

# Guideline



## CCHMC Trauma Services Guidelines

Title: Trauma OR Resuscitation

Effective Date: 11/2024

Number: TR-02

Page: 1 of 4

### 1.0 SCOPE

- 1.1. This procedure outlines the criteria and procedure for seriously injured children to be directly admitted to the Operating Room (OR) for surgical management and pertains to all Cincinnati Children's personnel who participate in the care of the seriously injured child.
- 1.2. It is generally recognized that a seriously injured child in need of an OR Resuscitation during off shifts and weekends requires additional personnel to support the resuscitation.
- 1.3. The OR Resuscitation team is comprised of an inner core group of health professionals who provide direct patient care and an outer core which support the resuscitative efforts.
- 1.4. OR Resuscitation members function within this role until they can be replaced by appropriate OR personnel. Additional OR personnel are mobilized by the OR Manager on call.

### 2.0 DEFINITIONS

- 2.1. StatLine: Communication center within the Emergency Department (ED) that receives calls from outside agencies
- 2.2. Inner Core: Group of 10 team members (Surgeons, Nurses, Anesthesiologists) that provide direct patient care
- 2.3. Outer Core: X-ray Technician, Family Support / Chaplain, Security, Radiologist, Paramedic, PCA

### 3.0 GUIDELINE

- 3.1. Activation Criteria:
  - 3.1.1. Child in full arrest with pre-hospital signs of life following a non-cranial penetrating chest, abdominal, back, flank injury, axilla or groin injury
  - 3.1.2. Child with a penetrating injury and shock unresponsive to 40 mL/kg fluid administration
  - 3.1.3. At the discretion of the ED and surgical attending
- 3.2. Procedure for Activation:
  - 3.2.1. StatLine receives notification from an outside hospital (OSH) or pre-hospital personnel. Prior authorization from the Emergency Department Attending Physician occurs before the Trauma OR Resuscitation page is initiated.
  - 3.2.2. The ED Attending Physician collaborates with the Surgical Attending/Fellow to determine whether the patient meets the criteria for a Trauma OR Resuscitation (notification outlined in 3.5 below).
    - 3.2.2.1. ESR will page the Surgery Attending (listed as "Attending Main Campus On-Call Surgeon/Trauma (Days) (PPL)" in Who's on Call?) with the call back number, followed by 911.
    - 3.2.2.2. If the Surgery Attending cannot be reached, or if the ETA is < 20 minutes, an OR Resuscitation can be activated at the discretion of the ED Attending.
    - 3.2.2.3. In cases where a patient presents in extremis and there is no surgery attending onsite, the surgery fellow UNDER DIRECTION OF THE ATTENDING may start an OR case while the attending is en route to the OR.
  - 3.2.3. The ED Attending Physician notifies StatLine to request the activation of a Trauma OR Resuscitation. Required information includes:
    - Patient name (If known)
    - Injury
    - Mode of arrival
    - Estimated Time of Arrival (ETA)

3.3. Registration:

- 3.3.1. StatLine generates a state name in Epic. If the name is known and verified, the actual name is used for registration.
- 3.3.2. Lead ESR and/or Triage ESR are responsible to make sure labels and bracelet go up with the patient via ED Staff or hand delivered to OR.
- 3.3.3. Surgery registration is completed once the patient has been admitted.

3.4. Timing of Page:

- 3.4.1. Can be upgraded from any type of resuscitation if patient meets criteria prior to the patient's arrival.
- 3.4.2. When possible, OR Resuscitations are paged up to 20 minutes before the patient's expected arrival. If less than 20-minute ETA, paging is activated with the given ETA by EMS. If it is more than 20 minutes before the patient's expected arrival, OR Resuscitation standby is paged.
- 3.4.3. Once the initial page is sent, OR Charge Nurse and Anesthesia Board Runner will determine and assign an OR to be used. OR Charge Nurse will notify StatLine of the assigned room. Statline will send an update page the includes OR Resuscitation location (assigned OR suite building and room number).
- 3.4.4. If patient meets "violence guidelines" criteria, this should be included as the last notation within the content of the trauma page.

