NVRTAB NORTHWEST REGIONAL TRAUMA ADVISORY BOARD

Northwest (1) Regional Planning Committee Microsoft Teams

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728b62cf32c5%22%2c%22Oid%22%3a%22463c8334-e408-4d1d-b4eb-52f4b934efe4%22%7d

November 13th, 2020 – 9:00 am

AGENDA

There is no physical meeting location and the following members are participating remotely using the Microsoft Teams teleconferencing platform: Rodney Baker, Joshua Boden, Vanessa Brewington, Tamara Fischer, Jamie McAlister, Emily Powell, Derek Vermillion, Valerie Schultz, and Grant Wadley.

- I. Call to Order Chair Jamie McAlister
- II. Welcome and Introductions Chair Jamie McAlister
- III. Roll Call Chair Jamie McAlister
- IV. Approval of Minutes July 28th, 2020 Chair Jamie McAlister

V. Business

- A. Discussion, consideration, possible action and vote to approve draft Region 1 Stroke Plan for recommendation to the RTAB Chair Jamie McAlister
- B. Discussion, consideration, possible action and vote to approve amended Region 1 Trauma Plan for recommendation to the RTAB Chair Jamie McAlister
- C. Discussion, consideration, possible action and vote to approve amended Region 1 Bylaws for recommendation to the RTAB – Chair Jamie McAlister
- D. Discussion, consideration, possible action and vote to approve draft letter to send to the stroke coordinators of licensed hospitals regarding proposed stroke algorithm and need to provide education to EMS agencies for recommendation to the RTAB – Chair Jamie McAlister
- E. Discussion, consideration, possible action and vote to approve 2021 Meeting Dates, Times, and Venue Chair Jamie McAlister
 - January 26th, 2021 beginning at 9:00 am at the High Plains Technology Center
 - April 27th, 2021 beginning at 9:00 am at the High Plains Technology Center
 - July 27th, 2021 beginning at 9:00 am at the High Plains Technology Center
 - October 26th, 2021 beginning at 9:00 am at the High Plains Technology Center

VI. New Business - Chair Jamie McAlister

(For matters not reasonably anticipated 48 hours prior to the meeting)

VII. Next Meeting - Chair Jamie McAlister

A. Regional Trauma Advisory Board

Microsoft Teams

October 27th, 2020 - 10:30 am

B. Quality Improvement Committee

Microsoft Teams

October 27th, 2020 - 12:00 pm

C. Oklahoma Trauma and Emergency Response Advisory Council

Oklahoma Department of Health

1000 Northeast 10th Street

Oklahoma City, OK 73117

Date - 1:00 pm

D. Regional Planning Committee

High Plains Technology Center

3921 34th Street

Woodward, OK 73801

January 26th, 2021 – 9:00 am

VIII. Adjournment - Chair Jamie McAlister



Northwest (1) Regional Planning Committee Microsoft Teams

https://teams.microsoft.com/l/meetup-

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728b62cf32c5%22%2c%22Oid%22%3a%22463c8334-e408-4d1d-b4eb-52f4b934efe4%22%7d
July 28th, 2020 – 9:00 am

MINUTES

The following members are participating remotely using the Microsoft Teams teleconference platform: Rodney Baker, Joshua Boden, Vanessa Brewington, Tamara Fischer, Jamie McAlister, Emily Powell, Derek Vermillion, Valerie Schultz, and Grant Wadley.

The meeting notice was filed with the Oklahoma Secretary of State on July 17th, 2020 at 1:21 pm. The meeting notice/agenda was posted on the Oklahoma State Department of Health website for the Region 1 RTAB on July 23rd, 2020.

I. Call to Order

The meeting was called to order by Jamie McAlister at 9:00 am.

II. Welcome and Introductions

Jamie welcomed participants and no introductions were made.

III. Roll Call

Roll call was taken with the following members present: Joshua Boden, Vanessa Brewington, Tamara Fischer, Jamie McAlister, and Valerie Shultz. The following members were absent: Rodney Baker, Derek Vermillion, and Grant Wadley.

IV. Approval of Minutes – January 22nd, 2019

A motion to approve the minutes as written was made by Tamara Fisher and seconded by Vanessa Brewington. There was no discussion and the motion passed 5 - 0.

V. Business

- A. Discussion, consideration, possible action and vote to recommend to RTAB amendments to the Rural EMS Stroke Triage Algorithm for recommendation to the Oklahoma State Stroke System Advisory Council (OSSSAC) – Jennifer Woodrow The Severity-Based Stroke Triage Guideline Algorithm for Rural EMS was presented to the Committee for review and discussion. Jenifer Woodrow requested members review and submit suggestion for improvement before the algorithm is presented to OTERAC for final approval. Valerie Schultz stated OSSSAC had provided input regarding the document to help the rural facilities get patients to the closest facility as quickly as possible. No amendments were recommended to vote on for approval.
- B. Discussion, consideration, possible action and vote to approve draft Region 1 Stroke Plan for recommendation to the RTAB Erin Fast
 - Erin Fast was not available for report. Jennifer Woodrow reviewed activities from the last meeting regarding the stroke plan which included Valerie Schultz sending out the draft plan for review/comments and identifying the need to approach Level IV facility management to ensure EMResource is updated regarding the ability to administer Alteplase. Any needed changes would then be sent to Jennifer to make and bring back to the next meeting for approval. Valerie Shultz reported she sent out the draft plan a few months ago with no recommendations for changes received and that facilities were not approached because it was decided there were too many variables regarding availability and administration of Alteplase. Dan Whipple asked members if the draft plan meshed with the Rural EMS Stroke Triage Algorithm and suggested the plan may need to be more specific on processes to determine EMS destinations or on how EMS can identify facilities with the ability to administer Alteplase, Valerie Shultz noted the algorithm specified transport to the generic destination of closest IV thrombolytic administering facility with the intent of matching regional plans. Tamara Fisher suggested education is needed for rural EMS facilities. Members noted that education is currently being provided within the region and that those resources should be added to the draft regional stroke plan. Tamara Fisher suggested and agreed to draft a letter to be sent to facility stroke coordinators requesting education be provided to staff.



Northwest (1) Regional Planning Committee Microsoft Teams

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join/19%3ameeting_MDA5MjQ0NWUtZWY3NC00MGZkLWEwMDUtY2ZIZjU5YjlyYWNk%40thread.v2 /0?context=%7b%22Tid%22%3a%229a307864-3e98-4f08-b90a-

728b62cf32c5%22%2c%22Oid%22%3a%22463c8334-e408-4d1d-b4eb-52f4b934efe4%22%7d
July 28th, 2020 – 9:00 am

MINUTES

A special REPC meeting was called to review the draft stroke plan and draft letter to stroke coordinators for approval of recommendation to the RTAB. The Chair of the RTAB Jamie McAlister also called for a special RTAB meeting to vote to approve the recommended items. The RPC is to be scheduled in approximately 2 weeks with the RTAB scheduled 1 week after the RPC.

- C. Discussion, consideration, possible action and vote to approve amended Region 1 Trauma Plan for recommendation to the RTAB Chair Jamie McAlister Jennifer Woodrow has updated the Region 1 Trauma Plan with current facility names, population data, and EMS descriptions from information obtained from the Region 1 Trauma Survey, EMResource surveys, and Department files. The updated Trauma Plan is available for review on the OSDH Emergency Systems webpage. The Region 1 Trauma Plan and Bylaw Ad Hoc Committee is currently working on additional changes to include simplification of EMS Descriptions and consideration of recommended changes from the Region 1 MERC. The Ad Hoc Committee hopes to bring a draft plan and amended Region 1 Blyaws to the upcoming special meetings for review and approval.
- Discussion, consideration, possible action and vote to approve amended Region 1 Bylaws for recommendation to the RTAB – Chair Jamie McAlister
 Discussion occurred with Business item C.
- E. Discussion, consideration, possible action and vote to approve 2021 Meeting Dates, Times, and Venue Chair Jamie McAlister
 - January 26th, 2021 beginning at 9:00 am at the High Plains Technology Center
 - April 27th, 2021 beginning at 9:00 am at the High Plains Technology Center
 - July 27th, 2021 beginning at 9:00 am at the High Plains Technology Center
 - October 26th, 2021 beginning at 9:00 am at the High Plains Technology Center Proposed 2021 Board meeting dates, times, and venues were announced to be voted on for approval at the October 27th, 2020 meeting. Medic update was identified as a possible conflict to the July 27th, 2021 meeting date. Members determined the meeting date would remain the same as long as it coincided with the third quarter RTAB date.

VI. New Business

(For matters not reasonably anticipated 48 hours prior to the meeting) There was no new business.

VII. Next Meeting

- A. Regional Trauma Advisory Board July 28th, 2020 – 10:30 am
- B. Quality Improvement Committee July 28th, 2020 – 12:00 pm
- C. Oklahoma Trauma and Emergency Response Advisory Council October 7th, 2020 1:00 pm
- D. Regional Planning Committee October 27th, 2020 – 9:00 am

VIII. Adjournment

A motion to adjourn the meeting was made by Valerie Schultz and seconded by Joshua Boden. The meeting adjourned at 9:31 am.



Telephone: 580-822-4417 Toll Free: 866-858-2071 Fax: 580-822-3018

August 18, 2020

To Stroke coordinators in Oklahoma Region 1:

The Oklahoma Region 1 Planning Committee has a subcommittee for our Stroke Care and Protocols in Region 1. We have developed an algorithm based on the recommendations from OSSAC (Oklahoma State Stroke Advisory Committee) for rural stroke care. There was a significant amount of planning to include the different contingencies we experience in Northwest Oklahoma.

The success of the stroke plan is dependent on the participation by every EMS agency and every hospital in Region I. The included algorithm is the foundation for success to ensure that all of Region I is practicing the same standardization and implementation of stroke care. We have made a lot of progress to standardize and implement stroke care based on AHA guidelines; we still need to work together to make certain that we are getting the patient to the right facility in the quickest amount of time.

We need the Stroke Coordinator from each hospital in Region I to network with the EMS agencies that bring patients to your Emergency Department. All EMS personnel and ED staff (including providers) need to be aware of the algorithm. Below are resources to use for education.

Also, St. Mary's Regional Medical Center is the Level II stroke facility for Region I. Christina Terry, RN is the Stroke Coordinator and is available for education to EMS agencies and hospitals. She can be reached at: 580-249-3823.

https://strokevan.com/get-certified/

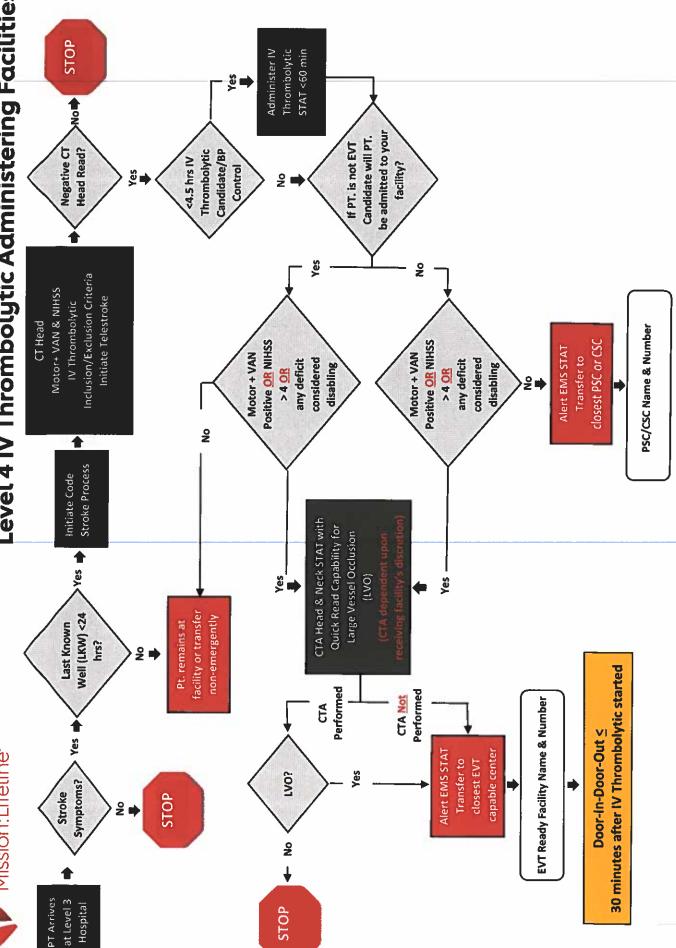
https://www.bing.com/videos/search?q=van+assessment+education&&view=detail&mid=C6487 D84CDD2A55ECCFEC6487D84CDD2A55ECCFE&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Dvan%2Bassessment%2Beducation%26FORM%3DHDRSC4

If you have any questions, please let Tamara Fischer or Valerie Schultz know and we will do our best to get you the information you need.

Valerie Schultz RN 580-249-3000 St. Mary's Regional Medical Center Tamara Fischer RN 580-822-4323 Okeene Hospital

American Heart Association, Mission: Lifeline*

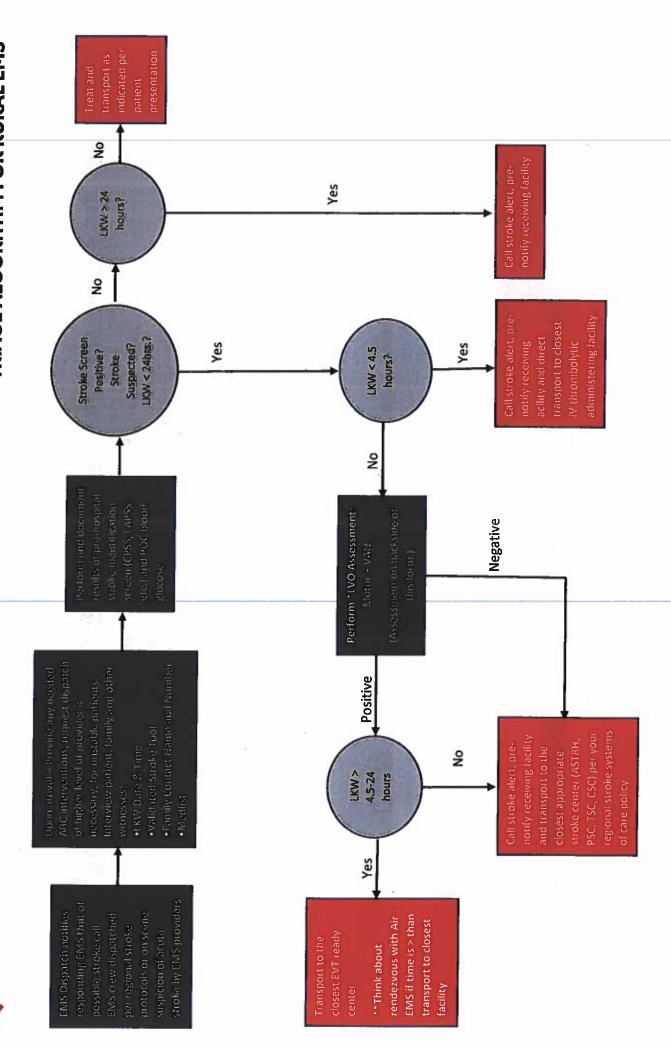
Level 4 IV Thrombolytic Administering Facilities Level 3 Oklahoma Stroke Hospital &



Created by OSSCAR: 1/2020
Reference: National Stroke Association – Integrated Endovascular Workflow & AHA/ASA Guidelines for the Early Management of Patients with Acute Ischemic Stroke: 2019 Update to the 2018 Guidelines for the Early Management of Acute Ischemic Stroke

American Heart Association. Mission: Lifeline

SEVERITY-BASED STROKE TRIAGE ALGORITHM FOR RURAL EMS





EMS Motor + VAN: Acute Stroke Screening Tool for Large Vessel Occlusions

		ť	No			
		p VAN exan	Ş			
	xam.	tive. Sto	Yes			
	e VAN e	AN nega				
ent?	Continue the VAN exam.	Patient is VAN negative. Stop VAN exam.				
Is ARM weakness present?	☐ Yes	°N □	- S-K	al Disturbance?	ısia?	ect?
ARM v			w ¹	Visual Dis	Aphasia?	Neglect?

