

# Guideline



## CCHMC Trauma Services Operation Guidelines

Title: Trauma Team Roles and Responsibilities

Effective Date: 6/202

Number: TR-01

### 1.0 SCOPE

- 1.1. For a trauma resuscitation to be efficient, every member of the trauma team should have and understand a specific role in addition to functioning within those responsibilities.
  - 1.1.1. Team members must understand other team members' roles and responsibilities and how they relate to the overall resuscitation.
- 1.2. The roles and responsibilities will be organized into tasks to be completed before the patient arrives, during the initial assessment and treatment phase of the resuscitation.
  - 1.2.1. Tasks will also be completed during the secondary assessment and evaluation of treatment.
- 1.3. The trauma team will be divided into two core teams
  - 1.3.1. The inner core will consist of the senior surgical resident, pediatric resident, anesthesia, respiratory therapy, nurse right, nurse left, physician team leader and the nursing team leader
  - 1.3.2. The outer core will consist of the paramedic, patient care assistant, medication nurses, operating room personnel, nurse liaison, pediatric intensive care fellow, x-ray technician, pastoral care, child life, social service, protective services.

### 2.0 DEFINITIONS

- 2.1. Respiratory therapist (RRT)
- 2.2. Specialty Resource Unit (SRU)
- 2.3. Emergency Department (ED)
- 2.4. Pediatric Intensive Care (PICU)
- 2.5. Intravenous Fluid (IV)
- 2.6. Glasgow Coma Scale (GCS)
- 2.7. Operating Room (OR)
- 2.8. Advanced Trauma Life Support (ATLS)
- 2.9. Pediatric Advanced Life Support (PALS)
- 2.10. Shock Trauma Suite (STS)
- 2.11. Trauma Core Nurse

### 3.0 PROCEDURE

- 3.1. **Physician Team Leader – Pediatric Emergency Medicine Attending Physician or Fellow**
  - 3.1.1. Respond to trauma stats, alerts, OR resuscitation and trauma evaluations
    - 3.1.1.1. In an OR resuscitation coordinates with anesthesia and surgery attending in prioritization and implementation of primary and secondary assessments.
    - 3.1.1.2. Has ultimate authority and decision-making responsibilities.
  - 3.1.2. Prior to patient's arrival:
    - 3.1.2.1. Assembles the trauma team and reviews roles
    - 3.1.2.2. Communicates pre-hospital information
    - 3.1.2.3. Ensure availability of resuscitation medications, blood / fluids and necessary equipment.
  - 3.1.3. Oversee and coordinate primary assessment to identify and treat any life threats
    - 3.1.3.1. Airway
    - 3.1.3.2. Breathing
    - 3.1.3.3. Circulation
    - 3.1.3.4. Disability
  - 3.1.4. Provides shared mental model to include background, plan of care and solicit team feedback
  - 3.1.5. Oversees and coordinated the secondary survey to identify and treat other injuries
  - 3.1.6. Coordinates radiologic and laboratory studies
  - 3.1.7. Coordinates any necessary consults
  - 3.1.8. Discusses care with the family
  - 3.1.9. Coordinates release of the Trauma Team personnel
  - 3.1.10. Ensures a safe hand-off of care to appropriate physician

**3.2. Surgical Attending Physician or Fellow**

- 3.2.1. Responds to all trauma stats and OR resuscitations
- 3.2.2. Assumes leadership during an OR resuscitation and as needed during a trauma stat.
- 3.2.3. Communicates/collaborates directly with Emergency Medicine Team Leader as needed during a trauma stat.