3.5. OR Room Availability:

- 3.5.1. An operating room is committed to trauma 24 hours a day, seven days a week, and 365 days a year.
- 3.5.2. Between 7 a.m. and 11 p.m. Monday – Friday, the OR charge nurse identifies a room which is available for an injured patient.
- 3.5.3. Between 11 p.m. and 7 a.m. Monday – Friday, Saturday, and Sunday an operating room is always available for trauma. If the in-house surgical team is needed to staff another room, the other room does not start until the on-call trauma team has been notified and is on-site.
- 3.6.4. As outlined in 3.4.3., OR Charge Nurse and Anesthesia board runner collaborate to assign an OR suite and notify StatLine of the designated room.
- 3.6.5. A member from the OR designated by OR Charge Nurse will greet arriving team members at the Rally Point and direct them towards the assigned OR.

3.6. OR Equipment Availability:

- 3.6.1. Surgical/trauma carts will be obtained by OR staff and brought to the designated OR suite.
- 3.6.2. There are two sets of trauma/emergency resuscitations carts. The trauma cart on the low side is in the designated spot with the other emergency carts and contains the basic operating instruments and equipment for trauma resuscitations.
- 3.6.2. The emergency chest cart on the high side is in the designated spot with other emergency carts and contains instruments to start a trauma case however additional trauma trays must be brought into the room.
- 3.6.3. The neuro carts are located by the neuro rooms.
- 3.6.4. Upon an impending emergent transfer of a child to the operating room, the OR nursing staff prepares the major trauma operating room for a laparotomy, thoracotomy, or craniotomy as directed by the trauma surgeon.

3.7. OR Resuscitation Attire:

- 3.7.1. Attire to be worn during an OR Resuscitation is located at the rally point, on the left inside the G3.362 entrance, or in the hallway by the B entrance. The attire for OR Resuscitation is listed below:

- 3.7.1.1. Minimal protective attire for inner core OR trauma team participants is hat, OR grade mask, gowns, gloves, goggles (fluid shields).
- 3.7.1.2. If time allows additional protective attire for OR trauma team members at the bedside includes scrubs or a yellow gown and shoe covers, in addition to the minimal OR attire listed above.

3.8. The trauma team will report directly to the assigned OR as specified in the update page except for the following:

3.8.1. ED PCA

3.8.1.1. ED PCA will report to the Rally Point on G3 and assist the OR liaison to direct arriving personnel towards the assigned OR.

3.8.1.2. ED PCA will escort the off-load team and patient to the assigned OR.

3.8.1.3. ED PCA is responsible for accepting the blood cooler at the Rally Point. ED PCA continues to serve as a blood runner during the case until dismissed.

3.8.2. Offload team consisting of paramedic and nurse left

3.8.2.1. Responsible for meeting the pre-hospital providers at the helipad or ambulance bay and escorting them to the OR.

3.8.2.2. Offload team will obtain gowns and hair bonnets and assist pre-hospital staff donning OR PPE while in the elevator for transport.

3.8.2.3. Once arriving in the OR, paramedic and nurse left function as defined in TR-01.

3.7.3. Family liaison(s) consisting of Social Work, Spiritual Care Coordinators, and Child Life

3.7.3.1. Family liaison(s) should accompany the off-load team if the family is expected to be transported and arrive with the patient.

3.7.3.1. Family liaisons should facilitate final good-byes between patient and family while en route from off-load to the OR but prior to arriving at the designated room. Families are not permitted to accompany patients into the OR and off-load team will not stop prior to entering the OR.

3.9. Roles and Responsibilities. Roles and responsibilities for the Trauma team as defined in TR-01 are the same in the Operating Room setting, except for roles noted below.

3.9.1. The EM Attending will perform the MD Team Leader role, until there is a clear handoff to the Anesthesia Attending. All other team members will function in their assigned role until relieved by an OR team member or dismissed by the MD Team Leader.

3.9.1.1. EM Attending and Surgery Attending may jointly decide that Surgery Attending will function as the MD Team Lead in certain cases. In the event that Surgery is team leading, this will be clearly communicated to the team.