If patient has any degree of weakness PLUS any 1 of the below:

Visual Disturbance - (Assess field cut by testing both sides, 2 fingers right, 1 left)

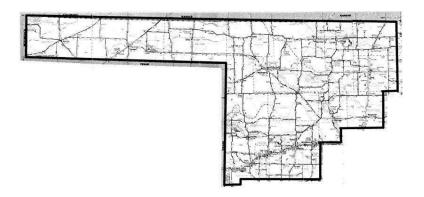
Aphasia - (Inability to speak or understand. Repeat and name 2 objects, close eyes, make fist)

Neglect - (Forced gaze to one side or ignoring one side, touching both sides)

This is likely a large artery clot (cortical symptoms) = VAN Positive

Region 1 Trauma Plan

Developed by the RTAB NW Regional Planning Committee



Plan Approval Dates: OTSIDAC: 08-02-2006

Pre-Hospital RTAB: 07-18-2006

Inter-facility RTAB: 03-27-2007 OTSIDAC: 08-01-2007 EMResource™ RTAB: 05-23-2006 OTSIDAC: 08-02-2006

Northwest Trauma Triage and Destination Regional Trauma Plan

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	C Revision to Trauma Triage Algorithm Guidelines: February 2, 2010	

I. GOALS / PURPOSE

The goals of the regional trauma pre-hospital destination/inter-facility transfer plans are to:

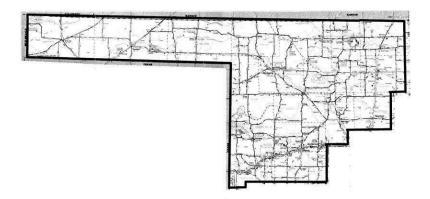
- A. Assure trauma patients are stabilized and transported to the most appropriate hospital facility with the available resources and capacity to provide care in a timely fashion.
- B. Support the Pre-Hospital/Inter-Facility Trauma Triage and Transport Guidelines to effectively reduce trauma morbidity and mortality.
- C. Match a facility's resources with each trauma patient's needs to ensure optimal and cost effective care is achieved.
- D. This plan will not conflict with any rules and/or regulations that are currently in place, or may be written or changed in the future. In the event new rules and/or regulations are considered, the RTAB should be included in that dialogue prior to implementation.

II. REGION DESCRIPTION

Region 1 consists of the northwest portion of Oklahoma and includes the following counties: Alfalfa, Beaver, Beckham, Blaine, Cimarron, Custer, Dewey, Ellis, Garfield, Grant, Harper, Kingfisher, Major, Roger Mills, Texas, Washita, Woods and Woodward.

Region 1 is the largest region in Oklahoma and encompasses 21,334 square miles with a population of 240,473. Region 1 has common borders with four states: Colorado, Kansas, New Mexico and Texas.

It is serviced by 43 ambulance services, two (2) Level III trauma hospitals, and seventeen (17) level IV trauma hospitals of which seven (7) are designated critical access, and one (1) psychiatric facility and one (1) Long Term Acute Care hospital.



Plan Approval Dates:

Pre-Hospital RTAB: 07-18-2006

Inter-facility RTAB: 03-27-2007 OTSIDAC: 08-01-2007 EMResource™ RTAB: 05-23-2006 OTSIDAC: 08-02-2006

OTSIDAC Revision to Trauma Triage Algorithm Guidelines: February 2, 2010

OTSIDAC: 08-02-2006

III. 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. This three-tiered system is outlined in Appendix C and it is imperative that all pre-hospital and hospital medical providers use this system and language.

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

1. Priority 1 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, Level II or designated Level III Trauma Centers with 24/7 in house ED physicians, 24/7 general and orthopedic surgeon availability. These patients should be directly transported to a Level I, Level II or designated Level III facility for treatment, but may be stabilized at any 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 receive definitive care in a Level III facility if the appropriate services and resources are available. (e.g. orthopedic, vascular or maxillofacial surgery).

2. Priority 2 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.

3. Priority 3 Trauma Patients:

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

Plan Approval Dates: OTSIDAC: 08-02-2006

Pre-Hospital RTAB: 07-18-2006

Inter-facility RTAB: 03-27-2007 OTSIDAC: 08-01-2007 EMResource™ RTAB: 05-23-2006 OTSIDAC: 08-02-2006

IV. CATEGORIZATION OF HOSPITALS

- A. Hospital Providers in Region 1 include: (2008 Information). For the latest information regarding facility capabilities, refer to EMResource™
 - Level I: None
 Level II: None
 - 3. Level III:
 - a. INTEGRIS Bass Baptist Health Center (Enid)
 - b. St. Mary's Regional Medical Center (Enid)

4. Level IV:

- a. Beaver County Memorial Hospital (Beaver)
- b. Cimarron Memorial Hospital (Boise City)
- c. Cordell Memorial Hospital (Cordell)
- d. Fairview Regional Hospital (Fairview)
- e. Harper County Community Hospital (Buffalo)
- f. AlilianceHealth Clinton (Clinton)
- g. Mercy Hospital Kingfisher (Kingfisher)
- h. Memorial Hospital of Texas County (Guymon)
- i. Newman Memorial Hospital (Shattuck)
- j. Okeene Municipal Hospital (Okeene)
- k. Roger Mills Memorial Hospital (Cheyenne)
- I. Seiling Municipal Hospital Authority (Seiling)
- m. Share Memorial Hospital (Alva)
- n. Weatherford Regional Hospital (Weatherford)
- o. Mercy Hospital Watonga (Watonga)
- p. Great Plains Regional Medical Center (Elk City)
- q. AllianceHealth Woodward (Woodward)

5. Long Term Acute Care Facilities:

a. INTEGRIS Bass Pavilion

6. **Psychiatric Hospitals:**

- a. Northwest Center for Behavioral Health (Ft. Supply)
- b. St. Mary's Behavioral Health

7. Other Facilities:

- a. USPHS Indian Hospital (Clinton)
- b. Oklahoma Veterans Center (Clinton)

Plan Approval Dates: OTSIDAC: 08-02-2006

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- B. Out of Region Hospital Resources:
 - 1. Level I:
 - a. OU Medical Center, Oklahoma City, OK
 - b. Wesley Medical Center, Wichita, KS
 - c. Via Christi Regional Medical Center(St. Francis Campus), Wichita, KS
 - d. University Medical Center Health System, Lubbock, TX
 - 2. Level II:
 - a. St. John Medical Center, Tulsa, OK
 - b. St. Francis Medical Center, Tulsa, OK
 - 3. Level III:
 - a. Northwest Texas Healthcare System, Amarillo, TX

V. DESCRIPTION OF EMS SERVICES

Region 1 is a very large area encompassing 18 counties (Population 240,473) and covering approximately 21,334 square miles that is serviced by 40 ambulance services and two air transport service with three bases. Ground Ambulance Services: (2017 Information). For current information, refer to the EMS Registry available at: https://www.ok.gov/health2/documents/2017OKAmbRegistry.pdf

1. <u>Alfalfa County</u>:

1 Basic ambulance services cover Alfalfa County with 4 routine units covering the 881 square miles of the county.

2. Beaver County:

1 Basic ambulance service covers Beaver County with 2 routine units covering the 1,818 square miles of the county.

3. Beckham County:

2 Basic ambulance services and 1 intermediate ambulance service covers Beckham County with 5 routine units that cover the 904 square miles of the county.

4. Blaine County:

Blaine County is covered by 4 Basic ambulance services with 12 routine units covering the 939 square miles of the county.

5. <u>Cimarron County</u>:

Cimarron County is covered by 3 Basic ambulance services with 3 routine units that cover the 1,841 square miles of the county.

6. <u>Custer County:</u>

Custer County is covered by 3 Intermediate ambulance services and 1 Basic service with 10 routine units that cover the 1,002 square miles of the county.

7. Dewey County:

Dewey County is covered by 4 Basic services with 8 routine units that cover the 1,002 square miles of the county.

8. Ellis County:

Ellis County is covered by 1 Basic ambulance service with 3 routine units that cover the 1,232 square miles of the county.

9. Garfield County:

Garfield County is covered by 1 Paramedic service with 3 routine units that cover the 1,060 square miles of the county.

10. Grant County:

Grant County is covered by 2 Basic ambulance services with a total of 4 units that cover the 1,004 square miles of the county.

11. <u>Harper County</u>:

Harper County is covered by 2 Basic ambulance services with a total of 4 units that cover the 1,041 square miles of the county.

12. <u>Kingfisher County</u>:

Kingfisher County is covered by 3 Intermediate and one backup unit that covers the 906 square miles of the county.

13. Major County:

Major County is covered by 1 Basic Ambulance service with 3 routine units that cover the 958 square miles of the county.

14. Roger Mills County:

Roger Mills County is covered by 1 Basic ambulance service with 3 routine units that cover the 1,146 square miles of the county.

15. <u>Texas County</u>:

Texas County is covered by 1 Intermediate and 2 Basic ambulance services with 7 routine units that cover the 2,049 square miles of the county.

16. Washita County:

Washita County is covered by 2 Basic ambulance services with 4 routine units that cover the 1,009 square miles of the county.

17. Woods County:

Woods County is covered by 3 Basic ambulance services with 6 routine units that cover the 1,290 square miles of the county.

18. Woodward County:

Woodward County is covered by 1 Basic ambulance service with 6 routine units that cover the 1,246 square miles of the county.

B. Air Ambulance Services

1. Air Evac Lifeteam based in Elk City (AE21), Woodward (AE70), Weatherford (AE122) and Kingfisher (131)

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Pre-Hospital RTAB: 07-18-2006

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- 2. Apollo based in Guymon, Oklahoma.
- 3. Eaglemed 23 and LifeSave Team based in Liberal, KS provides fixed wing service to Region 1.
- Eaglemed has one Fixed Wing Aircraft (EagleMed21) located in Yukon, Oklahoma that can service all Regions.

VI. TRAUMA TRANSFER AND 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 these centers is to ensure that trauma patients transported or transferred to facilities in Region 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. On April 1, 2010, TReC was consolidated to a single call center in Region 7. TReC is located in the Tulsa 911 center and serves the entire State of Oklahoma.

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

Ambulances from Region 1 are required to call into the center prior to entering Regions 7 or 8 in order to ensure appropriate patient destination. Likewise, hospitals may call these centers for assistance in identifying the appropriate destination for their trauma patients.

These centers will provide information on resource utilization to the OSDH that will be available to the Region 1 RTAB for Quality Improvement purposes.

Plan Approval Dates: OTSIDAC: 08-02-2006

Pre-Hospital RTAB: 07-18-2006

Inter-facility RTAB: 03-27-2007 OTSIDAC: 08-01-2007

EMResource™RTAB: 05-23-2006 OTSIDAC: 08-02-2006

OTSIDAC Revision to Trauma Triage Algorithm Guidelines: February 2, 2010

PRE-HOSPITAL DESTINATION PROTOCOLS

I. PROCEDURE FOR SELECTION OF HOSPITAL DESTINATION

It is recognized that some patients have needs that can only be met at specific destination hospitals. Thus, a trauma patient will often benefit from transfer directly to an appropriate hospital with the capability 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 Trauma Triage and Transport Guidelines is essential in determining the appropriate hospital destination for Priority 1, 2, and 3 trauma patients (see appendix B).

These Destinations are:

ALL PATIENTS:

- 1. All trauma patients should be rapidly transported to the closest medical facility with the capability and capacity to provide the appropriate level of care as indicated by the patient's injury type and severity.
- 2. Patients with a traumatic arrest or the need to secure an airway should be transported to the closest facility to the traumatic event.
- 3. Any priority 1 or 2 trauma patient who needs immediate stabilization should be transported to the nearest facility with the capability and capacity to provide definitive care.
- 4. Patient preference as well as the time and distance should factor into where definitive care will be considered for most Priority 2 and 3 trauma patients.

GENERAL TRAUMA PATIENTS:

General trauma patients who meet the State of Oklahoma approved trauma criteria should be transported using the following guidelines. General geographic and transportation borders have been used as boundaries for these transportation designations. These boundaries are used as guidelines and it is understood that there are sites in the region that based on time and distance may need to be transported into a different border area.

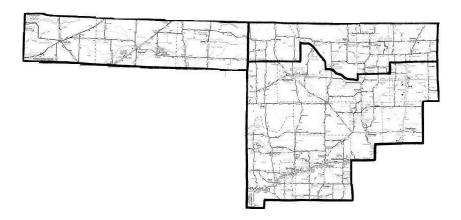
Plan Approval Dates: OTSIDAC: 08-02-2006

Pre-Hospital RTAB: 07-18-2006

Inter-facility RTAB: 03-27-2007 OTSIDAC: 08-01-2007 EMResource™ RTAB: 05-23-2006 OTSIDAC: 08-02-2006

- 1. Priority 1 adult and pediatric trauma patients that meet the state approved trauma criteria should be transported to the nearest Level 1 or 2 trauma center.
 - a. OU Medical Center will be the appropriate center for the majority of Region 1.
 - b. Cimarron, Texas and Beaver counties <u>may</u> transport to University Medical Center Health Systems in Lubbock, Via Christi Regional Medical Center or Wesley Medical Center in Wichita, and OU Medical center in Oklahoma City.
 - c. Harper, Woods, Alfalfa and Grant counties <u>may</u> transport to Via Christi Regional Medical Center or Wesley Medical Center in Wichita, Kansas.
 - d. The appropriate method of transport for those patients **outside** of an area **45 minutes** from the appropriate center should activate **air transport** as defined in Section IX, as soon as possible to ensure rapid transport to the appropriate facility.
 - e. If air transport is unavailable ground transport and/or ALS intercept can be utilized for transport. In the event there will be an excessive time delay for transport the patient may be taken to the closest treating facility for stabilization.

Region 1 Priority 1 Trauma Patient Destinations:



- 2. Priority 2 trauma patients that meet the state approved trauma criteria should be transported using the following guidelines:
 - a. 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

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transported to a trauma facility with the resources to perform a complete trauma evaluation and medical screening and can care for their injuries. Additionally, Priority 2 patients should be transported to a facility with the capability and capacity to provide definitive care.

- b. If air transport is unavailable ground transport and/or ALS intercept can be utilized for transport. In the event there will be an excessive time delay for transport, the patient may be taken to the closest treating facility for stabilization.
- c. All single system Priority 2 Pediatrics being transferred or transported into Region 8 will now go directly to The Children's Hospital at OUMC.
- 3. Priority 3 adult and pediatric trauma patients should be transported to the nearest appropriate treating facility or the facility of patient preference.

NEUROLOGICAL TRAUMA PATIENTS:

- 1. Priority 1 adult and pediatric neurological trauma patients.
 - a. The majority of Priority 1 neurosurgical trauma patient in Region 1 will go to Oklahoma City via use of the TReC.
 - b. Cimarron, Texas and Beaver counties should transport to the Northwest Texas Healthcare System in Amarillo, Texas. University Medical Center Health Systems in Lubbock, Texas, Via Christi Regional Medical Center or Wesley Medical Center in Wichita, Kansas and OU Medical center in Oklahoma City, Oklahoma.
 - c. Harper, Woods, Alfalfa and Grant counties should transport to Via Christi Regional Medical Center or Wesley Medical Center in Wichita, Kansas.
 - d. Adult Priority 1 neurological trauma patients may also be transported to St.
 Mary's Medical Center in Enid if neurosurgical services are available at the time.
- 2. Priority 2 adult trauma patients should be transported to the appropriate facility in Enid or Oklahoma City based on the time/distance factor with preference given to patient preference and the ability to keep the patient within Region 1.
- 3. All single system Priority 2 Pediatrics being transferred or transported into Region 8 will now go directly to The Children's Hospital at OUMC.
- 4. Priority 3 adult and pediatric trauma patients should be transported to the closest facility for evaluation.

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BURN PATIENTS:

- 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.
- 2. Pediatric: Combination of burns > 10% or significant burns involving face, airway, hands, feet or genitalia *without* significant trauma transport to Hillcrest Burn Center or OUMC Children's Hospital. Burns >10% *with* significant trauma, transport to trauma center.

II. PROCEDURE FOR MONITORING HOSPITAL STATUS AND

CAPABILITY A. EMResource™

The MERC coordinator will generate reports from the EMResource™ for use in monitoring hospital status related to destination. These reports will be provided periodically to OSDH and made available to the Region 1 CQI Committee. 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.

B. QI Indicators

A set of QI Indicators has been developed for use in monitoring hospital status and appropriateness of destination. The Region 1 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.

III. ALS INTERCEPT (Ground)

A. Purpose: Appropriate utilization of ground ambulance resources by Region 1 providers.

This differs from other mutual aid requests that may occur during a mass casualty incident or other catastrophe. For the purposes of this protocol, an ALS Intercept occurs when a BLS unit requests assistance for an emergent patient. This support is to be rendered if the ALS unit is available and will not put the ALS response area at risk.