**3.3. Nursing Team Leader – Trauma Core Nurse**

- 3.3.1. Respond to all trauma stat, alert, OR resuscitation and trauma evaluations
- 3.3.2. Positioned at the foot of the bed
- 3.3.3. During an OR resuscitation collaborates with OR Circulating Nurse
  - 3.3.3.1. Documents the resuscitation and performs routine NTL role until the circulating nurse assumes OR documentation and leadership. The hand-off will be initiated after confirmation with anesthesia, OR Circulating RN and Surgery Attending there is no longer need for service.
  - 3.3.3.2. Determines nursing responsibilities after a shared mental model.
  - 3.3.3.3. Oversees availability of necessary trays and equipment
  - 3.3.3.4. Dismisses team members no longer required after handoff between OR staff and Trauma Team staff.
- 3.3.4. Records entire resuscitation acquiring data from all team members
- 3.3.5. Prior to arrival
  - 3.3.5.1. Ensures all team members are present and badged into the resuscitation
    - 3.3.4.1.1. Greets helicopter on heliport if transferred by air
    - 3.3.4.1.2. For OR resuscitations, greets ambulance at elevators if transported by ground
- 3.3.6. Communicates with Physician Team Leader and other team members
  - 3.3.5.1. Vital signs
  - 3.3.5.2. Medication availability and administration
  - 3.3.5.3. Trends from collected data
  - 3.3.5.4. Fluid status
- 3.3.7. Monitors all nursing activities and patient's needs
- 3.3.8. Oversees crowd control
- 3.3.9. Provides report to either the OR or PICU charge nurses on current patient status before transfer.
- 3.3.10. Designates who will restock the STS
- 3.3.11. Accompanies patient to radiology and definitive care-Operating Room, PICU, ED Pod.
- 3.3.12. Ensures continuous monitoring for instability and perform a safe hand-off of care to receiving nurse.
  - 3.3.12.1. Ensures necessary equipment, supplies, medications and personnel are ready for transport
  - 3.3.12.2. Receives medications prepared to travel with the patient during transport from the medication nurse
- 3.3.13. Communicates with family
- 3.3.14. Identifies and reports any process improvement concerns to the Trauma Service within 24 hours (or next working day)

**3.4. Anesthesiologist/Fellow**

- 3.4.1. Respond to all trauma stat and OR resuscitations. During an OR resuscitation:
  - 3.4.1.1. Collaborates with the Attending Surgeon and ED Attending for decision making responsibilities
  - 3.4.1.2. Ensures availability of resuscitation medications, blood/fluids and necessary equipment for an OR resuscitation
  - 3.4.1.3. Collaborates with the Medication Nurses on all non-anesthetic medications
  - 3.4.1.4. Prior to patient's arrival
  - 3.4.1.5. Ensure availability of necessary equipment
  - 3.4.1.6. Assumes responsibility of all airway and breathing requirements
  - 3.4.1.7. Directs placement of arterial lines as necessary
  - 3.4.1.8. Controls bleeding from head and neck wounds.
  - 3.4.1.9. Monitors for central nervous system changes and reports to team leader
  - 3.4.1.10. Directs insertion of oral or nasogastric tube

**3.5. Doctor Right – Pediatric Surgical Resident / Fellow**

- 3.5.1. Respond to trauma stat, alert, OR resuscitation activations
- 3.5.2. Stands on the patient's right side
- 3.5.3. During an OR resuscitation

- 3.5.3.1. Collaborates with the Attending Surgeon to perform Doc Right activities
- 3.5.4. Prior to arrival:
- 3.5.5. Ensures availability of necessary equipment
- 3.5.6. Performs primary patient assessment in accordance with ATLS guidelines
  - 3.5.6.1. Identifies and treats all life threats
  - 3.5.6.2. Verifies IV access obtained
  - 3.5.6.3. Communicates findings with Physician and Nurse Team Leaders
- 3.5.7. Performs secondary patient survey in accordance with ATLS guidelines
- 3.5.8. Identifies all other injuries
- 3.5.9. Communicates findings with Physician and Nurse Team Leaders
- 3.5.10. Performs necessary OR procedures including central access as needed
- 3.5.11. Obtains and completes history and physical of patient
- 3.5.12. Communicates and reviews assessment and plan with surgical attending
- 3.5.13. Accompanies patient to radiology and definitive care – Operating Room, PICU, or ED pod.
- 3.5.14. Ensures continuous monitoring for instability
  - 3.5.15. Ensures safe hand-off with physician and nursing staff including plan of care

