Roles and Responsibilities of the Trauma Team

- The Trauma Team is a multidisciplinary team designed to provide optimal care for the injured patient in the Emergency Department. In general, the Trauma Team consists of staff from Trauma Surgery, Emergency Medicine, Nursing, Prehospital/EMS, Respiratory Therapy, Pharmacy, Radiology, Anesthesiology, and Social Work. Other consultants such as Neurosurgery, Orthopedic Surgery, Plastic Surgery, Oral Maxillofacial Surgery, and Head & Neck Surgery may be involved in the care of trauma patients as well. Ancillary support from Blood Bank, Environmental Services, Registration, and other staff is also critical for optimal trauma care.

- The assignment of specific roles and responsibilities for defined team members is essential to provide high quality trauma care. While trauma resuscitations are often good learning opportunities for medical, nursing, paramedic, and other allied health professional students, our primary priority is to provide the highest quality trauma care to the individual patient.

- General
  - Once activated, the Trauma Area clerk should assign a HAR-alias to a TTA-1/TTA-2 trauma patient in order to facilitate prompt ordering of diagnostic and therapeutic interventions.
  - ED Registration staff will convert the HAR-alias to the actual patient name as soon as the patient’s identity can be confirmed. Medical Records will merge the new record of a trauma patient with any historical records in ORCHID for the same patient.
  - Trauma patients who are already registered prior to Trauma Team activation are designated as “delayed” traumas. When upgraded to a TTA-1 or TTA-2, ED Nursing should begin a Trauma Flowsheet so that the patient arrival time and Trauma Surgery Attending signature/time can be documented.
  - The Trauma Team is expected to perform hand hygiene and wear “standard precautions” to include a disposable gown, gloves, and facial/eye protection prior to evaluating the trauma patient. Protective lead apparel should also be worn when x-rays are anticipated.
  - It is expected that when possible, a pre-patient arrival “huddle” will be performed. During this huddle, pre-hospital information from the MICN/Radio Room will be reviewed; staff will identify themselves and their assigned roles during the trauma resuscitation.
  - Upon arrival of the patient, the Trauma Team will be respectful of pre-hospital paramedic providers in giving their full attention to a formal handoff report.
  - The initial evaluation of the trauma patient in the ED will be based on Advanced Trauma Life Support (ATLS) guidelines.
  - Non-essential personnel may be asked to step outside of the trauma bay at any time.

- Specific roles and responsibilities
  - **Trauma Surgery Attending**
    - Will be stationed near the foot of the bed at the time of patient arrival.
    - Is responsible for directing the overall care of the trauma patient and is considered the Trauma Team Leader whenever present.
    - Will make all final decisions regarding diagnostic and therapeutic interventions as well as disposition for the trauma patient. This responsibility includes
directing the approach to airway management including the choice of airway management personnel.

- Will appropriately supervise housestaff and students in the management of the trauma patient.
- Will document their participation in a TTA-1/TTA-2 by signing the Trauma Flowsheet and recording the time of their signature. The Trauma Surgery Attending is required to sign the flowsheet within 15 minutes of patient arrival for a TTA-1, and within 30 minutes for a TTA-2.
- Will provide direct patient care (e.g. resuscitative thoracotomy, REBOA, surgical airway) to the trauma patient whenever needed.

- **Emergency Medicine Attending**
  - Will be stationed near the head of the bed at the time of patient arrival.
  - Has primary responsibility for management of the trauma patient’s airway. This responsibility includes direction and supervision of the EM Senior Resident as well as direct involvement in managing the airway him/herself or asking Anesthesiology to assume responsibility for airway management.
  - Will assume, in the absence of the Trauma Surgery Attending, overall direction and decision-making capability for management of the trauma patient.
  - Will appropriately supervise housestaff and students in the management of the trauma patient.
  - Will document their participation in a TTA-1/TTA-2 by signing the Trauma Flowsheet and recording the time of their signature.
  - Will assure that the Trauma Team is appropriately activated/upgraded based on the established TTA/TC criteria (see Trauma Team Activation).
  - Will communicate all significant changes in patient condition in the ED to the Trauma Surgery team.
  - Will confirm all final ED dispositions with the Trauma Surgery team.