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B. Conditions of use

BLS units should request ALS units for the purposes of:

- 1. Airway and respiratory interventions
- 2. Circulatory Support
- 3. Other life-sustaining interventions beyond the scope and practice of BLS crewmembers.

BLS units should not request support from ALS units for the purposes of non-emergency transports of the trauma patients, as this will tax resources of supporting agencies. As such, it is only when a BLS unit is transporting Priority 1 and 2 patients should an ALS intercept be considered.

Additionally, the BLS unit should consider location, time constraints and distance when considering a ground or air unit for support and transportation.

ALS agency or ALS units that can provide ALS intercepts should support requests for intercepts and assistance in the following circumstances:

- 1. Crew is available for response
- 2. Adequate time is received for the request to meet the BLS crew before arrival at a receiving facility.
- 3. Any safety concerns such as hazardous material, violence, weather, and traffic are addressed or within acceptable margins.

IV. HELICOPTER UTILIZATION PROTOCOL

A. Purpose

Appropriate utilization of air ambulance resources by Region 1 providers.

B. "No Fly" Conditions:

Helicopter utilization is seldom indicated for patients without a chance for survival or without serious injury. The following are other situations in which an air ambulance should not be used:

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- a. Patients at a location where time and distance constraints make air transport to the closest appropriate medical facility more time consuming should be transported by ground. This is generally within 45 minutes of the destination facility.
- b. Priority 3 patients should be transported by ground ambulance.
- c. Cardiac arrest without return of spontaneous circulation in the field.

C. "Fly" Conditions:

- 1. The following are conditions that warrant the use of an air ambulance:
 - a. Priority 1 trauma patients that are being transported to a facility in which time and distance constraints make air transport more timely, generally for distances with a transport time greater than 45 minutes by ground ambulance.
 - Priority 2 trauma patients that are being transported to a facility with a transport time greater than 45 minutes by ground ambulance, based on local resource availability.
- 2. The following are conditions that warrant the use of an air ambulance even when the patient is within a 45 minutes of a medical facility:
 - a. The closest facility is not appropriate for the patient's' injury and the appropriate facility is at a distance in which time and distance constraints justify air transport.
 - b. There are hazardous or impassable road conditions resulting in significant delays for ground transportation.
 - c. There are multiple patients of a serious nature requiring rapid transport, overwhelming available ground units.
 - d. Based on information available, the lead rescuer determines a lengthy rescue is required and transportation by ground would extend and delay definitive care.
- D. The **closest available** medical helicopter will be utilized to improve survival of all patients being transported to a definitive care facility.

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- E. After the responders have initially treated the patient using standard protocol and the patient is ready for transport, the responders should proceed to the closest pre-existing landing area (PELA site) or to the nearest treating facility if the patient's' condition warrants.
- F. Early Activation / Standby:

When a dispatch center or ground ambulance service receives a call that meets the following criteria, it is recommended that the air ambulance be "early activated" or placed on ground standby:

- 1. Significant mechanism of injury as defined in the Trauma Triage Algorithm
- 2. Multiple patients
- 3. "Gut Feeling" from the responding crew

**** NOTE: If a Non-EMS/First Responder or bystander activates an air service, the air service will communicate with local EMS to avoid multiple responses to the incident. ****

- G. Landing Zone Parameters:
 - 1. Free of wires, trees, signs, poles, vehicles, and people;
 - 2. Landing zone is flat, smooth, and clear of debris;
 - 3. The landing zone should be at least 100 x 100 feet square in size;
 - 4. The landing zone should be well defined at night without lights pointed towards the helicopter;
 - 5. The area should be secured and free of all loose debris as well as clear of all unauthorized personnel;
 - 6. The helicopter should be approached with the crew only and care should be taken to avoid the tail rotor;
 - 7. The landing zone should remain clear and secure for at least one minute after departure for safety reasons.
- H. Training:

Landing zone training should be accomplished by all ground ambulance services on an annual basis.

Each individual ground ambulance service can contact an air ambulance service for this training.

I. EMTALA:

There are concerns regarding air utilization and rendezvous with a local ground transport at a helipad upon a medical facilities property. This is addressed in Appendix C.

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V. DIVERSION

Guidelines to determine the possible need for total Emergency Department divert are: The Emergency Department cannot handle additional emergencies based on the lack of professional personnel.

- 1. Maximum <u>capacity</u> (beds) of the Emergency Department has been met.
- 2. Maximum <u>capability</u> (staff) of the Emergency Department has been met.

Notification of Emergency Department diversion status:

- 1. Each hospital will notify the MERC or his/her designee of the diversion status and a written record shall be maintained documenting the date, time started, and time ended of each interval of divert status.
- 2. Each hospital shall notify each entity providing emergency medical services, such as ambulance services and hospitals in the catchment's area of the divert status.
- 3. The EMResource™ will be updated to show current information.

Compliance:

- 1. If a hospital goes on Emergency Department divert, then the MERC or his/her designee will re-evaluate every 2 hours for continuation of diversion.
- The MERC or his/her designee has the authority at any time to deny or discontinue Emergency Department divert based on the needs of the community.
- 3. The MERC or his/her designee also has the authority to place ambulance services on a rotating basis to avoid over-saturation of any one given facility.
- 4. Update of the EMResource™ will be made accordingly.

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INTER-FACILITY TRANSFER PROTOCOLS

I. TRAUMA CENTER PROGRAM

Each hospital shall have a designated Trauma Team that is appropriate for that facilities level of care. It is important to incorporate all facilities in trauma planning and implementation, as well as, in the planning of transfer protocols.

Level III Trauma Center:

In general the Level III Trauma Center is expected to provide initial resuscitation of the trauma patient and immediate operative intervention to control hemorrhage and to assure maximal stabilization prior to transfer to a higher level of care institution. In many instances, patients will remain in the Level III trauma center unless the medical needs of the patient require secondary transfer. The decision to transfer will rest with the physician attending the trauma patient and all Level III centers will work collaboratively with other trauma facilities to develop transfer protocols and a well-defined transfer sequence.

Level IV Trauma Center:

In general the Level IV Trauma Center is a licensed, small, rural facility with a commitment to the resuscitation of the trauma patient and written transfer protocols in place to assure those patients needing a higher level of care are transferred appropriately. These facilities may be staffed by a Physician, or licensed independent practitioner, RN, LPN, Paramedic or Intermediate EMT. The major trauma patient in this facility will be stabilized and transported to the most appropriate facility for the patients on-going care needs.

Trauma Program:

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

There must be a commitment letter from the Hospital Board and the Medical Staff on behalf of the entire facility, which states the facility's commitment to compliance with the Oklahoma Trauma Care Regulations. A trauma program must be established and recognized by each organization and evidenced by:

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- 1. Hospital Board and Medical Staff commitment to trauma care.
- 2. Written policies and procedures for the care of the trauma patient.
- 3. A defined Trauma Team with written roles and responsibilities.
- 4. Appointed Trauma Medical Director with a written job description.
- 5. A written Trauma Performance Improvement plan.
- 6. Appointed Trauma Program Manager (coordinator) with a written job description.
- 7. Documentation of the trauma center representative's attendance at the Regional Trauma Advisory Boards meetings.

II. TRAUMA TEAM

The team approach is optimal in the care of the injured patient. The trauma center must have a written policy for notification and mobilization of an organized trauma team (in a 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 mid-level practitioner on the trauma team should have ATLS or possess equivalent training for care of the trauma patient and is responsible for directing all phases of the resuscitation.

Suggested composition of the trauma team includes:

Level III:

- a. ED Physicians
- b. Physician Specialists
- c. Laboratory Technicians
- d. Nursing
- e. Auxiliary Support Staff

Level IV:

- a. Physician or Mid Level Practitioner
- b. Nursing
- c. Laboratory Technicians
- d. Auxiliary Staff

Compliance with the above will be evidenced by:

There will be written resuscitation protocols that adhere to the principles of ATLS guidelines, and a written trauma team criteria activation policy. This policy should include physiologic, anatomical, and mechanism of injury protocols in accordance with the Oklahoma Trauma Triage Algorithms and protocols.

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Medical Director:

The Trauma Center should have a physician director for the trauma program. The physician should be responsible for working with all members of the trauma team, and overseeing the implementation of a trauma specific performance improvement plan for the entire facility. Through this process, he/she should have the overall responsibility for the quality of trauma care rendered at the facility. The director should assist in the development of standards of care and assure appropriate policies and procedures are in place for the safe resuscitation and transfer of trauma patients. The physician director should have ATLS or possess equivalent training for care of the trauma patient

Trauma Program Manager (Coordinator):

All Level III trauma centers must have a Registered Nurse working in the role of the Trauma Program Manager (TPM). In conjunction with the Medical Director, the TPM is responsible for organization of the program and all necessary systems for the multidisciplinary approach throughout the continuum of trauma care. He/she is responsible for working with the trauma team to assure optimal care and will liaison with local EMS personnel, the RTAB, and other trauma centers.

The TPM will also develop a methodology for which activation of the trauma team is accomplished in their facility. The activation may be either full or partial depending upon the severity of the trauma patients' injuries.

III. HOSPITAL TRIAGE AND TRANSFER PLAN:

A well designed trauma program within the hospital is crucial to the success for providing optimal care to the trauma patients in Region 1. A written commitment on behalf of the entire facility devoted to the organization of trauma care is vital. Therefore, all hospitals in the region will establish criteria for the activation of their respective trauma programs and these criteria will be clearly defined in each institutions trauma policy. The following are intended as guidelines only for each hospitals policy as each and every hospital is unique in the way it serves its stakeholders.

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A. LEVEL III TRAUMA CENTER

A team approach is optimal in the care of the trauma patient. As noted above, the trauma team should consist of those individuals that can expedite care for the trauma patient. In a Level III facility this should include:

- i. Emergency Physician(s)
- ii. Emergency Room Nurses
- iii. Laboratory
- iv. Radiology
- v. Respiratory Therapy

The Level III trauma center must have an Emergency Department (ER) staffed so that trauma patients are assured immediate and appropriate initial care. An ER physician deemed competent in the care of the trauma patient shall be available 24 hours/day. This ER physician must be in-house 24 hours/day, immediately available at all times, and capable of evaluating trauma patients and provide initial resuscitation. The ER physician will provide team leadership and care for the trauma patient until the surgeon or other specialist arrives to take over care. The ER must have established standards and procedures to ensure immediate and appropriate care for the adult as well as the pediatric trauma patient. The medical director of the ER must participate in the trauma PI process.

The Level III trauma center must also have published on- call schedules and have the following medical specialties immediately available 24 hours/day to the injured patient:

- i. General Surgery
- ii. Anesthesia
- iii. Other medical specialties that may be available in the local area to assist with care of the trauma patient.

A surgical team must be on-call with a well-defined mechanism for notification to expedite transfer to the operating room if the patient's condition warrants.

Clinical support services such as Respiratory Therapy and Radiology technicians shall be available 24 hours/day to meet the immediate needs of the trauma patient. Written policies should exist delineating the prioritization/availability of the CT scanner for trauma patients. The use of tele-radiology is an acceptable practice in the Level III facility.

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Clinical laboratory services shall have the following services available in-house 24 hours per day:

- i. Blood typing and cross matching capabilities
 - ii. Access to sufficient quantities of blood and blood products
 - iii. Microbiology
 - iv. Blood gas and pH determination
 - v. Alcohol and drug screening
 - vi. Coagulation studies.

All Level III trauma centers should have the following:

- i. Written transfer agreements with other providers as a transferring facility
 - ii. Available Helipad.

B. LEVEL IV TRAUMA CENTER

The team approach is optimal in the care of trauma patients. The Level IV trauma center must have a written policy for notification and mobilization of an organized trauma team to the extent that one is available. The team may vary in size and composition depending on the logistics of the facility. The physician leader or mid-level practitioner on the trauma team is responsible for directing all phases of the resuscitation. Suggested composition of the trauma team includes, if available:

- i. Physician or Licensed Mid-level practitioner
- ii. Emergency Room Nurse
- iii. Laboratory
- iv. Radiology
- v. Ancillary personnel as needed

The ER of the Level IV trauma center should be staffed so trauma patients are assured immediate and appropriate initial care. A system must be developed and in place to assure early notification of the on-call practitioner. Adequate number of nurses must be immediately available 24 hours/day to ensure adequate care of the trauma patient.

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The Level IV trauma center should have the following clinical services available for consultation via a communication system on a 24-hour basis:

- i. General surgery
- ii. Neurology
- iii. Neurosurgery
- iv. Orthopedics

The Level IV facility must have written transfer agreements with other trauma facilities in the region. A policy must be in place to facilitate and expedite the transfer sequence to assure the most appropriate care is rendered to the patient. Agreements should be in place so that ALL facilities will work together to implement the Trauma Transfer Guidelines.

IV. CRITERIA FOR ACTIVATION OF THE TRAUMA TEAM

In either a Level III or Level IV facility, immediate activation of the trauma system (FULL ACTIVATION) should occur when you have any of the following:

- a. Glasgow Coma Scale (GCS) < 10
- b. Systolic blood pressure < 90 mmHg (adult)
 - c. Respiratory rate < 10 or > 30/min
 - d. Penetrating injury to the head, neck, torso, or extremities above the elbows or knees
 - e. Flail chest
 - f. Two or more proximal long bone fractures
 - g. Pelvic fracture
 - h. Limb paralysis
 - i. Amputation proximal to the wrist or ankle
 - j. Body surface burns > 5% (second or third degree)
 - k. Burns associate with other traumatic or inhalation injury
 - I. Trauma transfer patient that is intubated or receiving blood
 - m. Children under 12 with any of the following criteria
 - n. Ejection from vehicle
 - o. Death of same passenger compartment
 - p. Extrication time greater than 20 minutes
 - g. Rollover MVC
 - r. High-speed auto crash greater than 40 mph
 - s. Auto deformity greater than 20 inches of external damage or intrusion into passenger compartment greater than 12 inches
- t. Pedestrian thrown or run over
- u. Motorcycle crash greater than 20 mph or separation of rider from the bike.

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In a Level III or Level IV facility, PARTIAL ACTIVATION of the trauma team should occur when a patient presents to the ER with a Priority II or Priority III injury. After triage by the appropriate personnel the patient should be treated appropriately for the injury and if necessary full activation of the team may occur.

V. INTER-FACILITY TRANSFERS

In an effort to optimize patient care and deliver the trauma patient to most appropriate destination, rapid assessment of the patient is imperative. When a trauma patient arrives at a destination hospital the trauma team should be activated 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:

- 1. The patient will be stabilized and then transferred to the most appropriate facility (Priority I or Priority II trauma that is time-sensitive), if appropriate staff and resources are available, stabilization may require surgical intervention, all Priority I patients that are admitted at a level III or IV hospital will have automatic CQI by the RTAB,
- 2. The patient will be stabilized and then admitted to that facility (Priority II that is not time-sensitive or Priority III),
- 3. The patient will be stabilized and transferred to their facility of choice (Priority II that is not (time-sensitive), or
- 4. The Priority III trauma patient will be treated at the closest acute care hospital or the hospital of patient's choice. The patient will be treated and discharged to home with appropriate instruction for their injuries (Priority III trauma).
- It is recommended that the transfer of Priority II and Priority III trauma patients follow the same routing as the Pre-Hospital Destination Plan. This is an effort to provide optimal care in the most appropriate amount of time for the trauma patient. As always, the patient's choice of facility will be considered when the injuries are not of a time-sensitive matter.
- In accordance with the ATLS guidelines of the American College of Surgeons, "Once the need to transfer is recognized, arrangements should be expedited and not delayed for diagnostic procedures that do not change the immediate plan of care for the patient."

VI. PROCEDURE FOR SELECTION OF HOSPITAL DESTINATION

It is recognized that some patients have needs that can only be met at specific destination hospitals. 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.

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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 (see appendix B of the Pre-Hospital Trauma Destination Plan).

VII. PROCEDURE FOR MONITORING HOSPITAL STATUS AND CAPABILITY

A. EMResource™

The MERC coordinator will generate reports from the EMResource™ for use in monitoring hospital status related to destination. These reports will be provided periodically to OSDH and made available to the Region 1 CQI Committee. 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.

B. QI Indicators

A set of QI Indicators has been developed for use in monitoring hospital status and appropriateness of destination. The Region 1 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.