**3.6. Doctor Left – Pediatric ED Resident / Fellow**

- 3.6.1 Responds to trauma stat, alert and OR resuscitations
- 3.6.2. Stands on the patient's left side
- 3.6.3. During an OR resuscitation
  - 3.6.3.1. Performs Doc left activities
- 3.6.4. Prior to patient arrival
  - 3.6.4.1. Ensures availability of necessary equipment
- 3.6.5. Assist Doctor Right with primary assessment in accordance with ATLS guidelines
  - 3.6.5.1. Performs assessment in absence of Doc Right
  - 3.6.5.2. Assist to identify all life threats
  - 3.6.5.3. Verifies IV access obtained on patient's left side
  - 3.6.5.4. Communicates findings with Physician Team Leader and Nursing Team Leader
- 3.6.6. Assists Doctor Right with secondary assessment in accordance with ATLS guidelines
  - 3.6.6.1. Performs assessment in absence of Doc Right
  - 3.6.6.2. Assists to identify all other injury
  - 3.6.6.3. Communicates findings with Physician Team Leader and Nursing team Leader
- 3.6.7. Assists in performing OR procedures on patient's left side

**3.7. Nurse Left – Trauma Core Nurse**

- 3.7.1. Respond to trauma stat, alert and OR Resuscitations
- 3.7.2. Positioned on the patient's left side
- 3.7.3. In OR resuscitation
  - 3.7.3.1.1. Performs Nurse Left activities
  - 3.7.3.1.2. Completes tasks assigned by Nursing Team Leader or OR Circulating Nurse
- 3.7.4. Prior to arrival
  - 3.7.4.1. Ensures availability of necessary equipment for blood draw and IV access
    - 3.7.4.1.2. Prepares chest tube drainage system as needed per pre-hospital report
  - 3.7.4.2. Sets monitor for appropriate sized blood pressure cuff
  - 3.7.4.3. Ensures monitor leads and pulse oximeter have been applied correctly
  - 3.7.4.4. Obtains initial manual blood pressure and subsequent blood pressure readings from the monitor
  - 3.7.4.5. In conjunction with the Respiratory Therapist, communicates with the patient, giving reassurance and explanations (see Psychosocial Support of the Injured Child and Family Policy)
  - 3.7.4.6. Observes and assists with cervical spine precautions and places cervical collar as indicated
  - 3.7.4.7. Assists with any left sided procedures
  - 3.7.4.8. Obtains IV access, draws labs, assesses patency of existing lines, secures left-sided IV lines with stopcocks and appropriate extension tubing in all patients potentially requiring operative repair
  - 3.7.4.9. Monitors vital signs including temperature, pulse, respirations, blood pressure and ETCO<sub>2</sub>(for intubated patients) and communicates to Nursing team Leader every 5 minutes (minimum of 4 times) until the following criteria are met.
    - 3.7.4.9.1. Temperature taken within 10 minutes of admission; repeat every 30 minutes if below or above normal (36-38F)
    - 3.7.4.9.2. Pulse: within 5% of age appropriate rate

3.7.4.9.3. Respirations: within 5% of age appropriate rate

3.7.4.9.4. Blood pressure: stable within 5mmHg (pressure greater than or equal to 80 mmHg systolic)

3.7.4.9.5. When vital signs are stable to the above criteria, obtain every 15 minutes

3.7.4.10. Monitors and regulates IV, blood products, lavages, and all outputs (blood, urine, drainage, vomitus etc.) on left-side of patient and communicates to nursing team leader

3.7.4.11. Administers medications if IV located on left side as ordered

3.7.4.12. Assists or applies dressings to left sided wounds

3.7.5. Post stabilization and preparation for transport

3.8.1. Communicates all findings to Nursing and / or Physician Team Leader

3.8.2. Places chest tube to portable suction if chest tube is on left side

3.8.3. Ensures identification bracelet has been applied and verifies patient identification before transport to area of definitive care

3.8.4. Accompanies patient to area of definitive care as directed by the Nursing Team Leader

### **3.8. Nurse Right – ED Staff Nurse**

3.8.1. Responds to all trauma stat, alert, OR resuscitations and trauma evaluations

3.8.2. Positioned on the patient's right side

3.8.3. During an OR resuscitation

3.8.3.1.1. Performs Nurse Right activities

3.8.3.1.2. Completes tasks assigned by Nursing Team Leader or OR Circulating Nurse

3.8.4. Prior to arrival

3.8.4.1.1. Ensures availability of necessary equipment

3.8.4.1.2. Places Bair Hugger on stretcher

3.8.5. Obtains initial manual blood pressure readings from monitor if Nurse Left is unable to obtain

3.8.6. In conjunction with Respiratory Therapist communicates with patient, providing reassurance and explanation of procedures

3.8.7. Assists in all right-sided procedures

3.8.8. Obtains IV access and lab draws

Monitors and regulates IV, blood products, lavage and all outputs on right-side of patient and communicates to Nursing Team Leader.