- **Trauma Chief Resident (R4/5) or Surgical Critical Care Fellow**
  - Will be stationed near the foot of the bed at the time of patient arrival.
  - Will assume, in the absence of both the Trauma Surgery and Emergency Medicine Attendings, overall direction and decision-making capability for management of the trauma patient.
  - Will independently perform an examination of critical findings (e.g., wounds, pulses, abdominal exam) according to ATLS principles without disrupting the ongoing primary assessment.
  - Will perform / assist in the performance of various procedures according to the guidelines for procedures below.
  - Will review x-rays, FAST images, CT scans, laboratory/POC results, and other diagnostic information. The Trauma Chief Resident will confirm that an ABG and lactate are drawn on appropriate patients.
  - Will assist in transferring the patient to a portable monitor and transporting the patient to the CT scan, Operating Room, ICU, or other initial disposition.
  - Will assist in the complete examination of the patient (e.g., rolling the patient to examine the back in CT scan).
Will assist in administering rectal contrast for CT when needed.

Will confirm that adequate sedation and analgesia are provided for patient comfort and to prevent tube/line dislodgement.

Will confirm that an appropriate disposition is determined in discussion with the Trauma Surgery Attending and that this plan is communicated to EM staff.

Will provide the appropriate handoff communication to consultants or for subsequent transfers to the next phase of care (e.g. ICU, Angio/IR)

- **Emergency Medicine Senior Resident (R3/4)**
  - Will be stationed at the head of the bed at the time of patient arrival.
  - Will perform the initial primary assessment of the trauma patient and calls out his/her findings to the Nurse Scribe.
  - Will be responsible for initially managing the airway of the trauma patient under the supervision of the EM Attending. This responsibility includes confirming that all necessary airway equipment is readily available prior to the patient’s arrival. In addition, he/she will confirm that the endotracheal tube is properly secured with the assistance of Respiratory Therapy.
  - Will perform a secondary survey of the trauma patient.
  - Will perform / assist in the performance of various procedures according to the guidelines for procedures below.
  - Will review x-rays, FAST images, CT scans, laboratory/POC results, and other diagnostic information.
  - Will assist in transferring the patient to a portable monitor and transporting the patient to the CT scan, Operating Room, ICU, or other initial disposition.
  - Will assist in the complete examination of the patient (e.g., rolling the patient to examine the back in CT scan).
  - Will assist in administering rectal contrast for CT when needed.
  - Will confirm that adequate sedation and analgesia are provided for patient comfort and to prevent tube/line dislodgement.
  - Will place orders as needed for the trauma patient. This includes the “Request to Admit” order. Orders for CT scan should include some description of the mechanism of injury or areas of concern for injury.
  - Will document his/her involvement in the initial patient evaluation and any procedures in the electronic medical record.
  - Will request consultations as needed and provide appropriate documentation of such requests in the electronic medical record.
  - Will communicate all significant changes in patient condition in the ED to the Trauma Surgery team.
  - Will confirm that an appropriate disposition is determined in discussion with the Trauma Surgery Chief Resident or Attending and that this plan is communicated to EM staff.
  - Will confirm all final ED dispositions with the Trauma Surgery team.

