Approved by: Trauma Services, MEC

DEPARTMENT: Emergency Department	POLICY TITLE: Trauma Patient Evaluation, Admission, Transfer in the Emergency Department
Page 1 of 3	REPLACES POLICY DATED: 8/03, 6/05, 1/07, 4/08, 10/10, 6/11, 12/12, 4/15
EFFECTIVE DATE: 10/2015	REFERENCE NUMBER: 780-408

PURPOSE:
To provide efficient and effective trauma care to the injured patient.

POLICY:
Trauma Patients with a **HIGH RISK** of serious injury who, during or after evaluation by the ED, have been determined to require hospitalization and immediate surgical evaluation will receive a surgical evaluation in the Emergency Department (ED) by the appropriate surgical service prior to admission to the hospital. Determination of whether or not a patient is at High Risk of Serious Injury involves medical decision making based on multiple factors. A High Risk Mechanism of Injury is one factor that may be considered but by itself does not constitute sufficient information to always determine High Risk of Serious Injury.

Multi-system injury patients will be admitted to the Trauma Surgery Service.

Single-system injury patients will be admitted to the appropriate surgical service unless the patient is determined by the evaluating physician to be of high risk for serious injury, in which case they will be admitted to Trauma Surgery.

Physicians, Admitting and/or Consulting, shall arrive within 30 minutes of notification as requested by the ED physician or Admitting Physician.

The ED physician will determine if a patient is considered to be at **HIGH** risk for serious injury. Patients sustaining the following high risk mechanisms of injury have a higher potential to sustain serious injury and so the ED Physician may use this list as part of their evaluation in determining if a patient is at high risk for serious injury. If requested by the ED physician, a trauma surgeon must evaluate and/or admit such patients within 30 minutes of notification.

1. Ejection from automobile
2. High speed auto crash (initial speed over 40 mph)
3. Major auto deformity or intrusion into passenger compartment
4. Extrication time over 20 minutes
5. Auto-pedestrian/auto-bicycle injury with significant impact (over 5 mph)
6. Motorcycle crash over 20 mph or with separation of bike and rider
7. Vehicle roll-over
8. Death of another person in same vehicle
9. Falls over 10 ft.

The following list also indicates various signs, symptoms, conditions or mechanisms of trauma suggesting serious injury or potential high risk of such injury which, at the discretion of the ED physician, may also require admission to or evaluation by Trauma Surgery.

- CPR in field
- Respiratory arrest or intubation
- SBP: Adult less than 100, Children under 10yrs less than 70+2*age in yrs
- Gunshot wound to head, neck or torso

- Penetrating injury to head, neck or torso
- Flail chest / obvious multiple rib fractures
- Major pelvic fracture
- GCS less than 9 AND evidence of other injuries
- Traumatic paralysis
- Traumatic paresis
- Pulse less than 65 or over 140
- Respirations less than 9 or over 30
- Pneumothorax / Hemothorax
- Two or more proximal long bone fractures
- Any open long bone fractures associated with multiple trauma
- Electrocution
- Trauma with burns over 10% BSA or inhalation injury
- Burns over 20% BSA
- Penetrating injuries of extremities with vascular compromise
- Amputation proximal to the wrist or ankle
- Penetrating injuries proximal to the wrist or ankle with vascular compromise

PROCEDURE:

1. The ED physician will initiate the primary and secondary survey, initiate diagnostic work-up and promptly notify the appropriate Trauma Surgeon or sub-specialty surgical service as needed. All notification, response and arrival times will be documented on the trauma flow sheet.

2. Multi-system injury patients:
   A. All multi-system injury patients requiring admission will be admitted to Trauma Surgery.
   B. If after 24 hours a multi-system injury patient is found to have no need for trauma surgical intervention, the Trauma Surgeon may transfer care to another physician who is already actively involved in the patients care. The trauma surgeon may make a determination as to which subspecialty physician already caring for the patient is most appropriate to assume primary care of the patient, and that physician shall assume care. The Trauma Surgeon should still consult and follow the patient throughout the hospital stay, as appropriate, or sign off when deemed appropriate.