3.8.9. Administers medication if IV located on patient's right side

3.8.10. Assists or applies any right sided procedures or dressings

3.8.11. Communicates all findings to the Physician and Nursing Team Leaders

3.8.11.1. Post-stabilization and transport

3.8.11.2. Prepares IV lines for transport

3.8.11.3. Accompanies patient to area of definitive care as directed by the Nursing Team Leader

### **3.9. Medication Nurses – ED Staff Nurse and PICU Staff Nurse**

3.9.1. Respond to all trauma stat, OR resuscitations

3.9.2. During an OR resuscitation

3.9.2.1. Performs Medication Nurse responsibilities or tasks assigned by the Nursing Team Leader and OR Circulating Nurse

3.9.2.2. Prepares medications according to the standard Emergency Dosing Code Book and collaborates with anesthesia on all medications.

3.9.2.3. Operates the rapid infuser if blood products are being administered

3.9.3. Positioned at the medication counter

3.9.4. Prior to patient arrival

3.9.4.1. Ensures availability of normal saline flushes

3.9.4.2. Prepares appropriate dose specific medication and fluids as directed by the Physician Team Leader according to the Emergency Dosing Code Book

3.9.5. Verbalizes all drug actions, incompatibilities and dilutions

3.9.6. Completes independent double check for all prepared drugs

3.9.7. Signs Hoxworth specimen forms as necessary

3.9.7.1. If blood needs to be administered via the rapid infuser, ONE nurse will move to assist the

paramedic and initiate the blood infusion. The ED medication nurse will accompany the patient if urgently transferred to the OR to continue operation of the rapid infuser with blood products.

3.9.8. Post-stabilization and transport

- 3.9.8.1. In collaboration with the Physician Team Leader prepares appropriate medications for transport and hands off to the Nursing Team Leader

**3.10. Respiratory Therapy – RRT from the ED or Respiratory Resource Unit**

3.10.1. Responds to all trauma stat, alert and evaluations

3.10.2. Position is at head of the patient's bed

3.10.3. Prior to patient arrival

3.10.3.1. Ensures that 100% oxygen is available

3.10.3.2. Ensures all intubation equipment is available and in working order including suction equipment

3.10.4. Supports anesthesiologist or airway physician in a trauma stat as directed

3.10.4.1. Assumes airway management when the patient is stable and directed by anesthesia or airway physician

3.10.4.2. Provides suctioning, bagging and monitoring of endotracheal tube placement

3.10.4.2.1. Monitors end tidal CO2 reading and communicates to Physician and Nursing team Leaders

3.10.5. Assumes management of the airway and breathing in a trauma alert or evaluation

3.10.6. Monitors and reports neurologic status and notifies Team Leader of findings/changes

3.10.7. Maintains in-line immobilization of the cervical spine

3.10.8. Communicates with the patient giving reassurance and explanations

3.10.9. Places patient on the portable ventilator after intubation

3.10.10. Post stabilization and transport

3.10.11. Places patient on portable oxygen

3.10.12. Accompanies patient during transport and ensures adequate ventilation and oxygenation

**3.11. Nurse Liaison – Manager of Patient Services and/ or ED Clinical manager/ED Charge Nurse**

3.11.1. Respond to all trauma stats and OR Resuscitations

3.11.2. Assists Nursing Team leader with crowd control

3.11.3. Serves as communication link between trauma area and rest of the hospital system

3.11.4. Initiates and expedites triage process to facilitate patient disposition

3.11.5. Calls consulting services as needed

3.11.6. Monitors availability of CT

3.11.7. Acts as a liaison with public relations if legal and / or media is involved

3.11.8. Communicates with flow coordinator or receiving unit on status of patient and approximate time of transfer or necessary equipment requirements