- **Trauma Junior Resident (R2/3)**
  - Will be stationed on the left (patient’s left) side of the gurney at the time of patient arrival.
- Will, in the absence of the Trauma Chief Resident, independently perform an examination of critical findings (e.g., wounds, pulses, abdominal exam) according to ATLS principles without disrupting the ongoing primary assessment.
- Will perform / assist in the performance of various procedures according to the guidelines for procedures below.
- May perform the FAST / eFAST exam under the supervision of the Trauma Surgery Attending when appropriate and call out the results to the ED Nurse Scribe.
- Will review x-rays, FAST images, CT scans, laboratory/POC results, and other diagnostic information. The Trauma Junior Resident will confirm that an ABG and lactate are drawn on appropriate patients.
- Will assist in transferring the patient to a portable monitor and transporting the patient to the CT scan, Operating Room, ICU, or other initial disposition.
- Will assist in exposing and performing a complete examination of the patient (e.g., rolling the patient to examine the back in CT scan).
- Will perform closed chest CPR when needed.
- Will assist in administering rectal contrast for CT when needed.
- Will confirm that an appropriate disposition is determined in discussion with the Trauma Surgery Chief Resident and Attending and that this plan is communicated to EM staff.
- Will provide the appropriate handoff communication to consultants or for subsequent transfers to the next phase of care (e.g. ICU, Angio/IR).

- **Emergency Medicine Resident (R2)**
  - Will be stationed on the right (patient’s right) side of the gurney at the time of patient arrival.
  - May perform the FAST / eFAST exam under the supervision of the ED attending when appropriate and call out the results to the ED Nurse Scribe.
  - Will perform / assist in the performance of various procedures according to the guidelines for procedures below.
  - May enter orders as needed in the care of the trauma patient. Orders for CT scan should include some description of the mechanism of injury or areas of concern for injury.
  - Will assist in transferring the patient to a portable monitor and transporting the patient to the CT scan, Operating Room, ICU, or other initial disposition.
  - Will assist in exposing and performing a complete examination of the patient (e.g., rolling the patient to examine the back in CT scan).
  - Will perform closed chest CPR when needed.
  - Will assist in administering rectal contrast for CT when needed.
  - Will contact and provide appropriate handoff communication to consultants or for subsequent transfers to the next phase of care (e.g. ICU, Angio/IR) when needed.

- **Emergency Medicine Intern**
- Will be stationed at the right side (patient’s right) computer at the time of patient arrival.
- Will enter orders as needed for the care of the trauma patient. This includes entering the order for a FAST prior to its performance in appropriate patients. Orders for CT scan should include some description of the mechanism of injury or areas of concern for injury.
- Will document the EM provider evaluation in the medical record as needed.
- Will assist in exposing and performing a complete examination of the patient (e.g., rolling the patient to examine the back in CT scan).
- Will contact the appropriate consultants needed for the care of the trauma patient.
- Will assist in stabilizing extremity injuries, cleansing and repairing wounds, and perform other procedures as directed by the Trauma Team Leader.
- Will perform closed chest CPR when needed.

- **Trauma Intern**
  - Will be stationed at the left side (patient’s left) computer at the time of patient arrival.
  - Will document the Trauma Surgery provider evaluation in the medical record.
  - Will enter orders as needed for the care of the trauma patient (e.g., medications, CT scans, consultations). This includes Admission Orders to a med/surg ward, PCU/SDU, or ICU bed. Orders for CT scan should include some description of the mechanism of injury or areas of concern for injury.
  - Will assist in exposing and performing a complete examination of the patient (e.g., rolling the patient to examine the back in CT scan).
  - Will contact the appropriate consultants needed for the care of the trauma patient.
  - Will assist in stabilizing extremity injuries, cleansing and repairing wounds, and perform other procedures as directed by the Trauma Team Leader.
  - Will perform closed chest CPR when needed.
  - Will follow-up on laboratory and radiographic results and report these results to the Trauma Junior Resident or Trauma Chief Resident.

