

Oklahoma City Regional Trauma Plan

Region 8



Developed by the Regional Planning Committee

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Region 8 Trauma Plan

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I. GOALS/PURPOSE

- A. Assure trauma patients are stabilized and transported to the closest, appropriate hospital facility with the available resources and capacity to provide definitive care in a timely fashion.
- B. Support the Trauma Triage and Transport Guidelines to effectively reduce trauma morbidity and mortality.
- C. Match a facility's resources with each trauma patients needs to ensure optimal and cost-effective care is achieved.
- D. This plan will not conflict with any rules and/or regulations that are in place now or may be written or changed in the future.

II. MISSION STATEMENT

In support of the statewide system, create a regional system of optimal care for all trauma patients, to ensure the right patient goes to the right place, receiving the right treatment, in the right amount of time.

III. REGION DESCRIPTION

Region 8 consists of Oklahoma County and its contiguous communities.

IV. 911 CAPABILITIES

Enhanced 911 serves region 8. Infrastructure is now in place for Wireless E-911 to incorporate E-911 to cell phones. Wireless E-911 is currently being implemented.

V. TRAUMA PRIORITY CATEGORIZATION

All injured patients must be identified and transported/transferred to the facility that provides the appropriate care based on the clinical needs of the patient. This should be done in a timely fashion with specific attention focused on preserving the highest level of care for major trauma patients. A three-tiered system designed to determine the appropriate hospital destination for all injured patients considers injury severity, severity risk, time and distance from injury to definitive care, and available resources to meet the region's specific needs.

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Three trauma triage priorities are used in determining the appropriate destination for patients:

A. Priority I Trauma Patients:

These are patients with blunt or penetrating injury causing physiological abnormalities or significant anatomical injuries. These patients have time sensitive injuries requiring the resources of a Level I or “On-Call Facility”. These patients should be directly transported to a Level I or “On-Call Facility” for treatment but may be stabilized at a Level III or Level IV facility, if needed, depending on location of occurrence and time and distance to the higher-level trauma center. If needed these patients may be cared for in a Level III facility if the appropriate services and resources are available.

B. Priority II Trauma Patients:

These patients are those that have potentially time sensitive injuries because of a high-energy event or single system injury. These patients do not have physiological abnormalities or significant anatomical injuries and can be transported to a trauma facility with the resources to perform a complete trauma evaluation and medical screening and can care for their injuries. Patients > 20 weeks pregnant will also be considered Priority II trauma patients.

C. Priority III Trauma Patients:

These patients are without physiological instability, altered mentation, neurological deficit, or significant anatomical or single system injury that has been involved in a low energy event. These patients should be treated at the nearest treating facility or the patient’s hospital of choice.

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VI. CATEGORIZATION OF HOSPITALS

A. Hospital Providers in Region 8 include:

1. Level I Trauma Center: OU Health
2. Level II Trauma Center: None
3. Level III Trauma Center:
 - a. Integris Baptist Medical Center – NWE
 - b. Integris Health Edmond, Inc.
 - c. Integris Southwest Medical Center
 - d. Mercy Hospital Oklahoma City, Inc.
 - e. SSM Health St. Anthony Hospital – Midwest
 - f. SSM Health St. Anthony Hospital – Oklahoma City
4. Level IV Trauma Center:
 - a. Community Hospital, LLC
 - b. Integris Community Hospital – Council Crossing
 - c. Oklahoma ER & Hospital
5. Rehabilitation Hospitals:
 - a. Edmond – AMG Specialty Hospital
 - b. Inspire Specialty Hospital
 - c. Mercy Rehabilitation Hospital Oklahoma City
 - d. Mercy Rehabilitation Hospital Oklahoma City South
 - e. Valir Rehabilitation Hospital of OKC, LLC
6. Focus Facilities:
 - a. Curahealth Oklahoma City
 - b. Lakeside Women’s Hospital
 - c. McBride Orthopedic Hospital
 - d. Northwest Surgical Hospital
 - e. OKC-AMG Specialty Hospital
 - f. Oklahoma Center for Orthopedic & Multi-Specialty Surgery
 - g. Oklahoma Heart Hospital, LLC
 - h. Oklahoma Heart Hospital South, LLC
 - i. Oklahoma Spine Hospital
 - j. OneCore Health
 - k. Select Specialty Hospital – Oklahoma City, Inc
 - l. Summit Medical Center, LLC
 - m. Surgical Hospital of Oklahoma
 - n. The Children’s Center, Inc
7. Psychiatric Hospitals
 - a. Cedar Ridge
 - b. Oakwood Springs, LLC

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B. Region 8 Trauma Rotation On-Call Facility System

1. Hospitals participating in the Region 8 Trauma Rotation On-Call Facility System are:

- a. Integris Baptist Medical Center – NWE
- b. Integris Southwest Medical Center
- c. Mercy Hospital Oklahoma City, Inc
- d. OU Health
- e. SSM Health St. Anthony Hospital – Oklahoma City

The On-Call schedule is posted daily to the EMResource™ computer as a document. Additionally, the EMResource™ computer posts the On-Call hospital as an FYI daily at the top of the Oklahoma West screen.

2. On-Call Facility Requirements: (Refer to Call Schedule)

- a. When “on-call”, each hospital will provide neurosurgery, facial trauma and hand trauma (both adult and pediatric) or to arrange coverage through hospital transfer agreements.
- b. This schedule is for unassigned, Priority II patients with single-system, or at risk for injury that at least include neurosurgery, facial trauma, or hand trauma but currently stable, picked up by EMSA in its service area or transported into the metropolitan area from other regions of the State. As of September 1, 2013, isolated Priority I neurologically injured patients transported directly by EMS within or into the OKC region will go to OU Health. All other patients will be transported to the closest, most appropriate facility.
- c. In order to maintain accurate statistics for patient transfers into Region 8 and to comply with interfacility triage and transfer criteria, all requests to the on-call hospital or physicians for the transfer of unassigned injured patients should be referred and managed through TReC.
- d. Each hospital will provide care for established patients, stable patients that have requested the facility, or patients arriving to their ED even on the date they are not the designated on-call hospital if they have the capability to do so.
- e. It is understood that the other hospitals may have to provide back-up coverage for a designated hospital.
- f. The On-Call facility will serve as a backup should the Level I facility become overwhelmed or incapacitated.

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- g. When an On-Call facility is incapacitated, the facility must complete the following:
- i. Update EMResource™ to ensure their most current status is reflected. This will serve as notification to the hospital licensing authority, OSDH Facilities Services as required in Oklahoma Administrative Code (OAC) 310:667
 - ii. Patients are to be transported/directed to the closest most appropriate facility according to the Trauma Triage Transfer and Transport Algorithm with the capability and capacity based on information provided on EMResource™.
 - iii. When the facility will be incapacitated for a prolonged period or have systemwide impact, it must begin actions to provide situation reporting as provided in the Region 6/8 Medical System Response Plan. Telephone number for the Region 8 MERC 24/7 Duty Officer is 405-297-7200. Region 8 Medical Facility Incident Status Report is available at: <https://arcg.is/Ob40X0> or Code



VII. TRAUMA CENTER PROGRAM

Each hospital shall provide the level of Trauma Services for which the facility is licensed in accordance with the Hospital Standards of the Oklahoma Administrative Code (OAC) 310:667. It is important to incorporate all facilities in trauma planning and implementation, as well as, in the planning of transfer protocols.

VIII. TRAUMA TEAM

The team approach is optimal in the care of the multi-injured patient. The trauma center must have written policy notification and mobilization of an organized trauma team (in a Level I, "On-Call" Facility, or Level III Facility) or to the extent that one is available (Level IV Facility). The Trauma Team may vary in size and composition when responding to trauma activation. The physician leader or the advanced practice clinician on the trauma team will have preferably completed ATLS certification and is responsible for directing all phases of the resuscitation in compliance with ATLS protocol. Suggested composition of the trauma team can be found in the current version of "Resources for Optimal Care of the Injured Patient by the Committee on Trauma, American College of Surgeons."