3.11.9. Communicates status of receiving unit to team members

3.11.10. Calls for additional protective services officer if necessary

**3.12. Fluids – ED Paramedic**

3.12.1. Respond to trauma stat, alert and evaluations

3.12.2. Prior to patient arrival

3.12.2.1. Prepares fluids for the rapid infuser, HotLine or Alaris Pump

3.12.2.2. Back-up for Nurse Left until RN assumes Nurse Left role

3.12.2.3. Applies monitor leads

3.12.2.4. Obtains first manual blood pressure

3.13.3. Resumes fluid role when nurse left arrives

3.13.4. Operates rapid infuser, Hot Line or Alaris pump during trauma stat or alerts for crystalloids

3.13.4.1. Blood products administration must be initiated by a registered nurse

3.13.4.2. Continues to operate the rapid infuser if the patient is emergently transferred to the Operating Room

3.13.4.2.1. The Medication Nurse will operate the rapid infuser in the OR if blood products are being administered

3.13.5. Informs the Nursing Team Leader of the fluid volume infused during the resuscitation

3.13.6. Assist with iSTAT as indicated

- 3.13.7. Assumes other responsibilities as directed by Nurse Left, Nursing Team Leader and / or Physician Team Leader
- 3.13.8. Ensures adequate fluid is available for transport
- 3.13.9. Post resuscitation
  - 3.13.9.1. Assists PCA and nursing in restocking trauma bay
  - 3.13.9.2. Cleans and places EMS equipment in storage location for either pick-up by unit or equipment return by mail

### 3.14. OR Nurse

- 3.14.1. Respond to all trauma stats and OR Resuscitations
- 3.14.2. In an OR resuscitation
  - 3.14.2.1. Collaborates with the Nursing Team Leader to delegate roles to the OR team members once in the OR
  - 3.14.2.2. Continually oversees availability of necessary trays and equipment
- 3.14.3. Prior to patient arrival
  - 3.14.3.1. Assists with preparation of trauma area
  - 3.14.3.2. Opens trays requested by the Physician Team leader or Surgeon
  - 3.14.3.3. Assist with emergency surgical procedures or use of surgical trays if necessary  
Contacts additional OR personnel if necessary
- 3.14.4. Contacts the OR Front Desk to request preparation of the OR suite to receive patient
- 3.14.5. Communicates with operating room / anesthesia staff regarding age, injury, condition of patient, immediate plan of care and potential time of arrival to the OR
- 3.14.6. If no surgical intervention in STS may return to OR after consulting with the Physician Team Leader

### 3.15. Patient Care Assistant – ED staff

- 3.15.1. Responds to trauma stat, alert, evaluation and OR resuscitations
- 3.15.2. During an OR resuscitation
  - 3.15.2.1. Meets the ambulance or helicopter with the Nursing Team Leader to escort patient to the OR
  - 3.15.2.2. Performs PCA activities
- 3.15.3. Prior to patient arrival:
  - 3.15.3.1. Places Bair Hugger on stretcher
  - 3.15.3.2. Assembles laboratory tubes for blood specimens
  - 3.15.3.3. Greets helicopter if air transport
    - 3.15.3.3.1. Transports pedipac to helipad and places on stretcher if receiving child via air
    - 3.15.3.3.2. Exposes patient in STS
    - 3.15.3.3.3. Starts chest compressions if cardiac arrest
- 3.15.4. Notifies team if blood has not been obtained within six minutes
- 3.15.5. Labels all specimens
- 3.15.6. Witnesses patient identification and blood draw for type and screen and  
Cosigns specimen per policy BB.SPE.801
- 3.15.7. Communicates time specimens sent to the laboratory with Nursing Team Leader
- 3.15.8. Transports labs to lab processing as necessary
- 3.15.9. Obtains type specific blood from Hoxworth if indicated
- 3.15.10. Obtains equipment within bay for set-up prior to patient arrival and throughout the resuscitation
- 3.16.11. Post resuscitation and stabilization
  - 3.16.11.1. Obtains necessary equipment for transport (monitor and portable suction)
  - 3.16.11.2. Cleans and places EMS equipment in storage location for either pick-up by unit or equipment return by mail

### 3.16. PICU Fellow

- 3.16.1. Respond to all trauma stats
- 3.16.2. Serves as back-up for Anesthesia as airway MD
  - 3.16.2.1. Prior to patient's arrival
    - 3.16.2.1.1. Ensures availability of resuscitation medications, blood/fluids and necessary equipment.
    - 3.16.2.1.2. Assumes responsibility of all airway and breathing requirements