VIII. HELICOPTER UTILIZATION PROTOCOL

A. Purpose

Appropriate utilization of air ambulance resources by Region 1 providers.

B. "No Fly" Conditions:

Helicopter utilization is seldom indicated for patients without a chance for survival or without serious injury. The following are other situations in which an air ambulance should not be used:

- i. Patients at a location where time and distance constraints make air transport to the closest appropriate medical facility more time consuming should be transported by ground. This is generally within 45 minutes of the destination facility.
- ii. Priority 3 patients should be transported by ground ambulance.
- iii. Cardiac arrest without return of spontaneous circulation in the field.

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C. "Fly" Conditions:

The following are conditions that warrant the use of an air ambulance:

- i. Priority 1 trauma patients that are being transported to a facility in which time and distance constraints make air transport more timely, generally for distances with a transport time greater than 30 minutes by ground ambulance.
- ii. Priority 2 trauma patients that are being transported to a facility with a transport time greater than 45 minutes by ground ambulance, based on local resource availability.
- D. The following are conditions that warrant the use of an air ambulance even when the patient is within a 45 minutes of a medical facility:
 - i. The closest facility is not appropriate for the patient's' injury and the appropriate facility is at a distance in which time and distance constraints justify air transport.
 - ii. There are hazardous or impassable road conditions resulting in significant delays for ground transportation.
 - iii. There are multiple patients of a serious nature requiring rapid transport, overwhelming available ground units.
 - iv. Based on information available, the lead rescuer determines a lengthy rescue is required and transportation by ground would extend and delay definitive care.
- E. The **closest available** medical aircraft should be utilized to improve survival of all patients being transported to a definitive care facility.

IX. DIVERSION

A hospital on divert can maintain that status for a **maximum** of 2 hours and then the situation should be re-evaluated. If it a hospital is continued on divert status for an additional 2 hour time period the Medical Emergency Response Center (MERC) coordinator in conjunction with the Regional Medical Director will assess the situation and determine if it is appropriate to continue on divert status and activate the MERC if deemed necessary.

X. QUALITY IMPROVEMENT

Each facility in the region shall conduct Quality Improvement (QI) activities with regard to their trauma program. Under the auspices of the Medical Director and the Trauma Program Manager each facility will conduct QI activities in accordance with the approved regional QI process.

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EMResource[™] Usage 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.

Usage Requirements

Within Region 1 all providers are required of to comply with the guidelines established by the State $EMResource^{\intercal} Joint \ Advisory \ Committee \ and/or the Oklahoma State Department of Health in the <math>EMResource^{\intercal} Manual$. In the event that the $EMResource^{\intercal} Manual$ is updated, the revisions to the $EMResource^{\intercal} Manual$ override the requirements in this document.

Specific usage requirements include but are not limited to:

Contact Information

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

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.

<u>Critical Concept: Emergency Departments and Hospitals are considered open unless posted otherwise on</u>
<u>EMResource™</u>

Emergency Department Status

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.

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. *Hospital Status*

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.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™.

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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:

Yes – Coverage is currently available.

No – Coverage is not currently available.

N/A – This service is not offered at this facility.

Air Ambulance Status

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

Available – the areomedical resource is currently ready and able to respond to emergency calls. Call for Status – current conditions necessitate that providers in need of aeromedical transport call to determine resource availability because:

The aeromedical resource may already be dispatched to a call or be on standby.

Local weather conditions may temporarily impact the ability of this aeromedical resource to respond.

This aeromedical resource may be temporarily unavailable due to routine service or fueling.

Not Available – the aeromedical resource is currently unable to respond in a timely manner.

In region 1 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.

System Alerts

Providers in Region 1 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.

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.

Compliance with appropriate usage will be monitored through routine MERC drills.

Data Reporting

Providers in Region 1 are required to participate in reporting data supported by the EMResource™ application. This reporting requirement includes but is not limited to:

Hospital Daily Report of bed capacity and ED volume; EMS

Daily Report of resources and volume;

Monitoring

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

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™.

Plan Approval Dates: OTSIDAC: 08-02-2006

Pre-Hospital RTAB: 07-18-2006

Inter-facility RTAB: 03-27-2007 OTSIDAC: 08-01-2007 EMResource™ RTAB: 05-23-2006 OTSIDAC: 08-02-2006

The CQI committee will review all cases referred to them for inappropriate use of EMResource™ in any of the listed categories. 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 CQI committee for further action.

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 1 supports use of this tool through adoption of these requirements.

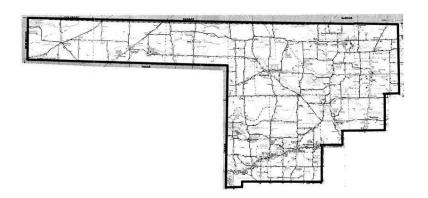
Plan Approval Dates: OTSIDAC: 08-02-2006

Pre-Hospital RTAB: 07-18-2006

Inter-facility RTAB: 03-27-2007 OTSIDAC: 08-01-2007 EMResource™ RTAB: 05-23-2006 OTSIDAC: 08-02-2006

Region 1 Trauma Plan

Developed by the RTAB NW Regional Planning Committee



Plan Approval Dates:

Pre-Hospital RTAB: 07-18-2006 OTSIDAC: 08-02-2006 Inter-facility RTAB: 03-27-2007 OTSIDAC: 08-01-2007 EMResource™ RTAB: 05-23-2006 OTSIDAC: 08-02-2006 OTSIDAC Revision to Trauma Triage Algorithm Guidelines: February 2, 2010

Northwest Trauma Triage and Destination Regional Trauma Plan

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	Revision to Trauma Triage Algorithm Guidelines: February 2, 2010	

I. GOALS / PURPOSE

The goals of the regional trauma pre-hospital destination/inter-facility transfer plans are to:

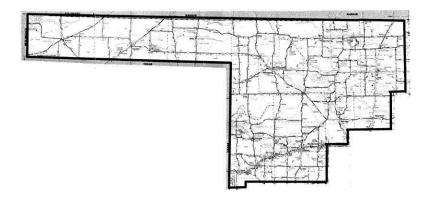
- A. Assure trauma patients are stabilized and transported to the most appropriate hospital facility with the available resources and capacity to provide care in a timely fashion.
- B. Support the Pre-Hospital/Inter-Facility Trauma Triage and Transport Guidelines to effectively reduce trauma morbidity and mortality.
- C. Match a facility's resources with each trauma patient's needs to ensure optimal and cost effective care is achieved.
- D. This plan will not conflict with any rules and/or regulations that are currently in place, or may be written or changed in the future. In the event new rules and/or regulations are considered, the RTAB should be included in that dialogue prior to implementation.

II. REGION DESCRIPTION

Region 1 consists of the northwest portion of Oklahoma and includes the following counties: Alfalfa, Beaver, Beckham, Blaine, Cimarron, Custer, Dewey, Ellis, Garfield, Grant, Harper, Kingfisher, Major, Roger Mills, Texas, Washita, Woods and Woodward.

Region 1 is the largest region in Oklahoma and encompasses 21,232 square miles with a population of 238,148. Region 1 has common borders with four states: Colorado, Kansas, New Mexico and Texas.

It is serviced by 40 ambulance services, two (2) Level III Trauma Centers, 17 Level IV Trauma Centers, of which 14 are designated Critical Access Hospitals, one (1) Psychiatric Hospital, and one (1) Long Term Acute Care Hospital.



Plan Approval Dates:

III. 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. This three-tiered system is outlined in Appendix B and it is imperative that all pre-hospital and hospital medical providers use this system and language.

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

1. Priority 1 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, Level II, or designated Level III Trauma Centers with 24/7 in house ED physicians, 24/7 general and orthopedic surgeon availability. These patients should be directly transported to a Level I, Level II, or designated Level III facility for treatment, but may be stabilized at any 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 receive definitive care in a Level III facility if the appropriate services and resources are available. (e.g. orthopedic, vascular, or maxillofacial surgery).

2. Priority 2 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.

3. Priority 3 Trauma Patients:

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

IV. CATEGORIZATION OF HOSPITALS

- A. Hospital Providers in Region 1 include: (2020 Information). For the latest information regarding facility capabilities, refer to EMResource™.
 - 1. Level I: None
 - Level II: None
 - 3. Level III:
 - a. INTEGRIS Bass Baptist Health Center (Enid)
 - b. St. Mary's Regional Medical Center (Enid)

4. Level IV:

- a. AllianceHealth Clinton (Clinton)
- b. AllianceHealth Woodward (Woodward)
- c. Beaver County Memorial Hospital (Beaver)
- d. Cimarron Memorial Hospital (Boise City)
- e. Cordell Memorial Hospital (Cordell)
- f. Fairview Regional Medical Center Authority (Fairview)
- g. Great Plains Regional Medical Center (Elk City)
- h. Harper County Community Hospital (Buffalo)
- i. Memorial Hospital of Texas County Authority (Guymon)
- j. Mercy Hospital Kingfisher (Kingfisher)
- k. Mercy Hospital Watonga (Watonga)
- I. Newman Memorial Hospital, Inc. (Shattuck)
- m. Okeene Municipal Hospital (Okeene)
- n. Roger Mills Memorial Hospital (Cheyenne)
- o. Seiling Municipal Hospital (Seiling)
- p. Share Medical Center (Alva)
- q. Weatherford Regional Hospital, Inc. of Weatherford, Oklahoma (Weatherford)

5. Long Term Acute Care Facilities:

a. INTEGRIS Bass Pavilion

6. **Psychiatric Hospitals:**

a. Northwest Center for Behavioral Health (Ft. Supply)

7. Other Facilities:

- a. Clinton Indian Health Center (Clinton)
- b. Oklahoma Veterans Center (Clinton)

B. Out of Region Hospital Resources:

1. Level I:

- a. Ascension Via Christi St. Francis, Wichita, KS
- b. OU Medicine, Oklahoma City, OK
- c. University Medical Center Health System, Lubbock, TX
- d. Wesley Medical Center, Wichita, KS

2. Level II:

- a. St. John Medical Center, Inc., Tulsa, OK
- b. St. Francis Hospital, Inc., Tulsa, OK

3. Level III:

a. Northwest Texas Healthcare System, Amarillo, TX

V. DESCRIPTION OF EMS SERVICES

Region 1 is a very large area encompassing 18 counties (Population 238,148) and covering approximately 21,232 square miles that is serviced by 40 ambulance services and seven (7) air transport services.

A. Ground Ambulance Services: (2020 Information). For current information, refer to the EMS Registry available at:

http://www.ok.gov/health/Protective Health/Emergency Medical Services/

1. Alfalfa County:

One (1) Basic ambulance service covers Alfalfa County with four (4) routine units covering the 866 square miles of the county.

2. Beaver County:

One (1) Basic ambulance service covers Beaver County with two (2) routine units covering the 1,815 square miles of the county.

3. <u>Beckham County</u>:

Three (3) Basic ambulance services cover Beckham County with five (5) routine units that cover the 902 square miles of the county.

4. Blaine County:

Blaine County is covered by three (3) Basic ambulance services with four (4) routine units that cover the 928 square miles of the county.

5. Cimarron County:

Cimarron County is covered by two (2) Basic ambulance services with three (3) routine units that cover the 1,835 square miles of the county.

6. <u>Custer County:</u>

Custer County is covered by three (3) Basic ambulance services, one (1) Intermediate ambulance service, and one (1) Advanced ambulance service with nine (9) routine units that cover the 989 square miles of the county.

7. Dewey County:

Dewey County is covered by three (3) Basic services with six (6) routine units that cover the 999 square miles of the county.

8. Ellis County:

Ellis County is covered by one (1) Basic ambulance service with two (2) routine units that cover the 1,232 square miles of the county.

9. Garfield County:

Garfield County is covered by one (1) Paramedic ambulance service and one (1) Basic ambulance service with five (5) routine units that cover the 1,058 square miles of the county.

10. Grant County:

Grant County is covered by three (3) Basic ambulance services with three (3) routine units that cover the 1,001 square miles of the county.

11. Harper County:

Harper County is covered by two (2) Basic ambulance services with two (2) routine units that cover the 1,039 square miles of the county.

12. Kingfisher County:

Kingfisher County is covered by two (2) Paramedic ambulance services and one (1) Intermediate ambulance service with four (4) routine units that cover the 898 square miles of the county.

13. Major County:

Major County is covered by one (1) Basic Ambulance service with two (2) routine units that cover the 955 square miles of the county.

14. Roger Mills County:

Roger Mills County is covered by one (1) Basic ambulance service with one (1) routine unit that covers the 1,141 square miles of the county.

15. Texas County:

Texas County is covered by one (1) Intermediate ambulance service and two (2) Basic ambulance services with seven (7) routine units that cover the 2,041 square miles of the county.

16. Washita County:

Washita County is covered by two (2) Basic ambulance services with two (2) routine units that cover the 1,003 square miles of the county.

17. Woods County:

Woods County is covered by three (3) Basic ambulance services with four (4) routine units that cover the 1,287 square miles of the county.

18. Woodward County:

Woodward County is covered by one (1) Basic ambulance service with six (6) routine units that cover the 1,242 square miles of the county.

Plan Approval Dates:

 Pre-Hospital
 RTAB: 07-18-2006
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 Inter-facility
 RTAB: 03-27-2007
 OTSIDAC: 08-01-2007

 EMResource™
 RTAB: 05-23-2006
 OTSIDAC: 08-02-2006

OTSIDAC Revision to Trauma Triage Algorithm Guidelines: February 2, 2010

B. Air Ambulance Services

- 1. Air Evac Lifeteam, based in Elk City, OK (AE21); Kingfisher, OK (AE131); Weatherford, OK (AE122); and Woodward, OK (AE70), provides rotor wing service to Region 1.
- 2. Apollo MedFlight, based in Amarillo, TX, provides fixed wing service to Region 1.
- 3. Air MD LLC dba: Life Save, based in Liberal, KS, provides fixed wing service to Region 1.
- 4. EagleMed Kansas, based in Wichita, KS, provides fixed wing service to Region 1.

VI. TRAUMA TRANSFER AND 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 these centers is to ensure that trauma patients transported or transferred to facilities in Region 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. On April 1, 2010, TReC was consolidated to a single call center in Region 7. TReC is located in the Tulsa 911 center and serves the entire State of Oklahoma.

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

Ambulances from Region 1 are required to call into the center prior to entering Regions 7 or 8 in order to ensure appropriate patient destination. Likewise, hospitals may call these centers for assistance in identifying the appropriate destination for their trauma patients.

These centers will provide information on resource utilization to the OSDH that will be available to the Region 1 RTAB for Quality Improvement purposes.

PRE-HOSPITAL DESTINATION PROTOCOLS

I. PROCEDURE FOR SELECTION OF HOSPITAL DESTINATION

It is recognized that some patients have needs that can only be met at specific destination hospitals. Thus, a trauma patient will often benefit from transfer directly to an appropriate hospital with the capability 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 Trauma Triage and Transport Guidelines is essential in determining the appropriate hospital destination for Priority 1, 2, and 3 trauma patients (see appendix B).

These Destinations are:

ALL PATIENTS:

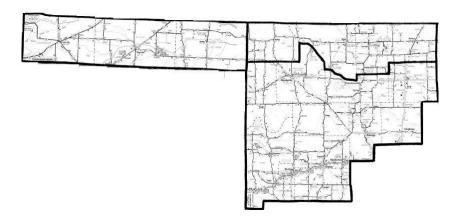
- 1. All trauma patients should be rapidly transported to the closest medical facility with the capability and capacity to provide the appropriate level of care as indicated by the patient's injury type and severity.
- 2. Patients with a traumatic arrest or the need to secure an airway should be transported to the closest facility to the traumatic event.
- 3. Any priority 1 or 2 trauma patient who needs immediate stabilization should be transported to the nearest facility with the capability and capacity to provide definitive care.
- 4. Patient preference as well as the time and distance should factor into where definitive care will be considered for most Priority 2 and 3 trauma patients.

GENERAL TRAUMA PATIENTS:

General trauma patients who meet the State of Oklahoma approved trauma criteria should be transported using the following guidelines. General geographic and transportation borders have been used as boundaries for these transportation designations. These boundaries are used as guidelines and it is understood that there are sites in the region that based on time and distance may need to be transported into a different border area.

