

Statewide Trauma Advisory Council
Birmingham Regional Emergency Medical Service System (BREMSS)
Meeting Minutes
Wednesday, January 9, 2008

In Attendance	Beth Anderson, Gary Gore, Bryan Kindred, Chief Billy Pappas, Dr. Rony Najjar, Dr. Loring Rue, Dr. John Campbell, Dr. Donald Williamson, Robin Moore, Verla Thomas, Choona Lang, Joe Acker, Alex Franklin, Glenn Davis, Dr. Elwin Crawford, Charlie Faulkner, Danne Howard, David Garmon, Denise Louthain, Dennis Blair, Greg Locklier, Michael Minor, Dr. Adam Robertson, John Reed, Steve Baldwin, Geni Smith
Members not Present	Allen Foster, Dr. John Vermillion, Dr. Alzo Preyear
Proxy Vote	Bryan Kindred for Allen Foster
Presiding	Dr. Donald Williamson

Welcome/ Call To Order

Dr. Williamson called the meeting to order with roll call of the Trauma Advisory Council/TAC.

Agenda topic added: BREMSS Update- Dr. Loring Rue

Dr. Williamson asked for any modification to last meeting minutes. Mr. Kindred stated he was not listed as participating in last meeting. Motion to add Mr. Kindred to minutes.

Motion to amend minutes Chief Pappas
Second Mr. Kindred
All was in favor

Workgroup Updates

Dr Campbell stated the council had already voted on the hospital designation criteria. The document would go to the State Committee of Public Health (SCPH) on January 16, 2008; and, because it would become part of the Trauma System Rules, it then must be sent out for public comment. It should be ready for adoption by the SCPH in March.

The Trauma staff was going to take on the commitment of doing most of the Work on the various workgroups and then send the drafts to the TAC members for review. However, several council members stated they also wanted to attend the workgroup meetings. It was decided that all members on the TAC would be sent a schedule and agenda of every workgroup meeting and would be invited to attend. The information would also be posted on the ADPH website, www.adph.org/ats.

Air Medical Protocols

At the initial meeting of the workgroup, it was suggested that two sets of Protocols are needed:

1. Protocol for 911 Dispatch with suggestions for when a helicopter might be needed at a trauma scene, and thus early activation of the helicopter would be appropriate.
2. Protocol for EMT on ground, both for when to call for early activation of the helicopter, and also for situations in which use of a helicopter would be appropriate.

Trauma Regions

Dr. Williamson gave three options for the Trauma Regions Designation:

1. Make the EMS Region match the Trauma Region
2. Make the Trauma Region match the EMS Region
3. EMS and Trauma Regions are separated and do not have to match

The workgroup had initially suggested having the Trauma Regions match the EMS Regions, but this may cause problems in the West Trauma Region. It was decided that no recommendation would be made until the workgroup meets again on Tuesday, February 12, 2008. The workgroup should have a recommendation at the next TAC meeting.

QI Committee

The QI Committee met to study the QI plans of North Alabama Trauma System (NATS) and Birmingham Regional Emergency Medical Services System (BREMSS). They also discussed how electronic patient care reports could be used to facilitate the QI process. The first meeting was preliminary to making any recommendations to the TAC but some quality markers were discussed.

The QI Committee will monitor

1. Under triage (Patient met criteria for trauma system but was not entered)
2. Over triage (Patient entered into the trauma system but was sent home from the emergency department after evaluation)
3. EMS response times, scene times and transport times. Some QI will be done at the state level and some will be done on a regional basis. The next meeting was scheduled for Wednesday, January 16, 2008.

Trauma Rules

Trauma Rules are ongoing. The hospital designation criteria will become part of the rules. Dr. Campbell stated all members of the council would be notified about all meetings. Dr. Najjar volunteered for any available slot for the workgroups. He also suggested that the minutes of each workgroup be sent out to the TAC prior to the next meeting so that everyone could be prepared.

Suggestions made by Dr. Williamson:

1. Have a link to the website with minutes and meeting schedule
2. Inform TAC members about all meetings and workgroups meeting along with any and send an agenda and any documents needed for discussion.

North Alabama Trauma System (NATS) Update:

Dr. Najjar gave a brief update on the NATS with a Power Point presentation as attached.

Birmingham Regional Emergency Medical Service System (BREMSS) Update:

Dr. Rue gave a brief update on the BREMSS as attached.

Money Distribution:

Dr. Williamson stated that approximately \$40 million dollar would be needed to maintain our trauma system. He also raised the question of having subcommittees or workgroups for discussion on how to distribute money within the trauma system. (Subcommittee composes up of TAC members only. Workgroup composed whoever the council members appoint to the group).

Ms. Anderson stated would oppose creating a workgroup for money distribution discussion because of the possibility of it becoming too big and thus non-productive. Dr. Rue suggested the entire TAC should be on the subcommittee With the addition of a very limited number of other members (see below).

A motion was made to include the following workgroup members in addition to the TAC members:

1. Orthopedic Surgeon
2. Neurosurgeon
3. Oral/Facial Surgeon
4. Representative from Children's Hospital
5. A representative from level II hospital

Discussion followed. Dr. Najjar suggested that the TAC establish deadlines for decision making. Dr. Williamson stated that he would like to send a letter to the Medical Association and the Hospital Association stating the request of the TAC for their help in identifying the appropriate persons to be a part of the Trauma System money distribution work group.

The motion was seconded and carried unanimously. Dr. Williamson reiterated the importance of time frames for trauma implementation as mentioned earlier by Dr. Najjar.

Pediatric Physicians presentation regarding Children's Hospital:

Steve Baldwin gave a brief overview regarding Children's Hospital Trauma Services. Dr. Campbell stated that the TAC had discussed the need to have a list of pediatric equipment for the ED and additional pediatric training of ED staff. Dr. Campbell also pointed out that pediatric patients will probably have longer transport times because of the limited number of hospitals with the capability of caring for pediatric trauma patients. A motion was made and seconded by have standing workgroup for Pediatric Trauma Care. The motion carried unanimously

Next Region to Approach:

Dr. Campbell discussed a plan to invite representatives from each hospital and EMS service in each region to attend the initial regional trauma system meeting. Dr. Williamson will discuss the makeup and functions of the Trauma System, and from that meeting will be selected the Regional Trauma Advisory Council. This council will then hold a meeting of all of the hospitals and EMS services to listen to suggestions and concerns. The council will then develop a Regional Trauma Plan.

1. Each region has a council.
2. The West and Southeast regions will be established next and quickly move into the two remaining regions. Dr. Williamson stated there is no action required for this decision.
3. A champion will be needed in each region who wants to make the system works.

Next Meeting:

Dr. Williamson suggested meeting earlier than March 11, 2008, to discuss workgroups for Trauma Regions and monetary distribution followed by a regular TAC meeting after March 11, 2008.

Dr. Najjar suggested quickly identifying people that will be brought in for the trauma money distribution workgroup and educating them about why they were Selected and what we are planning to do at the workgroup meeting before the meeting in March.

Dr. Rue suggested we gather trauma patient flow data and circulate the information before the March meeting as well as money distribution thoughts to ensure the March meeting will be as productive as possible.

Dr. Williamson stated we would gather state trauma registry data and circulate it before the March meeting.

Discussion for next meeting

1. A representative for all level of hospitals
2. Data about referral patterns in each region
3. Data information on trauma
4. Invitation for everyone to send thoughts about monetary distribution
5. Names for a neurosurgeon, orthopedic surgeon, and oral/facial surgeon from respective specialty societies.

Dr. Rue proposed for a two day retreat to discuss several issues on the table.

Dr. Williamson will check to see if a two day retreat can be arranged.

Adjournment:

There being no further business, the meeting was adjourned at approximately 12:20p.m.

Trauma Advisory Council Teleconference
February 25, 2008
8:30a.m.-10 a.m.

In Attendance	Dr. Loring Rue, Dr. Rony Najjar, Dr. Alzo Preyear, Allen Foster, Beth Anderson, Bryan Kindred, Gary Gore, Dr. John Campbell, Dr. Donald Williamson, Dennis Blair, Choona Lang, Verla Thomas, Mike Dauthtry. Dr. Alsip, Danne Howard
Absent	Dr. John Mark Vermillion, Chief Billy Pappas

Welcome

Dr. Williamson opened meeting with a welcome and a roll call of TAC members.

Trauma System Implementation Update

Huntsville Hospital will be on by February 25, 2008 and all other hospital in the North Region will be on by the end of the week.

Dr. Williamson will hold a press conference in Huntsville on March 7, 2008 to show how the trauma system has been implemented in the North Region.

There are two town hall meeting scheduled for the end of March of the East and Southeast Regions.

Trauma System Workgroup Updates

Dr. Campbell gave brief update on each workgroup.

1. Trauma Region

- a. Some of the surgical staff has concerns about patient routing.
- b. Move Dallas & Wilcox counties to Southeast Region
- c. Make EMS & Trauma Regions coincides.

Dr. Campbell recommended voting on:

1. Move Dallas & Wilcox counties to Southeast Region
2. To make EMS & Trauma regions overlap or coincide.
3. Adopt regions modifications

2. Air Ambulance

- a. Guidelines of early activation
- b. Guidelines of Trauma System Patient (Meeting March 4, 2008)
- c. Protocols will be brought to the TAC April meeting.

3. **QI Workgroup**
 - a. Plans for pre-hospital of EMS (air & ground)
 - b. Scene and transport times
 - c. Plans for hospitals
 - d. Plan for system-patient routed
4. Trauma Rules will meet Friday February 29, 2008

Trauma Center Designation Update

TAC approved the trauma center designation and it went to the State Committee to be set up for a Public Hearing. There were comments made by Dr. Alsip. TAC motion to changes.

Dr. Rue asked the question: “Will there be anymore changes?”
Answer: Yes, changes can be made.

Dr. Rue’s Concerns (Dr. Najjar seconded):

1. Page 6 Call in X-ray technician form home
change form desirable to essential
2. Page 8 Trauma Related from desirable to essential (all transfers should be reviewed by QI)
3. Page 6 Respiratory therapist in house for a level 2 hospital from desirable to essential
4. Page 3 Strike requirements for ATS certification.

All in favor to adopted amendments.

(Dr. Williamson will contact lawyers about changes and if they should go back out for a Public Hearing).

Money Distribution

The TAC will have a two day retreat in April to work on money distribution.

There will be addition people added to this discussion on distribution. Dr. Rue expressed concerns about picking the right person for the group. Dr. Williamson will go the specialty Organization of each of the following group to request the right person for the group:

1. Neurosurgeons
2. Orthopedic surgeons
3. Oral/Facial surgeons

Dr. Williamson will have the names by April meeting.

Also needed are representatives from level 2 & 3 hospitals

Trauma Retreat

The TAC Retreat will be held April 21-22, 2008 at The Legends at Capitol Hill in Prattville, AL

1. Money Distribution discussion
2. Discuss the Regional Council
(10 members, 8 hospital administrative, 8 physicians)
3. Opened invitation
4. Get volunteers
(Select the regional council then others will be selected as workgroups)

Meeting adjourn

*Trauma Funding Workgroup
Marriot Legends, Prattville, AL
April 21-22, 2008*

Day 1

In Attendance:

<i>Dr. Donald Williamson</i>	<i>State Health Officer</i>	<i>Alabama Department of Public Health</i>
<i>Dr. John Campbell</i>	<i>EMS Medical Dir.</i>	<i>Alabama Department of Public Health</i>
<i>Beth Anderson</i>	<i>Administrator</i>	<i>USA Medical Center</i>
<i>Allen Foster</i>	<i>Administrator</i>	<i>Mizell Memorial Hospital</i>
<i>Bryan E. Kindred</i>	<i>CEO</i>	<i>DCH Regional Medical Center</i>
<i>Gary Gore</i>	<i>CEO</i>	<i>Marshall Health System</i>
<i>Rony Najjar, M.D.</i>		<i>Huntsville Hospital</i>
<i>John Mark Vermillion, M.D.</i>		<i>Baptist Medical Center South</i>
<i>Loring Rue, III, M.D.</i>		<i>University of Alabama Birmingham</i>
<i>Alzo Preyear, O.D.</i>		<i>Various Hospitals in Southeast Region</i>
<i>Chief Billy Pappas</i>		<i>Mobile Fire-Rescue Department</i>
<i>David Garmon</i>	<i>Region 6 Director</i>	<i>USA</i>
<i>E. Alan Pace</i>	<i>Region 2 Director</i>	<i>EAEMS</i>
<i>Kathy Gillison-Parker</i>	<i>Region 2</i>	<i>EAEMS</i>
<i>Spencer Howard</i>	<i>Region 1 Director</i>	<i>ALEMS</i>
<i>Alex Franklin</i>	<i>Region 1 Director</i>	<i>ALEMS</i>
<i>Denise Louthain</i>	<i>Region 5 Director</i>	<i>SEAEMS</i>
<i>Joe Acker</i>	<i>Region 3 Director</i>	<i>BREMSS</i>
<i>Dennis Blair</i>	<i>Director OEMST</i>	<i>Alabama Department of Public Health</i>
<i>Robin Moore</i>	<i>OEMST</i>	<i>Alabama Department of Public Health</i>
<i>Elwin Crawford, M.D.</i>	<i>OEMST</i>	<i>Alabama Department of Public Health</i>
<i>Danne Howard</i>		<i>ALAHA</i>
<i>Mike Daughtry</i>	<i>OEMST</i>	<i>Alabama Department of Public Health</i>
<i>Verla Thomas</i>	<i>OEMST</i>	<i>Alabama Department of Public Health</i>
<i>Choona Lang</i>	<i>OEMST</i>	<i>Alabama Department of Public Health</i>
<i>Thomas Francavilla, M.D.</i>		<i>Neurosurgical Soc of Al</i>
<i>Brian Hale</i>	<i>Legal</i>	<i>Alabama Department of Public Health</i>
<i>Dr. Andy Rucks</i>	<i>Facilitator</i>	<i>University of Alabama</i>

Dr. Rucks opened the meeting with a brief review of how other states distribute trauma system funding.

Dr. Williamson charged the workgroup to:

- 1. Focus on where the dollars need to go to maintain the trauma system*
- 2. Try to base hospital funding on level of care provided and number of patients treated.*

Dr Rucks led a discussion to identify the components of the Trauma System:

1. Ancillary activities

A. System administration (ADPH)

- 1. Office of EMS & Trauma*
- 2. Trauma region staff*

B. Alabama Trauma Communications Center

- 1. Building and equipment*
- 2. Personnel*

2. Pre-hospital EMS

A. Non-transport first responders (Fire Department, Volunteer Fire or Rescue)

B. Transporting EMS

- 1. Ground*
 - a. Urban*
 - b. Rural*
- 2. Air (Helicopter)*

3. In-hospital care

A. Trauma- designated hospital (level I, II, III)

B. Facilities, staff, and equipment

C. Physicians (on-call, recruiting additional staff)

4. Post-hospital care (rehabilitation)

Definitions of a Trauma Patient:

- ◆ *A pre-hospital patient meeting trauma system patient criteria(see Patient Care Protocol 8.5) routed by the trauma system to a trauma-designated ready hospital*
- ◆ *An in-hospital patient meeting trauma system criteria (see Criteria for Entering a Hospital Patient into Trauma System) transferred by the trauma system from a non-trauma-designated hospital to a trauma-designated ready hospital*
- ◆ *An in-hospital patient meeting trauma system criteria (see Criteria for Entering a Hospital Patient into Trauma System) entered into the trauma system by a trauma-designated hospital*

Dr. Rucks then led a discussion of general concepts of funding allocation.

The workgroup agreed that distribution of funds should follow these general guidelines

- 1. **Ancillary Services:** will have fixed costs of about \$2 million per year that will be allocated at the discretion of the State Health Officer.*
- 2. **Prehospital Trauma Care:** would receive 5% of funds remaining after ancillary services costs. These funds would be used by the EMS & Trauma regions to provide scholarships for primary EMT training, continuing education, and trauma-related equipment*
- 3. **In-hospital Care:** would receive 95% of funds remaining after ancillary services costs. This would be divided equally between hospital needs (facilities, staff, and equipment) and physician needs. A formula for distribution of hospital funds would need to be developed based on four factors:
 - A. Level of care provided*
 - B. Volume of patients treated*
 - C. Acuity of the patients treated*
 - D. Availability of the hospital (green vs. red)*A formula for distribution of physician funds will need to be developed based on current physician reimbursement data for care of trauma patients.*
- 4. **Post-hospital Care:** there would be no funding allocated for this initially but it would be revisited in the future.*

Discussion ensued about getting good data about trauma patients. It was agreed that the trauma registry (to be expanded from the current head & spinal registry) would be a critical part of this.

It was suggested that the hospital distribution formulas should be reviewed every 90 days and that distribution of hospital funds should occur 90 days in arrears. There was discussion about considering some compensation for non-trauma hospitals when trauma patients are directed to them by the trauma system (patients with airway problems or unstable patients requiring local stabilization before transfer). It was suggested that hospital availability and diversion patterns be monitored and a standard established in order for a hospital to remain in the trauma system. It was also suggested that data be collected about the number of out-of-state trauma patient treated by Alabama hospitals. The question of whether out-of-state trauma centers that treat Alabama trauma patients should receive Alabama trauma funds was discussed but no suggestions made. This question will be revisited in the future.