The required Trauma Physician Specialties are defined in the Hospital Standards Oklahoma Administrative Code (OAC) 310:667 (See Appendix C).

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IX. CRITERIA FOR ACTIVATION OF THE TRAUMA TEAM

Activations of the trauma system per hospital operations should occur for Priority I and Priority II patients in accordance with the Oklahoma Triage and Transport Algorithm (See Appendix A).

X. INTER-FACILITY TRANSFERS

In an effort to optimize patient care and deliver the trauma patient to the most appropriate destination, rapid assessment of the patient is imperative. When a trauma patient arrives at a destination hospital, the trauma team will be activated in accordance with the hospital operating procedures for Priority I and Priority II patients and the patient will have an immediate medical screening completed. Depending upon the screening and the needs of the patient, any of the following may occur:

- A. The Priority I patient will be stabilized, admitted if appropriate, or transferred to the designated Trauma Center.
- B. The Priority II patient will be stabilized and then admitted to that facility or transferred to the Level II rotation, or other facility of choice.
- C. The Priority III patient will be stabilized and treated then transferred if necessary to the facility of choice or discharged to home with appropriate follow-up instructions.

It is the expectation that facilities with the capability and capacity to treat patients at their facility will not initiate a transfer.

XI. DESCRIPTION OF EMERGENCY MEDICAL SERVICE (EMS)

A. EMS Providers within Region 8 include:

1. EMSA – EMSA Western Division is the largest EMS Provider in the State of Oklahoma, covering Oklahoma County and small portions of Logan and Canadian Counties. EMSA provides exclusive paramedic ambulance service to Oklahoma City and surrounding cities. The service area is approximately 900 square miles.
2. Pafford EMS of Oklahoma – BWA
3. Pafford Medical Services of Oklahoma – Del City
4. Samaritan EMS – Tinker AFB serving on Tinker Air Force Base
5. SSM Health St. Anthony (Midwest City) – SSM Health St. Anthony (Midwest City) is the oldest and largest hospital-based ambulance service in Oklahoma. It is a paramedic level service providing emergency response to

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Midwest City, Del City, Choctaw, Nicoma Park, Luther, Spencer, Hickory Hills, Harrah, Jones, Newalla, Forest Park and Southwest Lincoln County. The service area is approximately 240 square miles.

6. SSM Health St. Anthony Hospital – Oklahoma City EMS

XII. TRAUMA REFERRAL CENTER (TReC)

The Trauma Transfer and Referral Centers were created by statute (Senate Bill 1554, 2004) and they were implemented on July 1, 2005. The purpose of TReC is to ensure that trauma patients transported or transferred to facilities in Regions 7 or 8 are transported to the facility that provides the appropriate level of care based on the clinical needs of the patient. This should be done in a timely fashion with specific attention focused on preserving the highest level of care for major trauma patients. Contact information for TReC is located in Appendix B.

Statewide training sessions were held throughout June 2005 to orient all providers to the use of TReC.

Ambulances entering Region 8 are required to call TReC prior to entering Region 8 in order to ensure appropriate destination. Likewise, hospitals may call TReC for assistance in identifying the appropriate destination for their trauma patients. TReC will provide information on resource utilization to the OSDH that will be available to the Region 8 RTAB for Quality Improvement purposes.

XIII. PROCEDURE FOR SELECTION OF HOSPITAL DESTINATION

It is recognized that some patients have needs that can only be met at specific destination hospital. Thus, a trauma patient will often benefit from transfer directly to an appropriate hospital with the capabilities and capacity to provide definitive trauma care. This care may not necessarily be at the closest or patient preferred facility and this must be taken into account when treating the patient.

Rapid pre-hospital recognition and appropriate triage of trauma patients using the Oklahoma Model Trauma Triage and Transport Guidelines is essential in determining the appropriate selection of Priority I, II and III trauma patient hospital destination (Appendix A).

These Destinations Are:

- A. Within the EMSA service area:
 1. Priority I adult and pediatric patient trauma destination – OU Health
 2. Priority II unassigned adult trauma destination – communitywide on-call facility

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3. Priority II pediatric patient (≤ 16 years of age) trauma destination – Oklahoma Children’s Hospital at OU Health
 4. Priority III adult and pediatric trauma destination – facility of patient preference or closest appropriate facility
 5. Pediatric (≤ 16 years of age) and adult single system **hand injuries** will be transported to the on-call facility as assigned by the trauma call rotation committee
- B. Within Midwest Regional EMS service area:
1. Priority I adult and pediatric trauma destination – OU Health
 2. Priority II unassigned adult destination – SSM Health St. Anthony (Midwest City) or community wide on-call facility based on time/distance constraints.
 3. Priority II unassigned pediatric trauma patient destination – Oklahoma Children’s Hospital at OU Health
 4. Priority III adult and pediatric trauma destination – facility of patient preference or closes appropriate facility
 5. Pediatric (≤ 16 year of age) and adult single system **hand injuries** will be transported to the on-call facility as assigned by the trauma call rotation committee.
- C. Burn Patients:
- In Region 8, the following burn care specialty centers exist:
- Oklahoma City: Adult – Integris Baptist Medical Center – NWE
 Pediatric – Integris Baptist Medical Center – NWE
 Adult – Up to 40% BSA – OU Health
 Pediatric – Oklahoma Children’s Hospital at OU Health

Patients with the following burn injuries (without additional trauma center criterion injuries) should either be transported directly to a burn care specialty center or be referred to such after initial emergency department evaluation:

- Partial thickness (second degree) burns $> 10\%$ total boy surface area (TBSA);
- Full thickness (third degree) burns;
- Partial or full thickness burns of the face, hands, feet, genitalia/perineum, or major joint;
- Electrical burns (including lightning injury), inhalation burns, chemical burns;
- Burn injury in patients with preexisting medical disorders compromising healing and survival (cardiac disease, chronic respiratory illness, diabetes);
- Multisystem trauma with partial or full thickness burns as the predominant injury.

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If the burn patient cannot be oxygenated or ventilated, transport the patient to the nearest appropriate emergency department for airway management.

Refer to Triage & Transport Guidelines – Oklahoma Model Trauma Triage Algorithm

D. Discretionary Patients

Adult trauma patients may be determined to be Priority I or Priority II if clinical suspicion of significant injury and heightened by any single or particularly a combination of the following patient attributes:

1. Age > 55;
2. Anticoagulation and bleeding disorders;
3. Time sensitive extremity injury;
4. Pregnancy > 20 weeks.

XIV. PROCEDURE FOR MONITORING HOSPITAL STATUS AND CAPABILITY

A. EMResource™

The EMResource™ Administrator at the Oklahoma State Department of Health will generate reports from the EMResource™ for use in the monitoring hospital status related to destination. These reports will be made available to the Region 8 CQI Committee as requested. Any problems and/or trends identified through review of this data will be addressed by the CQI Committee directly with the provider and if necessary, through referral to the appropriate state level committee (Appendix D).

B. QI Indicators

A set of QI Indicators has been developed for use in monitoring hospital status and appropriateness of destination. The Region 8 CQI Committee will monitor these indicators. Any problems and/or trends through review of the indicators will be addressed by the CQI Committee directly with the provider and if necessary, through referral to the appropriate state level committee.

XV. HELICOPTER UTILIZATION PROTOCOL

Purpose – Appropriate utilization of air ambulance resources by Region 8 providers.

Medical literature to date demonstrates no significant survival benefit utilizing medical helicopter for patients in densely populated urban settings. The Oklahoma State Department of Health and the University of Oklahoma Department of Emergency Medicine EMS Section provide the following information regarding the clinically appropriate utilization of medical helicopters to maximize patient benefit and protect the safety of patients, aeromedical professionals, and ground EMS professionals.

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A. “No Fly” Patient Conditions

Medical helicopter utilization rarely affects outcome in already moribund patient or in the converse, stable patients without apparent serious illness/injury. A medical helicopter should NOT be utilized for the following patients:

1. Medical or Traumatic Cardiac Arrest Without Return of Spontaneous Circulations;
2. Trauma patients with minimal traumatic injury, without apparent risk of life/limb loss;
3. Patients with stable vital signs and without signs of serious illness/injury.