- 1. Priority 1 adult and pediatric trauma patients that meet the state approved trauma criteria should be transported to the nearest Level I or II Trauma Center.
 - a. OU Medicine will be the appropriate center for the majority of Region 1.
 - b. Cimarron, Texas and Beaver counties <u>may</u> transport to University Medical Center Health Systems in Lubbock, Ascension Via Christi St. Francis or Wesley Medical Center in Wichita, and OU Medicine in Oklahoma City.
 - c. Harper, Woods, Alfalfa and Grant counties <u>may</u> transport to Ascension Via Christi St. Francis or Wesley Medical Center in Wichita, Kansas.
 - d. The appropriate method of transport for those patients outside of an area 45 minutes from the appropriate center should activate air transport as defined in Section IX, as soon as possible to ensure rapid transport to the appropriate facility.
 - e. If air transport is unavailable, ground transport and/or ALS intercept can be utilized for transport. In the event there will be an excessive time delay for transport, the patient may be taken to the closest treating facility for stabilization.

Region 1 Priority 1 Trauma Patient Destinations:



- 2. Priority 2 trauma patients that meet the state approved trauma criteria should be transported using the following guidelines:
 - a. 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

Plan Approval Dates:

transported to a trauma facility with the resources to perform a complete trauma evaluation and medical screening and can care for their injuries. Additionally, Priority 2 patients should be transported to a facility with the capability and capacity to provide definitive care.

- b. If air transport is unavailable, ground transport and/or ALS intercept can be utilized for transport. In the event there will be an excessive time delay for transport, the patient may be taken to the closest treating facility for stabilization.
- c. All single system Priority 2 Pediatrics being transferred or transported into Region 8 will now go directly to The Children's Hospital at OU Medicine.
- 3. Priority 3 adult and pediatric trauma patients should be transported to the nearest appropriate treating facility or the facility of patient preference.

NEUROLOGICAL TRAUMA PATIENTS:

- 1. Priority 1 adult and pediatric neurological trauma patients.
 - a. The majority of Priority 1 neurosurgical trauma patient in Region 1 will go to Oklahoma City via use of the TReC.
 - b. Cimarron, Texas, and Beaver counties should transport to the Northwest Texas Healthcare System in Amarillo, Texas; University Medical Center Health Systems in Lubbock, Texas; Ascension Via Christi St. Francis or Wesley Medical Center in Wichita, Kansas; and OU Medicine in Oklahoma City, Oklahoma.
 - c. Harper, Woods, Alfalfa and Grant counties should transport to Ascension Via Christi St. Francis or Wesley Medical Center in Wichita, Kansas.
 - d. Adult Priority 1 neurological trauma patients may also be transported to St. Mary's Regional Medical Center in Enid if neurosurgical services are available at the time.
- 2. Priority 2 adult trauma patients should be transported to the appropriate facility in Enid or Oklahoma City based on the time/distance factor with preference given to patient preference and the ability to keep the patient within Region 1.
- 3. All single system Priority 2 Pediatrics being transferred or transported into Region 8 will now go directly to The Children's Hospital at OU Medicine.
- 4. Priority 3 adult and pediatric trauma patients should be transported to the closest facility for evaluation.

BURN PATIENTS:

- 1. 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.
- 2. Pediatric: Combination of burns > 10% or significant burns involving face, airway, hands, feet, or genitalia without significant trauma, transport to Alexander Burn Center at Hillcrest Medical Center or OU Medicine Children's Hospital. Burns >10% with significant trauma, transport to trauma center.

II. PROCEDURE FOR MONITORING HOSPITAL STATUS AND CAPABILITY

A. EMResource™

The Medical Emergency Response Center (MERC) Coordinator will generate reports from the EMResource™ for use in monitoring hospital status related to destination. These reports will be provided periodically to OSDH and made available to the Region 1 Quality Improvement (QI) Committee. 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.

B. Quality Improvement (QI) Indicators

A set of QI Indicators has been developed for use in monitoring hospital status and appropriateness of destination. The Region 1 QI Committee will monitor these indicators. Any problems and/or trends through review of the indicators will be addressed by the QI committee directly with the provider and, if necessary, through referral to the appropriate state level committee.

III. ALS INTERCEPT (Ground)

A. Purpose: Appropriate utilization of ground ambulance resources by Region 1 providers.

This differs from other mutual aid requests that may occur during a mass casualty incident or other catastrophe. For the purposes of this protocol, an ALS Intercept occurs when a BLS unit requests assistance for an emergent patient. This support is to be rendered if the ALS unit is available and will not put the ALS response area at risk.

Plan Approval Dates:

B. Conditions of use

BLS units should request ALS units for the purposes of:

- 1. Airway and respiratory interventions
- 2. Circulatory Support
- 3. Other life-sustaining interventions beyond the scope and practice of BLS crewmembers.

BLS units should not request support from ALS units for the purposes of non-emergency transports of the trauma patients, as this will tax resources of supporting agencies. As such, it is only when a BLS unit is transporting Priority 1 and 2 patients should an ALS intercept be considered.

Additionally, the BLS unit should consider location, time constraints, and distance when considering a ground or air unit for support and transportation.

ALS agency or ALS units that can provide ALS intercepts should support requests for intercepts and assistance in the following circumstances:

- 1. Crew is available for response
- 2. Adequate time is received for the request to meet the BLS crew before arrival at a receiving facility.
- 3. Any safety concerns such as hazardous material, violence, weather, and traffic are addressed or within acceptable margins.

IV. HELICOPTER UTILIZATION PROTOCOL

A. Purpose

Appropriate utilization of air ambulance resources by Region 1 providers.

B. "No Fly" Conditions:

Helicopter utilization is seldom indicated for patients without a chance for survival or without serious injury. The following are other situations in which an air ambulance should not be used:

Plan Approval Dates:

- a. Patients at a location where time and distance constraints make air transport to the closest appropriate medical facility more time consuming should be transported by ground. This is generally within 45 minutes of the destination facility.
- b. Priority 3 patients should be transported by ground ambulance.
- c. Cardiac arrest without return of spontaneous circulation in the field.

C. "Fly" Conditions:

- 1. The following are conditions that warrant the use of an air ambulance:
 - a. Priority 1 trauma patients that are being transported to a facility in which time and distance constraints make air transport more timely, generally for distances with a transport time greater than 45 minutes by ground ambulance.
 - b. Priority 2 trauma patients that are being transported to a facility with a transport time greater than 45 minutes by ground ambulance, based on local resource availability.
- 2. The following are conditions that warrant the use of an air ambulance even when the patient is within a 45 minutes of a medical facility:
 - a. The closest facility is not appropriate for the patients' injury and the appropriate facility is at a distance in which time and distance constraints justify air transport.
 - b. There are hazardous or impassable road conditions resulting in significant delays for ground transportation.
 - c. There are multiple patients of a serious nature requiring rapid transport, overwhelming available ground units.
 - d. Based on information available, the lead rescuer determines a lengthy rescue is required and transportation by ground would extend and delay definitive care.
- D. The **closest available** medical helicopter will be utilized to improve survival of all patients being transported to a definitive care facility.

E. After the responders have initially treated the patient using standard protocol and the patient is ready for transport, the responders should proceed to the closest pre-existing landing area (PELA site) or to the nearest treating facility if the patients' condition warrants.

F. Early Activation / Standby:

When a dispatch center or ground ambulance service receives a call that meets the following criteria, it is recommended that the air ambulance be "early activated" or placed on ground standby:

- 1. Significant mechanism of injury as defined in the Trauma Triage Algorithm
- 2. Multiple patients
- 3. "Gut Feeling" from the responding crew

**** NOTE: If a Non-EMS/First Responder or bystander activates an air service, the air service will communicate with local EMS to avoid multiple responses to the incident. ****

G. Landing Zone Parameters:

- 1. Free of wires, trees, signs, poles, vehicles, and people;
- 2. Landing zone is flat, smooth, and clear of debris;
- 3. The landing zone should be at least 100 x 100 feet square in size;
- 4. The landing zone should be well defined at night without lights pointed towards the helicopter;
- 5. The area should be secured and free of all loose debris as well as clear of all unauthorized personnel;
- 6. The helicopter should be approached with the crew only and care should be taken to avoid the tail rotor;
- 7. The landing zone should remain clear and secure for at least one minute after departure for safety reasons.

H. Training:

Landing zone training should be accomplished by all ground ambulance services on an annual basis. Each individual ground ambulance service can contact an air ambulance service for this training.

I. EMTALA:

There are concerns regarding air utilization and rendezvous with a local ground transport at a helipad upon a medical facilities property. This is addressed in Appendix C.

V. DIVERSION

Guidelines to determine the possible need for total Emergency Department divert are: The Emergency Department cannot handle additional emergencies based on the lack of professional personnel.

- 1. Maximum capacity (beds) of the Emergency Department has been met.
- 2. Maximum <u>capability</u> (staff) of the Emergency Department has been met.

Notification of Emergency Department diversion status:

- 1. Each hospital will notify the MERC or his/her designee of the diversion status and a written record shall be maintained documenting the date, time started, and time ended of each interval of divert status.
- 2. Each hospital shall notify each entity providing emergency medical services, such as ambulance services and hospitals in the catchment's area of the divert status.
- 3. The EMResource™ will be updated to show current information.

Compliance:

- 1. If a hospital goes on Emergency Department divert, then the MERC or his/her designee will re-evaluate every 2 hours for continuation of diversion.
- 2. The MERC or his/her designee has the authority at any time to deny or discontinue Emergency Department divert based on the needs of the community.
- 3. The MERC or his/her designee also has the authority to place ambulance services on a rotating basis to avoid over-saturation of any one given facility.
- 4. Update of the EMResource™ will be made accordingly.

INTER-FACILITY TRANSFER PROTOCOLS

I. TRAUMA CENTER PROGRAM

Each hospital shall have a designated Trauma Team that is appropriate for that facilities level of care. It is important to incorporate all facilities in trauma planning and implementation, as well as, in the planning of transfer protocols.

Level III Trauma Center:

In general the Level III Trauma Center is expected to provide initial resuscitation of the trauma patient and immediate operative intervention to control hemorrhage and to assure maximal stabilization prior to transfer to a higher level of care institution. In many instances, patients will remain in the Level III trauma center unless the medical needs of the patient require secondary transfer. The decision to transfer will rest with the physician attending the trauma patient and all Level III centers will work collaboratively with other trauma facilities to develop transfer protocols and a well-defined transfer sequence.

Level IV Trauma Center:

In general the Level IV Trauma Center is a licensed, small, rural facility with a commitment to the resuscitation of the trauma patient and written transfer protocols in place to assure those patients needing a higher level of care are transferred appropriately. These facilities may be staffed by a Physician, or licensed independent practitioner, RN, LPN, Paramedic or Intermediate EMT. The major trauma patient in this facility will be stabilized and transported to the most appropriate facility for the patients on-going care needs.

Trauma Program:

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

There must be a commitment letter from the Hospital Board and the Medical Staff on behalf of the entire facility, which states the facility's commitment to compliance with the Oklahoma Trauma Care Regulations. A trauma program must be established and recognized by each organization and evidenced by:

- 1. Hospital Board and Medical Staff commitment to trauma care.
- 2. Written policies and procedures for the care of the trauma patient.
- 3. A defined Trauma Team with written roles and responsibilities.
- 4. Appointed Trauma Medical Director with a written job description.
- 5. A written Trauma Performance Improvement plan.
- 6. Appointed Trauma Program Manager (coordinator) with a written job description.
- 7. Documentation of the trauma center representative's attendance at the Regional Trauma Advisory Boards meetings.

II. TRAUMA TEAM

The team approach is optimal in the care of the injured patient. The trauma center must have a written policy for notification and mobilization of an organized trauma team (in a 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 mid-level practitioner on the trauma team should have ATLS or possess equivalent training for care of the trauma patient and is responsible for directing all phases of the resuscitation.

Suggested composition of the trauma team includes:

Level III:

- a. ED Physicians
- b. Physician Specialists
- c. Laboratory Technicians
- d. Nursing
- e. Auxiliary Support Staff

Level IV:

- a. Physician or Mid Level Practitioner
- b. Nursing
- c. Laboratory Technicians
- d. Auxiliary Staff

Compliance with the above will be evidenced by:

There will be written resuscitation protocols that adhere to the principles of ATLS guidelines, and a written trauma team criteria activation policy. This policy should include physiologic, anatomical, and mechanism of injury protocols in accordance with the Oklahoma Trauma Triage Algorithms and protocols.

Plan Approval Dates:

Medical Director:

The Trauma Center should have a physician director for the trauma program. The physician should be responsible for working with all members of the trauma team, and overseeing the implementation of a trauma specific performance improvement plan for the entire facility. Through this process, he/she should have the overall responsibility for the quality of trauma care rendered at the facility. The director should assist in the development of standards of

care and assure appropriate policies and procedures are in place for the safe resuscitation and transfer of trauma patients. The physician director should have ATLS or possess

equivalent training for care of the trauma patient

Trauma Program Manager (Coordinator):

All Level III trauma centers must have a Registered Nurse working in the role of the Trauma Program Manager (TPM). In conjunction with the Medical Director, the TPM is responsible for organization of the program and all necessary systems for the multidisciplinary approach throughout the continuum of trauma care. He/she is responsible for working with the trauma team to assure optimal care and will liaison with local EMS personnel, the RTAB, and other

trauma centers.

The TPM will also develop a methodology for which activation of the trauma team is accomplished in their facility. The activation may be either full or partial depending upon the

severity of the trauma patients' injuries.

III. HOSPITAL TRIAGE AND TRANSFER PLAN:

A well designed trauma program within the hospital is crucial to the success for providing optimal care to the trauma patients in Region 1. A written commitment on behalf of the entire facility devoted to the organization of trauma care is vital. Therefore, all hospitals in the region will establish criteria for the activation of their respective trauma programs and these criteria will be clearly defined in each institutions trauma policy. The following are intended as guidelines only for each hospitals policy as each and every hospital is unique in

the way it serves its stakeholders.

Plan Approval Dates:

OTSIDAC Revision to Trauma Triage Algorithm Guidelines: February 2, 2010

A. LEVEL III TRAUMA CENTER

A team approach is optimal in the care of the trauma patient. As noted above, the trauma team should consist of those individuals that can expedite care for the trauma patient. In a Level III facility this should include:

- i. Emergency Physician(s)
- ii. Emergency Room Nurses
- iii. Laboratory
- iv. Radiology
- v. Respiratory Therapy

The Level III trauma center must have an Emergency Department (ER) staffed so that trauma patients are assured immediate and appropriate initial care. An ER physician deemed competent in the care of the trauma patient shall be available 24 hours/day. This ER physician must be in-house 24 hours/day, immediately available at all times, and capable of evaluating trauma patients and provide initial resuscitation. The ER physician will provide team leadership and care for the trauma patient until the surgeon or other specialist arrives to take over care. The ER must have established standards and procedures to ensure immediate and appropriate care for the adult as well as the pediatric trauma patient. The medical director of the ER must participate in the trauma PI process.

The Level III trauma center must also have published on-call schedules and have the following medical specialties immediately available 24 hours/day to the injured patient:

- i. General Surgery
- ii. Anesthesia
- iii. Other medical specialties that may be available in the local area to assist with care of the trauma patient.

A surgical team must be on-call with a well-defined mechanism for notification to expedite transfer to the operating room if the patient's condition warrants.

Clinical support services such as Respiratory Therapy and Radiology technicians shall be available 24 hours/day to meet the immediate needs of the trauma patient. Written policies should exist delineating the prioritization/availability of the CT scanner for trauma patients. The use of tele-radiology is an acceptable practice in the Level III facility.

Clinical laboratory services shall have the following services available in-house 24 hours per day:

- i. Blood typing and cross matching capabilities
- ii. Access to sufficient quantities of blood and blood products
- iii. Microbiology
- iv. Blood gas and pH determination
- v. Alcohol and drug screening
- vi. Coagulation studies.

All Level III trauma centers should have the following:

- i. Written transfer agreements with other providers as a transferring facility
- ii. Available Helipad.

B. LEVEL IV TRAUMA CENTER

The team approach is optimal in the care of trauma patients. The Level IV trauma center must have a written policy for notification and mobilization of an organized trauma team to the extent that one is available. The team may vary in size and composition depending on the logistics of the facility. The physician leader or mid-level practitioner on the trauma team is responsible for directing all phases of the resuscitation. Suggested composition of the trauma team includes, if available:

- i. Physician or Licensed Mid-level practitioner
- ii. Emergency Room Nurse
- iii. Laboratory
- iv. Radiology
- v. Ancillary personnel as needed

The ER of the Level IV trauma center should be staffed so trauma patients are assured immediate and appropriate initial care. A system must be developed and in place to assure early notification of the on-call practitioner. Adequate number of nurses must be immediately available 24 hours/day to ensure adequate care of the trauma patient.