- **ED Nurse Scribe**
  - Will be stationed at the door of the Trauma Bay at the time of patient arrival.
  - Is typically assigned to the Trauma Bay for that patient.
  - Will confirm that the trauma bay has been adequately stocked with supplies and necessary equipment.
  - Will receive report from the MICN/Radio Room regarding the prehospital information for the incoming trauma patient and document this on the Trauma Flowsheet.
  - Will obtain two ID bands from the Trauma Area clerk and ask right nurse to place on patient
  - Will obtain patient identification stickers and affix to Trauma Flowsheet
  - Will obtain printed specimen labels when needed and give to left nurse
- Will document all aspects of the initial trauma resuscitation on the Trauma Flowsheet (including paramedic sequence number, procedure times and results, involvement of consultants, and times for tourniquets / REBOA / pelvic binder).
- Will document all therapies and interventions (e.g., medications).
- Will confirm that staff listed sign the Trauma Flowsheet and include their time of arrival.
- Will record the time of contact to Interventional Radiology when needed.
- Will assign a runner to remove blood from the ED satellite refrigerator. When blood is requested, ED Nurse Scribe will ask the Trauma Team Leader whether to activate the Massive Transfusion Protocol (MTP). If the answer is “yes”, ED Nurse Scribe to call the Blood Bank to activate the MTP.

  - **ED Nurse Right**
    - Will be stationed on the right (patient’s right) side at the time of patient arrival.
    - Will establish peripheral IV access and draw blood when needed. If difficulty in establishing IV access or drawing blood, will notify the Trauma Team Leader promptly.
    - Will confirm necessary equipment is available for procedures.
    - Will retrieve medications from the Pyxis as needed and administer to the patient.
    - Will set up a Pleurovac chest drainage system when needed.
    - Will place an NG/OG tube and foley catheter when needed.
    - Will assist in exposing and examining the entire patient. The ED Nurse Right will make efforts to keep the patient normothermic (blankets, external warming devices).
    - Will place two ID bands on the patient.
    - Will send blood work to the laboratory.

  - **ED Nurse Left**
    - Role may be filled by the Trauma Resuscitation Nurse (TRN).
    - Will be stationed on the left (patient’s left) side at the time of patient arrival.
    - Attaches patient to the cardiac monitor.
    - Take manual BP initially and as needed.
    - Take patient temperature.
    - Will establish peripheral IV access and draw blood when needed. If difficulty in establishing IV access or drawing blood, will notify the Trauma Team Leader promptly.
    - Will set up a Pleurovac chest drainage system and connect to suction when needed.
    - Will place an NG/OG tube and foley catheter when needed.
    - Will operate the Belmont rapid infusion device.
    - Will administer blood and blood products.
    - Will prepare the external or internal paddles for defibrillation.
    - (TRN only) Will prepare arterial line set-up for REBOA insertion when needed.
• Will connect the patient to the transport monitor and transport the patient. The ED Nurse Left will confirm that the automatic BP cuff is set to cycle at least every 5 minutes.
• Will give handoff report to the nurse or anesthesia provider for the next phase of care.

○ Anesthesia Provider
  • Will be stationed in the Trauma Bay at the time of patient arrival for TTA-1s.
  • Will be available to assist with / perform airway management when asked to do so by the EM Attending or Trauma Surgery Attending.
  • When asked to perform airway management, will call out the details of such (ETT position, size, etc.) to the ED Nurse Scribe and document the procedure in the electronic medical record.

○ Respiratory Therapist
  • Will be stationed at the head of the bed at the time of patient arrival for TTA-1s.
  • Will assist in airway management by the EM / Anesthesia provider when needed.
  • Is responsible for securing the ETT after intubation or surgical airway.
  • Is responsible for confirming ETCO2 using a colorimetric device and then connecting the patient to continuous waveform capnography on the monitor.