B. “No Fly” Zones

Medical helicopter utilization is very rarely indicated within an approximate 30-minute radius of an appropriate destination hospital unless there are extenuating circumstances. These extenuating circumstances include the following:

1. Hazardous or impassible road conditions resulting in significant ground transport delays for seriously injured or ill patients;
2. Multiple casualty incidents with high numbers of red/Priority I patients, overwhelming available ground EMS units;
3. A combination of lengthy extrication and extended ground transportation (traffic conditions/weather conditions) or a Priority I or Priority II patient at the lead EMS professional’s careful discretion.

PROTOCOL 14F: Helicopter EMS (HEMS) Considerations, cont. Medical Helicopter Utilization:

At incidents greater than 30-minutes from the appropriate destination hospital, the decision to activate a medical helicopter response should be based upon an EMS professional’s assessment of the patient’s clinical condition, factoring in apparent and/or suspected illness or injury, mechanisms of injury – if applicable, anticipated scene time, and anticipated ground transport time to an appropriate destination hospital (e.g., cardiac catheterization capable hospital or trauma center). Medical helicopters should not be activated until an EMS professional or medically-trained law enforcement officer has assessed the patient.

C. Further Utilization Concepts Include:

1. EMS professionals on scene may elect to activate a medical helicopter if flight time to the incident, flight scene time, and return flight time would still allow a critical patient to arrive at an appropriate destination hospital significantly faster by air.
2. If ground EMS transport capability is not on scene and a decision is being factored as to ground or air transport, the on-scene EMS professionals

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should first request an ETA for the ground transport unit. If the on-scene EMS professionals then judge transport time by ground will be detrimental to the patient clinical condition, a medical helicopter response can be activated. This decision should be communicated to ground EMS agency to keep all responding apparatus crews aware of scene and patient dynamics.

3. If uncertain whether medical helicopter activation is in the best interest of the patient, contact online medical control (OLMC) at the anticipated destination hospital for consultation and determination of transport mode and destination.
4. The primary determinant of helicopter transport mode is to achieve getting the critical patient to the most appropriate definitive care hospital in the shortest amount of time. The medical helicopter to be utilized is the medical helicopter appropriate for the patient's needs and closes to the incident location.

D. Cancellation of Medical Helicopter Activation:

An EMS professional may cancel a medical helicopter response after being activated if patient condition significantly improves or deteriorates to meet – no fly criteria. Keep in mind, though, that once a medical helicopter is responding to the scene, it is generally unwise to cancel that response. EMS professionals should avoid requesting a medical helicopter response, cancelling the response, and then having to request the helicopter again. Such a situation prolongs scene time and helicopter response time in addition to conveying indecisive patient care.

E. Landing Zone:

Appropriate fire or law enforcement personnel will be responsible for establishing and maintaining a safe landing zone.

XVI. DIVERSION

In the event OU Health is on divert for Priority I trauma patients, the “On Call” Facility will be the adult Priority I trauma patient destination.

In the event the “On Call” Facility is on diversion, the resources of the metropolitan area Level III facilities as identified on EMResource™ will determine appropriate Priority II patient destination.

XVII. REGIONAL QUALITY IMPROVEMENT ACTIVITIES

Every licensed hospital and ambulance service is to participate with the Continuous Quality Improvement process. Participation in the process will be demonstrated by meaningful response to committee correspondence, and will respectfull consideration

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being given to the recommendations made by the committee. Those who do not participate with the CQI Committee process will be subject to the schedule of escalation outlined in Appendix F.

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Appendix A

Oklahoma Trauma Triage Algorithm

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TRAUMA PATIENT TRIAGE DEFINITIONS

Trauma Triage

Since patients differ in their initial response to injury, trauma triage is an inexact science. Current patient identification criteria does not provide 100% sensitivity and specificity for detecting injury. As a result, trauma systems are designed to over-triage patients in order not to miss a potentially serious injury. Under-triage of patient should be avoided since a potentially seriously injured patient could be delivered to a facility not prepared to manage their injury. Large amount of over-triage is not in the best interest of the Trauma System since it will potentially overwhelm the resources of the facilities essential for the management of severely injured patients.

Priority I Trauma Patients

These are patients with high energy blunt or penetrating injury causing physiological abnormalities or significant single or multisystem anatomical injuries. These patients have time sensitive injuries requiring the resources of designated Level I, Level II, or Regional Level III Trauma Center. These patients should be directly transported to a Designated Level I, Level II, or Regional Level III facility for treatment but may be stabilized at a Level III or Level IV facility, if needed, depending on location of occurrence and time and distance to the higher-level trauma center. If needed these patients may be cared for in a Level III facility if the appropriate services and resources are available.

Physiological Compromise Criteria:

Hemodynamic Compromise – Systolic BP <90 mmHg

Other signs that should be considered include:

- Sustained Tachycardia
- Cool diaphoretic skin

Respiratory Compromise – RR <10 or >29 Breaths/Minute
Or <20 in infant <1 year

Altered Mentation of trauma etiology – GCS <14

Anatomical Injury Criteria:

Penetrating injury of head, neck, chest/abdomen, or extremities proximal to elbow or knee;

Amputation above wrist or ankle;

Paralysis or suspected spinal fracture with neurological deficit;

Flail chest;

Two or more obvious proximal long bone fractures (upper arm or thigh);

Open or suspected depressed skull fracture;

Unstable pelvis or suspected pelvic fracture;

Tender and/or distended abdomen;

Burns associated with Priority I Trauma;

Crushed, degloved, or mangled extremity.

TRAUMA PATIENT TRIAGE DEFINITIONS

Priority 2 Trauma Patients

These are patients with potentially time sensitive injuries due to a high energy event (positive mechanism of injury) or with a less severe single system injury but currently with no physiological abnormalities or significant anatomical injury.

Significant Single System Injuries:

Neurology: Isolated head trauma with transient loss of consciousness or altered mental status but currently alert and oriented.

Orthopedic: Single proximal and distal extremity fractures (including open) from high energy event, isolated joint dislocations – knee, hip, elbow, shoulder without neurovascular deficits, and unstable joint (ligament) injuries without neurovascular deficits.

Maxillofacial Trauma: Facial lacerations; such as those requiring surgical repair, isolated open facial fractures or isolated orbit trauma with or without entrapments, or avulsed teeth.

High Energy Event:

Patient involved in rapid acceleration decelerations events absorb large amounts of energy and are at an increased risk for severe injury despite normal vital signs on their initial assessment. Five to Fifteen percent of these patients, despite normal vital signs and no apparent anatomical injury on initial evaluation, will have a significant injury discovered after a full trauma evaluation with serial observations. Determinates to be considered are direction and velocity of impact and the use of personal protection devices. Motor vehicle crashes when occupants are using personal safety restraint devices may not be considered a high-energy event. Personal safety devices will often protect the occupant from absorbing high amounts of energy even when the vehicle shows significant damage.

High Energy Events:

- Ejection of the patient from an enclosed vehicle;

- Auto/pedestrian or auto/bike or motorcycle crash with significant impact (>20mph) impact with the patient thrown or run over by a vehicle;

- Falls greater than 20 feet for adult, >10 feet for pediatric or distance 2-3 times height of patient

- Significant assault or altercations

- High risk auto crash

- o The following motor vehicle crashes particularly when the patient has not used personal safety restraint devices:

- Death in the same passenger compartment;

- Rollover;

- High speed auto crash;

- Compartment intrusion greater than 12 inches at occupant site or >18 inches at any site;

- Vehicle telemetry data consistent with high-risk injury.

TRAUMA PATIENT TRIAGE DEFINITIONS

Medic Discretion:

Since trauma triage is an inexact science and patients differ in their response to injury, clinical judgement by the medic at the scene is an extremely important element in determining the destination of all patients. If the medic is concerned that a patient may have a severe injury which is not yet obvious, the patient may be upgraded in order to deliver that patient to the appropriate level Trauma Center. Paramedic suspicion for a severe injury may be raised by but not limited to the following factors:

- Age greater than 55;

- Age less than 5;

- Extremes of environment;

- Patient's previous medical history such as:

- Anticoagulation or bleeding disorders
 - Pregnancy (>20 weeks)

Priority III Trauma Patients:

These patients are without physiological abnormalities, altered mentation, neurological deficit, or a significant single system injury that has been involved in a low energy event. These patients should be treated at the nearest treating facility or the patient's hospital of choice.