In attendance:

<i>Dr. Donald Williamson</i>	<i>State Health Office</i>	<i>ADPH</i>
<i>Dr. John Campbell</i>	<i>EMS Medical Dir.</i>	<i>ADPH</i>
<i>Beth Anderson</i>	<i>Administrator</i>	<i>USA Medical Center</i>
<i>Allen Foster</i>	<i>Administrator</i>	<i>Mizell Memorial Hospital</i>
<i>Bryan E. Kindred</i>	<i>CEO</i>	<i>DCH Regional Medical Center</i>
<i>Gary Gore</i>	<i>CEO</i>	<i>Marshall Health System</i>
<i>Rony Najjar, M.D.</i>		<i>Huntsville Hospital</i>
<i>Loring Rue, III, M.D.</i>		<i>University of Alabama Birmingham</i>
<i>Alzo Preyear, O.D.</i>		<i>Various Hospitals in South</i>
<i>Chief Billy Pappas</i>		<i>Mobile Fire-Rescue Department</i>
<i>David Garmon</i>	<i>Director</i>	<i>Region 6 USA</i>
<i>E. Allan Pace</i>	<i>Director</i>	<i>Region 2 EAEMS</i>
<i>Kathy Gillison-Parker</i>		<i>Region 2 EAEMS</i>
<i>Spencer Howard</i>	<i>Director</i>	<i>Region 1 ALEMS</i>
<i>Alex Franklin</i>		<i>Region 1 ALEMS</i>
<i>Denise Louthain</i>	<i>Director</i>	<i>Region 5 SEAEMS</i>
<i>Joe Acker</i>	<i>Director</i>	<i>Region 3 BREMSS</i>
<i>Dennis Blair</i>	<i>Director-OEMST</i>	<i>ADPH</i>
<i>Robin Moore</i>	<i>OEMST</i>	<i>ADPH</i>
<i>Edwin Crawford, M.D.</i>	<i>OEMST</i>	<i>ADPH</i>
<i>Mike Daughtry</i>	<i>OEMST</i>	<i>ADPH</i>
<i>Verla Thomas</i>	<i>OEMST</i>	<i>ADPH</i>
<i>Choona Lang</i>	<i>OEMST</i>	<i>ADPH</i>
<i>Brian Hale</i>	<i>Legal</i>	<i>ADPH</i>
<i>Dr. Andy Rucks</i>	<i>Facilitator</i>	<i>University of AL</i>
<i>Glenn Davis</i>	<i>Director</i>	<i>Region 4 UACCHS</i>

Not in attendance:

<i>John Mark Vermillion, M.D.</i>	<i>Baptist Medical Center South</i>
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*Day 2 continued with Dr. Rucks reviewing discussion from the day one funding workgroup discussion.
(presented power point)*

See attached report from Dr. Andy Rucks.

Trauma Funding Workgroup Adjourned 9:30a.m.

The Statewide Trauma Advisory Council meeting convened at 10:00a.m.

Minutes from January 9 and February 25, 2008 TAC meetings were read and approved.

Dr. Campbell began the meeting with a brief update on the workgroup updates. He discussed the helicopter operations guidelines (See attached Guidelines for Early Activation of Helicopter Emergency Medical Services 7.9, Guidelines for Helicopter Transport of Trauma System Patient 7.10)

Members of the council stated some concerns of helicopters and ground communication.

- 1. Helicopters appear to frequently be used inappropriately and seem to operate outside of the medical control system*
- 2. Helicopters sometime increase transport time from scene to hospital rather than decreasing the time to care*
- 3. There is frequently poor or no communication between air & ground units and between the helicopter and the receiving hospital*
- 4. Services operating in Alabama, but owned by out-of-state interests, may not be using Alabama licensed personnel and following Alabama protocols*

The helicopter protocols will require that the helicopters operate as part of the trauma system. If they consistently ignore the system, the paramedics may have their licenses suspended and the helicopter services may lose their fluid & drug licenses.

Motion to approve helicopter protocol: Dr. Rue

Second: Chief Pappas

All was in favor.

Dr. Campbell discussed the criteria for the hospitals (both trauma-designated hospitals and non-trauma hospitals) to enter patients into the trauma system. This will include:

- 1. Patients meeting system criteria but arrived by private vehicles*
- 2. Patients meeting system criteria but under-triaged by EMS*
- 3. Patients meeting system criteria but EMS forgot to enter into the system*

(See attached draft of Criteria for Hospitals to Enter Patients into the Trauma System)

Dr. Williamson gave a brief review of the Trauma Funding Expenditures (See attached).

Dr. Campbell pointed out that we have been unable to move forward in the East and Southeast regions because no rules have been established for Regional Trauma Advisory Councils. The law states that the first ten members have to be appointed in the same manner as the Statewide Advisory Council. Since the Regional Advisory Councils need to have representation from all hospitals in the regions, rules will have to be made to allow this. Dr. Campbell suggested that an emergency rule be presented to the State Committee of Public Health so we can move forward with the system.

A. State Appointment Criteria:
4 Physicians by MASA
4 Hospital administrators by ALHA
1 pre hospital provider by Dr. Williamson
1 State EMS Medical Director
Dr. Williamson

B. Suggested Regional Criteria for 20 members
First ten appointed as above members
Second ten appointed by TAC

Suggestions:

8 doctors
3 Surgeons or trauma surgeons
2 emergency physicians
1 neurosurgeon
1 orthopedic surgeon
1 plastic surgeon

8 Administrators

Breakdown of region (metro, rural, levels of trauma centers, nonparticipating)
Could have two nonparticipating hospitals (one rural, one urban)
6 trauma hospitals (3 rural, 3 urban)
2 or 3 pre hospital providers (2 grounds & 1 air)
1 Regional Medical director
Dr. Williamson or his designee

Any member of the Statewide Trauma Advisory Council that lives in a developing region should serve on the Regional Trauma Council as a liaison.

Danne Howard of the Hospital Association suggested asking for volunteers for the second ten (or more) and choosing from those. Also, in choosing the additional members, she noted that while we should seek people that are advocates of the trauma system, it is important to have some representation from those who are not system advocates, in order to understand their point of view and also to prevent misinformation.

Dr. Najjar suggested delaying selection process a month so we could better identify potential members, so that we did not leave out anyone that may be interested. Dr. Williamson suggested having 10 members appointed as specified by the law and TAC members add as many others as necessary.

He tasked Ms. Lang and Dr. Campbell with drafting an emergency rule to accomplish these things.

Pediatric Workgroup

Only two doctors have been identified to be a part of this workgroup:

Dr. Steven Baldwin

Dr. Ann Klasner

Danne Howard of the Hospital Association suggested asking MASA & ALHA to make suggestions for other members of the Pediatric workgroup.

Trauma Funding Workgroup

Since there is still work to do on the hospital funding formula and physician reimbursement, Dr. Williamson tasked Dr. Campbell with forming another funding workgroup to address these tasks and report back to the TAC.

The next Trauma Advisory Council meeting is scheduled for June 17, 20008 (teleconference)

Meeting Adjourned

GUIDELINES FOR EARLY ACTIVATION OF HELICOPTER EMERGENCY MEDICAL SERVICES	7.9
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PURPOSE: Helicopter EMS services (HEMS) offer speed of transport and ALS personnel experienced in managing critical patients. These guidelines are to assist EMS responders in determining when early activation of HEMS would likely be in the critical patient's best interest. Early Activation means initiation of a helicopter response prior to arrival of the EMS responders to the scene. Early Activation may be based on pre-arrival information regarding the incident or a suspicion by EMS that specialty care may be needed. Early Activation is initiated at the request of the first responding EMS providers or in conjunction with Dispatch and the EMS service. It is recognized that pre-arrival information may be misleading and the activated HEMS may be cancelled. The HEMS service that can respond to the scene in the shortest time should be called. If a HEMS service cannot answer a call and a second service is requested, the requesting agency must notify the second service that the call has already been refused and why.

Situations in which Early Activation of HEMS may be needed includes, but are not limited to:

1. Report of severe collision involving one or more vehicles
2. Multiple victim incidents with severe illness or injuries
3. Report of person being ejected from a vehicle
4. Pedestrian vs. vehicle with reported injuries
5. MVC with reported death and other injured persons
6. Report of severe burns
7. An unbroken fall of twenty feet or more onto a hard surface
8. Penetrating injury to head, neck, torso, or groin
9. Report of injury with paralysis
10. Sickness with new onset focal weakness or paralysis (suspected stroke)
11. Severe chest pain thought to be of cardiac etiology
12. Near drowning
13. Report of amputation proximal to wrist or ankle
14. Report of serious injury in a patient whose location would be difficult to access by ground ambulance but is more accessible by helicopter
15. Severe shortness of breath or airway problems
16. There is no available ground ambulance to respond
17. Report of patient with symptoms of shock
18. Report of patient with history of trauma and altered mental status
19. Discretion of Medical Direction or responding EMS personnel

HEMS are most appropriately used when their use would **SIGNIFICANTLY** reduce the time required to get the patient to the appropriate hospital or when potentially lifesaving prehospital interventions may be needed that cannot be provided by the responding EMS service. The Regional Aero medical Plan must be followed when approved. Quality Improvement monitoring is important and is best done in partnership with the responding helicopter service.

**GUIDELINES FOR HELICOPTER TRANSPORT
OF TRAUMA SYSTEM PATIENTS****7.10****Purpose**

Helicopter EMS services (HEMS) offer speed of transport and ALS personnel experienced in managing critical patients. The purpose of this Air Evacuation Protocol is to provide EMS personnel who are on scene, with guidelines for utilizing HEMS for transporting trauma system patients.

Process

Several factors must be considered before summoning HEMS for a trauma scene response. Stable patients who are accessible by ground vehicles and are within a reasonable distance from the designated trauma center are best transported by ground vehicles. Often, patients can be transported by ground ambulance and delivered to the appropriate trauma center before a helicopter can reach the scene. You must follow your Regional Aero medical Plan when approved. If a question exists as to whether HEMS transport would be appropriate, Medical Direction should be consulted before summoning a helicopter for a scene response.

HEMS are best used to transport critical trauma patients such as those entered into the trauma system because of physiologic or anatomic criteria. Those patients entered into the trauma system because of mechanism of injury or EMT discretion criteria are often more appropriately transported by ground ambulance.

The primary determinant should be to get the patient to the most appropriate facility in the shortest amount of time.

Emergency Medical Services personnel should request HEMS when transportation by air will SIGNIFICANTLY reduce actual transport time to the receiving facility and/or the patient needs potentially lifesaving prehospital interventions that cannot be provided by the responding EMS service. The following are some criteria when HEMS transport should be considered.

1. Transport time to the designated trauma center by ground ambulance is significantly greater than the response time and transport to the designated Trauma Center by air.
2. Ambulance access to the scene or away from the scene is significantly impeded by road conditions and/or traffic.
3. Prolonged patient extrication when a Level I facility is needed. Understand that some extricated patients are not injured and/or have sustained minor injuries and may not need HEMS.
4. Multi-system blunt or penetrating trauma with unstable vital signs.
5. Severe burns that require transport to a burn center (See Protocol 4.7).
6. Patients with severe respiratory distress or airway problems.
7. Multiple patient incidents that exceed ground ambulance service resources.
8. No ambulance available to transport the patient and/or no ALS service (if needed) within 30 minutes.
9. Discretion of Medical Direction or the on-scene EMS personnel.

When use of HEMS is not specifically defined by the protocol, the on-scene EMS personnel can establish communication with Medical Direction for advice.

Once the decision is made to use HEMS for a trauma patient, the service that can respond to the scene in the shortest time should be called. Because helicopters must go through a preflight protocol before lift-off, the shortest response time should be obtained by calling the HEMS first and then calling the TCC to decide on the proper destination hospital. When a decision is made on a destination hospital, the helicopter service should be immediately notified so they may develop their flight plan. If Early Activation was utilized, the responding HEMS service should be notified of the patient destination as soon as possible. If a HEMS service is unable to answer a call and a second service is requested, the requesting agency must notify the second service that the call has already been refused and why.

An EMS service should not wait on the scene or unduly delay transport waiting for HEMS to arrive. If the patient is packaged and ready for transport, the EMS service should reassign the landing zone to a mutually agreeable site that is closer to the hospital, and should initiate transport. The helicopter may intercept an ambulance at an agreed upon alternate landing site.

Cancellation

When EMS personnel arrive on scene, they should assess the situation. If HEMS has already been called and it is the professional judgment of the **HIGHEST LEVEL LICENSED EMS PERSONNEL ON THE SCENE** that the helicopter will not provide a significant benefit, it should be cancelled as soon as possible. A HEMS request by a BLS agency may be cancelled by the responding ALS agency only after an appropriate patient assessment has been conducted. A HEMS request by an ALS agency may be cancelled only by the agency making the initial request. If HEMS cancels a flight, they must inform the requesting agency ASAP.

If HEMS arrives on scene and determines that the patient does not meet criteria for helicopter transport or that patient, weather, or aircraft issues preclude use of the helicopter for transport, they may request ground transport of that patient. The request for ground transport does not preclude the HEMS crew from boarding the ground ambulance and continuing to provide advanced care as would be provided in flight. In situations where the HEMS crew determines that the patient does not have a medical need for HEMS transport, the transfer of this patient to a ground ambulance shall not constitute abandonment as defined by EMS regulations.

Quality Assurance/Improvement

As with all EMS responses in which HEMS is utilized, there should be QA/QI done in partnership with the responding helicopter service. Follow the Regional Aero medical Plan when approved.

THIS IS A GUIDELINE AND IS NOT ALL INCLUSIVE. EMS PERSONNEL SHOULD USE GOOD CLINICAL JUDGEMENT AT ALL TIMES. IF THERE ARE ANY QUESTIONS, OLMD SHOULD BE CONSULTED.

SPECIFIC INFORMATION NEEDED:

- A. Environmental Hazards - Smoke, toxic chemicals or fumes, potential for explosion, electrical sources, etc.
- B. Type of exposure - Any information concerning products involved should be collected at the scene if possible. Note if patient was in a closed space and if inhalation of smoke or fumes occurred.
- C. Duration of exposure. Associated trauma or blast injury.
- D. History of loss of consciousness.
- E. Past medical history - especially cardiac or pulmonary disorders.

PHYSICAL ASSESSMENT:

- A. Airway - inhalation exposure can cause airway compromise. Note presence of stridor, facial swelling, carbonaceous sputum, singed nasal hair or drooling.
- B. Breathing - smoke or chemical exposure can cause bronchospasm. Note presence of wheezing. Carbon monoxide and cyanide poisonings usually cause dyspnea. Pulse oximeter gives false high reading in presence of carbon monoxide poisoning or cyanide poisoning.
- C. Circulation - large burns will cause severe fluid loss. Note tachycardia, signs of volume depletion and hypotension.
- D. Neurological - carbon monoxide and cyanide poisoning will cause cerebral anoxia. Check for headache, confusion or decreased level of consciousness.
- E. Skin- Identify severity of burns (superficial- erythema only; partial thickness- blistered areas; full thickness - scarred or leathery areas) and extent of burns (refer to the rule of nines).
- F. Associated trauma - Burns associated with explosion have great potential for other injuries. All unconscious patients have potential for cervical spine injury. Perform rapid trauma survey.

TREATMENT:

- A. Take scene safety precautions
- B. Airway - maintain patency, consider intubation
- C. Breathing - Oxygen 12-15 L/M with non-rebreather mask – do not rely on pulse oximeter, as it is unreliable in the setting of carbon monoxide exposure or cyanide exposure.
- D. If known cyanide exposure or smoke inhalation victim who shows clinical evidence of closed-space smoke exposure (soot in mouth or nose, sooty sputum) and is either comatose, in shock, or in cardiac arrest, consider Cyanokit (hydroxycobalamin 5 grams) I.V. over 15 minutes (Cat. A). **Not for Peds.**
- E. If patient is wheezing, consider Albuterol (CAT B)
Adults (CAT B): 2.5mg (nebulized, rothaler, MDI w/spacer)
Pediatrics (CAT B): 2.5mg (nebulized, rothaler, MDI w/spacer)

TREATMENT (continued)

F. Circulation-

- IV, large bore, normal saline, in unaffected area at 250 cc/hr for burns over 20%, with at least partial thickness involvement, and the hospital arrival time will be in excess of 20 minutes

Pediatric patients: give NS 20cc/kg over 30 minutes, then reassess.

- IV, large bore, normal saline, in unaffected area at KVO rate for:
 - a. All electrical burns.
 - b. Significant chemical exposures.
 - c. All inhalation exposures.
 - d. Any patient with loss of consciousness.
 - e. Any patient with potential for other associated trauma.

G. Cardiac monitor (essential if electrical exposure) -12 lead if available.

H. Brush off dry chemicals if present on skin before flushing with large amounts of water.

I. Liquid chemicals should be flushed with copious amounts of normal saline.

J. Eyes may be irrigated with normal saline.

K. Cover affected areas with a dry burn sheet..

L. If patient has severe pain, consider Morphine Sulfate:

Adult (CAT A): 4 mg IV initial dose. Titrate to pain relief in 2 mg doses, every 3-5 minutes, up to 10mg MAX.

Adult (CAT B): If pain is not relieved after 10 mg you must call OLMD for further doses.

Pediatrics (CAT B): 0.1 mg/kg not to exceed 5 mg.

**INDICATIONS TO ENTER PATIENT INTO THE TRAUMA SYSTEM AND
TRANSPORT DIRECTLY TO A READY BURN CENTER IF WITHIN REGIONAL
TRANSPORT TIME CRITERIA**

A. Partial or full thickness burns >10% of the total body surface area

B. Partial or full thickness burns of the face, hands, feet, genitalia, perineum, or major joints

C. High voltage (1,000 volts or greater) electrical burns, including lightning injury

D. Chemical burns with obvious partial or full thickness skin damage. Also any patient requiring decontamination in an industrial, agricultural, or law enforcement setting (Decontamination should be performed prior to transport)

E. Inhalation injury from a thermal or chemical exposure in an enclosed area

F. If in doubt, consult Medical Direction or the Trauma Communications Center

SPECIFIC PRECAUTIONS:

- A. Scene hazards - electrical wires, chemical fumes, carbon monoxide or fire. Do not attempt rescue in hazardous environment unless trained in this area.
- B. Airway involvement - Always consider the possibility of airway compromise. Airway swelling can occur rapidly. Be prepared to support patient or secure the airway via endotracheal intubation if necessary.
- C. Unconsciousness - always consider the possibility of occult head or cervical spine injury. Suspect the possibility of carbon monoxide or cyanide exposure. Pulse oximeter is unreliable if carbon monoxide or cyanide is present. If unconscious from smoke inhalation give 100% oxygen and consider use of Cyanokit.
- D. Do not induce hypothermia by applying cold or moist dressing to burned areas as the body may lose excessive heat through burned skin. Maintaining a good core body temperature is essential
- E. Consider the possibility of abuse when certain burns are encountered. These include cigarette burns, iron burns, grill burns, and any burns in the elderly or children where the described mechanism of injury appears to be unlikely.
- F. Cardiac involvement - consider the potential for myocardial injury, ischemia and arrhythmia in any patient with electrical or inhalation injury.
- G. Avoid initiating IVs in burned areas except in extreme circumstances.
- H. Transport - Do not delay the transport of the seriously burned patient to administer volume boluses of fluid. Fluid loss occurs over the course of hours. Initiate fluids en route if burns are extensive, or the potential for airway compromise exists.

RULE OF NINES

When it is necessary to estimate the percentage of Total Body Surface (TBS) burns, such as making the decision to transport directly to a burn center, the rule of nines is useful. In children, relatively more area is taken up by the head and less by the lower extremities. Accordingly, the rule of nines is modified.