The Level IV trauma center should have the following clinical services available for consultation via a communication system on a 24-hour basis:

- i. General surgery
- ii. Neurology
- iii. Neurosurgery
- iv. Orthopedics

The Level IV facility must have written transfer agreements with other trauma facilities in the region. A policy must be in place to facilitate and expedite the transfer sequence to assure the most appropriate care is rendered to the patient. Agreements should be in place so that ALL facilities will work together to implement the Trauma Transfer Guidelines.

IV. CRITERIA FOR ACTIVATION OF THE TRAUMA TEAM

In either a Level III or Level IV facility, immediate activation of the trauma system (FULL ACTIVATION) should occur when you have any of the following:

- a. Glasgow Coma Scale (GCS) < 10
- b. Systolic blood pressure < 90 mmHg (adult)
- c. Respiratory rate < 10 or > 30/min
- d. Penetrating injury to the head, neck, torso, or extremities above the elbows or knees
- e. Flail chest
- f. Two or more proximal long bone fractures
- g. Pelvic fracture
- h. Limb paralysis
- i. Amputation proximal to the wrist or ankle
- j. Body surface burns > 5% (second or third degree)
- k. Burns associate with other traumatic or inhalation injury
- I. Trauma transfer patient that is intubated or receiving blood
- m. Children under 12 with any of the following criteria
- n. Ejection from vehicle
- o. Death of same passenger compartment
- p. Extrication time greater than 20 minutes
- g. Rollover MVC
- r. High-speed auto crash greater than 40 mph
- s. Auto deformity greater than 20 inches of external damage or intrusion into passenger compartment greater than 12 inches
- t. Pedestrian thrown or run over
- u. Motorcycle crash greater than 20 mph or separation of rider from the bike.

Plan Approval Dates:

In a Level III or Level IV facility, PARTIAL ACTIVATION of the trauma team should occur when a patient presents to the ER with a Priority II or Priority III injury. After triage by the appropriate personnel the patient should be treated appropriately for the injury and if necessary full activation of the team may occur.

V. INTER-FACILITY TRANSFERS

In an effort to optimize patient care and deliver the trauma patient to most appropriate destination, rapid assessment of the patient is imperative. When a trauma patient arrives at a destination hospital the trauma team should be activated 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:

- 1. The patient will be stabilized and then transferred to the most appropriate facility (Priority I or Priority II trauma that is time-sensitive), if appropriate staff and resources are available, stabilization may require surgical intervention, all Priority I patients that are admitted at a level III or IV hospital will have automatic CQI by the RTAB,
- 2. The patient will be stabilized and then admitted to that facility (Priority II that is not time-sensitive or Priority III),
- 3. The patient will be stabilized and transferred to their facility of choice (Priority II that is not (time-sensitive), or
- 4. The Priority III trauma patient will be treated at the closest acute care hospital or the hospital of patient's choice. The patient will be treated and discharged to home with appropriate instruction for their injuries (Priority III trauma).

It is recommended that the transfer of Priority II and Priority III trauma patients follow the same routing as the Pre-Hospital Destination Plan. This is an effort to provide optimal care in the most appropriate amount of time for the trauma patient. As always, the patient's choice of facility will be considered when the injuries are not of a time-sensitive matter.

In accordance with the ATLS guidelines of the American College of Surgeons, "Once the need to transfer is recognized, arrangements should be expedited and not delayed for diagnostic procedures that do not change the immediate plan of care for the patient."

VI. PROCEDURE FOR SELECTION OF HOSPITAL DESTINATION

It is recognized that some patients have needs that can only be met at specific destination hospitals. 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.

Plan Approval Dates:

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 (see appendix B of the Pre-Hospital Trauma Destination Plan).

VII. PROCEDURE FOR MONITORING HOSPITAL STATUS AND CAPABILITY

A. EMResource™

The MERC coordinator will generate reports from the EMResource™ for use in monitoring hospital status related to destination. These reports will be provided periodically to OSDH and made available to the Region 1 CQI Committee. 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.

B. QI Indicators

A set of QI Indicators has been developed for use in monitoring hospital status and appropriateness of destination. The Region 1 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.

VIII. HELICOPTER UTILIZATION PROTOCOL

A. Purpose

Appropriate utilization of air ambulance resources by Region 1 providers.

B. "No Fly" Conditions:

Helicopter utilization is seldom indicated for patients without a chance for survival or without serious injury. The following are other situations in which an air ambulance should not be used:

- i. Patients at a location where time and distance constraints make air transport to the closest appropriate medical facility more time consuming should be transported by ground. This is generally within 45 minutes of the destination facility.
- ii. Priority 3 patients should be transported by ground ambulance.
- iii. Cardiac arrest without return of spontaneous circulation in the field.

Plan Approval Dates:

C. "Fly" Conditions:

The following are conditions that warrant the use of an air ambulance:

- i. Priority 1 trauma patients that are being transported to a facility in which time and distance constraints make air transport more timely, generally for distances with a transport time greater than 30 minutes by ground ambulance.
- ii. Priority 2 trauma patients that are being transported to a facility with a transport time greater than 45 minutes by ground ambulance, based on local resource availability.
- D. The following are conditions that warrant the use of an air ambulance even when the patient is within a 45 minutes of a medical facility:
 - i. The closest facility is not appropriate for the patients' injury and the appropriate facility is at a distance in which time and distance constraints justify air transport.
 - ii. There are hazardous or impassable road conditions resulting in significant delays for ground transportation.
 - iii. There are multiple patients of a serious nature requiring rapid transport, overwhelming available ground units.
 - iv. Based on information available, the lead rescuer determines a lengthy rescue is required and transportation by ground would extend and delay definitive care.
- E. The **closest available** medical aircraft should be utilized to improve survival of all patients being transported to a definitive care facility.

IX. DIVERSION

A hospital on divert can maintain that status for a **maximum** of 2 hours and then the situation should be re-evaluated. If it a hospital is continued on divert status for an additional 2 hour time period the Medical Emergency Response Center (MERC) coordinator in conjunction with the Regional Medical Director will assess the situation and determine if it is appropriate to continue on divert status and activate the MERC if deemed necessary.

X. QUALITY IMPROVEMENT

Each facility in the region shall conduct Quality Improvement (QI) activities with regard to their trauma program. Under the auspices of the Medical Director and the Trauma Program Manager each facility will conduct QI activities in accordance with the approved regional QI process.

EMResource™ Usage 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.

Usage Requirements

Within Region 1 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:

Contact Information

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

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.

<u>Critical Concept: Emergency Departments and Hospitals are considered open unless posted otherwise</u> <u>on EMResource™</u>

Emergency Department Status

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.

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.

Hospital Status

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.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™.

Plan Approval Dates:

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:

Yes - Coverage is currently available.

No - Coverage is not currently available.

N/A - This service is not offered at this facility.

Air Ambulance Status

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

Available – the areomedical resource is currently ready and able to respond to emergency calls. Call for Status – current conditions necessitate that providers in need of aeromedical transport call to determine resource availability because:

The aeromedical resource may already be dispatched to a call or be on standby.

Local weather conditions may temporarily impact the ability of this aeromedical resource to respond.

This aeromedical resource may be temporarily unavailable due to routine service or fueling.

Not Available – the aeromedical resource is currently unable to respond in a timely manner.

In region 1 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.

System Alerts

Providers in Region 1 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.

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.

Compliance with appropriate usage will be monitored through routine MERC drills.

Data Reporting

Providers in Region 1 are required to participate in reporting data supported by the EMResource™ application. This reporting requirement includes but is not limited to:

Hospital Daily Report of bed capacity and ED volume;

EMS Daily Report of resources and volume;

Monitoring

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

Plan Approval Dates:

The CQI committee will review all cases referred to them for inappropriate use of EMResource™ in any of the listed categories. 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 CQI committee for further action.

<u>Summary</u>

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 1 supports use of this tool through adoption of these requirements.

Appendix A

EMS Provider Descriptions

DESCRIPTION OF EMS SERVICES

EMS Providers within Region 1 include: 2008 Information. For current information go to: http://www.ok.gov/health/Protective_Health/Emergency_Medical_Services/

Alfalfa County

Alfalfa County EMS is a Basic Service with one (1) Emergency Medical Responder, 18 EMTs, nine (9) Advanced/Intermediate EMTs, and two (2) Paramedics.

Beaver County

Beaver County EMS is a Basic Service with three (3) Emergency Medical Responders, 11 EMTs, and three (3) Advanced/Intermediate EMTs.

Beckham County

Elk City Fire Department EMS is a Basic Service with nine (9) Emergency Medical Responders, 18 EMTs, four (4) Advanced/Intermediate EMTs, and 11 Paramedics.

Erick Ambulance is a Basic Service with four (4) Emergency Medical Responders, five (5) EMTs, one (1) Advanced/Intermediate EMT, and one (1) Paramedic.

Sinor EMS (Sayre) is a Basic Service with one (1) Emergency Medical Responder, one (1) EMT, and one (1) Advanced/Intermediate EMT.

Blaine County

Canton-Longdale EMS is a Basic Service with six (6) EMTs.

Okeene Ambulance is a Basic Service with two (2) Emergency Medical Responders, six (6) EMTs, two (2)

Advanced/Intermediate EMTs, and one (1) Paramedic.

Watonga EMS is a Basic Service with one (1) Emergency Medical Responder, 10 EMTs, one (1) Advanced/Intermediate EMT, and three (3) Paramedics.

Cimarron County

Cimarron County EMS is a Basic Service with two (2) Emergency Medical Responders, four (4) EMTs, two (2) Advanced/Intermediate EMTs, and one (1) Paramedic.

Keyes EMS is a Basic Service with six (6) EMTs, two (2) Advanced/Intermediate EMTs, and two (2) Paramedics.

Custer County

Butler EMS is a Basic Service with six (6) EMTs.

Cheyenne-Arapaho Tribes EMS is an Intermediate Service with four (4) Emergency Medical Responders, one (1) EMT, four (4) Advanced/Intermediate EMTs, and seven (7) Paramedics.

Lifeguard Ambulance Service Weatherford is an Advanced Service with eight (8) EMTs, two (2) Advanced/Intermediate EMTs, and eight (8) Paramedics.

Sinor EMS Clinton is a Basic Service with four (4) Emergency Medical Responders, five (5) EMTs, two (2) Advanced/Intermediate EMTs, and six (6) Paramedics.

Sinor EMS Thomas is a Basic Service with one (1) Emergency Medical Responder, two (2) EMTs, and one (1) Advanced/Intermediate EMT.

Plan Approval Dates:

Dewey County

Community Ambulance Service is a Basic Service with nine (9) Emergency Medical Responders, eight (8) EMTs, one (1) Advanced/Intermediate EMT, and one (1) Paramedic.

Leedey Ambulance Service is a Basic Service with three (3) EMTs, one (1) Advanced/Intermediate EMT, and two (2) Paramedics.

Vici-Camargo EMS is a Basic Service with four (4) Emergency Medical Responders and six (6) EMTs.

Ellis County

Ellis County EMS is a Basic Service with one (1) Emergency Medical Responder, eight (8) EMTs, nine (9) Advanced/Intermediate EMTs, and five (5) Paramedics.

Garfield County

Life EMS is a Paramedic Service with eight (8) EMTs, five (5) Advanced/Intermediate EMTs, and 12 Paramedics.

Miller EMS – Garfield County is a Basic Service with one (1) Emergency Medical Responder and nine (9) EMTs.

Grant County

Medford Ambulance is a Basic Service with two (2) Emergency Medical Responders, four (4) EMTs, and one (1) Advanced/Intermediate EMT.

Miller EMS is a Basic Service with one (1) Emergency Medical Responder, seven (7) EMTs, and six (6) Paramedics. Pond Creek Fire Department Ambulance is a Basic Service with seven (7) EMTs and five (5) Paramedics.

Harper County

Buffalo EMS District is a Basic Service with two (2) Emergency Medical Responders, three (3) EMTs, and two (2) Advanced/Intermediate EMTs.

Laverne EMS is a Basic Service with six (6) Emergency Medical Responders, eight (8) EMTs, and one (1) Advanced/Intermediate EMT.

Kingfisher County

Kingfisher Ambulance (City of) is an Intermediate Service with 16 Advanced/Intermediate EMTs and four (4) Paramedics.

Life EMS of Hennessey is a Paramedic Service with six (6) EMTs, seven (7) Advanced/Intermediate EMTs, and 14 Paramedics.

Miller EMS – Kingfisher is a Paramedic Service with six (6) EMTs and six (6) Paramedics.

Major County

Major County EMS is a Basic Service with three (3) Emergency Medical Responders, 11 EMTs, eight (8) Advanced/Intermediate EMTs, and 12 Paramedics.

Roger Mills County

Roger Mills Ambulance is a Basic Service with 10 EMTs, three (3) Advanced/Intermediate EMTs, and five (5) Paramedics.

Plan Approval Dates:

Texas County

Goodwell Ambulance is a Basic Service with three (3) Emergency Medical Responders, three (3) EMTs, and two (2) Paramedics.

Guymon Fire Department Ambulance is an Intermediate Service with seven (7) Emergency Medical Responders, eight (8) EMTs, and 16 Paramedics.

Hooker Municipal Ambulance is a Basic Service with two (2) Emergency Medical Responders and six (6) EMTs.

Washita County

Burns Flat Ambulance is a Basic Service with three (3) Emergency Medical Responders, three (3) EMTs, two (2) Advanced/Intermediate EMTs, and one (1) Paramedic.

Cordell Ambulance is a Basic Service with four (4) Emergency Medical Responders, eight (8) EMTs, one (1) Advanced EMT, and two (2) Paramedics.

Woods County

Alva Ambulance is a Basic Service with four (4) EMTs, six (6) Advanced/Intermediate EMTs, and one (1) Paramedic. Freedom Volunteer Fire & Ambulance is a Basic Service with one (1) Emergency Medical Responder, four (4) EMTs, and one (1) Advanced/Intermediate EMT.

Waynoka Ambulance is a Basic Service with three (3) Emergency Medical Responders and five (5) EMTs.

Woodward County

Woodward County EMS is a Basic Service with one (1) Emergency Medical Responder, 10 EMTs, seven (7) Advanced/Intermediate EMTs, and three (3) Paramedics.

AIR SERVICES

Air Evac Lifeteam Elk City
Air Evac Lifeteam Kingfisher
Air Evac Lifeteam Weatherford
Air Evac Lifeteam Woodward
Air MD, LLC dba: Life Save
Apollo Medflight
Eaglemed - Kansas

Appendix B

Oklahoma Trauma Patient Definitions and Triage Algorithms

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 do not provide 100% percent sensitivity and specificity for detecting injury. As a result, trauma systems are designed to over-triage patients in order to not miss a potentially serious injury. Under-triage of patients should be avoided since a potentially seriously injured patient could be delivered to a facility not prepared to manage their injury. Large amounts 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 1 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 a 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 per minute

or <20 in infant <1 year of age

Altered Mentation of trauma etiology - GCS <14

Anatomical Injury Criteria

Penetrating injury of the head, neck, chest/abdomen, or extremities proximal to elbow of 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 1 Trauma

Crushed, degloved, or mangled extremity

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.