Example: Same level falls with extremity or hip fracture.

ADULT PRE-HOSPITAL TRIAGE AND TRANSPORT GUIDELINES

INABILITY TO SECURE AIRWAY
TRAUMATIC ARREST

YES

GO DIRECTLY TO NEAREST APPROPRIATE FACILITY

PHYSIOLOGICAL COMPROMISES CRITERIA **PRIORITY I**

- Hemodynamic Compromise¹-Systolic BP < 90mmHg
Or signs that should be considered include:
 - Sustained tachycardia
 - Cool diaphoretic skin
- Respiratory Compromise²- RR < 10 or > 29 breaths/minute
or < 20 in infant < 1 yr
- Altered Mentation of trauma etiology³- GCS < 14

ANATOMICAL INJURY

Penetrating injury of head, neck, chest/abdomen, or extremities proximal to elbow or knee;
Combination of burns >10% or significant burns involving face, airway, hands, feet or genitalia without significant trauma transport to Regional Burn Center. Burns >10% with significant trauma, transport to trauma center;
Amputation above wrist or ankle;
Paralysis or suspected spinal fracture with neurological deficit;
Flail chest;
Two or more obvious proximal long bone fractures (upper arm or thigh);
Open or suspected depressed skull fracture;
Unstable pelvis or suspected unstable pelvic fracture;
Tender and/or distended abdomen;
Crushed, degloved, or mangled extremity

INITIATE TRAUMA TREATMENT PROTOCOL

ACTIVATE TRAUMA SYSTEM

RAPID transport to the designated Level II, or Regional Level III Trauma Center according to the Regional Trauma Plan but may be stabilized at a Level III or IV facility depending on location of receiver and time and distance to the higher-level trauma center.

Air Rendezvous may be necessary considering time & distance constraints. If conditions do not permit air transport, then consider ALS rendezvous. Stabilization may occur either in the field or at the nearest appropriate facility.

Combination of burns >10% or significant burns involving face, airway, hands, feet or genitalia without significant trauma transport to Regional Burn Center. Burns >10% *with* significant trauma transport to trauma center.

RISK OF SERIOUS INJURY – SINGLE SYSTEM INJURY

Patients with potentially time sensitive injuries due to a high energy event (positive mechanism of injury) but currently with no physiological abnormalities or significant anatomical injury or patient with less severe single system injury.⁴

Ejection (partial or complete) of the patient from an enclosed vehicle;
Auto/pedestrian, auto/bike, or motorcycle crash with significant impact (>20mph) and patient thrown or run over by a vehicle;
Falls greater than 20 feet or 2-3 times height of patient;
Significant assault or altercations;
High risk auto crash⁵;
Neurology: Isolated head trauma with transient loss of consciousness or altered mental status but currently alter and oriented;
Orthopedic: Single proximal and distal extremity (including open) from high energy event, isolated joint dislocations-knee, hip, elbow, shoulder without neurovascular deficits, and unstable joint (ligament) injuries without neurovascular deficits;
Maxillofacial trauma: Facial lacerations; such as those requiring surgical repair, isolated open facial fractures or isolated orbit trauma with or without entrapments, or avulsed teeth.

PRIORITY II

INITIATE TRAUMA TREATMENT PROTOCOL

PROMPT transport to the designated Level III Trauma Center or higher depending on location according to the Regional Trauma Plan

PRIORITY III

CONSIDER: - Co-morbid factors
- Gestalt-EMS clinical judgement

TRANSPORT to either the closest Level IV Trauma Center or higher depending on location according to the Regional Trauma Plan or the facility of the patient's choice.