ADULT Body Part	Percentage of Total Body Surface (TBS)
Arm (shoulder to fingertips)	9 %
Head and neck	9 %
Leg (groin to toes)	18 %
Anterior trunk	18 %
Posterior trunk	18 %
Perineum	1 %

RULE OF NINES (continued)

In children, relatively more area is taken up by the head and less by the lower extremities. Accordingly, the rule of nines is modified.

Child Body Part	Percentage of Total Body Surface (TBS)
Arm (shoulder to fingertips)	9 %
Head and neck	18 %
Leg (groin to toes)	14 %
Anterior trunk	18 %
Posterior trunk & Buttocks	18 %

Infant Body Part	Percentage of Total Body Surface (TBS)
Arm (shoulder to fingertips)	9 %
Head and neck	14 %
Leg (groin to toes)	16 %
Anterior trunk	18 %
Posterior trunk	18 %

SPECIAL NOTE:

An accurate description of the burn, including location and severity, should be provided to the receiving facility. The rule of nines is not intended to replace such a description.

CRITERIA FOR HOSPITALS TO ENTER PATIENTS INTO THE TRAUMA SYSTEM.

One of the problems with the current trauma system is that there is no way for hospitals to add patients to the system. Obviously there are patients who arrive at hospitals by private vehicle and they should be added if they meet the criteria for a trauma system patient. There are other patients who are transported by EMS but who have been "under triaged" or the service simply forgot to enter them into the system. If the subsequent evaluation by the physicians in the emergency department or during observation, find that the patient is injured enough to qualify as a trauma system patient, the patient should be entered into the system. ADPH legal staff advises that there is no reason rules cannot be made to accomplish these tasks. It would be to everyone's advantage to do this. Probably all patients who are entered into the system by this route should be reviewed by QA/QI to try to correct any system errors that contributed.

The following are possible criteria for in-hospital medical personnel to enter a patient who has been involved in a trauma incident into the Alabama Trauma System.

Physiological criteria present on arrival or develop during evaluation and observation:

1. A systolic BP < 90 mm/Hg in an adult **or < 80 mm/Hg in a child five or younger.**
2. Respiratory distress - rate < 10 or >29 in adults, **or < 20 or > 40 in a child one year or younger.**
3. Head trauma with Glasgow Coma Scale score of 13 or less.

Anatomical Criteria:

1. The patient has a flail chest.
2. The patient has two or more obvious proximal long bone fractures (humerus, femur).
3. The patient has a penetrating injury of the head, neck, torso, or groin, associated with an energy transfer.
4. The patient has in the same body area a combination of trauma and burns (partial and full thickness) of fifteen percent or greater.
5. The patient has an amputation proximal to the wrist or ankle.
6. The patient has one or more limbs which are paralyzed.
7. The patient has a pelvic fracture, as evidenced by a positive "pelvic movement" exam.
8. Significant internal injuries found during hospital evaluation.

Mechanism of the patient injury: While this could be used as criteria for entering the patient into the trauma system, it probably should not be used as criteria for transferring a patient to a level I trauma center. It could be argued that in the hospital setting, a stable patient with no anatomic criteria should not be transferred until an evaluation has been done and an actual injury found. However, it could also be argued that some small hospitals lack the resources and expertise to properly evaluate a patient for internal injuries and so the patient should be transferred to at least a Level III hospital for evaluation.

1. A patient with the same method of restraint and in the same seating area as a dead victim.
2. Ejection of the patient from an enclosed vehicle.
3. Motorcycle/bicycle/ATV crash with the patient being thrown at least ten feet from the motorcycle/bicycle.

4. Auto versus pedestrian with significant impact with the patient thrown, or run over by a vehicle.
5. An unbroken fall of twenty feet or more onto a hard surface.

PURPOSE:

The following are criteria for entering a patient who has been involved in a trauma incident into the Alabama Trauma System.

Physiological criteria:

4. A systolic BP < 90 mm/Hg in an adult **or < 80 mm/Hg in a child five or younger.**
5. Respiratory distress - rate < 10 or >29 in adults, **or < 20 or > 40 in a child one year or younger.**
6. Head trauma with Glasgow Coma Scale score of 13 or less.

Anatomical Criteria:

9. The patient has a flail chest.
10. The patient has two or more obvious proximal long bone fractures (humerus, femur).
11. The patient has a penetrating injury of the head, neck, torso, or groin, associated with an energy transfer.
12. The patient has in the same body area a combination of trauma and burns (partial and full thickness) of fifteen percent or greater.
13. The patient has an amputation proximal to the wrist or ankle.
14. The patient has one or more limbs which are paralyzed.
15. The patient has a pelvic fracture, as evidenced by a positive “pelvic movement” exam.

Mechanism of the patient injury:

6. A patient with the same method of restraint and in the same seating area as a dead victim.
7. Ejection of the patient from an enclosed vehicle.
8. Motorcycle/bicycle/ATV crash with the patient being thrown at least ten feet from the motorcycle/bicycle.
9. Auto versus pedestrian with significant impact with the patient thrown, or run over by a vehicle.
10. An unbroken fall of twenty feet or more onto a hard surface.

EMT Discretion:

1. If, the EMT is convinced the patient could have a severe injury which is not yet obvious, the patient should be entered into the trauma system.
2. The EMTs suspicion of severity of trauma/injury may be raised by the following factors:
 - a. Age > 55
 - b. **Age < five**
 - c. Environment (hot/cold)
 - d. Patient's previous medical history
 - i. Insulin dependent diabetes
 - ii. Cardiac condition
 - iii. Immunodeficiency disorder
 - iv. Bleeding disorder
 - v. COPD/Emphysema
 - e. Pregnancy

- f. Extrication time > 20 minutes with heavy tools utilized
- g. Motorcycle crash
- h. Head trauma with history of more than momentary loss of consciousness.

ENTERING A PATIENT INTO THE TRAUMA SYSTEM:**1. Regions that are not yet operating under the Alabama Trauma System**

Patients should be transported to a hospital with a trauma response program if such is available in the region, per the region's Medical Control and Accountability Plan.

2. Regions that are currently operating under the Alabama Trauma System should call the Trauma Communications Center (TCC) to determine patient destination:

TCC contact numbers:

Toll-Free Emergency: 1-800-359-0123, or
Southern LINC EMS Fleet 55: Talk group 10/Private 55*380, or
Nextel: 154*132431*4

After assessing a trauma situation and making the determination the patient should be entered into the Trauma System, the EMT licensed at the highest level should contact the Trauma Communications Center (TCC) at the earliest time which is practical, and provide the following:

1. Identify yourself and your agency by name, unit number and county. If on-line medical direction is necessary, the receiving trauma center becomes medical direction. TCC will help coordinate on-line medical direction with a physician immediately.
2. Give your geographic location.
3. Give age and sex of patient (patient name is not necessary).
4. Assign patient number if more than one patient.
5. Give criteria for entry into Trauma System.
6. Give vital signs: Blood Pressure, Pulse rate, Respiratory rate, GCS
7. TCC Communicator will offer available trauma centers based on information given above.
8. Give unit number of transporting unit, mode of transport, and time of transport from the scene.
9. You will be given a unique identification number that must be entered into the chart when you generate your e-PCR. The Office of EMS and Trauma will use this to identify the charts for quality improvement studies.

Notify the TCC of any change in the patient's condition. The receiving trauma center (or TCC, who can relay to trauma center) should be updated by the transporting unit 5-10 minutes out. This update need only consist of any patient changes and patient's current condition. A repeat of information used to enter the patient into the Trauma System is not necessary since this information will be relayed by the TCC to the receiving trauma center. After the patient is delivered to the trauma center, the transporting provider should call the TCC with the Patient Care Report times.

NOTE: If you are considering helicopter transport of the trauma patient, you should follow Protocol 7.10: Guidelines for Helicopter Transport of Trauma Patients

Proceedings of the Alabama Trauma Funding Workgroup

April 21 and 22, 2008

The purpose of the workgroup was to develop a methodology for the distribution of state funds that will be sought from the State Legislature to support and operate the State-Wide Trauma System. This document reports the consensus opinions of the members of the Trauma Funding Workgroup, Alabama Department of Public Health professionals, and the representative of the Birmingham Regional Emergency Medical Services System (BREMSS).

Mission Focus

The focus of the workgroup was to allocate funding to support Alabama State-Wide Trauma System. The use of the funding will serve two purposes: (1) support existing trauma centers and (2) encouraging hospitals to join the Trauma System. Funding for and the use of funds for uncompensated care were expressly excluded from the discussions. The mission focus of the workgroup was exclusively the Alabama State-Wide Trauma System.

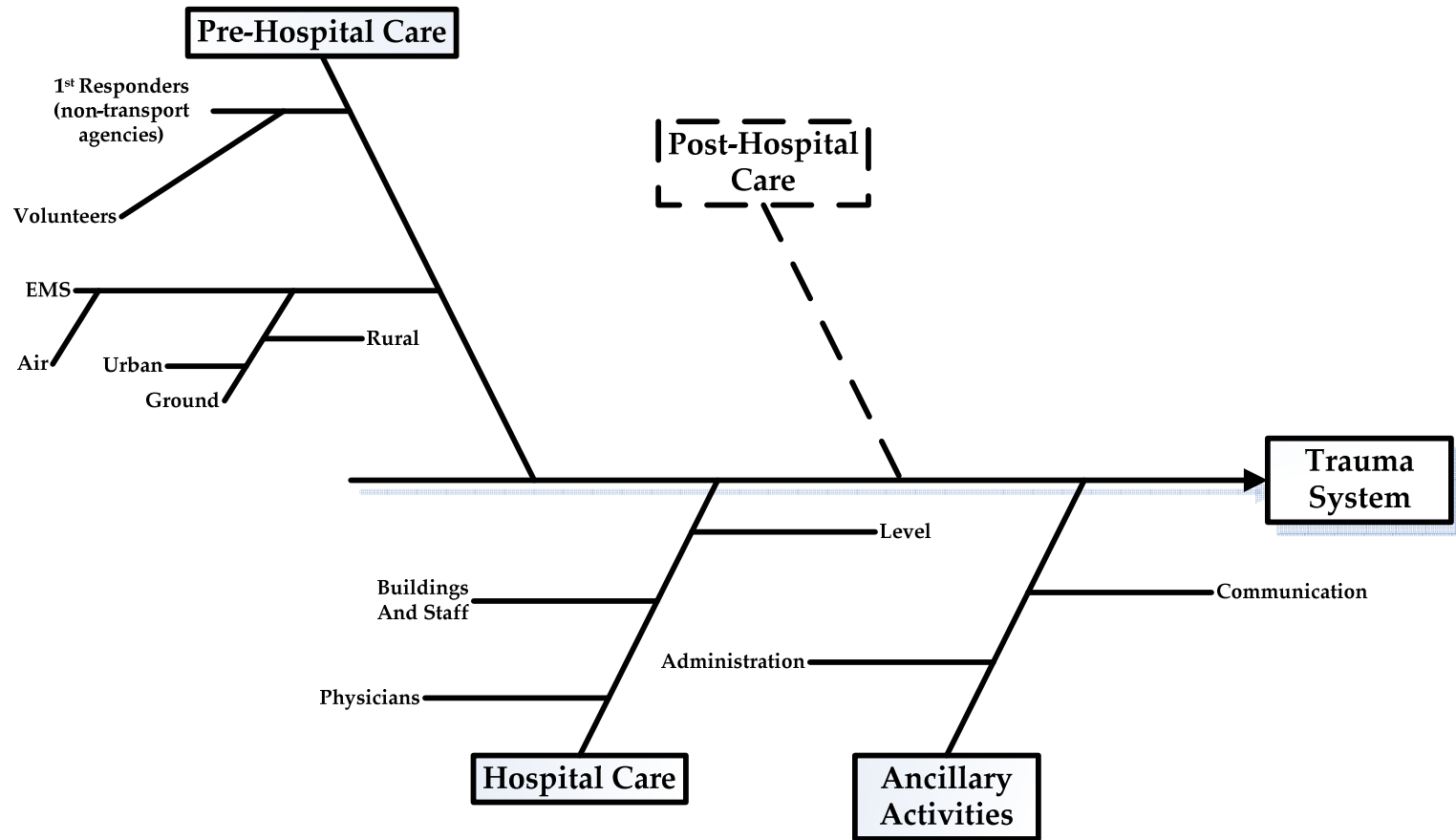
Structure of the Alabama State-Wide Trauma System

The structure of the Alabama State-Wide Trauma System is shown in the following system diagram. The diagram depicts the component elements of the Trauma System. At its highest level, the Trauma System consists of four major subsystems: (1) Pre-Hospital Care, (2) Hospital Care, (3) Post-Hospital Care, and (4) Ancillary Activities. The workgroup concluded that the Post-Hospital Care subsystem will be considered part for funding and funds distribution at some time in the future (it is included in the diagram for completeness and is attached by a dashed-line to signify its distinction from the other major subsystems).

The Pre-Hospital Care Subsystem consists of two major components: (1) First Responders who are non-transport agencies) including volunteers and (2) Emergency Medical Services (EMS). The EMS component is further subdivided into Air Transport and Ground Transport which is further subdivided into Urban Ground Transport and Rural Ground Transport.

The Hospital Care subsystem consists of three components: (1) trauma-ready designated hospital Level (I, II, or III), (2) Buildings and Staff, and 3) Physicians.

The Ancillary Activities subsystem consists of two components: (1) Communication (equipment and trained personnel) and (2) Administration.



System Diagram of the Alabama State-Wide Trauma System

Trauma Patient Defined

The workgroup defined a Trauma Patient as:

1. A Trauma System patient routed by the Trauma System to a trauma designated-ready hospital, or
2. a Trauma System patient transferred by the Trauma System from a non-trauma designated hospital to a trauma designated-ready hospital, or
3. A patient entered into the Trauma System by a “hospital”*.

Fund Allocation and Distribution

The following table defines the concepts of fund allocation and distribution the State-Wide Trauma System.

Allocation and Distribution Concept	Trauma System Subsystem		
	Ancillary Activities	Pre-Hospital Care	Hospital Care
Funding Level*	\$2M	5%	95%
Uses of Funds	<ul style="list-style-type: none"> • Communication System • Administration 	<ul style="list-style-type: none"> • Primary Training • Continuing Education • Trauma Related Equipment 	<ul style="list-style-type: none"> • Physician Coverage for Providing Trauma Services at Level I, II, and III • Hospital Services
Method of Distribution	Discretion of State Health Officer	To be determined by the <i>EMS Distribution Formula</i> and the at the discretion of the State Health Officer and the Office of EMS and Trauma	<p>Physician Coverage—a subcommittee of the Alabama Trauma Advisory Council will define a distribution (reimbursement) formula based on Medicare physician and hospital reimbursement data</p> <p>Hospital Services—<i>Hospital Distribution Formula</i></p>

* 100% is defined as total funds available minus the amount directed to Ancillary Activities.

* Hospital placed within quotation marks to indicate that the precise definition of the term for the purpose of defining a trauma patient is pending action of the Trauma System Advisory Council.

Hospital Distribution Formula

The Hospital Distribution Formula consists of two parts: (1) Level and Availability and (2) Volume and Acuity. It is anticipated that each of the parts will represent a pool of funds to be distributed.

Level and Availability Formula

$$D_L = (f(Level)) \times AM$$

Where: D_L is the distribution based on Level and Availability, $Level$ is the trauma-ready hospital designation I, II, or III, and AM is the availability multiplier defined as hours available divided by total hours per period
 $0 < AM \leq 1.0$

Volume and Acuity Formula

$$D_v = f(volume, acuity)$$

Where: D_v is the distribution based on volume and acuity, $volume$ is the number of Trauma Patients treated during a period, and $acuity$ is the severity of the trauma injury

Special Considerations for the Hospital Distribution Formula

1. The hospital distribution formulas will be reviewed every 90 days.
2. Hospital distributions will be made 90 days in arrears.
3. For Trauma System Patients directed by the Trauma System to a non-Trauma System hospital, consideration should be given to compensate the receiving hospital. During the period of time in which hospitals in Alabama are being educated about trauma funding, this consideration should be discussed.
4. Three issues concerning the Availability Modifier: (1) during the initial period of operating under the Hospital Distribution Formula, all availability exceptions will be reviewed, (2) during the period prior to the establishment of a “trauma fund”, availability patterns should be studied, and (3) a threshold minimum availability fraction should be established for hospitals to continue in the State-Wide Trauma System.

Out-of-State Trauma Patients

The Workgroup concluded that data should be collected and analyzed concerning out-of-state Trauma Patients being treated in Alabama. This issue is not only of interest to trauma centers near the state boundaries, but also the Level I centers that receive out-of-state trauma patients seeking rare and specialized treatments.

Compiled By

Andrew C. Rucks, PhD
School of Public Health
University of Alabama at Birmingham
April 22, 2008

Statewide Trauma Advisory Council Teleconference
July 10, 2008

Conference Room
Alabama Department of Public Health
The RSA Tower
Montgomery, Alabama

Members Present	Dr. Loring Rue, Dr. John Mark Vermillion, Dr. Rony Najjar, Beth Anderson, Gary Gore, Dr. John Campbell, Dr. Donald Williamson
Members Absent	Dr. Alzo Preyear, Chief Billy Pappas, Allen Foster
Staff Present	Dennis Blair, OEMS&T Director; Verla Thomas, OEMS&T
Guests	Jim Wells, Vaughn Regional Medical Center; Danne Howard, Alabama Hospital Association; Joe Acker, BREMSS

Welcome

Dr. Williamson called the meeting to order with a welcome and a roll call.

Consideration of the Minutes of April 21-22, 2008

The Council recommended approval of the Minutes of April 21-22, 2008, as distributed; the motion carried unanimously.

Discharge of Out of State Residents from Alabama Hospitals Report

The attached document provided by SHPDA identified the out-of-state discharges of each region.

Dr. Williamson stated that he had contacted Blue Cross regarding the trauma care reimbursement for hospitals and physicians and was waiting for the information

Trauma System Update

Gulf Region Town Hall Meeting was very productive. The Gulf Region may be the next trauma regional system to become operational.

An emergency rule was adopted by the State Committee of Public Health to establish the Regional Trauma Advisory Councils. (The Regional Trauma Advisory Council Emergency rule will be out for public comment until September 11, 2008, which is the date of the public hearing)

NATS Patient numbers

March 66 patients

May 178 patients 73 percent seen at Huntsville Hospital
6 percent seen at Decatur General Hospital
22 percent divided among eight Level III hospitals
Alex Franklin has done a great job with the QI process and patient tracking in the North Alabama Trauma System.

East Region Update

Dr. Campbell and Joe Acker have been to all hospitals in the East Region, except three. We are waiting for appointments for the Regional Trauma Advisory Council to move forward in East.

