**PRESENTATION AND ASSESSMENT**

Patient, visitor, or employee with blunt or penetrating trauma

Call Code Blue Team (713-792-7099)

Hemodynamic or respiratory compromise\(^1\) or altered mental status\(^2\)?

- Yes
  - Transfer to EC
  - Maintain airway with cervical spine stabilization

- No
  - Evidence of anatomical injury\(^3\)?
    - Yes
      - Evidence of high-energy event\(^4\)?
        - Yes
          - Medical management and disposition per Code Blue, EC and/or Primary teams as indicated
        - No
          - No
    - No

\(^1\) Hemodynamic or respiratory compromise is defined as: SBP < 90 mmHg, respiratory rate < 10 bpm or > 29 bpm

\(^2\) Altered mental status is defined as Glasgow Coma Scale < 14 or motor score ≤ 5 [see Appendix A: Glasgow Coma Scale (GCS)]

\(^3\) Anatomic injury includes the following:
  - Open or depressed skull fracture
  - Penetrating injury to head, neck, torso, and/or extremities proximal to elbow and knee
  - Flail chest
  - Long bone fracture

\(^4\) Evidence of high-energy event includes the following:
  - Falls > 20 feet (6 meters) in adults and > 10 feet (3 meters) or 2-3 times height in children
  - High-risk auto crash:
    - Intrusion > 12 inches occupant site or 18 inches any site
    - Ejection (partial or complete) from vehicle
    - Death in same passenger compartment
  - Auto vs. pedestrian/bicyclist thrown, run over, or with significant (> 20 mph) impact
  - High-energy electrical injury
  - Burns > 10% total body surface area and/or inhalation injury
  - Tender or rigid abdomen

**DISPOSITION**

Transfer to outside hospital for higher level of care [see Appendix B: Texas Medical Center (TMC) Hospital Contact Information]

Emergency transfer administrative process, see Page 2

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Note: Comorbid factors may increase the severity of injury:

- Age ≤ 5 or > 70 years
- Significant cardiac or respiratory disease
- Pregnancy
- Diabetes, cirrhosis, end-stage renal disease, morbid obesity
- Immunosuppression
- Bleeding disorders or currently taking anticoagulants

Note: For emergencies occurring on MD Anderson campus locations not supported by the Code Blue Team, contact 911 (Code Blue Team vs. 911 Response Map)
Triage, Stabilization and Transfer Process for Patients with Trauma

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson’s specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other healthcare providers in the context of individual clinical circumstances to determine a patient’s care. This algorithm should not be used to treat pregnant women.

EMERGENCY TRANSFER ADMINISTRATIVE PROCESS

EC/Inpatient

- Attending Physician will notify Case Management or Off Shift Administrator1 (OSA) (outside of business hours) to coordinate acceptance at outside hospital2

- Case Management or OSA will:
  - Contact Transfer Center at the receiving hospital to obtain approval3
  - Seek financial clearance and bed availability
  - Provide attending physician with contact number for physician at outside hospital
  - Attending Physician will discuss case with physician at outside hospital

- Transfer accepted?
  - Yes
    - Case Management or OSA will:
      - Identify and coordinate appropriate transportation service to be used
      - Complete the Memorandum of Transfer
      - Ensure proper documentation4 accompanies patient
      - Notify appropriate nursing unit when the approval to transfer has been obtained along with information such as address and phone numbers for calling clinical report
  - No
    - Inform patient/family that care will continue at MD Anderson
    - Manage patient as clinically indicated

Outpatient/MD Anderson public spaces

- Code Blue team contacts HFD EMS for transfer
- Code Blue team to notify outpatient area of patient disposition
- Outpatient team to notify available family and primary team as appropriate

HFD EMS = Houston Fire Department Emergency Medical Services

1 Contact Case Management or OSA via operator
2 Refer to MD Anderson Institutional Policy #CLN0614: Transfer of Patients to, from and Within MD Anderson Cancer Center Policy
3 Discuss with Attending Physician regarding preference for receiving hospital based on clinical scenario. See Appendix B: Texas Medical Center (TMC) Hospital Contact Information. If transfer approval is not promptly obtained, Case Management to contact alternate hospitals to avoid delay.
4 Documentation:
  - “Face sheet”
  - Medical records to include a current reconciled medication list and transfer orders per primary care team
  - Others as appropriate
## APPENDIX A: Glasgow Coma Scale (GCS)\(^1\)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Opening Response</td>
<td>Spontaneous</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>To verbal stimuli, command, speech</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>To pain only (not applied to face)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>1</td>
</tr>
<tr>
<td>Verbal Response</td>
<td>Oriented</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Confused conversation, but able to answer questions</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Inappropriate words</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Incomprehensible speech</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>1</td>
</tr>
<tr>
<td>Motor Response</td>
<td>Obeys commands for movement</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Purposeful movement to painful stimulus</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Withdraws in response to pain</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Flexion in response to pain</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Extension in response to pain</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>1</td>
</tr>
</tbody>
</table>

\(^1\)GCS is obtained by adding the score from each parameter

## APPENDIX B: Texas Medical Center (TMC) Hospital Contact Information

<table>
<thead>
<tr>
<th></th>
<th>Memorial Hermann TMC</th>
<th>Ben Taub Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Transfers:</td>
<td>Transfer Center (713) 704-2500</td>
<td>Transfer Center (713) 873-8601</td>
</tr>
</tbody>
</table>

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SUGGESTED READINGS


MD Anderson Institutional Policy #CLN0614 – Transfer of patients to, from and Within MD Anderson Cancer Center Policy


Triage, Stabilization and Transfer Process for Patients with Trauma

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DEVELOPMENT CREDITS

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