital providers (if PI identified need)
- Trauma Team Activation (TTA) Criteria:
  - Highest Level of Activation must include the following:
    - Confirmed blood pressure less than 90 mm Hg at any time in adults and age-specific hypotension in children.
    - Gunshot wounds to the neck, chest, or abdomen or extremities proximal to the elbow/knee.
    - Glasgow Coma Scale score less than 9 with mechanism attributed to trauma.
    - Transfer patients from other hospitals receiving blood to maintain vital signs.
    - Intubated patients transferred from the scene.
    - OR –
      - Patients who have respiratory compromise or are in need of an emergent airway.
      - Includes intubated patients who are transferred from another facility with ongoing respiratory compromise (does not include patients intubated at another facility who are now stable from a respiratory standpoint).
      - Emergency physician’s discretion.
- Documentation that demonstrates:
  - Identified opportunity for improvement
  - Corrective action plans
  - Methods of monitoring
  - Reevaluation
- PI initiative that crosses other specialty lines
- Processes for:
  - Identification of trauma program operational events
  - Ensuring that members of the Peer Review Committee receive information from the meetings when they are unable to attend
  - Identification of the injured patient for data abstraction
  - Demonstrating communication (feedback, letters, memos, education) to other hospitals in the region and to prehospital staff
  - Demonstrating the PI program is supported with data collection that can identify opportunities for improvement
Audit Filters

Fundamental to the performance improvement process is monitoring and measuring the outcome of specific processes or procedures. Another name for process and outcome measures is audit filters. Audit filters require defined criteria and metrics. The following section contains audit filters that level III facilities are required to monitor. As a site reviewer, you do not need to check every audit filter, but must be able to recognize them during chart and performance improvement process review.

Emergency Department:

- All trauma cases that arrive to Emergency Department (ED) when the ED physician has been required to leave the ED to address an in-house emergency. (CD 7-3)
- Trauma team activations (TTA) and all TTA criteria (CD 2-8, 5-15)
- Overtriage and undertriage rates. (CD 16-7, 3-3)
- Bypass and diversion events. (CD 3-4, 3-5, 3-6, 3-7)

Anesthesia:

- Anesthesiology services availability (within 30 minutes) after notification for emergency operations and managing airway problems. (CD 11-1, 11-2)

General Surgeons:

- 80% compliance of the surgeon’s presence in the emergency department for trauma team activations. The trauma surgeon must arrive within 30 minutes from activation. (CD 2-8)
- Programs that admit more than 10% of injured patients to non-surgical services must review all non-surgical admissions through the trauma PI process. (CD 5-18)

Operating Room (OR):

- OR room adequately staffed and available within 30 minutes of a call. (CD 11-17)
- If an on-call team is used, the availability of OR personnel and the timeliness of starting operations are continuously evaluated and measures implemented to ensure optimal care. (CD 11-18)

Transfers:

- Any issues regarding all trauma transfers. (CD 4-3)
- Transfer to a level of higher care within the hospital. (CD 16-8)
- Appropriateness of the decision to transfer or retain major orthopedic trauma cases. (CD 9-13)
- Trauma patients admitted or transferred by a primary care physician without the knowledge and consent of the trauma service are monitored. (CD 11-69)

Pediatrics:

- Facilities annually admitting fewer than 100 injured children younger than 15 years must review the care of their injured children. (CD 2-25)
Performance Improvement Checklist
Level III

Radiology:

☐ Radiologists availability (30 minutes), in person or by teleradiology, when requested for the interpretation of radiographs (CD 11-32)
☐ Changes in interpretation between preliminary and final reports, as well as missed injuries are monitored. (CD 11-37)
☐ If the CT technologist takes a call from outside the hospital, the technologist’s arrival to the hospital is documented (CD 11-47)

Intensive Care Unit (ICU):

☐ Timely and appropriate ICU care and coverage is provided. (CD 11-56)
☐ Timely response of credentialed providers to the ICU. (CD 11-60)

Miscellaneous:

☐ Trauma deaths in house or emergency department. (CD 16-6)
☐ Organ donation rate reviewed annually. (CD 16-9)
☐ The multidisciplinary trauma peer review committee must systematically review mortalities, significant complications, and process variances associated with unanticipated outcomes and determine opportunities for improvement. (CD 16-17)
☐ A process to address trauma program operational events. (CD 16-12, 16-13)
☐ Any system and process issues. (CD 16-10)
☐ Any clinical care issues, including identification and treatment of immediate life threatening injuries. (CD 16-10)

Multidisciplinary Peer Review Committee

Mortality data, adverse events and problem trends, and selected cases involving multiple specialties must undergo multidisciplinary trauma peer review. The facility’s Multidisciplinary Peer Review Committee must have the following components:

☐ This committee must have the following members as the core group and maintain at least 50% attendance:
  ☐ TMD – Chair
  ☐ Representatives from General Surgery (any trauma surgeons on the trauma call)
  ☐ Liaison from Orthopedic Surgery
  ☐ Liaison from Emergency Medicine
  ☐ Liaison from Anesthesia
  ☐ Liaison from ICU
  ☐ Liaison from Radiology
  ☐ Liaison from Neurosurgery (if applicable)
  ☐ Documentation of corrective action plans, methods of monitoring and reevaluation, and loop closure.
  ☐ Regular meeting schedule