- 3.16.2.1.3. Directs placement of arterial lines as necessary
- 3.16.2.1.4. Controls bleeding from head and neck wounds
- 3.16.2.1.5. Resumes PICU role when anesthesia arrives
- 3.16.3. Assists with the placement of central lines / chest tubes if indicated
- 3.16.4. Communicates with Physician Team leader patient condition and plan of care
- 3.16.5. Accompanies patient to CT if available
- 3.16.6. Accompanies patient to PICU and facilitates safe hand-off with surgery

### 3.17. X-ray Technician

- 3.17.1. Responds to all trauma stat and alert activations
- 3.17.2. Obtains x-rays as indicated in STS
- 3.17.3. Processes x-rays to the PACS system
- 3.17.4. Notifies Stat Box Radiologist when films are available for interpretation

### 3.18. Pastoral Care

- 3.18.1. Respond to all trauma stats and alert activations
- 3.18.2. Acts as primary contact with family to provide information and support to the family
- 3.18.3. Provides family supported presence in the trauma bay when appropriate
- 3.18.4. Documents family status in EPIC
- 3.18.5. Continually provides updates on the patient's general condition until the physician can meet with the family to provide specific information
- 3.18.6. Assesses the family situation for strengths and problems in coping with a traumatically injured child
- 3.18.7. Assist the family with contacting additional support resources
- 3.18.8. Acts as a liaison between the family and the medical / nursing staff
- 3.18.9. Follows Victims of Violence Guideline when indicated

### 3.18 Child Life

- 3.18.1. Responds to all trauma stat, alert and evaluations
- 3.18.2. Provides support and distraction techniques for the patient / family when appropriate
- 3.18.3. Provides therapeutic interventions
- 3.18.4. Provides assistance to Pastoral Care for psychosocial support of the family as needed
- 3.18.5. Acts as back-up for family supported presence when pastoral care is unavailable
- 3.18.6. Assists in educational opportunities for respiratory therapist regarding psychosocial support

### 3.19 Social Service

- 3.19.1. Responds to all trauma stats and for any case of suspected abuse or neglect
- 3.19.2. Interviews parent / caregiver
- 3.19.3. Contacts appropriate authorities
- 3.19.4. Initiates abuse forms and contacts Mayerson Center
- 3.19.5. Aggressive or inappropriate parent / caregiver / domestic violence
  - 3.19.5.1. Assesses if child is in danger
  - 3.19.5.2. Assesses and mediates response
- 3.19.6. Legal issues surrounding event (firearm / violence)
  - 3.19.6.1. Assesses situation surrounding event
  - 3.19.6.2. Determines actions taken to this point
  - 3.19.6.3. Initiates police involvement if necessary
  - 3.19.6.4. Explains victims of violence policy to parent / guardian and obtains signature from parent / guardian
- 3.19.7. Issues surrounding foster care / out of home placement / custody
  - 3.19.7.1. Assesses situation surrounding incident
  - 3.19.7.2. Identifies agencies currently involved
  - 3.19.7.3. Notifies appropriate organizations

### 3.20 Security

- 3.20.1 Respond to all stat and alerts activations
- 3.20.2. Greets helicopter if air transport
- 3.20.3. Controls traffic flow in resuscitation area
- 3.20.4. Secures elevator for transport

- 3.20.5. Communicates with police if patient was involved in criminal behavior
- 3.20.6. Secures patient valuables if parent / caregiver is not available
- 3.20.7. Follows Victims of Violence Policy when indicated

**3.21 Radiologist**

- 3.21.1 Immediately reviews imaging for all trauma stats
- 3.21.2. Interprets stat and / or outside films

**4.0 REFERENCES**

**5.0 APPROVALS**

All revisions of this guideline are approved by the Perioperative Administration and Trauma Services Division/Departments. This guideline is reviewed every three years or sooner if deemed necessary. Policy authority for this document resides with the Perioperative Administration Division/Department. This guideline is approved by the Trauma Services Director, Operating Room Director, Medical Director, Evidence Based Practice Mentor, Director of Patient Services compliance, and the Assistance Vice President of Patient Services.

<b>HISTORY</b>	
<b>Original Date</b>	
5/1990	
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6/18, 6/21	