3.9.2. The nurse team lead (Trauma Core Nurse), will bring a portable computer from the STS into the OR along with white colored team lead gowns and STS role stickers. Nurse team lead will staff-in present team members and scribe the resuscitation; including the primary survey and any secondary survey, until leadership is transferred to Anesthesia Attending.

3.9.3. Medication nurses from ED and PICU will only be responsible for code drug medications and utilize the OR crash cart and code medication dosing binder. All other medications including RSI are obtained and administered by Anesthesia unless otherwise delegated.

3.9.4. OR Charge Nurse will assist Nurse Team Lead and MD Lead in dismissing redundant or unnecessary personnel.

3.9.5. Nurse right should ensure Belmont Rapid Infuser is set up and primed prior to patient arrival.

3.9.6. Anesthesia should ensure a patient's CSN is programmed into the vital sign monitor prior to patient arrival.

3.10. Procedure for Emergent Blood in the OR:

3.10.1. Once a OR Resuscitation is activated, the blood bank automatically delivers 2 units of O negative blood and 2 units of liquid plasma to G3.362, otherwise known and marked as the Rally Point.

3.10.2. If additional blood is needed, the Massive Blood Transfusion procedure (MBTP) should be initiated at the order of an attending physician.

3.10.3. The ED PCA is responsible for obtaining the MBTP coolers from the blood bank unless otherwise already dismissed from the OR.

#### 4.0 REFERENCES

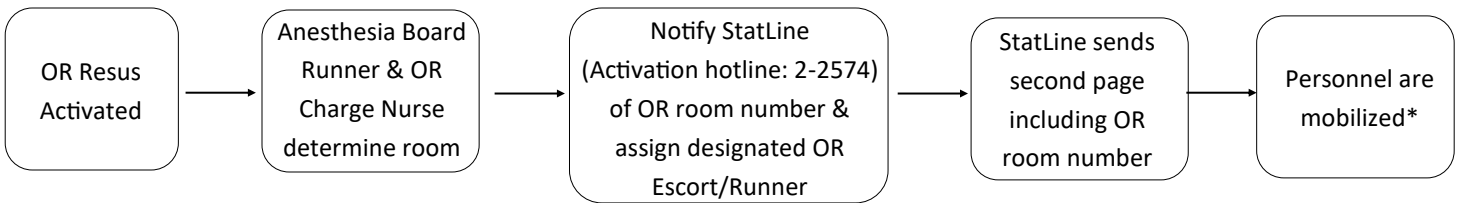
4.1. N/A

#### 5.0 APPROVALS

All revisions of this guideline are approved by the Trauma Service. This guideline is reviewed every three years or sooner if deemed necessary. Authority for this document resides with the Trauma Service. This guideline is approved by the Trauma Services Manager and the Director of Trauma Services.

<b>HISTORY</b>	
<b>Original Date</b>	
	7/1992
<b>Revision Date</b>	
	7/92, 5/95, 6/98, 12/00, 4/04, 11/04, 12/06, 08/09, 10/10, 10/13, 08/16, 10/16, 11/21, 6/24, 11/24
<b>Review Date</b>	
	6/18, 6/21, 6/24