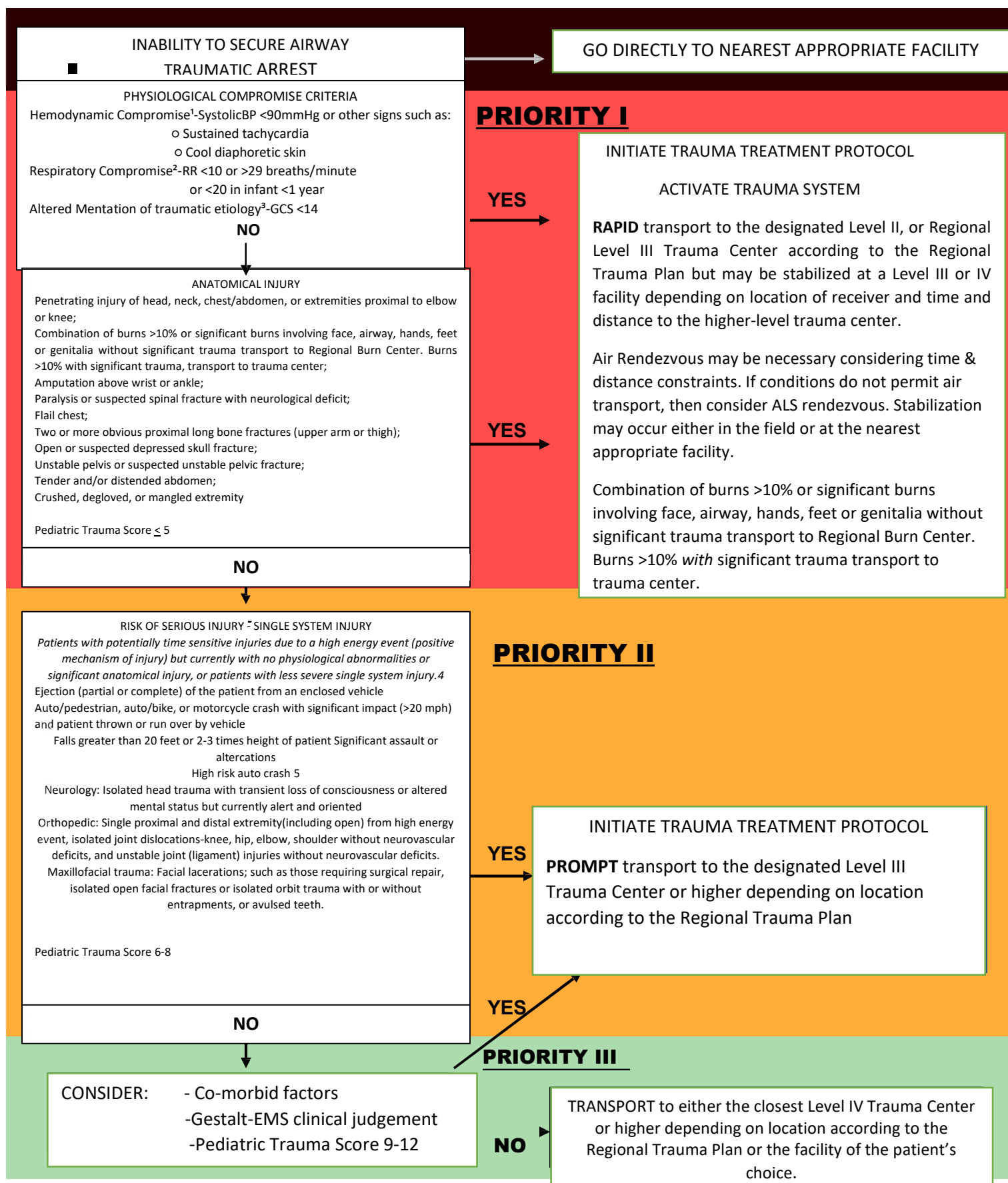
ADULT PRE-HOSPITAL TRIAGE AND TRANSPORT GUIDELINES

Oklahoma Model Trauma Triage Algorithm

1. In addition to hypotension: pallor, tachycardia or diaphoresis may be early signs of hypovolemia.
2. Tachypnea (hyperventilation) alone will not necessarily initiate this level of response.
3. Altered sensorium secondary to sedative-hypnotic will not necessarily initiate this level of response.
4. High Energy Event signifies a large release of uncontrolled energy. Patient is assumed injured until proven otherwise, and multisystem injuries may exist. Determinants to be considered by medical professionals are direction and velocity of impact, use of personal protection devices, patient kinematics and physical size and the residual signature of energy release (e.g., major vehicle damage). Motor vehicle crashes when occupants are using personal safety restraint devices may not be considered a high energy event because the personal safety restraint will often protect the occupant from absorbing high amounts of energy.
5. The following motor vehicle crashes, particularly when the patient has not used personal safety restraint devices:
 - a. Death in the same passenger compartment
 - b. Rollover
 - c. High speed auto crash
 - d. Compartment intrusion greater than 12 inches at occupant site or >18 inches at any site
 - e. Vehicle telemetry data consistent with high risk of injury
6. Since trauma triage is an inexact science and patients differ in their response to injury, clinical judgement by the medic at the scene is an extremely important element in determining the destination of all patients. If the medic is concerned that a patient may have a severe injury which is not yet obvious, the patient may be upgraded in order to deliver that patient to the appropriate Level Trauma Center. EMS provider suspicion for a severe injury may be raised by but not limited to the following factors:
 - Age greater than 55;
 - Age less than 5;
 - Extremes of environment;
 - Patient's previous medical history such as:
 - Anticoagulation or bleeding disorders
 - Pregnancy (>20 weeks)

PEDIATRIC (≤ 16 YEARS) PRE-HOSPITAL TRIAGE AND TRANSPORT GUIDELINES

Oklahoma Model Trauma Triage Algorithm



PEDIATRIC ($\leq$ 16 YEARS) PRE-HOSPITAL TRIAGE AND TRANSPORT GUIDELINES

Oklahoma Model Trauma Triage Algorithm

1. In addition to hypotension: pallor, tachycardia or diaphoresis may be early signs of hypovolemia.
2. Tachypnea (hyperventilation) alone will not necessarily initiate this level of response.
3. Altered sensorium secondary to sedative-hypnotic will not necessarily initiate this level of response.
4. High Energy Event signifies a large release of uncontrolled energy. Patient is assumed injured until proven otherwise, and multisystem injuries may exist. Determinants to be considered by medical professionals are direction and velocity of impact, use of personal protection devices, patient kinematics and physical size and the residual signature of energy release (e.g., major vehicle damage). Motor vehicle crashes when occupants are using personal safety restraint devices may not be considered a high energy event because the personal safety restraint will often protect the occupant from absorbing high amounts of energy.
5. The following motor vehicle crashes, particularly when the patient has not used personal safety restraint devices:
 - f. Death in the same passenger compartment
 - g. Rollover
 - h. High speed auto crash
 - i. Compartment intrusion greater than 12 inches at occupant site or >18 inches at any site
 - j. Vehicle telemetry data consistent with high risk of injury
6. Since trauma triage is an inexact science and patients differ in their response to injury, clinical judgement by the medic at the scene is an extremely important element in determining the destination of all patients. If the medic is concerned that a patient may have a severe injury which is not yet obvious, the patient may be upgraded in order to deliver that patient to the appropriate Level Trauma Center. EMS provider suspicion for a severe injury may be raised by but not limited to the following factors:
 - Age greater than 55;
 - Age less than 5;
 - Extremes of environment;
 - Patient's previous medical history such as:
 - Anticoagulation or bleeding disorders

**PEDIATRIC (≤ 16 YEARS) PRE-HOSPITAL
TRIAGE AND TRANSPORT GUIDELINES**
Oklahoma Model Trauma Triage Algorithm

Pediatric Trauma Score (PTS)				
Components	+2	+1	-1	Score
Weight	>20 kg (44 lb)	10-20 kg (22-44 lb)	< 10 kg (< 22 lb)	
Airway	Patent *	Maintainable ^	Unmaintainable #	
Systolic (cuff) Or BP	> 90 mm Hg Radial	50-90 mm Hg Femoral/Carotid	< 50 mm Hg None palpable	
CNS	Awake, no LOC	Obtunded Some LOC†	Comatose, unresponsive	
Fractures	None	Closed (or suspected)	Multiple open or closed	
Wounds	None	Minor	Major ‡, Burns or penetrating	
TOTAL	Range – 6 to +12			

Score: Possible Range -6 to +12, decreasing with increasing injury severity.

Generally:

- 9 to 1 = minor trauma
- 6 to 8 = potentially life-threatening
- 0 to 5 = life threatening
- < 0 = usually fatal

* No assistance required.

^ Protected by patient but constant observation required for position, patency, or O2 administration.

Invasive techniques required for control (e.g., intubation).

† Responds to voice, pain, or temporary loss of consciousness.

‡ Abrasions or lacerations.

ADULT INTERFACILITY TRIAGE AND TRANSPORT GUIDELINES

Oklahoma Model Trauma Triage Algorithm

PRIORITY I

Anatomy of the Injury:

Penetrating injury of the head, neck, torso or groin

Abdominal/Pelvic Injuries:

Hemodynamically unstable patient with physical evidence of abdominal or pelvic trauma;

Unstable pelvic ring disruption;

Pelvic fracture with shock or other evidence of continuing hemorrhage;

Open pelvic fracture;

Penetrating wound of abdomen with suspicion of penetration of the peritoneum;

Ruptured hollow viscous.

CNS:

Penetrating head injury or depressed skull fracture;

Open head injury;

GCS $\leq$ 10 or deterioration of 2 or more points;

Laterizing signs;

New neurological deficits;

CSF leak;

Spinal cord injury with neurological deficits;

Unstable spinal cord injuries.

CHEST:

Widened mediastinum or other signs suggesting great vessel injury;

Major chest wall or pulmonary injury with respiratory compromise;

Cardiac injury (blunt or penetrating);

Cardiac tamponade;

Patients who may require prolonged ventilation;

Suspected tracheobronchial tree or esophageal injury.

HEMODYNAMIC INSTABILITY:

Adult SBP consistently <90 following 2 liters of crystalloid

Respiratory distress with rate <10 or >29

MAJOR EXTREMITY INJURY:

Fracture/dislocation with loss of distal pulses;

Amputation, crush injury, or prolonged ischemia or extremity proximal to wrist or ankle;

Pelvic fractures with hemodynamic instability;

Two more long bone fracture sites;

Major vascular injuries documented by arteriogram or loss of distal pulses

MULTIPLE SYSTEM:

Head injury combined with face, chest, abdominal, or pelvic injury;

Significant injury to two or more body regions;

Combination of burns $>10\%$ or significant burns involving face, airway, hands, feet or genitalia *without* significant trauma transport to Regional Burn Center. Burns $>10\%$ *with* significant trauma transport to trauma center.

SECONDARY DETERIORATION:

Prolonged mechanical ventilation;

Sepsis;

Single or multiple organ system failure (deterioration in CNS, cardiac, pulmonary, hepatic, renal or coagulation systems);

Major tissue necrosis.

YES

Initiate internal Trauma Treatment Protocol if definitive surgical care and critical care monitoring are available.

NO

If definitive surgical care or critical care monitoring are not available then immediate stabilization & transfer to appropriate designated facility according to regional plan. Stabilization may involve surgical intervention prior to transfer. Air transport may be necessary considering time & distance constraints.