○ Pharmacist
  • Will be stationed at the door of the Trauma Bay at the time of patient arrival for TTA-1s.
  • Will bring RSI medications to the Trauma Bay when the patient will likely need to be intubated.
  • Will bring ACLS medications to the Trauma Bay when needed.
  • Will draw up and label RSI medications as directed by the EM physician or Anesthesia provider who is responsible for airway management when needed.
  • Will remove other necessary medications (e.g., analgesics, anticonvulsants, tetanus, and antibiotics) from the Pyxis, draw them up, and label them.
  • Will hand off RSI and other medications to the ED Nurse Right for administration to the patient.
  • Will assist with obtaining the patient’s medication history and performing medication reconciliation as needed.
  • Will provide consultation regarding medications when needed (e.g., reversal of anticoagulants).

○ X-ray Technologist
  • Will be stationed outside the door of the Trauma Bay at the time of patient arrival for TTA-1s.
  • Will perform portable x-rays as directed by the Trauma Team leader.
  • Will notify the Trauma Team Leader if x-ray orders have not been entered.
  • Will immediately transfer portable x-rays performed in the Trauma Bay to the PACS system.

○ Social Worker
• Will be stationed outside the door of the Trauma Bay at the time of patient arrival for TTA-1s and 2s when available.
• Will interact with and provide support family and friends of the trauma patient.
• Will be available to meet with patients, family, and friends when requested by EM or Trauma Surgery staff.

• Chain of command
  o The medical chain of command among the Trauma Team is as follows (in descending order):
    ▪ Trauma Surgery Attending (Team Leader)
    ▪ Emergency Medicine Attending
    ▪ Trauma Surgery Chief Resident
    ▪ Emergency Medicine Senior Resident
    ▪ Trauma Surgery Junior Resident
    ▪ Emergency Medicine Resident
  o If a nursing area of concern is raised, this should be discussed with the Adult ED Charge Nurse or Overall Charge Nurse (OCN). If unresolved, then the issue should be escalated to the ED Nurse Manager and then to the Clinical Nursing Director. When having a direct impact on patient care, these issues will also be discussed with the Trauma Team Leader in real time.
  o For all other concerns, the departmental chain-of-command should be utilized.

• Procedures
  o In general, the following guidelines will be followed in the performance of invasive procedures on a trauma patient in the ED:
    ▪ Odd / even rule: For patients who have a medical record number that ends with an odd number, the following procedures will be performed by a Trauma Surgery provider. For patients who have a medical record number that ends with an even number, the procedure will be done by an Emergency Medicine provider.
      • Tube thoracostomy
      • Central line insertion
    ▪ Intubation / airway management will be performed by the Senior EM Resident under the supervision of the EM Attending.
    ▪ A surgical airway / cricothyroidotomy will be performed by the Trauma Surgery Chief Resident or Attending. When deemed appropriate by the Trauma Surgery Attending, EM or Trauma Surgery residents will be asked to participate in the procedure as well.
    ▪ Resuscitative thoracotomy will be performed by the Trauma Surgery Chief Resident or Attending. When deemed appropriate by the Trauma Surgery Attending, EM or Trauma Surgery residents will be asked to participate in the procedure as well.
    ▪ FAST/eFAST is usually performed by an Emergency Medicine resident under the supervision of an EM attending. This procedure may also be performed by a Trauma Surgery resident under the appropriate supervision.
For an unstable trauma patient, the Trauma Surgery Attending has the ultimate authority to determine who will do a specific procedure.

- The time that a tourniquet or REBOA balloon is inflated and subsequently deflated will be called out by the provider and recorded on the Trauma Flowsheet by the ED Nurse Scribe.
- Closed loop communication between all members of the Trauma Team is critical to providing optimal care to the trauma patient. This is a responsibility shared by all team members and in general should follow the TeamSTEPPS model (e.g., huddles, briefings).
- The availability of blood products in the satellite ED and OR refrigerators is a limited resource. The decision to remove these products from the refrigerator for transfusion should be made by either the ED or Trauma Attending.
- An ABG and lactate should be routinely drawn on all TTA-1 patients and trauma patients age 65 years and older.
- The Trauma Team will confirm that an ID band is placed and a Type & Cross is sent for all trauma patients being “redlined” to the Operating Room.