I. 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 deceleration 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 significant damage. High Energy Events:

Ejection of the patient from an enclosed vehicle

Auto/pedestrian or auto/bike or motorcycle crash with significant impact (>20 MPH) 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

• 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

Medic Discretion

Since trauma triage is an inexact science and patients differ in their response to injury, clinical judgment 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 but not limited to the following factors:

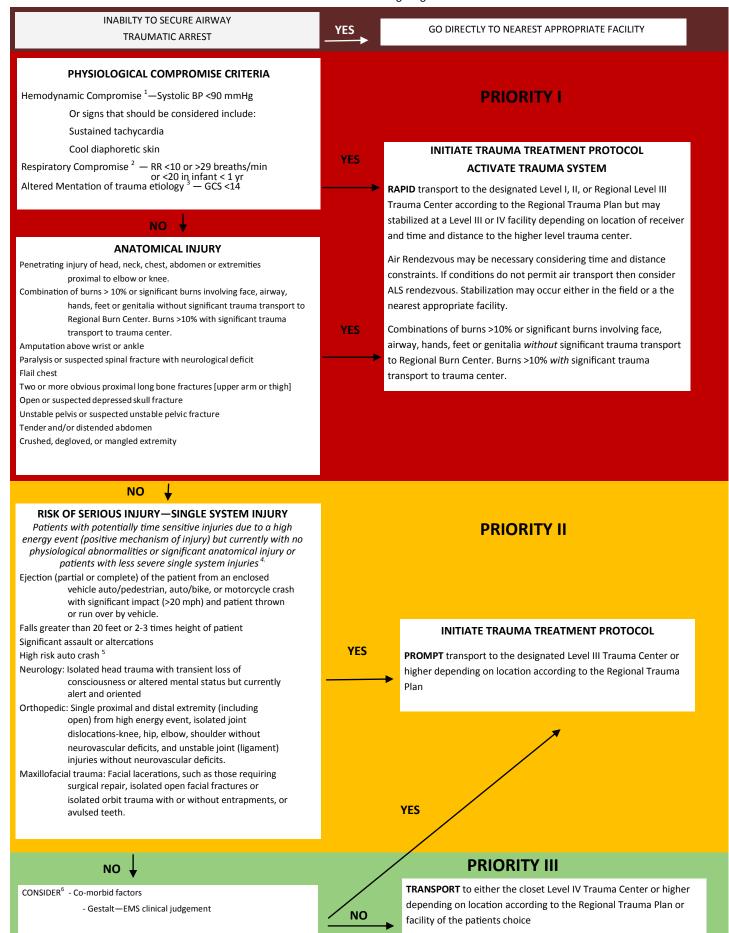
Priority 3 Trauma Patients

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 levels fall with extremity or hip fracture.

ADULT PRE-HOSPITAL TRIAGE AND TRANSPORT GUIDELINES

Oklahoma Model Trauma Triage Algorithm

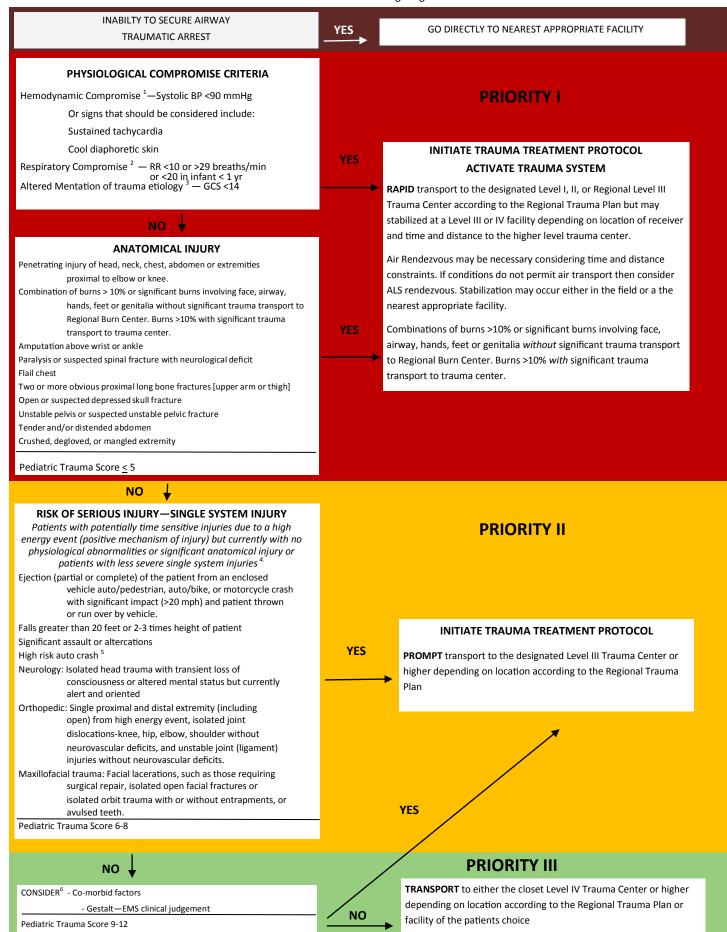


ADULT PRE-HOSPITAL TRIAGE AND TRANSPORT GUIDELINES

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 restraint 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 judgment 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:

Oklahoma Model Trauma Triage Algorithm



PEDIATRIC (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 restraint 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 judgment 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:

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)	>90 mmHg	50-90 mmHg	<50 mmHg	
or BP (pulses)	Radial	Femoral/Carotid	None palpable	
CNS	Awake, no LOC	Obtunded	Comatose, unresponsive	
		Some LOC †		
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 12 = minor trauma

6 to 8 = potentially life threatening

0 to 5 = life threatening <0 = usually fatal

- # Invasive techniques required for control (e.g. intubation)
- † Responds to voice, pain, or temporary loss of consciousness
- ‡ Abrasions or lacerations

^{*} No assistance required

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

ADULT INTERFACILITY TRIAGE AND TRANSFER GUIDELINES

Oklahoma Model Trauma Triage Algorithm

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 <10 or >29

Major Extremity Injury

Fracture/dislocation with loss of distal pulses Amputation of extremity proximal to wrist or ankle Pelvic fractures with hemodynamic instability

Two or more long bone fracture sites

Major vascular injuries documented by arteriogram <u>or</u> 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

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

Sepsi

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

Major tissue necrosis

PRIORITY I

YES

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

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

NO

Proceed to Priority II Interfacility Transfer Criteria

ADULT INTERFACILITY TRIAGE AND TRANSGER GUIDELINES

Oklahoma Model Trauma Triage Algorithm

Abdominal/Pelvic Injuries

Stable pelvic fractures

Hemodynamically stable isolated abdominal trauma

diffuse abdominal pain/tenderness

seat belt contusions

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 <u>without</u> respiratory compromise

Unilateral pulmonary contusion without respiratory compromise

Comorbid

Age <5 or > 55

Known cardiac, respiratory or metabolic disease

Pregnancy

Immunosupression

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

dencits

Unstable joint (ligament) injuries without neurovascular deficits Degloving injuries without evidence of limb threatening injury

Mechanism

Ejection of patient from enclosed vehicle

<u>Adult</u> 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

PRIORITY II

YES

Perform complete trauma evaluation and appropriate serial observation. 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.

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 YEARS) INTERFACILITY TRIAGE AND TRANSFER GUIDELINES

Oklahoma Model Trauma Triage Algorithm

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:

Newborn <30 or >60

Up to 1 yr <24 or >36

1-5 yr <20 or >30

Over 5 yr <15 or >30

Major Extremity Injury

Fracture/dislocation with loss of distal pulses Amputation of extremity proximal to wrist or ankle Pelvic fractures with hemodynamic instability

Two or more long bone fracture sites

Major vascular injuries documented by arteriogram <u>or</u> 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 regional Burn Center. Burns
>10% with significant trauma transport to

Secondary Deterioration

Prolonged mechanical ventilation

trauma center.

Sepsis

Single or multiple organ system failure (deterioration in CNS, cardiac, pulmonary, hepatic, renal or

coagulation systems)

Major tissue necrosis

Pediatric Trauma Score <5

PRIORITY I

YES

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

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

NO

Proceed to Priority II Interfacility Transfer Criteria

PEDIATRIC (16 YEARS) INTERFACILITY TRIAGE AND TRANSGER GUIDELINES

Oklahoma Model Trauma Triage Algorithm

Abdominal/Pelvic Injuries **PRIORITY II** Stable pelvic fractures Hemodynamically stable isolated abdominal trauma diffuse abdominal pain/tenderness seat belt contusions Perform complete trauma evaluation and visceral injuries appropriate serial observation. Consider Hemodynamically stable isolated solid organ injuries **CNS** admission if condition remains stable. 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 Deterioration of Glasgow Coma Scale, vital compromise signs or patient's condition or significant Unilateral pulmonary contusion without respiratory compromise findings on further evaluation. Comorbid Age <5 or > 55 Known cardiac, respiratory or metabolic disease NO YES Pregnancy **Immunosupression** Bleeding disorder or anticoagulants Major Extremity Injury If definitive surgical care or critical Single proximal extremity fractures, including open care monitoring are not available, Distal extremity fractures, including open activate Trauma System and prepare Isolated joint dislocations-knee, hip, elbow, shoulder without neurovascular for RAPID transfer to the appropriate Unstable joint (ligament) injuries without neurovascular deficits designated Trauma Facility according Degloving injuries without evidence of limb threatening injury to the Regional Trauma Plan. Mechanism Stabilization may involve surgical Ejection of patient from enclosed vehicle intervention. 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 Consider admission if condition discretion4, e.g.: patients involved in motor vehicle crashes with significant remains stable. 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 NO **PRIORITY III** Perform appropriate emergency department evaluation. Consider discharge or admit if condition remains 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 C

EMTALA Clarification

EMResource™

RTAB: 05-23-2006 OTSIDAC 08-02-2006

I. <u>EMTALA Regarding Helipad Usage</u>

There have been some concerns of possible EMTALA violations when using a hospitals helipad to transfer a patient from a ground ambulance to an air ambulance. The following two (2) circumstances will not trigger EMTALA. (Excerpt from the State Operations Manual, Appendix V – Interpretive Guidelines – Responsibilities of Medicare Participating Hospitals in Emergency Cases)

- 1. The use of a hospital's helipad by local ambulance services or other hospitals for the transport of individuals to tertiary hospitals located throughout the state does not trigger an EMTALA obligation for the hospital that has the helipad on its property when the helipad is being used for the purpose of transit as long as the sending hospital conducted the Medical Screening Exam (MSE) prior to transporting the individual to the helipad for medical helicopter transport to a designated recipient hospital. The sending hospital is responsible for conducting the MSE prior to transfer to determine if an Emergency Medical Condition (EMC) exists and implementing stabilizing treatment or conducting an appropriate transfer. Therefore, if the helipad serves simply as a point of transit for individuals who have received an MSE performed prior to the transfer to the helipad, the hospital with the helipad is not obligated to perform another MSE prior to the individuals continued travel to the recipient hospital. If, however, while at the helipad the individuals condition deteriorates, the hospital at which the helipad is located must provide another MSE and stabilizing treatment within its capacity if requested by medical personnel accompanying the individual.
- 2. If as part of the EMS protocol, EMS activates helicopter evacuation of an individual with a potential EMC, the hospital that has the helipad does not have an EMTALA obligation if they are not the recipient hospital, **unless a request** is made by EMS personnel, the individual, or a legally responsible person acting on the individuals behalf for the examination or treatment of an EMC.

II. <u>EMTALA EMERGENCY DEPARTMENT DEFINITIONS & DESCRIPTIONS</u>

Situations may occur in which patients are diverted to other healthcare facilities provided EMTALA is followed.

<u>Emergency Medical Treatment and Active Labor Act ("EMTALA")</u> refers to Sections 1866 and 1867 of the Social Security Act, 42 U.S.C. Section 1395dd, which obligates hospitals to provide medical screening, treatment, and transfer of individuals with emergency medical conditions or women in labor. It is also referred to as the "anti-dumping" statute and COBRA.

Emergency Medical Condition:

- 1. A medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain, psychiatric disturbances, and/or symptoms of substance abuse) such that the absence of immediate medical attention could reasonably be expected to result in:
 - a. Placing the health of the individual or, with respect to a pregnant woman, the health of a woman and her unborn child in serious jeopardy;
 - b. Serious impairment of bodily functions, or
 - c. Serious dysfunction of any bodily organ or part; or

- 2. With respect to a pregnant woman who is having contractions:
 - a. That there is inadequate time to effect a safe transfer to another hospital before delivery; or
 - b. That transfer may pose a threat to the health or safety of the woman or the unborn child.

<u>Capacity</u> means the ability of the hospital to accommodate the individual requesting examination or treatment of the transferred individual. Capacity encompasses number and availability of qualified staff, beds, equipment, and the hospital's past practices of accommodating additional patients in excess of its occupancy limits.

> Such as Emergency Department beds are filled, patients are backed up in the Emergency Department waiting room, and there are no other beds or personnel available to provide appropriate care for the patients.

<u>Capabilities</u> of a medical facility or main hospital provider means the physical space, equipment, supplies, and services (e.g. trauma care, surgery, intensive care, pediatrics, obstetrics, burn unit, neonatal unit, or psychiatry), including ancillary services available at the hospital. The capabilities of the hospital's staff mean the level of care that the hospitals personnel can provide within the training and scope of their professional licenses. For off-campus departments, the capability of the hospital as a whole is included. The obligations of the hospital provider must be discharged within the hospital as a whole. However, the hospital is not required to locate additional personnel or staff to off-campus departments to be on-call for possible emergencies.

Under no circumstances will an Emergency Department patient who has an emergency medical condition be transferred to another facility because of inability to pay for services or based on any illegal form of discrimination (national origin, race, gender, religion, etc.). Prior to any Emergency Department transfer, the Emergency Department staff will comply fully with EMTALA. A transfer form is to be used for patients who are transferred to a different acute care facility.

If a patient <u>Comes to the Hospital Property or Premises</u> and has an emergency medical condition, the hospital must provide either: (a) further medical examination and treatment, including hospitalization, if necessary, as required to stabilize the medical condition within the capabilities of the staff and facilities available at the hospital; or (b) a transfer to another more appropriate or specialized facility.

Comes to the Emergency Department with respect to an individual presenting for examination and treatment for what may be an emergency medical condition means that the individual is on the hospital property and premises. An individual in a non-hospital owned ambulance on hospital property or premises is considered to have come to the hospitals Emergency Department.

Appendix D

Advanced Life Support Intercept Protocol

EMResource™

RTAB: 05-23-2006 OTSIDAC 08-02-2006

ALS INTERCEPT PROTOCOL FOR REGION 1

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.

NAME AND GEOGRAPHIC DESCRIPTION

Section I. Name

The Board shall be known as the Northwest Regional Trauma Advisory Board, subsequently referred to as the Regional Trauma Advisory Board, Advisory Board, Board or RTAB.

Section II. Geographic description

Northwest region or Region 1 consists of all of the following counties, as determined by the Oklahoma State Trauma Advisory Council (OSTAC) in February 2004:

Alfalfa Custer Harper Washita
Beaver Dewey Kingfisher Woods
Beckham Ellis Major Woodward

Blaine Garfield Roger Mills

Cimarron Grant Texas

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 in the right amount of time.

PURPOSE

Section I.

The purpose of the Regional Trauma Advisory Board (RTAB) is to assist the Oklahoma Trauma and Emergency Response Advisory Council (OTERAC) and Oklahoma State Department of Health with the development and implementation of a formal trauma care system regionally and statewide.

Section II. The Regional Trauma Advisory Board shall be empowered, but not limited to:

- 1. Assessing the current resources and needs within the region respective to Emergency Medical Services (EMS), acute care facilities, rehabilitation facilities, communication systems, human resources, professional education, public education and advocacy.
- 2. Organizing regional human resources into coalitions and/or alliances, which will be proactive in trauma system development.
- 3. Development of Regional Trauma System Development Plan.
- 4. Development and implementation of Regional Trauma Quality Improvement program.
- 5. Providing public information and education programs regarding the need for a formal trauma care system.
- 6. Providing region-specific input to the Oklahoma Trauma System Improvement and Development Advisory Council and Oklahoma State Department of Health concerning trauma care issues.
- 7. Professional information and education program.

INITIAL STRUCTURE

The Commissioner of Health shall appoint the first chair of the board who will serve for the first year. This chair will work with the other providers identified for the initial membership rotation to identify the other individuals who will serve the first year. The term of the initial chair will expire with the election of a chair from the board membership.

ORGANIZATIONAL STRUCTURE

The RTAB shall consist of:

- 1. General Membership
- 2. Board Members
- 3. Board Officers

GENERAL MEMBERSHIP

General membership is composed of representatives from all of the licensed hospitals and ambulance service providers in the region, who are not current board members, as well as other interested individuals. Other interested individuals may include interested out of state healthcare providers.

Section I. Responsibilities of the General Membership

The General Members are expected to attend meetings regularly to provide input and receive updates on matters under consideration by the Board, but do not maintain voting privileges.

Section II. Committee Service

General Members may serve on committees, work groups and task forces.

Section III. Attendance Expectations

- 1. The general member may be subject to licensure action if a member misses one (1) or more schedule meetings in a year
- 2. Attendance from the required quarterly meeting may be excused by notification in writing to Board Officers. Notification may be by telephone, but must be followed by fax, mail or email.
- 3. An individual may represent more than one general member organization. In order to do this they must specify when signing in which organizations they are representing and answer roll for both organizations. They are responsible to take meeting information back to both member organizations.