Trauma System Website

All Trauma information is current on the Alabama Trauma System Website.
www.adph.org/ats

Trauma Workgroup Update

Trauma Rules

A working draft was presented on the status of the rules.

QI Workgroup

One of the main focuses of this workgroup is the under triage issues in North.

Pediatric Workgroup

The first meeting of the Pediatric Workgroup was June 20. One of the main goals would be to identify the minimal equipment for pediatric care for air/ground transport and in trauma centers. Selected members of this workgroup will bring information on pediatric equipment used in their hospital.

Hospital Entry Criteria

This criteria is for in-hospital medical personnel to enter a patient who meets the trauma or burn patient criteria into the Alabama Trauma System.

Suggested Changes by Dr. Loring Rue:

Physiological #3 Add to statement

(determination of appropriate trauma level will be made through secondary triage)

Also add as a requirement:

Patients entered under physiologic criteria may be transferred as soon as the transferring physician and the ATCC agree on a destination hospital. For patients entered under anatomic or mechanism of injury criteria (normal vital signs and level of consciousness), the doctor at the transferring hospital should speak to the physician (emergency physician or surgeon) at the receiving hospital to discuss the transfer and any

stabilization that should be done before transfer. The ATCC can link the two doctors.

Dr. Campbell will make the necessary changes and the revised version will be sent out STAC for review before sending to the State Committee of Public Health for adoption.

Trauma System Admission Forms

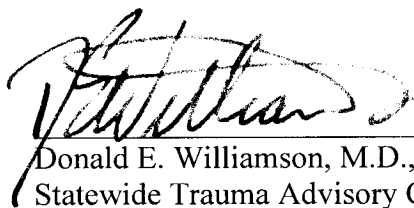
Admission forms were sent to the STAC for review and comments

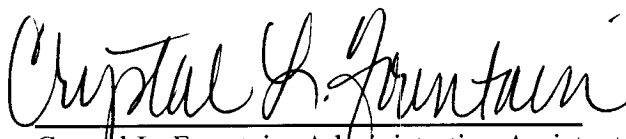
Recommended changes to the "Trauma Care Center Site Survey"
Add introduction of surgeons under opening remarks.

Next Meeting

August 21, 2008, Teleconference, 9:30 a.m.-11:00 a.m.

October 6, 2008, The RSA Tower, Suite 1586, 1:00 p.m. - 3:00 p.m.



Donald E. Williamson, M.D., Chairman
Statewide Trauma Advisory Council

Crystal L. Fountain, Administrative Assistant II
Statewide Trauma Advisory Council

Approved August 21, 2008

Discharges of Out of State Residents from Alabama Hospitals

October 2006 through September 2007 SHPDA Data

Region 1 (North)

State of Residence	Combined OOS Discharges
Delaware	1
Florida	5
Georgia	2
Indiana	2
Michigan	1
Mississippi	5
North Carolina	1
South Carolina	4
Tennessee	18
Wisconsin	1
Unknown	6
Total Out-of-State	46

Region 2 (East)

State of Residence	Combined OOS Discharges
Florida	2
Georgia	1
Ohio	1
Texas	1
Total Out of-State	5

Region 3 (BREMSS)

State of Residence	Combined OOS Discharges
California	1
Florida	20
Georgia	8
Louisiana	2
Kentucky	1
Mississippi	24
New York	1

Ohio	1
South Carolina	2
Tennessee	1
Texas	1
Virginia	1
Total Out-of-State	63

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Region 4 (West)

State of Residence	Combined OOS Discharges
Delaware	1
Florida	1
Georgia	1
Louisiana	3
Michigan	1
Mississippi	1
Ohio	1
Total Out-of-State	9

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Region 5 (Southeast)

State of Residence	Combined OOS Discharges
Florida	46
Georgia	33
Mississippi	2
Ohio	2
Tennessee	1
Virginia	1
West Virginia	1
Total Out-of-State	86

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Region 6 (Gulf)

State of Residence	Combined OOS Discharges
Florida	28
Georgia	5
Illinois	1
Indiana	1
Louisiana	6

Michigan	1
Mississippi	52
Missouri	1
Ohio	2
South Carolina	1
Tennessee	1
Texas	5
Virginia	1
Total Out-of-State	105

Statewide Trauma Advisory Council Teleconference
August 21, 2008
9:30a.m.-11:00a.m.

Conference Room
Alabama Department of Public Health
The RSA Tower
Montgomery, Alabama

Members Present	Dr. Loring Rue, Chief Billy Pappas, Allen Foster, Beth Anderson, Bryan Kindred, Gary Gore, Dr. John Campbell, Dr. Donald Williamson
Members Absent	Dr. John Mark Vermillion, Dr. Rony Najjar
Staff Present	Dennis Blair, Verla Thomas, Robin Moore, Brian Hale, Choona Lang
Guests	Denise Louthain, Danne Howard, David Garmon

Welcome

Dr. Williamson called the meeting to order with a welcome and roll call.

Consideration of the Minutes of July 10, 2008

The Council recommended approval of the minutes of July 10, 2008, as distributed; the motion carried unanimously.

Blue Cross/Blue Shield

Dr. Williamson reviewed information from Blue Cross/Blue Shield regarding trauma care reimbursement for hospitals and physicians.

The attached information includes data requested for the DRGs provided by Department of Public Health on trauma care reimbursement. (See attachment).

On August 26, 2008, Dr. Campbell will have a Trauma Funding sub committee meeting with surgeons to discuss funding.

Dr. Williamson gave an update from the budget and planning meeting with Jim Main. The figure \$60,000,000 was discussed for trauma.

Hospital Entry Criteria

Dr. Campbell discussed the revised changes to the criteria for in-hospital medical personnel to enter a patient into the trauma system.

Revision as stated:

Physiological criteria are the same as pre-hospital with changes to #3 which states:

‘Head tr auma with Glasgow Coma Scale Score of 13 or less the level of trauma center to which this patient would be transferred would depend on

regional secondary triage criteria. Generally only GCS scores of 9 or less are triaged to a level I Trauma Hospital.'

Anatomical criteria are also the same with the exception of adding #8:
'Significant internal injuries are found during hospital evaluation.'

Notes added:

1. Patients entered into the system for Physiologic criteria may be transferred by calling the Alabama Trauma Communications Center (ATCC).
2. Patients entered into the trauma system for Burn criteria may be transferred by calling the ATCC for availability of appropriate bed (floor vs. ICU) at ready burn center. When availability of a bed is confirmed, the ATCC will connect the transferring physician with the receiving surgeon (id immediately available) at the ready burn center to discuss any stabilization that should be done prior to transfer.
3. Facilities wishing to enter a patient into the trauma system for Anatomic or Mechanism of Injury criteria should call the ATCC who can identify the appropriate ready hospital and can facilitate the transferring physician consulting with a receiving physician to discuss the transfer.

The Council recommended approval of criteria for hospitals to enter a patient into the trauma system, as distributed; the motion carried unanimously.

RTAC Appointment Update

The appointees list for the Regional Trauma Advisory Council was received from the Alabama Hospital Association and the Medical Association. These lists will be reformatted for each STAC member to vote on via email.

Dr. Rue suggested responding by electronic vote. All were in agreement to respond electronic by Thursday, August 28, lunch time. All responses will be e-mailed to Crystal.

Trauma System Update

Dr. Campbell gave a brief update of the trauma system stats from North and BREMSS Regions. (See attached)

West Town Hall meeting has a projected date of October 9, 2008.
(Meeting is currently on hold)

Pediatric Workgroup

The Pediatric workgroup is currently working on the following items listed below:

Dr. Campbell is working on the air transport equipment information he received and will see if it matches the recommendations.

Dr. Baldwin will review the adult trauma criteria and tailor to fit pediatric patient, will develop a draft supply and equipment training requirement guide and will put together an outline for pediatric education for the workgroup to review.

Geni Smith will pole the nurses from the national trauma nurse association to identify the current training options.

David Garmon and Geni Smith will both try to get a copy of the ENA training course.

Verla will investigate the possibility of paying for a one day pediatric training course paid by EMSC.

Trauma Staff will bring the state map to the next meeting to start a pediatric care distance mapping.

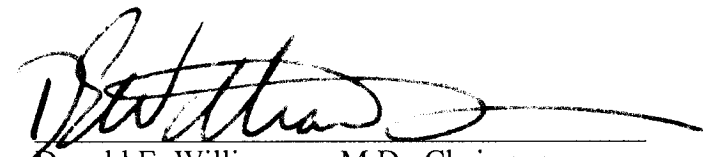
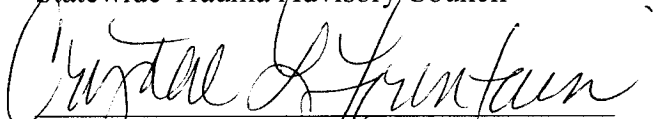
QI Workgroup

The QI workgroup is currently reviewing the hospital component of the Trauma System, scene response times, under and over triage.

Next Meeting

October 6, 2008, The RSA Tower, Suite 1586, 1:00p.m.-3:00p.m.

Meeting Adjourned 10:05a.m.


Donald E. Williamson, M.D., Chairman
Statewide Trauma Advisory Council
Crystal L. Fountain, Administrative Assistant II
Statewide Trauma Advisory Council

Approved October 6, 2008



**BlueCross BlueShield
of Alabama**

August 15, 2008

Donald E. Williamson, M.D.
State Health Officer
State of Alabama Department of Public Health
201 Monroe Street
Montgomery, AL 36104

Dear Dr. Williamson:

In response to your request for information on trauma reimbursement for hospitals and physicians, you will find enclosed a report on trauma claims for Blue Cross and Blue Shield of Alabama's regular business and Medicare.

This information includes claims data for the DRGs provided in your request for both hospitals and physicians. The regular business information is for the reporting period of April 2007 to March 2008. The Medicare information is for the reporting period of October 2006 to September 2007.

In addition to overall totals for trauma claims, the combined total for the top 10 hospitals are shown for regular business and Medicare. Some hospitals in Alabama file Medicare claims with a carrier other than Blue Cross and Blue Shield of Alabama, and are, therefore, not included in the Medicare information.

Thank you for the opportunity to assist you in developing a funding distribution methodology for potential trauma funds. Please contact Barry Nichols at (205) 220-7718 if you have any questions.

Sincerely,

Joe Bolen, III
Senior Vice President
Health Care Networks

Enclosure

JBB/bn

Blue Cross and Blue Shield of Alabama
Trauma Claims Information
Prepared for the Alabama Department of Public Health

	Count of hospital claims with a trauma DRG ⁽¹⁾	Total allowed amount for trauma hospital claims	Total allowed amount for professional claims associated with trauma admits at hospitals
Regular Business ⁽²⁾			
Top 10 Hospitals	4,451	\$60,826,983	\$7,325,647
Other Hospitals	3,620	\$33,212,111	\$4,325,493
Total Alabama Hospitals	8,071	\$94,039,095	\$11,651,140
Medicare ⁽³⁾			
Top 10 Hospitals	2,215	\$19,226,916	\$5,378,496
Other Hospitals	2,667	\$14,763,545	\$4,898,784
Total Alabama Hospitals ⁽⁴⁾	4,882	\$33,990,460	\$10,277,280

Notes:

- (1) Claims with a DRG matching the list provided by the Alabama Department of Public Health were included.
(2) Regular Business information includes claims with paid dates of 4/1/2007 to 3/31/2008.
(3) Medicare information includes claims with service dates of 10/1/2006 to 9/30/2007.
(4) Some hospitals in Alabama do not file Medicare claims with Blue Cross and Blue Shield of Alabama. Therefore, not all Alabama hospitals are represented in the Medicare information.

Statewide Trauma Advisory Council Meeting

**October 6, 2008
1:00 p.m. – 3:00 p.m.**

**Alabama Department of Public Health
The RSA Tower
Conference Room 1586
Montgomery, Alabama**

Members Present	Dr. Loring Rue, Dr. Rony Najjar, Dr. Alzo Preyear, Chief Billy Pappas, Beth Anderson, Gary Gore, Dr. John Campbell, Dr. Donald Williamson
Member Absent	Dr. John Mark Vermillion
Members by Phone	Allen Foster, Bryan Kindred
Staff Present	Dennis Blair, Choon Lang, Verla Thomas, Tammie Yeldell, Robin Moore, Brian Hale
Guest	Joe Acker, Danne Howard, Denise Louthain, E. Allan Pace, Alex Franklin (by phone)

Welcome

Dr. Williamson called the meeting to order with a welcome and roll call.

Consideration of Minutes of August 21, 2009

The Council recommended approval of the minutes of August 21, 2008, as distributed; the motion carried unanimously.

RTAC Meeting Rules/Standard Proxy Form

The Council recommended approval of the Standard Proxy Form for the Regional Trauma Advisory Council (RTAC), as distributed; the motion carried unanimously.

RTAC Appointees/Meeting Updates

Dr. Campbell gave brief update on the RTAC appointees and scheduled meetings.

The Council recommended approval of each RTAC appointee list by electronic vote; the motion carried unanimously.

Beth Anderson	approved	09/03/2008
Gary Gore	approved	09/02/2008
Dr. Rony Najjar	approved	09/02/2008
Bryan Kindred	approved	08/28/2008
Dr. Loring Rue	approved	09/04/2008

Dr. John Campbell	approved	09/04/2008
Dr. Alzo Preyear	approved	09/04/2008
Dr. Donald Williamson	approved	09/15/2008

Regional Trauma Advisory Meeting Update

North Region	To Be Announced Pediatric surgeons Dr. James Gilbert (North Region) and Dr. Celeste Holland (Gulf Region) were added to the appointees list at the request of the STAC members.
East Region	October 30, 2008 1:30 p.m. East Alabama EMS Office Lincoln, AL
BREMSS Region	October 28, 2009 5:00 p.m. Birmingham Botanical Gardens Birmingham, AL
Southeast Region	November 12, 2008 5:00 p.m. Adams/Trojan Center Ballroom A & B Troy State University Troy, AL
Gulf Region	Tentative date November 20, 2008 6:00 p.m. Location to be announced

All appointees terms started after the STAC voted electronically.

Regional Trauma Plan Template

Dr. Campbell discussed the regional trauma plan template designed from the two regions where trauma systems are operating.

Trauma Registry

Dr. Campbell discussed the Injury Case Criteria for the State Trauma Registry. The registry that is currently being used only captures head and spinal cord injuries.

The Council recommended approval of the Injury Case Criteria for State Trauma Registry with the modification of adding ICD-9 codes 905-909.9 (late effects of injury), as distributed; the motion carried unanimously. (See attached)

Trauma System Update

Dr. Campbell gave a brief update of the trauma system statistics from North and BREMSS Regions. (See attached)

West Town Hall meeting is still on hold at this point.

Trauma Funding

The Trauma Funding Workgroup conducted its first meeting to discuss the distribution of trauma dollars for the trauma system. The next meeting to be announced.

QI Workgroup

Dr. Campbell gave a brief update of some issues that the QI Committee is currently reviewing. STAC suggested QI workgroup bring reports of various issues to the STAC to review on ongoing basis.

Dr. Williamson suggested QI specific report updates at every STAC meeting.

Pediatric Workgroup

Dr. Campbell gave a brief update of the issues the Pediatric Workgroup is currently working on.

1. Pediatric equipment
2. Educational programs
3. Pediatric entry criteria
4. Alabama Pediatric facility map

Trauma Rules

Dr. Campbell gave a brief update of the Trauma Rules Process.

New Business


Dr. Najjar has a situation in North with increasing problems of traumatic brain injuries being transferred from all over the state to Huntsville Hospital. The expressed concern is that the selected surgeons will be overwhelmed in the neuro-area with the overloads then eventually run away.

The Council recommended establishing a Neurosurgeon Task Force; the motion carried unanimously. Dr. Campbell will coordinate the neurosurgeon task force.

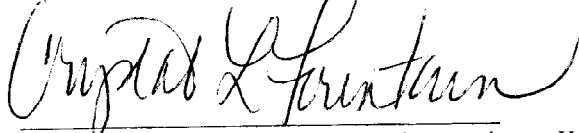
Blue Cross/Blue Shield needs to be included in the trauma funding process.

Next meeting November 17, 2009

Adjourned 2:45 p.m.



Donald E. Williamson, M.D., Chairman
Statewide Trauma Advisory Council



Crystal L. Fountain, Administrative Assistant II
Statewide Trauma Advisory Council

Approved December 3, 2008

Proxy Resolution for Trauma Advisory Council

WHEREAS, The Alabama Legislature has permitted the passage of House Bill 448, the establishment by the chair, with the consent of the majority of the members, a procedure for proxy representation, voting and quorum; and

WHEREAS, the committee determines that such procedures are necessary to the proper functioning of the committee;

NOW THEREFORE, BE IT RESOLVED BY THE ALABAMA REGIONAL TRAUMA ADVISORY COUNCIL:

1. All members of the Regional Trauma Advisory Council may select his/her proxy designee. The proxy statement shall name the members to whom the proxy is given, shall state whether the proxy is a general proxy or limited to a certain question and shall be signed by the members giving the proxy.
2. The council meeting shall be held at least twice a year and more frequently if needed. The council may meet by electronic means and voting shall be accepted electronically.
3. Voting privileges are extended only to members of the council who have attended in person or by proxy a minimum of 50 percent of the regular and called meetings of the committee during the last twelve months. Members who do not qualify for voting privileges regain such qualifications upon meeting the attendance requirements set forth herein.
4. The quorum to transact business at any regular or called meeting shall be 50 percent of the current membership. Members sending proxies shall be counted as present.

Done this _____ Day of _____ 2008

Dr. Donald Williamson
Chair

REGIONAL TRAUMA ADVISORY SCHEDULE MEETINGS

Region 1 Meeting

November 20, 2008 10:30 a.m.

Tentative Location: Huntsville Botanical Gardens

Region 2 Meeting

October 30, 2008 1:30 p.m.

East Alabama EMS

58 Speedway Industrial Drive

Lincoln, AL 35096

Region 3 Meeting

October 28, 2008 5:00 p.m.

Birmingham Botanical Gardens Auditorium 1st Floor

2612 Lane Park Road

Birmingham, AL 35223

Region 5 Meeting

November 12, 2008 5:00 p.m.

Adams/Trojan Center Ballroom A & B

Troy State University

Troy, AL 36082

Region 6 Meeting

November 18, 2008 6:00 p.m.