Proceed to Priority II Interfacility Transfer Criteria

ADULT INTERFACILITY TRIAGE AND TRANSPORT GUIDELINES

Oklahoma Model Trauma Triage Algorithm

PRIORITY II

Abdominal/Pelvic Injuries:

Stable pelvic fractures;
Hemodynamically stable isolated abdominal trauma
o diffuse abdominal pain/tenderness
o seat belt contusions
o visceral injuries
Hemodynamically stable isolated solid organ injuries

CNS:

Head Injury with GCS >10
Head injury with transient loss of consciousness <5 min
Head injury with transient neurological deficits
Spinal cord injury without neurological deficits

CHEST:

Isolated chest trauma – pain, mild dyspnea
Rib fractures, sternal fractures, pneumothorax, hemothorax without respiratory compromise
Unilateral pulmonary contusion without respiratory compromise

COMORBID:

Age <5 or >55
Known cardiac, respiratory or metabolic disease
Pregnancy
Immunosuppression
Bleeding disorder or anticoagulants

MAJOR EXTREMITY INJURY:

Single proximal extremity fractures, including open
Distal extremity fractures, including open
Isolated joint dislocations-knee, hip, elbow, shoulder without neurovascular deficits
Unstable joint (ligament) injuries without neurovascular deficits
Degloving injuries without evidence of limb threatening injury

MECHANISM:

Ejection of patient from enclosed vehicle
Adult auto/pedestrian, auto/bike, or motorcycle crash with significant impact and patient thrown or run over by vehicle
Falls greater than 20 feet
Significant assault or altercations
Other “high energy” events based on Paramedic discretion⁴, e.g.: patients involved in motor vehicle crashes with significant vehicular damage and not using personal safety restraint devices.

OTHER:

Isolated open facial fractures
Isolated orbit trauma with or without entrapments, without visual deficits

YES

Perform complete trauma evaluation and appropriate serial observations. Consider admission if condition remains stable.

Deterioration of Glasgow Coma Scale, vital signs or patient's condition or significant findings on further evaluation.

YES

If definitive surgical care or critical care monitoring are not available, activate Trauma System and prepare for RAPID transfer to the appropriate designated Trauma Facility according to the Regional Trauma Plan. Stabilization may involve surgical intervention.

NO

Consider admission if condition remains stable.

NO

PRIORITY III

Perform appropriate emergency department evaluation. Consider discharge or admit if condition remains stable.

Deterioration of Glasgow Coma Scale, vital signs or patient's condition or significant findings on further evaluation: Initiate Trauma Treatment Protocol – Activate Trauma System and prepare for RAPID transfer to the appropriate designated Trauma Facility according to the Regional Trauma Plan if definitive surgical care and critical care monitoring are not available.

PEDIATRIC (≤16) INTERFACILITY TRIAGE AND TRANSPORT GUIDELINES

Oklahoma Model Trauma Triage Algorithm

PRIORITY I

Anatomy of the Injury:

Penetrating injury of the head, neck, torso or groin

Abdominal/Pelvic Injuries:

Hemodynamically unstable patient with physical evidence of abdominal or pelvic trauma;

Unstable pelvic ring disruption;

Pelvic fracture with shock or other evidence of continuing hemorrhage;

Open pelvic fracture;

Penetrating wound of abdomen with suspicion of penetration of the peritoneum;

Ruptured hollow viscous.

CNS:

Penetrating head injury or depressed skull fracture;

Open head injury;

GCS ≤ 10 or deterioration of 2 or more points;

Lateralizing signs;

New neurological deficits;

CSF leak;

Spinal cord injury with neurological deficits;

Unstable spinal cord injuries.

CHEST:

Widened mediastinum or other signs suggesting great vessel injury;

Major chest wall or pulmonary injury with respiratory compromise;

Cardiac injury (blunt or penetrating);

Cardiac tamponade;

Patients who may require prolonged ventilation;

Suspected tracheobronchial tree or esophageal injury.

HEMODYNAMIC INSTABILITY:

SBP consistently <90 following 20cc/kg of resuscitation fluid

Respiratory distress with rate of:

o Newborn: <30 or >60

o Up to 1 yr: <24 or >36

o 1-5 yr: <20 or >30

o Over 5 yr: <15 or >30

MAJOR EXTREMITY INJURY:

Fracture/dislocation with loss of distal pulses;

Amputation of extremity proximal wrist or ankle;

Pelvic fractures with hemodynamic instability;

Two more long bone fracture sites;

Major vascular injuries documented by arteriogram or loss of distal pulses

Crush injury or prolonged extremity ischemia

MULTIPLE SYSTEM:

Head injury combined with face, chest, abdominal, or pelvic injury;

Significant injury to two or more body regions;

Combination of burns >10% or significant burns involving face, airway, hands, feet or genitalia *without* significant trauma transport to Hillcrest Burn Center or Oklahoma Children's Hospital at OU Health. Burns >10% *with* significant trauma transport to trauma center.

SECONDARY DETERIORATION:

Prolonged mechanical ventilation;

Sepsis;

Single or multiple organ system failure (deterioration in CNS, cardiac, pulmonary, hepatic, renal or coagulation systems);

Major tissue necrosis.

Pediatric Trauma Score ≤ 5

YES

Initiate internal Trauma Treatment Protocol if definitive surgical care and critical care monitoring are available.

NO

If definitive surgical care or critical care monitoring are not available then immediate stabilization & transfer to appropriate designated facility according to regional plan. Stabilization may involve surgical intervention prior to transfer. Air transport may be necessary considering time & distance constraints.

Proceed to Priority II Interfacility Transfer Criteria

PEDIATRIC (≤16) INTERFACILITY TRIAGE AND TRANSPORT GUIDELINES

Oklahoma Model Trauma Triage Algorithm

PRIORITY II

Abdominal/Pelvic Injuries:

Stable pelvic fractures;
Hemodynamically stable isolated abdominal trauma
o diffuse abdominal pain/tenderness
o seat belt contusions
o visceral injuries
Hemodynamically stable isolated solid organ injuries

CNS:

Head injury with GCS >10
Head injury with transient loss of consciousness <5 min
Head injury with transient neurological deficits
Spinal cord injury without neurological deficits

CHEST:

Isolated chest trauma – pain, mild dyspnea
Rib fractures, sternal fractures, pneumothorax, hemothorax without respiratory compromise
Unilateral pulmonary contusion without respiratory compromise

COMORBID:

Known cardiac, respiratory or metabolic disease
Pregnancy
Immunosuppression
Bleeding disorder or anticoagulants

MAJOR EXTREMITY INJURY:

Single proximal extremity fractures, including open
Distal extremity fractures, including open
Isolated joint dislocations-knee, hip, elbow, shoulder without neurovascular deficits
Unstable joint (ligament) injuries without neurovascular deficits
Degloving injuries without evidence of limb threatening injury

MECHANISM:

Ejection of patient from enclosed vehicle
Adult auto/pedestrian, auto/bike, or motorcycle crash with significant impact and patient thrown or run over by vehicle
Falls greater than 20 feet
Significant assault or altercations
Other “high energy” events based on Paramedic discretion⁴, e.g.: patients involved in motor vehicle crashes with significant vehicular damage and not using personal safety restraint devices.

OTHER:

Isolated open facial fractures
Isolated orbit trauma with or without entrapments, without visual deficits

Pediatric Trauma Score 6-8

YES

Perform complete trauma evaluation and appropriate serial observations.
Consider admission if condition remains stable.

Deterioration of Glasgow Coma Scale, vital signs or patient’s condition or significant findings on further evaluation.

YES

NO

If definitive surgical care or critical care monitoring are not available, activate Trauma System and prepare for RAPID transfer to the appropriate designated Trauma Facility according to the Regional Trauma Plan. Stabilization may involve surgical intervention.

Consider admission if condition remains stable.

NO

PRIORITY III

Perform appropriate emergency department evaluation. Consider discharge or admit if condition remains stable.

Pediatric Trauma Score 9-12

Deterioration of Glasgow Coma Scale, vital signs or patient’s condition or significant findings on further evaluation: Initiate Trauma Treatment Protocol – Activate Trauma System and prepare for RAPID transfer to the appropriate designated Trauma Facility according to the Regional Trauma Plan if definitive surgical care and critical care monitoring are not available.