## OR Resuscitation Activation and Role/Responsibilities Job Aid



Person/Title	Report To	Responsibilities
OR Charge Nurse	Designated OR	Assign OR room number, and inform StatLine of OR room number Assign person to role of OR escort/runner for arriving staff & blood Crowd control (can be assisted by OR Manager when available)
OR Escort/Runner <b>ESCORT TEAM</b>	Rally Point	Collaborate with ED PCA to ensure following tasks are completed: Serve as escort for arriving staff or aid in way-finding to designated OR Return to Rally Point to escort arriving off-load team/Air-care/EMS to designated OR If ED PCA unavailable, deliver trauma blood cooler to OR
ED PCA <b>ESCORT TEAM</b>	Rally Point	Collaborate with OR Escort/Runner to ensure following tasks are completed: Serve as escort for arriving staff or aid in way-finding to designated OR Return to Rally Point to escort arriving off-load team/Air-care/EMS to designated OR Deliver trauma blood cooler to OR (Blood Bank brings cooler to Rally Point) Continues to serve as blood runner for MBTP If necessary after pt arrival in OR
ED Medic <b>OFFLOAD TEAM</b>	Helipad or Ambulance Bay depending on mode of arrival	Greet Air-care/Transport/EMS upon arrival Assists Aircare/Transport/EMS with donning gown and hair bonnet while in escalator Escort patient to designated OR Completes medic role upon pt arrival in OR (monitors, access, fluids, etc.)
Trauma Nurse Left <b>OFFLOAD TEAM</b>	Helipad or Ambulance Bay depending on mode of arrival	Greet Air-care/Transport/EMS upon arrival Assists Aircare/Transport/EMS with donning gown and hair bonnet while in escalator Escort patient to designated OR Completes nurse left role upon pt arrival in OR (monitors, access, meds/fluids, runs Belmont rapid infuser, etc.)
Chaplain/Social Work/Child Life <b>FAMILY LIASION(S)</b>	Helipad or Ambulance Bay depending on mode of arrival	Greet Air-care/Transport/EMS upon arrival Introduce self to family, explain process of rapid transfer to OR, facilitate any final good-byes or prayers while in route to OR (off-load team will not stop at Rally Point for transition to OR) Escort family to waiting room once patient is taken to OR

**\*Orientees/trainees/students are not permitted in OR Resus**

Person/Title	Report To	Responsibilities
Trauma Core Nurse Nurse Team Lead	Designated OR	<p>Prior to patient arrival:</p> <ul style="list-style-type: none"> <li>Obtains portable computer from STS5</li> <li>Obtains to-go OR Resus Bag from STS5 computer (white team lead gowns x 3: Surgeon, EM Attending, Nurse Team lead), distributes gowns &amp; role stickers in OR</li> <li>Ensure team members understand role and responsibilities, delegate as necessary</li> <li>Rooms patient STSOOD and staff-in resus team members (EM Attending, Surgery Attending/Fellow/Resident, Nurse Left, Anesthesia, etc.)</li> </ul> <p>Completes Nurse Team Lead duties: Records primary/secondary survey, places any necessary orders, ensures bedside personnel complete delegated tasks, etc.</p>
EM Attending Physician Team Lead	Designated OR	<p>Prior to patient arrival:</p> <ul style="list-style-type: none"> <li>Identifies self as Team Lead until clear transition to Anesthesia/Surgical Team</li> <li>Provide pre-brief to resuscitation team</li> <li>Ensure team members understand role and responsibilities, delegate as necessary</li> <li>Outlines expected priorities of care</li> </ul> <p>Completes MD Team Lead duties: Collaborate with Surgery Attending to prioritize interventions, oversee completion of primary/secondary survey, verbalizes any necessary orders</p> <p>Transitions leadership to Anesthesia when appropriate and dismisses EM resus team</p>
ED RN Nurse Right	Designated OR	<p>Prior to patient arrival: Primes Belmont Rapid Infuser with Normal Saline</p> <p>Completes nurse right role upon pt arrival in OR (monitors, access, meds/fluids, etc.)</p>
ED RN Med Nurse	Designated OR	Collaborates with PICU RN to draw up any requested code medications (utilizing code sheets and code med tray in OR)
PICU RN Med Nurse	Designated OR	Collaborates with ED Med RN to draw up any requested code medications (utilizing code sheets and code med tray in OR)
Surgery Resident or Fellow Doc Right	Designated OR	Completes Doc Right duties: Primary/secondary survey, collaborates with Physician Team Lead & Surgery Attending to execute interventions
EM Resident Doc Left	Designated OR	Completes Doc Left duties: Aid in primary/secondary survey, aid in left sided procedures
Surgery Attending	Designated OR	<p>Completes Surgical Attending duties: Collaborates with Physician Team Lead to prioritize interventions</p> <p>Oversees surgical procedures</p>
Anesthesia	Designated OR	<p>Admits patient into the monitor</p> <p>Completes Anesthesia duties: Manages airway</p> <p>Obtains and administers RSI if indicated</p> <p>Obtains, administers, and documents non-code medications as requested by Physician Team Lead (ex: 3% Hypertonic Saline, Keppra, TXA, etc.) per standard procedures</p>

**\*Orientees/trainees/students are not permitted in OR Resus**