The Magnolia Ballroom

Mobile, AL

REGIONAL TRAUMA ADVISORY COMMITTEE (RTAC)

AlaHA Appointees

Region 1	William Anderson Tom Lackey Christine Stewart Pam Hudson	Helen Keller Hospital Highlands Medical Center Russellville Medical Center Crestwood Medical Center	4 years 3 years 2 years 1 year
Region 2	Peter Selman Judy Gould Tim Harlin Steve Gautney	Dekalb Regional Northeast Alabama Regional Randolph Medical Center Citizens Baptist	4 years 3 years 2 years 1 year
Region 3	Mike Waldrum Mike Warren Christine Stewart Terrell Vick	UAB Children's Hospital Lakeland Community St. Vincent's St. Clair	4 years 3 years 2 years 1 year
Region 5	Russ Tyner Jennie Rhinehart Ron Owen Bobby Ginn	Baptist Health Community Hospital Southeast Alabama LV Stabler Memorial	4 years 3 years 2 years 1 year
Region 6	Chris Griffin Phil Cusa Becky DeVillier Alan Whaley	DW McMillan Thomas Hospital USA Children & Women Mobile Infirmary	4 years 3 years 2 years 1 year

MASA Appointees

Region 1	Dr. Rony Najjar Dr. Ginger Bryant Dr. Larry Sullivan Dr. Bill Vermillion	4 years 3 years 2 years 1 year
Region 2	Dr. Gordon Hardy Dr. Charles Newman Dr. Lucian Newman Dr. Steven Isbell	4 years 3 years 2 years 1 year
Region 3	Dr. Sherry Melton Dr. Patrick Prithcard Dr. Steven Baldwin Dr. Christopher Rosko	4 years 3 years 2 years 1 year
Region 5	Dr. John Mark Vermillion Dr. John Moorehouse Dr. F. Donovan Kendrick Dr. Todd Michael Sheils	4 years 3 years 2 years 1 year
Region 6	Dr. Richard Gonzalez Dr. Jorge Alonso Dr. John McMahon	4 years 3 years 2 years

	Dr. Jimmie Gavras	1 year
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Dr. Williamson Appointees

Region 1	Don Webster, EMT-P	4 years
Region 2	Johnny Warren, EMT-P	4 years
Region 3	David Waid, EMT-P	4 years
Region 5	Larry Williams, EMT-P	4 years
Region 6	Chief Billy Pappas, EMT-P	4 years

Regional Medical Director

Region 1	Dr. Sherrie Squyres	4 years
Region 2	Dr. Neil Christen	4 years
Region 3	Dr. Adam Robertson	4 years
Region 5	Dr. Rick Weber	4 years
Region 6	Dr. Frank Pettyjohn	4 years

Hospital Representatives

Region 1	Mark Dooley	Athens Limestone	4 years
	James Weidner	Cullman Regional	3 years
	Dean Griffin	Decatur General	2 years
	Carl Bailey	Eliza Coffee	1 year
	Jeff Rains	Hartselle Medical Center	4 years
	David Spillers	Huntsville Hospital	3 years
	Thomas Dunning	Lawrence Baptist	2 years
	Cheryl Hayes	Marshall North	1 year
	John Anderson	Marshall South	4 years
	Sherry Jones	Parkway Medical	3 years
	Niles Floyd	Red Bay Hospital	2 years
	Jody Pigg	Shoals Hospital	1 year
	David Fuller	Woodland Medical Center	4 years
Region 2	Jeff Noblin	Cherokee Medical	4 years
	Linda Jordan	Clay County	3 years
	Glenn Sisk	Coosa Valley Medical Center	2 years
	Doug DeGraaf	Gadsden Regional	1 year
	Roger Collins	Jacksonville Medical Center	4 years
	Agnes Wages	Lake Martin	3 years
	Kelli Powers	Lanier Health Service	2 years
	Matt Hayes	Riverview Regional	1 years
	Jim Peace	Russell Medical Center	4 years
	Linda Burdette	Stringfellow Memorial	3 years
	Richard Daniel	Wedowee Hospital	2 years
Region 3	Keith PArratt	Princeton Baptist	4 years
	Timothy Thornton	UAB Medical Center West	3 years

	Bill Heburn Garry Gause Robert Bernstein Debra Richardson Dr. Sandral Hullett Dr. Bo Cofield Sean Tinney Todd Kennedy David Wilson Curtis James Joel Tate	Trinity Medcial Center Brookwood Medical Center Carraway Methodist Chilton Medical Center Cooper Green UAB Highlands St. Vincent's Blount St. Vincent's East Shelby BMC St. Vincent's Hospital Walker Baptist	2 years 1 year 4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year 4 years
Region 5	Libby Kennedy Barry Keel Mark Dooley Lynne Parker Mindy Burdick Ben Busbee Jim McKnight Vernon Johnson Terry Andrus Rusty Eldridge Ellen Briley Gordon Faulk Blair Henson L. Keith Granger Harry Cole, Jr. Don Henderson Allen Foster Ralph Clark Jeff Brannon James Matney Ginger Henry John Rainey	John Paul Jones Vaughn Regional Andalusia Regional Baptist Medical Center South Baptist Medical Center East Bullock County Crenshaw Baptist Dale Medican Center East Alabama Medical Center Troy Regional Elba General Elmore Community Florala Memorial Flowers Hospital Georgiana Hospital Jackson Hospital Mizell Memorial Medical Center Barbour Medical Center Enterprise Jack Hughston Prattville Baptist Wiregrass Medical Center	4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year 4 years 3 years
Region 6	Beth Anderson Douglas Tanner Bob Gowing Bob Humphrey Doug Sewell Terese Grimes Vince DeFranco Williams McLaughlin Clark Christianson Michael Neunendorf Kevin Bierschenk Bill Mason	USA Medical Center Washington County Atmore Community Evergreen Medical Grove Hill Jackson Medical Center Monroe County North Baldwin Providence Hospital South Baldwin Southwest Alabama Springhill Memorial	4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year

Physicians

Region 1	Rhett Murray, MD Joel Pickett, MD Randolph Buckner, MD James Thomas, MD Daniel Spangler, MD Stephan Moran, MD Jeff Johnson, MD David Garvey, MD Deepak Katyl, MD Robert Echols, MD Michael Samotowka, MD Scott Warner, MD John Markushewski, MD James Gilbert, MD	4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year 4 years
Region 2	James White, MD Ron Shiver, MD John Valente, MD Tony White, MD Michelle Gold hagen, MD Rodney Snead, MD David Roberts, MD Lewis Sellers, MD Henry Ruiz, MD Howard McVeigh, MD Buddy Smith, MD	4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year 4 years 3 years 2 years
Region 3	Loring Rue, MD Thomas Arnold, MD Bryan Balentine, MD David Elliott Thonas Francavilla, MD Oliver Muensterer, MD Keith Funderburk, MD Rena Stewart, MD Jeremy Rogers, MD Peter Ray, MD Annalissa Sorrention, MD Bart Guthrie, MD Wm. Kirkland Hawley, MD	4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year 4 years
Region 5	Carl Barlow, MD Allen Lazenby, MD Alan Moore, MD James York, MD Wallace Falero, MD Sam Sawyer, MD	4 years 3 years 2 years 1 year 4 years 3 years

	John Drew, DO Andy Gammill, MD Roland Hester, MD Adolfo Robledo, MD Jonathan Vukovich, MD Alzo Preyear, DO Clay Harper, MD James Jones, DO Jonathan Skinner, MD Mark McDonald, MD Jeffrey Whitehurst Fleming Brooks, MD Steven O'Mara, MD Danny Hood, MD Allen Hicks, MD Ronald Shaw, MD	2 years 1 year 4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year 4 years 2 years 1 year 4 years 3 years 3 years
Region 6	Melissa Costello, MD Arnold Luterman, MD Keith A. Scott, MD John Meade, MD Kenneth Brewington, MD Albert Simmons, MD Steve Bowden, MD Anthony Martino, MD William Farmer, MD Michael Sternberg, MD Eugene Quindlen, MD Mark Mitchell, MD Celeste Holland, MD	4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year 4 years 3 years 2 years 1 year

Pre-Hospital EMS Representatives

Region 1	Mike West, EMT-P David Gardner, EMT-P	4 years 3 years
Region 2	Shane Parker, EMT-P Matt Knight, EMT-P	4 years 3 years
Region 3	James Robinson, EMT-P Rickey Vest, EMT-P	4 years 3 years
Region 5	Michael Whaley, EMT-P Steve Kennedy, EMT-P	4 years 3 years
Region 6	Michael Lambert, EMT-P Lee Rumbley, EMT-P	4 years 3 years

Trauma System Stats 2008

Trauma Regions	Patients Entered						
	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>
BREMMS Total	321	314	333	324	358	341	314
UAB	232	252	258	230	242	230	228
TCH	29	22	14	19	36	38	27
Level II Hospitals							
Level III Hospitals	62	42	67	69	70	65	55
NATS Total	66	73	178	197	192	155	139
Huntsville Hospital	60	64	134	138	124	104	99
Level II Hospital	2	1	11	10	4	10	5
Level III Hospitals	4	6	39	34	51	31	26

**RULES
OF
ALABAMA STATE BOARD OF HEALTH
ALABAMA DEPARTMENT OF PUBLIC HEALTH**

CHAPTER 420-2-2

ALABAMA STATEWIDE TRAUMA SYSTEM



EFFECTIVE: FEBRUARY 18, 2009

**STATE OF ALABAMA
DEPARTMENT OF PUBLIC HEALTH
MONTGOMERY, ALABAMA**

**ALABAMA STATE BOARD OF HEALTH
ALABAMA DEPARTMENT OF PUBLIC HEALTH**

CHAPTER 420-2-2

ALABAMA STATEWIDE TRAUMA SYSTEM

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420-2-2-.01 General.

(1) Legal Authority for Adoption of Rules. Under and by virtue of authority vested in it by the Legislature of Alabama, Act 299, Regular Session, 2007(§22-11D-1,et seq. *Ala. Code 1975*), the State Board of Health does hereby adopt and promulgate the following rules to govern the Alabama Statewide Trauma System.

(2) Definitions.

- (a) The Board. The Alabama State Board of Health.
- (b) The Council. The Statewide Trauma Advisory Council.
- (c) The Department. The Alabama Department of Public Health.
- (d) Designated Trauma Center. A hospital that has met all the standards for trauma center designation as set out in these rules and that has been certified by the Department.
- (e) Designation. A formal determination by the Department that a hospital is capable of providing designated trauma care.
- (f) ED. Emergency Department.
- (g) EMT. Emergency Medical Technician.
- (h) The Fund. The Statewide Trauma System Fund.
- (i) Hospital. A health institution that has been licensed pursuant to the Board's Hospital Rules, Chapter 420-5-7, *Ala. Admin. Code* and that has a functioning ED.
- (j) ICU. Intensive Care Unit.
- (k) May. This indicates permissive requirements.
- (l) Office of EMS and Trauma. The Department's Office of Emergency Medical Services and Trauma.
- (m) OR. Operating Room.
- (n) QA/QI. Quality Assurance/Quality Improvement.
- (o) Regional Councils. The regional trauma advisory councils.

- (p) Regions. The trauma care regions.
- (q) The Registry. The Statewide Trauma Registry.
- (r) These Rules. Rules 420-2-2-.01 through 420-2-2-.14, Chapter 420-2-2, Alabama Statewide Trauma System, *Ala. Admin. Code*.
- (s) Shall. This indicates mandatory requirements.
- (t) Alabama TCC Operations Director. Trauma Communication Center Director.
- (u) Alabama TCC. Alabama Trauma Communication Center.
- (v) Pre-hospital Trauma Patient. A pre-hospital patient who meets trauma system entry criteria (see appendix E) and is entered into the trauma system by calling the Alabama Trauma Communications Center and obtaining a unique identification number.
- (w) Hospital Trauma Patient. A hospital patient who meets trauma system entry criteria (see appendix F) and is entered into the trauma system by calling the Alabama Trauma Communications Center and obtaining a unique identification number.

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975, §22-11D, et seq.*

History:

420-2-2-.02 Trauma Center Standards: Verification

Upon the receipt of advice and approval of the council, the board had adopted rules for verification and certification of trauma center status as set out in Appendix A.

Author: John Campbell, M.D.

Statutory Authority: Alabama Legislature, Act 299, Regular Session, 2007 (*Code of Alabama 1975, §22-11D-1, et seq.*)

History: Filed March 20, 2008; Effective April 24, 2008

420-2-2-.03 Trauma Center Designation.

(1) Types of Designation.

- (a) Regular Designation. A regular designation may be issued by the Board after it has determined that an applicant hospital has met all requirements to be

designated as a trauma center at the level applied for and is otherwise in substantial compliance with these rules.

(b) **Provisional Designation.** At its discretion, the Board may issue a provisional designation to an applicant hospital that has met all requirements to be designated as a trauma center at the level applied for, with exception to minor deviations from those requirements that do not impact patient care or the operation of a trauma region.

1. The provisional designation may be used for an initial designation or for an interim change in designation status to a lower level due to a trauma center's temporary loss of a component necessary to maintain a higher designation level.
2. A trauma center must submit a written corrective plan and interim operation plan for the provisional designation period including a timeline for corrective action to the Office of EMS and Trauma within 30 days of receiving a provisional designation.
3. A provisional designation shall not extend beyond 15 months.
4. A trauma center may submit a written request to the Office of EMS and Trauma that a provisional designation be removed once all components of its corrective plan have been achieved. Following its receipt of such a request, the Department will conduct a focused survey on the trauma center. A regular designation shall be granted in the event it is confirmed that all components of the corrective plan have been achieved.

(2) **Levels of Designation.** There shall be three levels of trauma center designation. The criteria of each level is set out in Appendix A.

(3) **Application Provision.** In order to become a trauma center, a hospital must submit an application (attached to these rules as Appendix B) and follow the application process provided in paragraph (4) below.

(4) **The Application Process.** To become designated as a trauma center, an applicant hospital and its medical staff shall complete the Department's "Application for Trauma Center Designation". An applicant hospital shall submit the completed application via mail or hand delivery to the address listed on the application. Within 30 days of receipt of the application, the Department shall provide written notification to the applicant hospital of the following:

- (a) That the application has been received by the Department;
- (b) Whether the Department accepts or rejects the application for incomplete information;
- (c) If accepted, the date scheduled for hospital inspection;
- (d) If rejected, the reason for rejection and a deadline for submission of a corrected “Application for Trauma Center Designation” to the Department;
- (e) Upon receipt of a completed application by the Department, an application packet containing a pre-inspection questionnaire will be provided to the applicant hospital. The pre-inspection questionnaire must be returned to the Department one month prior to the scheduled inspection.
- (f) The trauma center post-inspection process will proceed as listed below:
 - 1. The inspection report will be completed two weeks after completion of the inspection.
 - 2. A State and Regional review of the inspection report and a recommendation for or against designation will be made thirty days after completion of the inspection.
 - 3. A final decision will be made known to the applicant hospital within x weeks of the completion of the inspection.
 - 4. Focus visits may be conducted by the Department as needed.

(5) The Inspection Process. Each applicant hospital will receive an onsite inspection to ensure the hospital meets the minimum standards for the desired trauma center designation level as required by these rules. The Department’s Office of EMS and Trauma staff will coordinate the hospital inspection process to include the inspection team and a scheduled time for the inspection. The hospital will receive written notification of the onsite inspection results from the Office of EMS and Trauma.

(6) Designation Certificates.

- (a) A designation certificate will be issued after an applicant hospital has successfully completed the application and inspection process. The designation certificate issued by the Office of EMS and Trauma shall set forth the name and location of the trauma center, and the type and level of designation. The form of the designation certificate is attached to these rules as Appendix C.
- (b) **Separate Designations.** A separate designation certificate shall be required for each hospital when more than one hospital is operated under the same management.

(7) Designation for Contract.

- (a) A designation contract will be completed after the hospital has successfully completed the application and inspection process. The designation contract shall be issued by the Office EMS and Trauma. It shall set forth the name and location of the trauma center and the type and level of designation.
- (b) Separate Designation Contracts. A separate designation contract shall be required for each hospital when more than one hospital is operated under the same management.
- (c) The form of the designation contract is attached to these rules as Appendix D.

(8) Basis for Denial of a Designation.

The Department shall deny a hospital application for trauma center designation if the application remains incomplete after an opportunity for correction has been made, or if the applicant hospital has failed to meet the trauma center designation criteria as determined during the inspection.

(9) Suspension, Modification, and Revocation of a Designation.

- (a) A trauma center's designation may be suspended, modified, or revoked by the Board for an inability or refusal to comply with these rules.
- (b) The Board's denial, suspension, modification or revocation of a trauma center designation shall be governed by the Alabama Administrative Procedure Act, §41-22-1, et seq., *Ala. Admin. Code*.
- (c) Hearings. Contested case hearings shall be provided in accordance with the Alabama Administrative Procedure Act, §41-22-1, et seq., and the Board's Contested Case Hearing Rules, Chapter 420-1-3, *Ala Admin. Code*.
- (d) Informal settlement conferences may be conducted as provided by the Board's Contested Case Hearing Rules, Chapter 420-1-3, *Ala. Admin. Code*.

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975, §22-11D-5*

History:

420-2-2-.04 Statewide Trauma Advisory Council. There is established a Statewide Trauma Advisory Council. The Council assists in the development of these rules and serves as a consultant to the Board on matters related to the Statewide Trauma System.

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975, §22-11D-5*

History:

420-2-2-.05 Trauma Care Regions. Trauma Care Regions will be the same as the EMS Regions as approved by the State Board of Health.

Authors: John Campbell, M.D.

Statutory Authority: Alabama Legislature, Act 299, Regular Session, 2007(*Code of Alabama, 1975, §22-11D-1, et seq.*)

History: Filed May 21, 2008; Effective June 25, 2008

420-2-2-.06 Regional Trauma Advisory Councils.

- (1) Creation. Regional councils are established to advise, consult with, and accommodate specific regional needs. Each regional council shall provide data required by the Department or the Council to assess the effectiveness of the statewide trauma system
- (2) Membership. Each regional council shall have a minimum of 10 members. The membership of the regional councils shall be appointed in the same manner as the Council is appointed and shall be composed of representatives of the same groups. The chair of each regional council shall be elected by its members to serve for four year term. The members shall represent the demographic composition of the region served, as far as practicable. Regional trauma advisory council members shall be entitled to reimbursement for expenses incurred in the performance of their duties as the same rate as state employees.
- (3) Responsibilities. The regional trauma council is responsible for direct oversight and management of its specific regional trauma system. The regional council shall review the entire regional trauma program activities for appropriateness, quality, and quantity to include pre-hospital and hospital care. The regional trauma council shall decide the appropriate secondary patient care triage criteria for their specific region to ensure patients are routed to the closest and most appropriate hospital according to their injuries.