APPENDIX B

TRANSFER REFERRAL CENTER TReC

Approved by RPC: 03/07/2007, 05/23/2018, 08/19/2019, 01/11/2022, 10/11/2022

Approved by RTAB: 03/13/2007, 07/10/2018, 10/08/2019, 04/13/2021, 07/13/2021, 01/11/2022, 10/11/2022

Amended and consolidated: 03/2008, 05/2011, 04/2014, 01/2015, 10/2022

Approved by OTSIDAC: 08/02/2006

Approved by OTERAC: 06/04/2014

Oklahoma City (8) Regional Trauma Plan



Telephone: (888)658-7262

Or

(888)778-7262

For questions, issues, or concerns, please contact: Emergency Systems
Phone: 405-426-8480 Fax: 405-900-7560

Approved by RPC: 03/07/2007, 05/23/2018, 08/19/2019, 01/11/2022, 10/11/2022

Approved by RTAB: 03/13/2007, 07/10/2018, 10/08/2019, 04/13/2021, 07/13/2021, 01/11/2022, 10/11/2022

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Approved by OTSIDAC: 08/02/2006

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APPENDIX C

Code of Ethics for Region 8 Trauma Call System Providers

Approved by RPC: 03/07/2007, 05/23/2018, 08/19/2019, 01/11/2022, 10/11/2022

Approved by RTAB: 03/13/2007, 07/10/2018, 10/08/2019, 04/13/2021, 07/13/2021, 01/11/2022, 10/11/2022

Amended and consolidated: 03/2008, 05/2011, 04/2014, 01/2015, 10/2022

Approved by OTSIDAC: 08/02/2006

Approved by OTERAC: 06/04/2014

Code of Conduct for Region 8 Trauma Call System Providers

BACKGROUND:

Ensuring access to injury and trauma care requires extensive resources 24/7/365. Both personnel and physical resources are crucial to provide the best possible chance for optimal outcomes and survival for seriously injured patients. One vital resource is surgical specialty call panel coverage. Trauma Region VIII and the Oklahoma County Medical Society in collaboration with the community hospitals developed a hospital trauma call rotation for patients referred into the region with single system traumatic injuries. This rotation was established to provide backup for the Level I Trauma Center to maintain capability and capacity for multisystem, time sensitive and Priority I injured patients. The specialty surgeons and physicians provide the expertise for call coverage.

In compliance with the Oklahoma State and Regional Trauma Care Protocols, patients are referred to Region 8 trauma centers because of the lack of capability and specialty care at the transferring facilities; these referrals are urgent or emergent and require an equally time-sensitive response. A state-wide trauma fund was established to provide some remuneration to the specialty physicians for the under and uncompensated care of severely injured patients. The fund additionally provides reimbursement of care for time-sensitive facial trauma and hand injuries. Stipends are also available to call panel providers at the hospitals/trauma centers, when additional requirements are fulfilled.

PURPOSE:

The purpose of this code of conduct is to establish guidelines for requesting and providing consultations, including expectations for outpatient follow up for injured patients. Appropriate requests for consultation, timely completion of consultations, and follow up after discharge along with timely communication amongst physicians are the foundations for high quality, comprehensive physician services and a measurable demonstration of a commitment to a trauma system.

CODE OF CONDUCT

OBJECTIVE:

To ensure that:

- Consultation requests for patients in the emergency department or admitted to the hospital and discharged from the facility are seen in a timely manner;
- Recommendations and care plans are promptly communicated to the requesting service **and**
- All patients receive outpatient follow up in accordance with the current standard of care.

Meeting this objective will provide the highest quality service to both patients and the trauma system.

Approved by RPC: 03/07/2007, 05/23/2018, 08/19/2019, 01/11/2022, 10/11/2022

Approved by RTAB: 03/13/2007, 07/10/2018, 10/08/2019, 04/13/2021, 07/13/2021, 01/11/2022, 10/11/2022

Amended and consolidated: 03/2008, 05/2011, 04/2014, 01/2015, 10/2022

Approved by OTSIDAC: 08/02/2006

Approved by OTERAC: 06/04/2014

Code of Conduct for Region 8 Trauma Call System Providers

OPERATING GUIDELINES

CONSULTATIONS:

- Time sensitive injury consultations: General surgery, neurosurgery, orthopedic, face and hand surgery will evaluate defined time sensitive conditions per hospital/trauma center designation guidelines and/or bylaws.

FOLLOW-UP CARE:

- The consultation, evaluation, and recommendation of a treatment plan of a patient in the emergency department or in the hospital is the establishment of a doctor-patient relationship. The recommendation of a treatment plan to a patient in the hospital or emergency department to include the assignment of a patient to the on-call physician also establishes a doctor-patient relationship for the purposes of follow-up obligation noted in this document.
- If needed, that consulting physician (on-call physician)/service or staff shall arrange a follow-up appointment for this outpatient care.
- The consulting physician/service or staff must see the patient at this follow-up appointment.
- If prior to or after the initial follow-up visit the consulting physician/service or staff is unable to provide ongoing follow-up care due to insurance plan participation, inability to comply with a co-pay payment plan, or lack of insurance coverage, the consulting physician/service or staff is obligated to obtain a new treating physician/service with appropriate expertise.
- There must be a verbal communication from the consulting physician/service and/or staff regarding the transfer or care to the new treating physician and/or their office staff to ensure an appointment is confirmed and communicated to the patient.

REFERENCES:

Resources for Optimal Care of the Injured Patient 2014. American College of Surgeons, 633 N. Saint Clair St., Chicago, IL 60611-3211

American Academy of Orthopedic Surgeons: Code of Ethics and Professionalism for Orthopedic Surgeons. <http://www.aaos.org/about/papers/ethics/code.asp>

American Association of Oral and Maxillofacial Surgeons: Code of Professional Conduct. September 2019. Section V. F.2.
https://www.aaoms.org/images/uploads/pdfs/code_of_professional_conduct.pdf

American Academy of Otolaryngology-Head and Neck Surgery
https://www.entnet.org/sites/default/files/Code%20of%20Ethics_0.pdf

AANS Code of Ethics https://www.aans.org/-/media/Images/AANS/Header/Governance/AANS_Code_of_Ethics_11-22-2014.ashx?la=en&hash=124B159D6B41ACF78DFB0110EB55B10E68D5D3DD

Approved by RPC: 03/07/2007, 05/23/2018, 08/19/2019, 01/11/2022, 10/11/2022

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APPENDIX D

EMResource™ UTILIZATION

Approved by RPC: 03/07/2007, 05/23/2018, 08/19/2019, 01/11/2022, 10/11/2022

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Amended and consolidated: 03/2008, 05/2011, 04/2014, 01/2015, 10/2022

Approved by OTSIDAC: 08/02/2006

Approved by OTERAC: 06/04/2014

OKLAHOMA CITY (8) REGIONAL TRAUMA PLAN

EMResource™ Usage

I. **INTRODUCTION:**

For several years EMResource™ has served as a tool for hospitals to display their diversion status in Oklahoma City. Although diversion is still a feature on the EMResource™, we are going to ask that you look at EMResource™ as a communication tool capable of demonstrating resource availability, health alerts and disaster notifications. EMResource™ is now a vital tool that can better enable communication in both routine daily circumstances and during disasters. EMResource™'s ability to serve this function is limited by the use of the system by providers.

II. **USAGE REQUIREMENTS:**

Within Region 8 all providers are required of to comply with the guidelines established by the State EMResource™ Joint Advisory Committee and/or the Oklahoma State Department of Health in the EMResource™ Manual. In the event that the EMResource™ Manual is updated, the revisions to the EMResource™ Manual override the requirements in this document.

Specific usage requirements include but are not limited to:

A. Contact Information

1. Each provider is responsible to maintain accurate contact information on the EMResource™.
2. Hospitals shall post the telephone number they wish other providers to use when calling patient referrals or reports in this area of EMResource™.

B. Provider Status

Each hospital is required to maintain current status on the EMResource™ so that their capabilities or capacity can be readily accessed by other hospitals, EMS agencies and the Trauma Transfer and Referral Center.

Critical Concept: Emergency Departments and hospitals are considered open unless posted otherwise on EMResource™.

1. Emergency Department Status

- a. This is the specific status of the Emergency Department and is the only status appropriate for diversion of pre-hospital transports. The current ED Status categories are: Open, Total ED Divert, Trauma Divert, CT Divert, ED select, Forced Open, and Closed.
- b. If a facility has not updated their status on the EMResource™ their attempt to divert may be overridden by the pre-hospital provider or the Trauma Transfer and Referral Center.