BOARD MEMBERSHIP

Representation will rotate between the member organizations in the region based upon the approved rotation schedule (Attachment A); but will maintain a ratio of approximately:

50% Hospital representative 50% EMS representative

This ratio with equal permanent membership between hospital and emergency medical service providers will be considered for revision annually at the annual meeting. Board Membership should be multidisciplinary with broad representatives from the following list of disciplines, but not limited to:

Hospital	Emergency Medical Services	
1. Administrator/CEO /CNO	1. Administrator	
2.	2. Non Administrator EMT-B	
3. QI practitioner	3. Non Administrator EMT-I	
4. Emergency department physician	4. Non Administrator EMT-P	
5. Surgeon	5.	
6. Trauma nurse coordinator	6. EMS Medical Director/Designee	
7. Trauma registrar		
8. Emergency department nurse		
9. Operating room nurse		
10. Rehabilitation practitioner		
11. Safety officer		
12. Case Manager		

Section I. Powers and Responsibilities

The Board members are responsible for overall policy and direction of the RTAB.

Section II. Duties of the Board Members

Board members shall exercise ordinary business judgment in managing the affairs of the organization. In acting in their official capacity as Board Members of this organization they shall act in good faith and take actions they reasonably believe to be in the best interest of the organization and that are not unlawful. In all other instances, the Board Members shall not take any action that they should reasonably believe would be opposed to the organization's best interests or would be unlawful. Responsibilities of the Board Members include but are not limited to:

- 1. Conduct the business of the organization.
- 2. Specify the composition of and direct the activities of committees.
- 3. Consider for approval recommendations from committees.
- 4. Prepare and administer the budget, prepare annual reports of the organization.
- 5. Prepare grant applications for the organization.
- 6. Approve, execute and/or ratify contracts made in ordinary course of business of the organization.

7. Make continuous and regular reviews of RTAB matters and business affairs in order to provide information to general membership.

Section III. Number of Board Members

The Board shall consist of no fewer than nine (9) members and no more than twenty (20) members.

Section IV. <u>Actions of the Board</u>

Each Board Member shall be entitled to one (1) vote on each matter submitted to a vote at a meeting of the Board.

A simple majority of the Members present and voting at a meeting at which a quorum is present shall be sufficient to constitute action by the Board.

Section V. Term

- 1. The term of Board Members is as follows:
 - A. Hospital rotating members will serve two year rotating terms.
 - B. EMS rotating members with 2004 total run volume > 90 will serve two year rotating terms.
 - C. EMS rotating members with 2004 total run volume of 90 or less will serve one year terms.
 - D. In the first term, board members shall be staggered with half of the two year board members serving a two year term and the remaining half serving a three year term. An initial term for all board members is specified by year in Attachment A.

Section VI. Appointments

Member organizations will appoint a representative and an alternate to the board, but will have only one (1) vote each meeting. If both primary and alternate member are present at a meeting, the primary representative shall hold the voting right. If one year board members have appointed their representative for the following year by the meeting in which officer nominations occur then they will be eligible for consideration for officer nomination.

Section VII. Meetings

Meetings of the Board shall be held in accordance with the Oklahoma Open Meeting Act. Meetings of the Board Members shall be held at such times and places as determined by the Board Members. These meetings must be held at least quarterly.

The Board shall not review patient specific information or medical records at these meetings.

Section VIII. <u>Attendance Expectations/Removal of Board Members</u>

- 1. A Member is automatically removed from the Board if he/she misses two (2) consecutive posted meetings or 40% of the scheduled meetings in any year without arranging for a proxy.
- 2. Vacancies
 - In the event that a Board Member is removed from the board, the effected member organization will be asked to appoint a new member to take the place of the member.
- 3. Any member organization that subsequently fails to ensure participation by their representative shall be reported to both the *Oklahoma Trauma System Improvement and Development Advisory Council* and the member organization's licensing authority.

Section IX. Proxy

A Proxy for attendance and voting at a meeting must be initiated by the authorized representative, or the member organization administrator. This must be a signed statement on the represented organization's letterhead stating the authority of a specifically named substitute to attend and vote on their behalf. The proxy shall be delivered to the RTAB meeting prior to Calling to Order of the meeting, and shall be retained with the roll call. A proxy shall only be valid at the meeting for which it is executed.

Section X. Multiple Representation

An individual may only represent one Board Member Organization. However, a Board member may additionally represent a General Member Organization by specifying that they are doing this when signing in and by answering roll for the general member organization during roll call.

Section XI. Quorum

A simple majority of the Board shall constitute a quorum to conduct business at any meeting.

Section XII. Board Compensation

Persons serving on the Board shall not receive salaries for their services, but by resolution of the Board a reasonable amount of compensation for expenses incurred in attending to authorized duties may be allowed.

OFFICERS

Section I. The following officers shall be elected from the Board Members:

- 1. Chair
- 2. Vice-Chair
- 3. Secretary/Treasurer

Section II. The same person shall hold no more than one office.

Section III. The term for officers shall be one year.

Section IV. Nominations

Nominations of candidates for office shall occur at least one month prior to the election.

- 1. The candidates shall be Board Members.
- 2. The candidates shall express a willingness to serve.

Section V. Additional Officers

The Board Members may create additional officer positions, define the authority and duties of each such position, and elect persons to fill the position.

Section VI. <u>Attendance Expectations/Removal of Officers</u>

An Officer is automatically removed from office if he/she misses either two (2) consecutive posted meetings or 40% of the scheduled meetings in any year without making arrangements for a proxy to attend.

Section VII. Vacancies

A vacancy in any office may be filled by the Board for the unexpired portion of the officer's term.

DUTIES OF OFFICERS

Section I. The **Chair** shall be the executive officer of the RTAB and shall:

- 1. Set the agenda and preside at all meetings of the RTAB.
- 2. Appoint committee chairs on special committees...
- 3. Sign agreements and contracts after authorization by the Board.
- 4. Call special meetings when necessary.
- 5. Ensure that the RTAB is represented at Oklahoma Trauma System Improvement and Development Advisory Council meetings
- 6. Ensure that the RTAB is represented at all appropriate state and regional meetings.
- 7. Ensure that the RTAB membership is informed of all appropriate state and legislative activities.
- 8. Perform other tasks as deemed necessary by the Board Members.
- Section II. The **Vice-Chair** shall perform the duties of the Chair in the absence of the Chair and perform such duties as assigned by the Chair or the Board.

Section III. Duties of the **Secretary** shall include:

- 1. Ensure dissemination of all notices required by the Bylaws and the Oklahoma Open Meetings Act.
- 2. Assure a meeting attendance roster is maintained.
- 3. Assure a register of the name and mailing address of each member organization is maintained.
- 4. Ensure minutes are kept of all proceedings of the Board meetings.
- 5. Manage the correspondence of the organization.
- 6. Ensure board membership is in compliance with the proposed regional rotation and provides report to chair.

Section IV. Duties of the **Treasurer** shall include:

- 1. Manage all funds and assets of the RTAB.
- 2. Monitor monies due and payable to the RTAB.
- 3. Ensure the preparation of the annual budget and present it to the Board Members for approval.
- 4. Monitor the financial records of the RTAB and arrange for an independent audit when so directed by the Board Members.

MEETINGS

- Section I. Meetings of the Board shall be held in accordance with the Oklahoma Open Meeting Act.
- Section II. An Annual Board Meeting shall occur at the last regularly scheduled meeting of the year. A meeting notice shall be mailed to all member-organizations at least 30 days prior to the meeting. The meeting dates, times and places for the forthcoming year shall be established at the annual meeting.
- Section III. Meetings for the forthcoming year shall be posted with the Secretary of State in accordance with the Oklahoma Open Meeting Act prior to December 15. Any changes to the meeting schedule shall be duly noted to the Secretary of State.
- Section IV. Notice of the date, time and place of each meeting, including the agenda and minutes, shall be mailed or e-mailed to each Board Member at least seven (7) days prior to the date of that meeting. The notice of each meeting shall include an agenda of the matters to be considered.
- Section V. These meetings shall be held quarterly, or as often as deemed necessary.
- Section VI. The Board shall not review patient specific information or medical records at these meetings.

Section VII. Members of the General Membership are encouraged to attend these meetings to provide input on topics under consideration by the board.

Section VIII. Special Meetings

Special meetings of the Board may be called by the Chair of the Board, Vice-Chair of the Board, or by any three members of the Board on not less than forty-eight (48) hours notice. Notice of such a meeting must be posted as a special meeting with the Secretary of State. Notice to Board Members can be communicated by mail, e-mail, telegram, telephone, or fax.

COMMITTEES

Section I. Quality Improvement Committee

- 1. Each RTAB is required by statute to conduct quality improvement activities.
- 2. The function of this committee is to decrease death and disability by reducing inappropriate variation in care through progressive cycles of performance review.
- 3. A multidisciplinary standing committee for Quality Improvement shall be created in each region.
 - A. Minimum membership requirement:
 - i. Emergency Department Physician, and/or a Surgeon and/or an EMS Medical Director
 - ii. Physician Assistant and/or ARNP
 - iii. Emergency Department Nurse
 - iv. Operating Room Nurse
 - v. Emergency Medical Technician BLS
 - vi. EMT ALS
 - vii. Air Ambulance provider
 - viii. Quality Improvement Practitioner
 - B. Each member must be from an Oklahoma licensed and Oklahoma based hospital or ambulance service, and hold appropriate current/active professional licensure when applicable.
 - C. Other members for this committee may be identified based upon the need of the region. It is suggested that the membership be kept to 10 members but no less than 3 members.
 - D. Other specific disciplines that are not regular members of the committee may be called on to meet specific quality improvement needs.
 - E. A simple majority shall constitute a quorum to conduct business.
 - F. Upon approval by the chair, a committee member is automatically removed from the committee if he/she misses two (2) consecutive scheduled meetings or 40% of the scheduled meetings in any year.
 - G. Vacancies

- i. Notice of a vacancy shall be distributed to Board members at least ten (10)days prior to a scheduled meeting.
- ii. Volunteers or recommendations to fill the vacancy in membership on this committee shall be accepted and voted on at the next scheduled meeting of the Board.
- 4. Volunteers/recommendations for membership on this committee shall be accepted at the annual meeting, and membership appointments decided by a vote of the board members at the following meeting.
- 5. Each region shall adopt confidentiality policies for this committee.
- 6. The state Oklahoma Trauma System Improvement and Development Advisory Council, Medical Audit Committee & State QI committee shall define minimum quality improvement activities.
- 7. The regional committee may identify other activities to monitor based upon regional need.
- 8. Committee Tenure

 Membership on this committee is for a term of two (2) years. Half of the initial appointments to this committee shall be for a term of one year to ensure staggered terms.
- 9. This committee shall be for the duration of the RTAB, or as required by statute/

Section II. <u>Standing Committees</u> shall be established by a majority vote of the Board

- 1. Standing committees may include but are not limited to: Hospital Care Committee, Pre-Hospital Care Committee, Injury Prevention Committee, EMS/Hospital Disaster Committee, Trauma Coordinator Committee, Trauma Registry Committee, Finance, Professional Education, Membership, Bylaws, Public Relations, and Research.
- 2. At least one Board Member shall serve on each standing committee.
- 3. The Chair may recommend the remaining membership on these committees.
- 4. Each standing committee shall elect a Chair.
- 5. Each person on a committee shall continue to serve on the committee until the next annual meeting of the Board and until his/her successor is appointed unless sooner removed or the committee is dissolved.
- 6. The Chair of the Board, the Chair of the committee or a majority of the committee may call meetings of a committee. Each standing committee shall meet at least annually.
- 7. Notice of the committee meetings must be given in accordance with the Oklahoma Open Meetings Act.
- 8. A standing committee may be dissolved by a majority vote of the Board.
- 9. A committee member wishing to attend a meeting or vote by Proxy must prepare and sign a statement on their institution's letterhead stating their authorization of a specifically named alternate to attend the meeting and/or cast a vote on their behalf. The proxy should be presented to the *committee chair* prior to the meeting being called to order. A proxy shall only be valid at the meeting for which it is executed, unless otherwise indicated by board member and approved by the Chair.

Section III. Special Committees

The chair or the board may create special, ad hoc, or task force committees.

- 1. Members of these committees are not required to be members of the Board.
- 2. The Chair shall appoint members of these committees.
- 3. These committees will have no power to act other than as specifically authorized by the Board.
- 4. The chair will decide the tenure of these committees or the board based upon the specific need for the committee.

Section IV. Committee Resignations, Removal and Vacancies

- 1. Any person on a committee may resign from the committee at any time by giving a written notice to the chair of the Board, chair of the committee or to the secretary of the Board.
- 2. The Chair of the Board shall have the authority to remove committee member at will.

Section V. Committee Minutes

The Chair of each committee shall be responsible to ensure complete and accurate minutes of each meeting and promptly forward duplicate originals thereof to the Secretary of the Board. The Chair may appoint member/members to assist with meeting proceedings as necessary.

Section VI. Committee Recommendation

Recommendations by committees are to be taken back to the Board for action.

Section VII. Committee Compensation

Persons serving on a committee shall not receive salaries for their services, but by resolution of the Board a reasonable amount for expenses incurred in attending to authorized duties may be allowed.

PROCEDURES

All matters in reference to procedural policies that are not addressed by these bylaws will be deferred to the Robert's Rules of Order.

FINANCES

Section I. Deposits

All monies received by the corporation shall be deposited with a bank, trust company or other depository, that the Board selects, in the name of the corporation. All checks, notes, drafts and acceptances of the corporation shall be signed in the manner designated by the Board Members.

Section II. Gifts

- 1. The Board may accept on behalf of the RTAB any contribution, gift, bequest or legacy that is not prohibited by any laws or regulations in the State of Oklahoma.
- 2. The Board may make gifts and charitable contributions that are not prohibited by the Bylaws, state law and are not inconsistent with the requirement for maintaining the RTAB's status as an organization exempt from taxation under Section 501(c)(3) of the Internal Revenue code.

Section III. Conflicts of Interest

- 1. The Board shall not make a loan to any Board Member or member organization.
- 2. The Board shall not borrow money from a Board member, a member organization, an employee of a member organization or a family member of a member organization unless:
 - A. The transaction is described fully in a legally binding instrument;
 - B. The transaction is found to be in the best interests of the RTAB after full disclosure of all relevant facts at a scheduled meeting of the Board; and
 - C. Such action requires a 2/3-majority vote of the Board (excluding the vote of any person having a personal interest in the transaction) at a meeting when a quorum is present.
 - D. Disclosure of intent to undertake such action is declared to the OSDH and the OTERAC for approval prior to action.
- 3. The Board shall not transact business with a Board Member, a member organization, an employee of a member organization or a family member of a member organization unless:
 - A. The transaction is described fully in a legally binding instrument;
 - B. The transaction is found to be in the best interests of the RTAB after full disclosure of all relevant facts at a scheduled meeting of the Board; and
 - C. Such action requires a 2/3-majority vote of the Board (excluding the vote of any person having a personal interest in the transaction) at a meeting when a quorum is present.
 - D. Disclosure of intent to undertake such action is declared to the OSDH and the OTERAC for approval prior to action.

PARTICIPATION

All member organizations are required to participate in RTAB activities. Member organizations that are not currently represented on the Board may meet this requirement by attending meetings at least quarterly to give input to the Board.

Section I. Remote Locations

Individual RTABs may arrange for remote locations to Video Conference into their meetings to facilitate participation by the general membership. It is understood that

Board members must physically attend at the published meeting location to meet the participation requirements.

EMRESOURCE™

The RTAB adopts the policies, standards and definitions recommended by the Oklahoma State Department of Health for the operations of EMResource™. Any recommendations for changes to these documents will be made to the appropriate OSDH division that is administering EMResource™ to be considered for statewide adoption. As this is a statewide system, all changes must be made on a statewide basis.

Any necessary regional operational procedures will be available for review by the RTAB prior to implementation.

AMENDMENT OF BYLAWS

The Bylaws may be altered, amended or repealed, or new bylaws may be adopted by a majority vote of the Board Members at a regularly scheduled meeting or at a meeting specially called for the purpose of altering, amending or repealing the Bylaws or at the Annual meeting.

Section I. The notice of any meeting at which the Bylaws are to be altered, amended or repealed shall include the text of the proposed provisions as well as the text of any existing provisions proposed for alteration, amendment or repeal. Such notice must be distributed to members at least 2 weeks in advance.