In addition, the regional council shall fulfill the responsibilities as listed below:

1. Maintain standards;
2. Collect data;
3. Evaluate data-determine audit filters;
4. Re-evaluate to determine effectiveness of corrective action;
5. Participate on Regional Trauma QI Committee;
6. Devise plan of corrective action for QI issues;

(4) Committees.

1. **QA/QI Committees.** The regional trauma advisory councils shall document the effectiveness of hospital and emergency medical service QA/QI evaluations through routine reports of these QA/QI activities provided by each trauma system entity in their specific region. The regional trauma council will routinely perform focused review of specific QA/QI items of pre-hospital and hospital trauma care activities as determined appropriate by the regional trauma council. Recommendations for action will be developed by the committee based on analysis of data/information evaluated during committee function. The regional trauma council will submit quarterly compliance reports to the Office of EMS and Trauma for review to ensure the system process is followed.

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975, §22-11D-1, et seq.*

History:

420-2-2-.07 Patient Entry Criteria for hospitals. Patients shall be entered into the Alabama Trauma System according to the criteria set out in Appendix F.

Appendix F

Authors: John Campbell, M.D. and Choona Lang

Statutory Authority: *Code of Alabama, 1975, §22-11D-1, et seq.*

History:

420-2-2-.08 Patient Entry Criteria for pre hospital providers. Refer to EMS Alabama Patient Care Protocols 8.5

Appendix H

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975, §22-11D-1, et seq.*

History:

420-2-2-.09 Statewide Trauma Registry

- (1) **Creation.** There is established a Statewide Trauma Registry to collect data on the incidence, severity, and causes of trauma, including traumatic brain injury. The registry shall be used to improve the availability and delivery of pre-hospital or out-of-hospital care and hospital trauma care services.
- (2) **Data Elements.** Each designated trauma center shall furnish the following data to the registry. *See Appendix G for data elements.*

- (a) Injury Case Criteria for State Trauma Registry.
 - 1. ICD-9 diagnosis code 800.00 – 959.9 and
 - 2. Assigned an ATCC number
 - 3. Admitted to hospital for 24 hours or greater or
 - 4. Transferred from one hospital to another hospital or
 - 5. Death resulting from the traumatic injury (independent of hospital admission or hospital transfer status)
- (b) Excludes the following isolated injuries:
 - 1. 905 – 909.9 (late effects of injury)
 - 2. 910 – 924.9 (superficial injuries-including blisters, contusions, abrasions, and insect bites)
 - 3. 930 – 939.9 (foreign bodies)
- (3) **Reporting.** All cases of traumatic injuries meeting the trauma admission criteria, diagnosed, assigned an ATCC number or treated and admitted to a level I, II, or III trauma facility shall report to the Alabama Trauma Registry within 90 days of ED visit or facility admission or diagnosis as prescribed by these rules. Reports are to be submitted on a monthly basis.
- (4) **Confidentiality.** All registry data shall be held confidential pursuant to state and federal laws, rules, and policies.

Authors: John Campbell, M.D. and Choona Lang

Statutory Authority: *Code of Alabama, 1975, §22-11D-1, et seq.*

History:

420-2-2-.10 Centralized Dispatch and Communications System. Communications are critical to the function to the Trauma System.

- (1) The Alabama TCC will be staffed 24-hours-a-day by personnel with specific in-depth knowledge of the Trauma System design, function, and protocols.
- (2) It will be primary responsibility of the Alabama TCC to coordinate the Trauma System activities by maintaining, providing information and recommendations whenever needed to the field staff and hospital personnel in providing care to patients meeting the trauma system entry criteria. Oversight of day-to-day operations of the Alabama TCC will be responsibility of the Alabama TCC Operations Director.

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975, §22-11D-1, et seq.*

History:

420-2-2-.11 Air Ambulance Activation Requirements. Refer to Guidelines for Early Activation of Helicopter Emergency Medical Services 7.9

Appendix I

Guidelines for Helicopter Transport of Trauma System Patients 7.10

Appendix J

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975, §22-11D-1, et seq.*

History:

420-2-2-.12 Quality Assurance/Quality Improvement. Quality Assurance and Quality Improvement (QA/QI) activities are a vital component of the Trauma System. They are used to document and foster continuous improvement in performances and the quality of patient care. In addition, they will assist the Department in defining standards, evaluating methodologies, and utilizing the evaluation results from continued system improvement. The department shall develop guidelines for the state and regional level trauma staff in regarding QA/QI activities.

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975, §22-11D-1, et seq.*

History:

420-2-2-.13 Confidentiality

- (1) State and Regional Trauma QA/QI members shall be provided access to all information, reports, statements, or memoranda reviewed by or furnished to the State and Regional Trauma QA/QI workgroups members; and any discussion, findings, conclusions or recommendations resulting from the review of the records by the State and Regional Trauma QA/QI workgroups are declared to be privileged and confidential. All information, reports, statements, or memoranda reviewed by or furnished to the State and Regional Trauma QA/QI workgroups shall be used only in the exercise of proper functions and duties of the State and Regional Trauma QA/QI workgroups.
- (2) All information furnished to the State and Regional QA/QI workgroups shall include pertinent safety and health information associated with the case summary. All identifying patient information will be removed before preparing case summary.
- (3) All information and records acquired or developed by the State and Regional Trauma QA/QI workgroups shall be secured and have restricted access and shall be destroyed when no longer of use.

- (4) Statistical information and data may be released by the State and Regional Trauma QA/QI as long as no identifying patient information is provided.

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975*, §22-11D-1, et seq.

History:

420-2-2-.14 Statewide Trauma System Fund.

Pending

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975*, §22-11D-1, et seq.

History:

Alabama Trauma Center Designation

Trauma Facilities Criteria: **APPENDIX A** Trauma Rules

*The following table shows levels of categorization and their **essential (E)** or **desirable (D)** criteria necessary for designation as a Trauma Facility by the Alabama Department of Public Health*

	Level I	Level II	Level III
INSTITUTIONAL ORGANIZATION			
Trauma Program	E	E	E
Trauma Service	E	E	-
Trauma Team	E	E	E
Trauma Program Medical Director	E	E	D
Trauma Multidisciplinary Committee	E	E	D
Trauma Coordinator/ TPM	E	E	E
HOSPITAL DEPARTMENTS/ DIVISIONS/ SECTIONS			
Surgery	E	E	-
Neurological Surgery	E	-	-
Neurological trauma liaison	E	-	-
Orthopedic Surgery	E	E	-
Orthopedic trauma liaison	E	E	-
Emergency medicine	E	E	-
Anesthesia	E	E	-
CLINICAL CAPABILITIES			
Published on-call schedule	E	E	E
General Surgery (attending surgeon promptly available ¹ 24 hours/day)	E	E	D
Published back-up schedule or written back-up method ²	E	D	-
Dedicated to single hospital when on-call	E	D	-
Anesthesia (promptly available ³ 24 hours/day)	E	E	D
Emergency Medicine (Immediately available in-house 24 hours/day)	E	E	E
On-call and promptly available 24 hours/ day . . .			
Cardiac surgery	E	-	-
Hand surgery (does not include micro vascular/re implantation)	E	D	-
Micro vascular/replant surgery	D	-	-
Neurologic Surgery	E	D	-
Dedicated to one hospital or back-up call	E	D	-

	Level I	Level II	Level III
Obstetrics/gynecologic surgery ⁴	E	D	-
Ophthalmic surgery	E	D	-
Oral/maxillofacial surgery	E	D	-
Orthopedic	E	E	D
Dedicated to one hospital or back-up call	E	D	-
Plastic surgery	E	D	D
Critical care medicine	E	D	-
Radiology	E	E	D
Thoracic surgery	E	D	-
CLINICAL QUALIFICATIONS			
General/ trauma surgeon			
Current board certification	E	E	-
Average of 6 hours of trauma related CME/year ⁵	E	D	D
ATLS completion	E	E	E
Peer review committee attendance > 50%	E	E	-
Multidisciplinary committee attendance	E	E	-
Emergency Medicine			
Board certification ⁶	E	D	D
ATLS completion ⁷	E	E	E
Average of 6 hours of trauma related CME/year ⁵	E	D	-
Peer review committee attendance > 50%	E	E	-
Multidisciplinary committee attendance	E	E	-
Neurosurgery			
Current board certification	E	-	-
Average of 6 hours of trauma related CME/year ⁵	E	D	D
ATLS completion	D	D	D
Peer review committee attendance > 50%	E	E	-
Multidisciplinary committee attendance	E	E	-
Orthopedic surgery			
Board certification	E	D	-
Average of 6 hours of trauma related CME/year ⁵	E	D	D
ATLS Completion	D	D	D
Peer review committee attendance > 50%	E	E	D

	Level I	Level II	Level III
Multidisciplinary committee attendance	E	E	-
FACILITIES/ RESOURCES/ CAPABILITIES			
Volume Performance			
Trauma admissions 750/ year	E	-	-
Presence of surgeon at resuscitation	E	E	D
Presence of surgeon at operative procedures	E	E	E
Emergency Department (ED)			
Personnel - designated physician director	E	E	D
Equipment for resuscitation for patients of all ages			
Airway control and ventilation equipment	E	E	E
Pulse oximetry	E	E	E
Suction devices	E	E	E
Electrocardiograph-oscilloscope-defibrillator	E	E	E
Internal paddles	E	E	-
CVP monitoring equipment	E	E	D
Standard IV fluids and administration sets	E	E	E
Large-bore intravenous catheters	E	E	E
Sterile surgical sets for:			
Airway control/ cricothyrotomy	E	E	E
Thoracostomy	E	E	E
Venous cutdown	E	E	E
Central line insertion	E	E	-
Thoracotomy	E	E	-
Peritoneal lavage	E	E	D
Arterial catheters	E	D	D
Ultrasound	D	D	D
Drugs necessary for emergency care	E	E	E
X-ray available 24 hours/ day	E	E	D
Cervical traction devices	E	E	D
Broselow tape	E	E	E
Thermal control equipment:			
For patient	E	E	E
For fluids and blood	E	E	D

	Level I	Level II	Level III
Rapid infuser system	E	E	D
Qualitative end-tidal CO ₂ determination	E	E	E
Communications with EMS vehicles	E	E	E
OPERATING ROOM			
Immediately available 24 hrs/day ⁷	E	D	D
Operating Room Personnel			
In house 24 hrs/ day ⁸	E	-	-
Available 24 hrs/ day		E	E
Age Specific Equipment			
Cardiopulmonary bypass	E	-	-
Operating microscope	D	D	-
Thermal Control Equipment			
For patient	E	E	E
For fluids and blood	E	E	E
X-ray capability, including c-arm image intensifier	E	E	E
Endoscopes, bronchoscopes	E	E	D
Craniotomy instruments	E	D	-
Equipment for long bone and pelvic fixation	E	E	D
Rapid infuser system	E	E	D
Post Anesthetic Recovery Room (SICU is acceptable)			
Registered nurses available 24 hours/day	E	E	-
Equipment for monitoring and resuscitation	E	E	E
Intracranial pressure monitoring equipment	E	D	-
Pulse oximetry	E	E	E
Thermal control	E	E	E
Intensive or Critical Care Unit for Injured Patients			
Registered nurses with trauma education	E	E	-
Designated surgical director or surgical co-director	E	E	D
Surgical ICU service physician in-house 24 hours/day Emergency physician will satisfy this requirement	E	D	-
Surgically directed and staffed ICU service	E	D	-
Equipment for monitoring and resuscitation	E	E	-
Intracranial monitoring equipment	E	-	-
Pulmonary artery monitoring equipment	E	E	-

	Level I	Level II	Level III
Respiratory Therapy Services			
Available in-house 24 hours/day	E	E	D
On-call 24hrs/day	-	-	D
Radiological services (available 24 hours/day)			
In house radiology technologist	E	E	D
Angiography	E	D	-
Sonography	E	E	D
Computer Tomography (CT)	E	E	D
In house CT technician	E	-	-
Magnetic Resonance Imaging (Technician not required in house)	E	D	-
Clinical laboratory services (Available 24hours/day)			
Standard analyses of blood, urine, and other body fluids, including micro sampling when appropriate			
Blood typing and cross-matching	E	E	E
Coagulation studies	E	E	E
Comprehensive blood bank or access to a community central blood bank and adequate storage facilities	E	E	E
Blood gasses and pH determinations	E	E	
Microbiology	E	E	E
Acute Hemodialysis	E	E	E
In-house (staff not required in-house 24 hours)	E	-	-
Transfer agreement (written document not required)	--	E	E
Burn Care – Organized			
In house or transfer agreement with Burn Center (See above)	E	E	E
Acute Spinal Cord Management			
In-house or transfer agreement with Regional Acute Spinal Cord Injury Rehabilitation Center (See above)	E	E	E
REHABILITATION SERVICES			
Transfer agreement to an approved rehabilitation facility (See above)	E	E	E
Physical therapy	E	E	D
Occupational therapy	E	D	D
Speech therapy	E	D	-
Social Service	E	E	D

	Level I	Level II	Level III
PERFORMANCE IMPROVEMENT			
Performance improvement programs	E	E	E
Trauma registry			
In house	E	E	D
Participate in state, local or regional registry	E	E	E
Orthopedic database	D	-	-
Audit of all trauma deaths	E	E	E
Morbidity and mortality review	E	E	E
Trauma conference-multidisciplinary	E	E	D
Medical nursing audit	E	E	E
Review of pre-hospital trauma care	E	E	D
Review of times and reasons of trauma-related bypass	E	E	E
Review of times and reasons for transfer of injured patients	E	E	E
Performance improvement personnel dedicated to care of injured patients	E	D	D
CONTINUING EDUCATION/OUTREACH			
General Surgery residency program	D	-	-
ATLS provide/ participate	E	D	D
Programs provided by hospital for:			
Staff/community physicians (CME)	E	E	D
Nurses	E	E	D
Allied health personnel	E	E	-
Pre-hospital personnel provision/ participation	E	E	D
PREVENTION			
Collaboration with other institutions for injury control and prevention	E	D	D
Designated prevention coordinator-spokesman for injury control	E	D	-
Outreach activities	E	D	D
Information resources for public	E	D	-
Collaboration with existing national, regional and state programs	E	D	-
Coordination and/or participation in community prevention activities	E	E	D
RESEARCH			
Trauma registry performance improvement activities	E	E	E
Research committee	D	-	-

	Level I	Level II	Level III
Identifiable IRB process	D	-	-
Extramural educational presentations	D	D	-
Number of scientific publications	D	-	-

¹ In both Level I and Level II facilities 24-hour in-house availability is the most direct method for the attending surgeon to provide care. In hospitals with residency programs, a team of physicians and surgeons that can include the Emergency Department Physicians, Surgical Residents, or Trauma Residents may start evaluation and treatment allowing the attending surgeon to take call outside the hospital if he/she can arrive. For hospitals without residency programs, the attending surgeon may take call from outside the hospital but should be promptly available. Compliance with these requirements must be monitored by the hospital's quality improvement program.

² If there is no published back-up, call schedule there must be a written procedure of how to identify or locate another surgeon when needed and this should be monitored by the quality improvement plan.

³ Timeliness of anesthesia response should be monitored by the hospital's quality improvement program.

⁴ AL licensed specialty pediatric facilities, which are PPS exempt under Title 42 USC Section 1395ww(d)(1)(B)(iii) and receive funding under Title 42 USC 256e shall not be required to have an obstetric/gynecologic surgery service but should have a transfer agreement for OB-GYN surgery services.

⁵ An average of 18 hours of trauma CME every three years is acceptable.

⁶ Physicians may be board certified in Emergency Medicine or Pediatric Emergency Medicine by an ABMS- or AOA-recognized board, or may be board certified in a primary care specialty if they have extensive experience in management of trauma patients.

⁷ Physicians not board certified in Emergency Medicine or Pediatric Emergency Medicine by an ABMS- or AOA-recognized board must maintain their ATLS certification. There will be a three-year grace period for emergency department staff to become compliant with this requirement

⁸ An operating room must be adequately staffed and immediately available in a Level I trauma center. This is met by having a complete operating room team in the hospital at all times, so if an injured patient requires operative care, the patient can receive it in the most expeditious

manner. These criteria cannot be met by individuals who are also dedicated to other functions within the institution. Their primary function must be the operating room.

An operating room must be adequately staffed and available when needed in timely fashion in a Level II trauma center. The need to have an in-house OR team will depend on a number of things, including patient population served, ability to share responsibility for OR coverage with other hospital staff, pre hospital communication, and the size of the community served by the institution. If an out-of-house OR team is used, then this aspect of care must be monitored by the performance improvement program.

APPENDIX B Trauma Rules		<i>Alabama Department of Public Health</i> <i>Office of EMS and Trauma</i> <i>Page 1 of 2</i>	
ALABAMA TRAUMA CENTER CLASSIFICATION / DESIGNATION APPLICATION			
<i>(Instructions on page 2)</i>			
<hr/>			
Section A. LEVEL OF CLASSIFICATION / DESIGNATION			
Name of Hospital to appear on Certification:			
Classification / Designation Level (Check)	None	Level I	Level II
Current level:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level being applied for:		<input type="checkbox"/>	<input type="checkbox"/>
<hr/>			
Section B. FACILITY IDENTIFYING INFORMATION			
Facility Name:			
Mailing Address (include street address):			Telephone Number
City	State	Zip	County
Trauma Medical Director (Name, Title)			
E-mail	Telephone ()		Fax ()
Trauma Program Coordinator/ Manager (Name, Title)			
E-mail	Telephone ()		Fax ()
Physician Director of Emergency Medicine (Name, Title)			
E-mail	Telephone ()		Fax ()
Chief of Surgery (Name, Title)			
E-mail	Telephone ()		Fax ()

Contact Person (Name, Title)		
E-mail	Telephone ()	Fax ()
<div style="border: 1px solid black; height: 15px; width: 100%;"></div>		
Section C. REGIONAL TRAUMA ADVISORY COUNCIL (RTAC) NAME <input type="checkbox"/> North <input type="checkbox"/> East <input type="checkbox"/> BREMSS <input type="checkbox"/> West <input type="checkbox"/> Southeast <input type="checkbox"/> Gulf		
Section D. ACKNOWLEDGEMENT AND SIGNATURE(S)		
Signature of CEO		Date Signed
Signature of Chief of Staff		Date Signed
Signature of Chief of Surgery		Date Signed
In accordance with the requirements of the Trauma System Administrative Rules, the hospital listed above agrees to abide by the State Trauma System Hospital Classification / Designation Criteria.		