2. Hospital Status

- a. This status is specific to the inpatient capability/capacity and is only appropriate for diverting inter-facility transfer patients. The current Hospital Status categories are: Open, Caution, and Closed.

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- b. If a facility has not updated their status on the EMResource™ their attempt to divert may be overridden by the Trauma Transfer and Referral Center.

Critical Concept: Emergency Departments and Hospitals are considered open unless posted otherwise on EMResource™.

3. Provider Resource Availability

This status is for displaying hospital specialty coverage on a real time basis. A customized list of eight specialties has been developed to meet the needs of Oklahoma. The status categories for these coverage areas are:

- a. Yes – Coverage is currently available.
- b. No – Coverage is not currently available.
- c. N/A – This service is not offered at this facility.

4. Air Ambulance Status

This status is for displaying the current status/availability of Air Ambulances. The status categories for this status are:

- a. Available – the aeromedical resource is currently ready and able to respond to emergency calls.
- b. Call for Status – current condition necessitates those providers in need of aeromedical transport call to determine resource availability because:
 - 1) The aeromedical resource may already be dispatched to a call or be on standby.
 - 2) Local weather conditions may be temporarily impact the ability of this aeromedical resource to respond.
 - 3) This aeromedical resource may be temporarily unavailable due to routine service or fueling.
- c. Not Available – the aeromedical resource is currently unable to respond in a timely manner.
- d. In Region 8 the air ambulances are required to keep their most accurate status current. They may not leave their status as “call for status” at all times.

C. System Alerts

- 1. Providers in Region 8 are required to maintain EMResource™ in a manner that enables them to receive alerts in a timely manner. It is suggested that all providers maintain a computer specifically for EMResource™ use 24 hours a day.
- 2. If a provider is unable to maintain a computer with EMResource™ displayed 24 hours a day the provider is expected to work with the regional EMResource™ administrator to arrange the delivery of all System Alerts to the text enabled device of designated staff responsible to share the alert information with other on-duty staff.

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D. Data Reporting

Providers in Region 8 are required to participate in reporting data supported by the EMResource™ application. This reporting requirement includes but is not limited to:

1. Hospital Daily Report of bed capacity and ED volume;
2. EMS Daily Report of resources and volume.

III. **MONITORING**

Appropriate use of EMResource™ will be enforced in the region through the QI process.

- A. The CQI committee will routinely review reports from the Trauma Transfer and Referral Center on diversion of patients and compare the patient diversion list with the list of facility diversion hours generated from the EMResource™.
- B. The CQI committee will review all cases referred to them for inappropriate use of EMResource™ in any of the listed categories.
- C. The regional and/or state EMResource™ administrator will perform periodic drills using EMResource™ and monitor appropriateness of provider response. Reports of these drills will be provided to the RTAB CQI committee who will address problems/trends directly with the provider and if necessary, through referral to the appropriate state level committee.

The CQI committee will work with these providers to come into compliance with EMResource™ usage requirements. If these attempts fail the cases will be referred to the State QI committee for further action.

IV. **SUMMARY**

EMResource™ is a vital communication tool that provides the capability of real time communication among trauma system participants. This ability is limited by provider use of the system. Region 8 supports use of this tool.

APPENDIX E

Advanced Life Support Assistance Protocol

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ALS INTERCEPT PROTOCOL FOR REGION 8

Purpose:

To provide guidelines to Emergency Medical Services personnel on when to request Advanced Life Support (ALS) assistance from neighboring ambulance services.

Policy:

The following will apply to ensure that BLS/ALS assistance requests are managed appropriately. ALS Assist is defined as any request for an air or ground Advanced Life Support unit to respond to and/or intercept with an EMS unit for the purpose of providing an advanced level of patient care. A licensed Intermediate or Paramedic level of care should provide ALS assist.

ALS assist/intercept requests should be made in any situation where the EMS provider has determined that the patient may be unstable or has life-threatening injuries or illness. Medics should refer to the Oklahoma Trauma Triage and Transportation guidelines for classification of the patient.

Procedure:

1. Consideration must be given as to the location of the EMS unit, and anticipated location of intercept. The decision to request ALS should be made immediately.
2. The location of the intercept shall be decided as soon as possible.
3. Only if it is deemed to be in the best interest of the patient should the patient be transferred from a BLS unit to a ground ALS unit.
4. The ALS provider should be licensed at the Intermediate or Paramedic level or an Air Ambulance.
5. BLS and ALS personnel may elect to request air medical support based on the Regional Trauma Plan. BLS personnel need not wait for an assessment prior to requesting air medical support. Landing zone selection and security shall be coordinated with local resources. Transportation to the closest most appropriate medical facility shall not be inordinately delayed while waiting for air support.
6. A full verbal patient care report shall be given to the ALS personnel upon arrival and a full patient care report will be left with the patient at the hospital.

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Glossary of Terms

Assigned Patient: An established patient of a facility, or a stable patient who has requested a specific facility.

Definitive Care: Completed therapy; end point at which all treatment required at the time has occurred.

On-Call Facility: When “on-call”, the facility will provide orthopedics, neurosurgery, general surgery, facial trauma, hand trauma, and anesthesia or arrange coverage through hospital transfer agreements. This is for unassigned, Priority II patients with single-system injury, or at risk for injury that at least include neurosurgery, facial trauma, or hand trauma, but currently stable, picked up by EMSA in its service area or transported into the metropolitan area from other regions of the State.

Pediatric Patient: A patient less than or equal to sixteen (≤ 16) years of age.

Unassigned Patient: A patient with no preference for facility destination, or no pre-existing relationship with a facility.

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APPENDIX F

Letter Schedule of Escalation

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Letter Schedule of Escalation

The purpose of this proposal is to establish and define a statewide process to address organizations that fail to respond to letters received from the Regional Continuous Quality Improvement Committee in order to encourage participation in continuous quality improvement activities as required by Title 63 § 1-2530.3 for the betterment of the Oklahoma State Trauma System.

Tier 1 - Initial Letter from the Regional Continuous Quality Improvement (CQI) Committee is signed by the committee signatory(ies) and sent to the appropriate recipient named below.

EMS Agencies – Initial Letter for system errors or queries will be sent to the Medical Director and the EMS Director on file with the Oklahoma State Department of Health (OSDH).

Hospitals – Initial Letter for system errors or queries that occur related to the function of the Emergency Department (ED) will be sent to the ED Medical Director and the ED Director/Manager. Initial letters for system errors or queries that occur related to the function of areas outside of the ED will be sent to the Chief Medical Officer/Chief of Staff and Chief Executive Officer/President.

Response deadline: 30 days from the documented receipt of the letter.

Tier 2 – No response to the Initial Letter from the CQI Committee by the Tier 1 deadline. OSDH staff will place a call to the authorized Regional Trauma Advisory Board (RTAB) representative to enlist help providing a reminder to the letter recipient to respond and communicate the new deadline for receipt.

Response deadline: 15 days from successful contact with RTAB representative.

Tier 3 – No response to the Initial Letter from the CQI Committee by the Tier 1 deadline or reminder call from OSDH staff with the Tier 2 deadline (approximately 45 days from receipt of initial letter). A letter addressing the lack of response signed by RTAB Chair with a copy of the Initial Letter and sent to the appropriate recipient named below.

EMS Agency: Medical Director and the EMS Director on file with the Oklahoma State Department of Health (OSDH) as well as the appropriate License Owner/City Manager.

Hospital: CEO and CMO

Response deadline: 15 days from documented receipt of the Tier 3 letter.

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Tier 4 – No response to Tier 3 letter

A letter addressing the lack of response signed by the Oklahoma Trauma and Emergency Response Advisory Council (OTERAC) chair with copies of all previous tier letters and sent to the appropriate recipient named below.

EMS Agency: Medical Director and the EMS Director on file with the Oklahoma State Department of Health (OSDH) as well as the appropriate License Owner/City Manager.

Hospital: CEO and CMO

Response deadline: 10 days from documented receipt of the Tier 4 letter.