3. Single system injury patients:
   A. Patients with single system injury from a LOW risk mechanism of injury (e.g. fall from standing) do not automatically require a Trauma Surgery evaluation in the ED or admission to Trauma Surgery. These patients may, at the discretion of the ED physician, be referred to another appropriate surgical service (i.e. Orthopedics, Neurosurgery) for admission (See algorithm for Same Height Fall Guidelines). The subspecialty service may further request consultation by Trauma Surgery as appropriate.
   B. Patients with an injury from a SAME HEIGHT FALL sustaining an intracranial hemorrhage, greater than 2 rib fractures, hemothorax, pneumothorax, or two or more injuries requiring consultation should

be admitted to the trauma surgeon with consults from medicine and other specialists as needed. (See algorithm for Same Height Fall Guidelines).

C. Patients with single system injury, from a High risk mechanism of injury (as above) may be admitted to Trauma Surgery. If called by the ED for such a patient, the Trauma Surgeon will accept the patient for admission.

In all cases (multi or single system injury), the service called initially by the ED will not request that the ED refer the patient to another service for admission. The Surgeon initially called may, after an on-site evaluation of the patient, directly contact a subsequent surgical service and arrange for the patient to be admitted to that surgical service as appropriate and agreed to by them. The subsequent surgical service will evaluate the patient in the ED if so requested by the initial surgeon. If the subsequent surgical service declines to admit the patient after personally evaluating the patient, the initial surgeon will maintain care and arrange disposition of the patient. Any service which is called to see the patient will follow the patient as an inpatient for at least 24 hours before signing off on the case.

4. If, after evaluating a patient, the surgeon (Trauma or Sub-specialty) feels the patient can be discharged, the surgeon will arrange for the discharge of the patient. If the surgeon feels that the patient needs to be admitted to another service, the surgeon will directly arrange with that service for the patient's care. In either case, the patient will not be referred back to the ED for disposition as outlined in the Medical Staff Rules & Regulations B.8. page 8. [*If the physician on call to the ED is called to admit a patient, the physician must participate in the care of the patient by: a) accepting the admission; or b) arranging for care of the patient after personally completing an on-site evaluation for the patient*.]

5. Documentation of surgical evaluation and clearance for admission to a sub-specialty surgical service must be made on the patient record.

6. Surgeons cannot direct the ED physician to admit the patient to Family Practice, Internal Medicine or its subspecialists in lieu of admission to their service. Surgeons can ask the ED physician to help arrange for medical consultations and co-management as clinically indicated.

7. Patients presenting with the following conditions possess a potential for transfer to a higher level of care. These patients should be stabilized and the transfer process initiated as soon as reasonable. The Trauma Surgeon will assist with decision-making, stabilization and coordination of transfer if needed. However, Trauma Surgery consultation is not absolutely required prior to transfer.
   a. Paralysis or other signs of spinal cord injury, if neurosurgery is not immediately available
   b. Open globe injuries
   c. Patients 0-13 years with burns >10% total body surface area
   d. Major extremity trauma with vascular trauma
   e. Amputation proximal to wrist or ankle, with re-implantation potential

8. Pediatric patients (age less than 14) presenting with traumatic related injuries may potentially require transfer to a higher level of care for further treatment and possible admission. Consideration to actual injuries and mechanism of injury should be given when determining transfer options. The following should be used as guidelines:
    a. Isolated/single system orthopedic injuries with a low mechanism of injury can be transferred to a designated trauma or non-trauma designated pediatric facility.
    b. All multi-system injuries regardless of mechanism of injury as well as single system injuries with high mechanism of injury should be transferred to the highest level of designated pediatric trauma facility available.

References:

Resources for Optimal Care of the Injured Patient 2014, Committee on Trauma, American College of Surgeons