Appendix C Certificate (Sample)

<i>Alabama Trauma Center</i>	
<i>Alabama Department of Public Health acknowledges</i>	
<i>Vaughn Regional Medical Center</i>	
<i>Location</i>	<i>Selma, AL</i>
<i>for successfully completing the required Trauma Center Survey for</i>	
<i>Alabama Trauma Center as said designation level</i>	
<i>Level III</i>	
<i>Made with a Trial</i>	
<i>Copy of SmartDraw</i>	
<i>Buy SmartDraw's purchased copies print the</i>	
<i>document without a watermark</i>	
<i>This 2</i>	<i>Day of June 2008</i>

Appendix D Trauma Rules

Contract Appendix D Trauma Rules

This contract is for the purpose of establishing the responsibilities of the Alabama Statewide Trauma System and _____ hospital to injured patients within *(insert list of counties)* counties.

Alabama Department of Public Health agrees to coordinate through the Alabama Trauma Communications Center (TCC) and the triage protocols (**Appendix A**), a process which assures _____ will receive only those trauma patients from the Emergency Medical Services (EMSS), which _____ has the resources to provide effective trauma care.

(Listed as Appendix E to the State Committee of Public Health Statewide Trauma System Trauma Rules)

_____ agrees to participate in the trauma system as a level _____ and to meet all the requirements as set forth in **Appendix B** of this document.

(Listed as Appendix A to the State Committee of Public Health Statewide Trauma System Trauma Rules)

_____ agrees that at any time that resources, personnel, or facilities are unavailable as required for a level _____ as defined in **Appendix B**, that notification will be immediately made to the TCC.

(Listed as Appendix A to the State Committee of Public Health Statewide Trauma System Trauma Rules)

_____ agrees to support the function of the Alabama Statewide Trauma System & TCC to assure the proper triage and transport of trauma patients as well as the collecting of data to support QA and QI. Also _____ agrees that it will maintain the system-required computer linkage.

Nothing in this contract shall cause a trauma patient to be transported to a trauma hospital contrary to the patient's **expressed intent**.

The following is the process which will be followed if _____ breaches any of it required performance levels as contained in this contract, which are incorporated into and made a part of this contract.

- (1) The first breach of an activity standard will result in a letter of explanation indicating there has been a breach of an activity standard with an explanation and an indication that there is a need for corrective action. A one-month period for corrective action implementation will be allowed.

CONTRACT

Page two

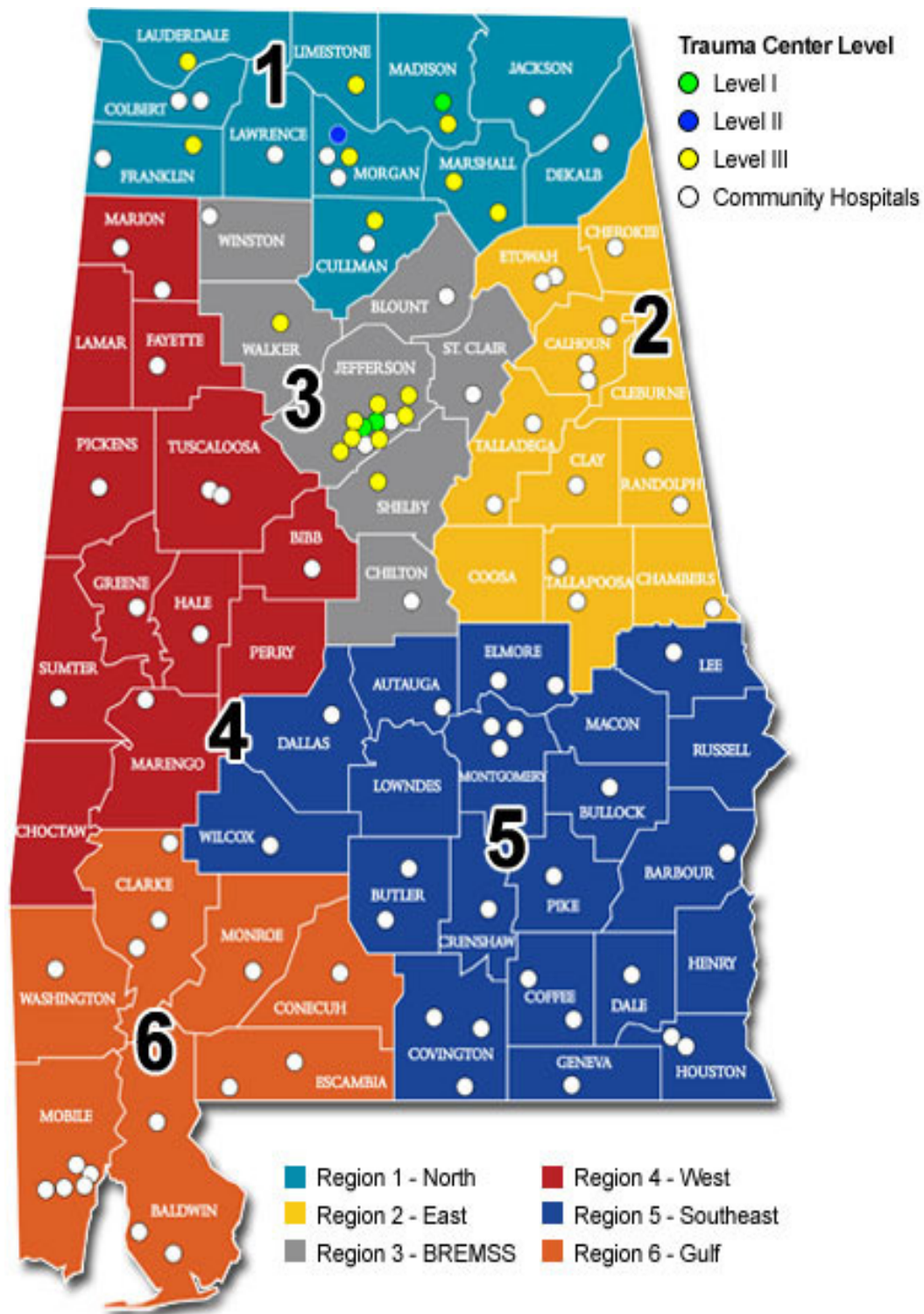
- (2) If a second breach of the same activity occur a letter to the responsible entity indicating that a second breach has occurred with a warning that a third breach in that activity standard will result in suspension from the Trauma System from a 30-day period of time. A one-month period for corrective action implementation will occur.
- (3) A third breach of the same activity will result in contract failure and suspension of that facility from the Trauma System for a period of 30 days as per decision of the Alabama Statewide Trauma System with the suspension time doubled from subsequent deviations of the same standard.

Hospital CEO

State Health Officer

State EMS/Trauma Medical Director

Appendix E



Appendix F

PATIENT ENTRY CRITERIA FOR HOSPITALS

The following are criteria for in-hospital medical personnel to enter a patient who has been involved in a trauma or burn incident into the Alabama Trauma System.

Physiological criteria present on arrival or develop during evaluation and observation:

1. A systolic BP < 90 mm/Hg in an adult **or < 80 mm/Hg in a child five or younger.**
2. Respiratory distress - rate < 10 or >29 in adults, **or < 20 or > 40 in a child one year or younger.**
3. Head trauma with Glasgow Coma Scale score of 13 or less. The level of trauma center to which this patient would be transferred would depend on regional secondary triage criteria. Generally only GCS scores of 9 or less are triaged to a Level I Trauma Hospital.

Anatomical Criteria (patient with normal physiologic signs):

1. The patient has a flail chest.
2. The patient has two or more obvious proximal long bone fractures (humerus, femur).
3. The patient has a penetrating injury of the head, neck, torso, or groin, associated with an energy transfer.
4. The patient has in the same body area a combination of trauma and burns (partial and full thickness) of 15% or greater.
5. The patient has an amputation proximal to the wrist or ankle.
6. The patient has one or more limbs which are paralyzed.
7. The patient has a pelvic fracture demonstrated by x-ray or other imaging technique.
8. Significant internal injuries are found during hospital evaluation.

Mechanism of Injury Criteria:

This should not be used as criteria for entering a patient into the trauma system except by facilities that lack the resources and/or expertise to properly evaluate a patient for internal injuries. Patients put into the system for this reason could adequately be evaluated by a Level II or Level III trauma hospital.

1. A patient with the same method of restraint and in the same seating area as a dead victim.
2. Ejection of the patient from an enclosed vehicle.
3. Motorcycle/bicycle/ATV crash with the patient being thrown at least ten feet from the motorcycle/bicycle.
4. Auto versus pedestrian with significant impact with the patient thrown, or run over by a vehicle.
5. An unbroken fall of twenty feet or more onto a hard surface.

Burn Criteria:

Indications for entering the patient into the trauma system and transferring to a burn center include the following:

1. Partial thickness burn of greater than 10% of the total body surface area.
2. Burns that involve the face, hands, feet, genitalia, perineum, or major joints.
3. Third-degree burns in any age group.
4. Electrical burns, including lightning injury.
5. Chemical burns.
6. Inhalation injury.
7. Burn injuries in patients with preexisting medical disorders that could complicate management, prolong recovery, or affect mortality.
9. Any patient with burns and concomitant trauma (such as fractures) in which the burn injury poses the greatest risk of morbidity or mortality. In such cases, if the trauma poses the greater immediate risk, the patient's condition may be stabilized initially in a trauma center before transfer to a burn center.
9. Burned children in hospitals without qualified personnel or equipment for the care of children.
10. Burn injury in patients who will require special social, emotional, or rehabilitative intervention.

NOTES:

1. Patients entered into the system for Physiologic criteria may be transferred by calling the Alabama Trauma Communications Center (ATCC).
2. Patients entered into the trauma system for Burn criteria may be transferred by calling the ATCC for availability of appropriate bed (floor vs. ICU) at ready burn center. When availability of a bed is confirmed, the ATCC will connect the transferring physician with the receiving surgeon (if immediately available) at the ready burn center to discuss any stabilization that should be done prior to transfer.
3. Facilities wishing to enter a patient into the trauma system for Anatomic or Mechanism of Injury criteria should call the ATCC who can identify the appropriate ready hospital and can facilitate the transferring physician consulting with a receiving physician to discuss the transfer.

Appendix G

Injury case criteria for State Trauma Registry

1. ICD-9 diagnosis code **800 - 959.9** (*per National Trauma Data Standard Version 1.2.2, revised April 2008*)
And
2. Hospital admission for 24 hours or greater **or**
3. Transferred from one hospital to another hospital **or**
4. Death resulting from the traumatic injury (independent of hospital admission or hospital transfer)
5. Assigned an **ATCC number ****

Exclusions:

1. 910 – 924.9 (**superficial injuries, including blisters, contusions, abrasions and insect bites**)
2. 930 – 939.9 (**foreign bodies**)

Reporting Schedule:

1. Within **90 days** of ED visit, admission, or diagnosis as above
2. Reports are to be **submitted** to ATR on a **monthly** basis

****** Anyone assigned an ATCC number will be reported to Trauma Registry

******* Approved per STAC on 10/06/08

Appendix H

Administrative

TRAUMA SYSTEM PROTOCOL

8.5

PURPOSE:

The following are criteria for entering a patient who has been involved in a trauma incident into the Alabama Trauma System.

Physiological criteria:

4. A systolic BP < 90 mm/Hg in an adult **or < 80 mm/Hg in a child five or younger.**
5. Respiratory distress - rate < 10 or >29 in adults, **or < 20 or > 40 in a child one year or younger.**
6. Head trauma with Glasgow Coma Scale score of 13 or less.

Anatomical Criteria:

10. The patient has a flail chest.
11. The patient has two or more obvious proximal long bone fractures (humerus, femur).
12. The patient has a penetrating injury of the head, neck, torso, or groin, associated with an energy transfer.
13. The patient has in the same body area a combination of trauma and burns (partial and full thickness) of fifteen percent or greater.
14. The patient has an amputation proximal to the wrist or ankle.
15. The patient has one or more limbs which are paralyzed.
16. The patient has a pelvic fracture, as evidenced by a positive “pelvic movement” exam.

Mechanism of the patient injury:

6. A patient with the same method of restraint and in the same seating area as a dead victim.
7. Ejection of the patient from an enclosed vehicle.
8. Motorcycle/bicycle/ATV crash with the patient being thrown at least ten feet from the motorcycle/bicycle.
9. Auto versus pedestrian with significant impact with the patient thrown, or run over by a vehicle.
10. An unbroken fall of twenty feet or more onto a hard surface.

EMT Discretion:

1. If, the EMT is convinced the patient could have a severe injury which is not yet obvious, the patient should be entered into the trauma system.
2. The EMTs suspicion of severity of trauma/injury may be raised by the following factors:
 - a. Age > 55
 - b. **Age < five**
 - c. Environment (hot/cold)
 - d. Patient's previous medical history
 - i. Insulin dependent diabetes
 - ii. Cardiac condition
 - iii. Immunodeficiency disorder
 - iv. Bleeding disorder

- v. COPD/Emphysema
- e. Pregnancy
- f. Extrication time > 20 minutes with heavy tools utilized
- g. Motorcycle crash
- h. Head trauma with history of more than momentary loss of consciousness.

ENTERING A PATIENT INTO THE TRAUMA SYSTEM:

1. Regions that are not yet operating under the Alabama Trauma System

Patients should be transported to a hospital with a trauma response program if such is available in the region, per the region's Medical Control and Accountability Plan.

2. Regions that are currently operating under the Alabama Trauma System should call the Trauma Communications Center (TCC) to determine patient destination:

TCC contact numbers:

Toll-Free Emergency: 1-800-359-0123, or
Southern LINC EMS Fleet 55: Talkgroup 10/Private 55*380, or
Nextel: 154*132431*4

After assessing a trauma situation and making the determination the patient should be entered into the Trauma System, the EMT licensed at the highest level should contact the Trauma Communications Center (TCC) at the earliest time which is practical, and provide the following:

1. Identify yourself and your agency by name, unit number and county. If on-line medical direction is necessary, the receiving trauma center becomes medical direction. TCC will help coordinate on-line medical direction with a physician immediately.
2. Give your geographic location.
3. Give age and sex of patient (patient name is not necessary).
4. Assign patient number if more than one patient.
5. Give criteria for entry into Trauma System.
6. Give vital signs: Blood Pressure, Pulse rate, Respiratory rate, GCS
7. TCC Communicator will offer available trauma centers based on information given above.
8. Give unit number of transporting unit, mode of transport, and time of transport from the scene.

Administrative

TRAUMA SYSTEM PROTOCOL (continued)

8.5

9. You will be given a unique identification number that must be entered into the chart when you generate your e-PCR. The Office of EMS and Trauma will use this to identify the charts for quality improvement studies.

Notify the TCC of any change in the patient's condition. The receiving trauma center (or TCC, who can relay to trauma center) should be updated by the transporting unit 5-10 minutes out. This update need only consist of any patient changes and patient's current condition. A repeat of information used to enter the patient into the Trauma System is not necessary since this information will be relayed by the TCC to the receiving trauma center. After the patient is delivered to the trauma center, the transporting provider should call the TCC with the Patient Care Report times.

NOTE: If you are considering helicopter transport of the trauma patient, you should follow Protocol 7.10: Guidelines for Helicopter Transport of Trauma Patients

Appendix I

Operations Guidelines

June 25, 2008

GUIDELINES FOR EARLY ACTIVATION OF HELICOPTER EMERGENCY MEDICAL SERVICES	7.9
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PURPOSE: Helicopter EMS services (HEMS) offer speed of transport and ALS personnel experienced in managing critical patients. These guidelines are to assist EMS responders in determining when early activation of HEMS would likely be in the critical patient's best interest. Early Activation means initiation of a helicopter response prior to arrival of the EMS responders to the scene. Early Activation may be based on pre-arrival information regarding the incident or a suspicion by EMS that specialty care may be needed. Early Activation is initiated at the request of the first responding EMS providers or in conjunction with Dispatch and the EMS service. It is recognized that pre-arrival information may be misleading and the activated HEMS may be cancelled. The HEMS service that can respond to the scene in the shortest time should be called. If a HEMS service cannot answer a call and a second service is requested, the requesting agency must notify the second service that the call has already been refused and why.

Situations in which Early Activation of HEMS may be needed includes, but are not limited to:

1. Report of severe collision involving one or more vehicles
2. Multiple victim incidents with severe illness or injuries
3. Report of person being ejected from a vehicle
4. Pedestrian vs. vehicle with reported injuries
5. MVC with reported death and other injured persons
6. Report of severe burns
7. An unbroken fall of twenty feet or more onto a hard surface
8. Penetrating injury to head, neck, torso, or groin
9. Report of injury with paralysis
10. Sickness with new onset focal weakness or paralysis (suspected stroke)
11. Severe chest pain thought to be of cardiac etiology
12. Near drowning
13. Report of amputation proximal to wrist or ankle
14. Report of serious injury in a patient whose location would be difficult to access by ground ambulance but is more accessible by helicopter
15. Severe shortness of breath or airway problems
16. There is no available ground ambulance to respond
17. Report of patient with symptoms of shock
18. Report of patient with history of trauma and altered mental status
19. Discretion of Medical Direction or responding EMS personnel

HEMS are most appropriately used when their use would **SIGNIFICANTLY** reduce the time required to get the patient to the appropriate hospital or when potentially lifesaving prehospital interventions may be needed that cannot be provided by the responding EMS service. The Regional Aeromedical Plan must be followed when approved. Quality Improvement monitoring is important and is best done in partnership with the responding helicopter service.

**GUIDELINES FOR HELICOPTER TRANSPORT
OF TRAUMA SYSTEM PATIENTS****7.10****Purpose**

Helicopter EMS services (HEMS) offer speed of transport and ALS personnel experienced in managing critical patients. The purpose of this Air Evacuation Protocol is to provide EMS personnel who are on scene, with guidelines for utilizing HEMS for transporting trauma system patients.

Process

Several factors must be considered before summoning HEMS for a trauma scene response. Stable patients who are accessible by ground vehicles and are within a reasonable distance from the designated trauma center are best transported by ground vehicles. Often, patients can be transported by ground ambulance and delivered to the appropriate trauma center before a helicopter can reach the scene. You must follow your Regional Aeromedical Plan when approved. If a question exists as to whether HEMS transport would be appropriate, Medical Direction should be consulted before summoning a helicopter for a scene response.

HEMS are best used to transport critical trauma patients such as those entered into the trauma system because of physiologic or anatomic criteria. Those patients entered into the trauma system because of mechanism of injury or EMT discretion criteria are often more appropriately transported by ground ambulance.

The primary determinant should be to get the patient to the most appropriate facility in the shortest amount of time.

Emergency Medical Services personnel should request HEMS when transportation by air will SIGNIFICANTLY reduce actual transport time to the receiving facility and/or the patient needs potentially lifesaving prehospital interventions that cannot be provided by the responding EMS service. The following are some criteria when HEMS transport should be considered.

1. Transport time to the designated trauma center by ground ambulance is significantly greater than the response time and transport to the designated Trauma Center by air.
2. Ambulance access to the scene or away from the scene is significantly impeded by road conditions and/or traffic.
3. Prolonged patient extrication when a Level I facility is needed. Understand that some extricated patients are not injured and/or have sustained minor injuries and may not need HEMS.
4. Multi-system blunt or penetrating trauma with unstable vital signs.
5. Severe burns that require transport to a burn center (See Protocol 4.7).

**GUIDELINES FOR HELICOPTER TRANSPORT
OF TRAUMA SYSTEM PATIENTS (Continued)****7.10**

6. Patients with severe respiratory distress or airway problems.
7. Multiple patient incidents that exceed ground ambulance service resources.
8. No ambulance available to transport the patient and/or no ALS service (if needed) within 30 minutes.
9. Discretion of Medical Direction or the on-scene EMS personnel.

When use of HEMS is not specifically defined by the protocol, the on-scene EMS personnel can establish communication with Medical Direction for advice.

Once the decision is made to use HEMS for a trauma patient, the service that can respond to the scene in the shortest time should be called. Because helicopters must go through a preflight protocol before lift-off, the shortest response time should be obtained by calling the HEMS first and then calling the TCC to decide on the proper destination hospital. When a decision is made on a destination hospital, the helicopter service should be immediately notified so they may develop their flight plan. If Early Activation was utilized, the responding HEMS service should be notified of the patient destination as soon as possible. If a HEMS service is unable to answer a call and a second service is requested, the requesting agency must notify the second service that the call has already been refused and why.

An EMS service should not wait on the scene or unduly delay transport waiting for HEMS to arrive. If the patient is packaged and ready for transport, the EMS service should reassign the landing zone to a mutually agreeable site that is closer to the hospital, and should initiate transport. The helicopter may intercept an ambulance at an agreed upon alternate landing site.

Cancellation

When EMS personnel arrive on scene, they should assess the situation. If HEMS has already been called and it is the professional judgment of the **HIGHEST LEVEL LICENSED EMS PERSONNEL ON THE SCENE** that the helicopter will not provide a significant benefit, it should be cancelled as soon as possible. A HEMS request by a BLS agency may be cancelled by the responding ALS agency only after an appropriate patient assessment has been conducted. A HEMS request by an ALS agency may be cancelled only by the agency making the initial request. If HEMS cancels a flight, they must inform the requesting agency ASAP.

If HEMS arrives on scene and determines that the patient does not meet criteria for helicopter transport or that patient, weather, or aircraft issues preclude use of the helicopter for transport, they may request ground transport of that patient. The request for ground transport does not preclude the HEMS crew from boarding the ground ambulance and continuing to provide advanced care as would be provided in flight. In situations where the HEMS crew determines that the patient does not have a medical need for HEMS transport, the transfer of this patient

**GUIDELINES FOR HELICOPTER TRANSPORT
OF TRAUMA SYSTEM PATIENTS (Continued)**

7.10

to a ground ambulance shall not constitute abandonment as defined by EMS regulations.

Quality Assurance/Improvement

As with all EMS responses in which HEMS is utilized, there should be QA/QI done in partnership with the responding helicopter service. Follow the Regional Aeromedical Plan when approved.

THIS IS A GUIDELINE AND IS NOT ALL INCLUSIVE. EMS PERSONNEL SHOULD USE GOOD CLINICAL JUDGEMENT AT ALL TIMES. IF THERE ARE ANY QUESTIONS, OLMD SHOULD BE CONSULTED.

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ⁱ 11/06/2008 c.f.

Statewide Trauma Advisory Council Meeting

December 3, 2008

10:00 a.m. – 12:00 p.m.

Alabama Department of Public Health

The RSA Tower

Conference Room 1586

Montgomery, Alabama

Members Present	Dr. Rony Najjar, Dr. Alzo Preyear, Chief Billy Pappas, Dr. John Mark Vermillion, Dr. John Campbell, Dr. Donald Williamson
Member Absent	Mr. Gary Gore
Members by Phone	Dr. Loring Rue, Beth Anderson, Allen Foster, Bryan Kindred
Staff Present	Dennis Blair, Choon Lang, Verla Thomas, Tammie Yeldell, Robin Moore, Brian Hale, Katherine Hert
Guest	Joe Acker, Danne Howard, Denise Louthain, E. Allan Pace, Alex Franklin, Spencer Howard, David Garmon

Welcome

Dr. Williamson called the meeting to order with a welcome and roll call.

Consideration of Minutes of October 6, 2008

The Council recommended approval of the minutes of October 6, 2008, as distributed; the motion carried unanimously.

RTAC Meeting Update/Trauma Plans for each Region

Dr. Campbell gave a brief overview of the Regional Trauma Advisory Council meetings and trauma plans with a PowerPoint presentation. (See attached)

Chattanooga-Hamilton County Hospital d/b/a Erlanger Health System has agreed to be part of the Alabama Trauma System.

Regional Trauma Plans

The Council recommended approval of the Regional Trauma Plans for each region, as distributed; the motion carried unanimously.

Trauma System Update

Trauma System/ATCC Operation Update

Joe Acker, Region 3 Director, gave a brief update on the Trauma System stats for North and BREMSS with a PowerPoint presentation (See attached).

Dr. Campbell gave a brief update of the trauma system workgroups.

QI Workgroup

The trauma registry software is currently in testing stage. Projected online date is March 2009. (See attached stats of Trauma System)

Pediatric Workgroup

Pediatric Workgroup is sorting through minimal equipment for pediatric care. Through research, there are courses for pre-hospital and nurses on pediatric care, but no courses available for physicians.

Trauma Funding

Dr. Campbell gave a brief interpretation of the Georgia Trauma Funding distribution (see attached). Dr. Campbell also made the observation that there may be some useful material to help with developing funding for our state.

Neurosurgeon Workgroup

The neurosurgeons will meet regionally and compile a report to be added to the regional trauma plans. This group will be headed by Dr. Bart Guthrie.

Trauma Rules

The Council recommended approval of Trauma Rule 420-2-2-.02 wording, as distributed; the motion carried unanimously.

The Council recommended approval of Trauma Rule 420-2-2-.03 with an amendment to letter F #2 and #3, as distributed; the motion carried unanimously.

Trauma Rule 420-2-2-.05 was tabled until the wording is established.

The Council recommended approval of Trauma Rule 420-2-2-.06 with additions of Responsibilities and QA/QI committees, as distributed; the motion carried unanimously.

The Council recommended approval of Trauma Rule 420-2-2-.09, Trauma Registry, as distributed; the motion carried unanimously.

The Council recommended approval of Trauma Rule 420-2-2-.10, Centralized Dispatch and Communication System, with change from Alabama TCC Operations Manager to Alabama TCC Operations Director, as distributed; the motion carried unanimously.

The Council recommended approval of Trauma Rule 420-2-2-.12, QA/QI, as distributed; the motion carried unanimously.

The Council recommended approval of Trauma Rule 420-2-2-.13, Confidentiality, as distributed; the motion carried unanimously.

All rule modifications will go to the State Committee of Public Health December 17, 2008.

New Business

The Council recommended approval to move DeKalb County from East Region to North Region, as distributed; the motion carried unanimously.

Dr. White rejected appointment to Region 2 RTAC. The Council recommended approval of adding Dr. Holley to East RTAC replacing Dr. White and replacing Dr. Holley with Dr. Cross on BREMSS RTAC, as distributed; the motion carried unanimously.

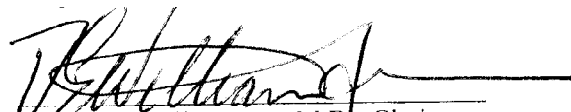
Dr. Alzo Preyear's appointment was renewed.

Mr. Allen Foster's, Administrator, Mizell Memorial Hospital, one-year appointment ended in October 2008 and is currently waiting on a replacement.

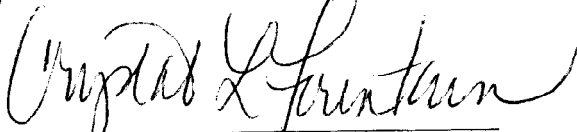
Admission packets and Q&A will be on the trauma system website soon.

Meeting adjourned 11:35 a.m.

Next meeting February 6, 2009, Teleconference 10 a.m. – 12 p.m.



Donald E. Williamson, M.D., Chairman
Statewide Trauma Advisory Council



Crystal L. Fountain, Administrative Assistant II
Statewide Trauma Advisory Council

Approved March 23, 2009

Trauma System Stats

Trauma Regions	March	April	May	June	July	August	September	October	November
BREMSS Total	321	314	333	324	358	341	314	273	321
UAB	232	252	258	230	242	230	228	195	233
TCH	29	22	14	19	36	38	27	21	18
Level IIs									
Level IIIs	62	42	67	69	70	65	55	57	24
NATS Total	66	73	178	197	192	155	139	148	109
Huntsville Hospital	60	64	134	138	124	104	99	105	71
Level IIs	2	1	11	10	4	10	5	4	4
Level IIIs	4	6	39	34	51	31	26	39	24
Erlanger									3

As of December 3, 2009

420-2-2-.02 Trauma Center Standards: Verification

Upon the receipt of advice and approval of the council, the board had adopted rules for verification and certification of trauma center status as set out in Appendix A.

Author: John Campbell, M.D.

Statutory Authority: Alabama Legislature, Act 299, Regular Session, 2007 (Code of Alabama 1975, §22-11D-1, et seq.)

History: Filed March 20, 2008; Effective April 24, 2008

Approved by STAC 12/03/2008

Approved by SCPH 02/18/2009

420-2-2-.03 Trauma Center Designation

(1) Types of Designation.

- (a) **Regular Designation.** A regular designation may be issued by the Board after it has determined that an applicant hospital has met all requirements to be designated as a trauma center at the level applied for and is otherwise in substantial compliance with these rules.
- (b) **Provisional Designation.** At its discretion, the Board may issue a provisional designation to an applicant hospital that has met all requirements to be designated as a trauma center at the level applied for, with exception to minor deviations from those requirements that do not impact patient care or the operation of a trauma region.
 - 1. The provisional designation may be used for an initial designation or for an interim change in designation status to a lower level due to a trauma center's temporary loss of a component necessary to maintain a higher designation level.
 - 2. A trauma center must submit a written corrective plan and interim operation plan for the provisional designation period including a timeline for corrective action to the Office of EMS and Trauma within 30 days of receiving a provisional designation.
 - 3. A provisional designation shall not extend beyond 15 months.
 - 4. A trauma center may submit a written request to the Office of EMS and Trauma that a provisional designation be removed once all components of its corrective plan have been achieved. Following its receipt of such a request, the Department will conduct a focused survey on the trauma center. A regular designation shall be granted in the event it is confirmed that all components of the corrective plan have been achieved.

(2) Levels of Designation. There shall be three levels of trauma center designation. The criteria of each level is set out in Appendix A.

(3) Application Provision. In order to become a trauma center, a hospital must submit an application (attached to these rules as Appendix B) and follow the application process provided in paragraph (4) below.

(4) The Application Process. To become designated as a trauma center, an applicant hospital and its medical staff shall complete the Department's "Application for Trauma Center Designation". An applicant hospital shall submit the completed application via mail or hand delivery to the address listed on the application. Within 30 days of receipt of

the application, the Department shall provide written notification to the applicant hospital of the following:

- (a) That the application has been received by the Department;
- (b) Whether the Department accepts or rejects the application for incomplete information;
- (c) If accepted, the date scheduled for hospital inspection;
- (d) If rejected, the reason for rejection and a deadline for submission of a corrected "Application for Trauma Center Designation" to the Department;
- (e) Upon receipt of a completed application by the Department, an application packet containing a pre-inspection questionnaire will be provided to the applicant hospital. The pre-inspection questionnaire must be returned to the Department one month prior to the scheduled inspection.
- (f) The trauma center post-inspection process will proceed as listed below:
 - 1. The inspection report will be completed two weeks after completion of the inspection.
 - 2. A State and Regional review of the inspection report and a recommendation for or against designation will be made thirty days after completion of the inspection.
 - 3. A final decision will be made known to the applicant hospital within x weeks of the completion of the inspection.
 - 4. Focus visits may be conducted by the Department as needed.

(5) The Inspection Process. Each applicant hospital will receive an onsite inspection to ensure the hospital meets the minimum standards for the desired trauma center designation level as required by these rules. The Department's Office of EMS and Trauma staff will coordinate the hospital inspection process to include the inspection team and a scheduled time for the inspection. The hospital will receive written notification of the onsite inspection results from the Office of EMS and Trauma.

(6) Designation Certificates.

- (a) A designation certificate will be issued after an applicant hospital has successfully completed the application and inspection process. The designation certificate issued by the Office of EMS and Trauma shall set forth the name and location of the trauma center, and the type and level of designation. The form of the designation certificate is attached to these rules as Appendix C.

- (b) Separate Designations. A separate designation certificate shall be required for each hospital when more than one hospital is operated under the same management.

(7) Designation for Contract.

- (a) A designation contract will be completed after the hospital has successfully completed the application and inspection process. The designation contract shall be issued by the Office EMS and Trauma. It shall set forth the name and location of the trauma center and the type and level of designation.
- (b) Separate Designation Contracts. A separate designation contract shall be required for each hospital when more than one hospital is operated under the same management.
- (c) The form of the designation contract is attached to these rules as Appendix D.

(8) Basis for Denial of a Designation.

The Department shall deny a hospital application for trauma center designation if the application remains incomplete after an opportunity for correction has been made, or if the applicant hospital has failed to meet the trauma center designation criteria as determined during the inspection.

(9) Suspension, Modification, and Revocation of a Designation.

- (a) A trauma center's designation may be suspended, modified, or revoked by the Board for an inability or refusal to comply with these rules.
- (b) The Board's denial, suspension, modification or revocation of a trauma center designation shall be governed by the Alabama Administrative Procedure Act, §41-22-1, et seq., *Ala. Admin. Code*.
- (c) Hearings. Contested case hearings shall be provided in accordance with the Alabama Administrative Procedure Act, §41-22-1, et seq., and the Board's Contested Case Hearing Rules, Chapter 420-1-3, *Ala Admin. Code*.
- (d) Informal settlement conferences may be conducted as provided by the Board's Contested Case Hearing Rules, Chapter 420-1-3, *Ala. Admin. Code*.

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975, §22-11D-5*

History:

Approved by STAC 12/03/2008

Approved by SCPH 02/18/2009

420-2-2-.06 Regional Trauma Advisory Councils.

- (1) **Creation.** Regional councils are established to advise, consult with, and accommodate specific regional needs. Each regional council shall provide data required by the Department or the Council to assess the effectiveness of the statewide trauma system
- (2) **Membership.** Each regional council shall have a minimum of 10 members. The membership of the regional councils shall be appointed in the same manner as the Council is appointed and shall be composed of representatives of the same groups. The chair of each regional council shall be elected by its members to serve for four year term. The members shall represent the demographic composition of the region served, as far as practicable. Regional trauma advisory council members shall be entitled to reimbursement for expenses incurred in the performance of their duties as the same rate as state employees.
- (3) **Responsibilities.** The regional trauma council is responsible for direct oversight and management of its specific regional trauma system. The regional council shall review the entire regional trauma program activities for appropriateness, quality, and quantity to include pre-hospital and hospital care. The regional trauma council shall decide the appropriate secondary patient care triage criteria for their specific region to ensure patients are routed to the closest and most appropriate hospital according to their injuries.

In addition, the regional council shall fulfill the responsibilities as listed below:

1. Maintain standards;
 2. Collect data;
 3. Evaluate data-determine audit filters;
 4. Re-evaluate to determine effectiveness of corrective action;
 5. Participate on Regional Trauma QI Committee;
 6. Devise plan of corrective action for QI issues;
- (4) **Committees.**
1. **QA/QI Committees.** The regional trauma advisory councils shall document the effectiveness of hospital and emergency medical service QA/QI evaluations through routine reports of these QA/QI activities provided by each trauma system entity in their specific region. The regional trauma council will routinely perform focused review of specific QA/QI items of pre-hospital and hospital trauma care activities as determined appropriate by the regional trauma council. Recommendations for action will be developed by the committee based on analysis of data/information evaluated during committee function. The regional trauma council will submit quarterly compliance

reports to the Office of EMS and Trauma for review to ensure the system process is followed.

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975*, §22-11D-1, et seq.

History:

Approved by STAC 12/03/2008

Approved by SCPH 02/18/2009

420-2-2-.09 Statewide Trauma Registry

- (1) Creation.** There is established a Statewide Trauma Registry to collect data on the incidence, severity, and causes of trauma, including traumatic brain injury. The registry shall be used to improve the availability and delivery of pre-hospital or out-of-hospital care and hospital trauma care services.
- (2) Data Elements.** Each designated trauma center shall furnish the following data to the registry. *See Appendix G for data elements.*

 - (a) Injury Case Criteria for State Trauma Registry.**

 1. ICD-9 diagnosis code 800.00 – 959.9 and
 2. Assigned an ATCC number
 3. Admitted to hospital for 24 hours or greater or
 4. Transferred from one hospital to another hospital or
 5. Death resulting from the traumatic injury (independent of hospital admission or hospital transfer status)
 - (b) Excludes the following isolated injuries:**

 1. 905 – 909.9 (late effects of injury)
 2. 910 – 924.9 (superficial injuries-including blisters, contusions, abrasions, and insect bites)
 3. 930 – 939.9 (foreign bodies)
- (3) Reporting.** All cases of traumatic injuries meeting the trauma admission criteria, diagnosed, assigned an ATCC number or treated and admitted to a level I, II, or III trauma facility shall report to the Alabama Trauma Registry within 90 days of ED visit or facility admission or diagnosis as prescribed by these rules. Reports are to be submitted on a monthly basis.
- (4) Confidentiality.** All registry data shall be held confidential pursuant to state and federal laws, rules, and policies.

Authors: John Campbell, M.D. and Choona Lang

Statutory Authority: *Code of Alabama, 1975, §22-11D-1, et seq.*

History:

Approved by STAC 12/03/2008

Approved by SCPH 02/18/2009

420-2-2-.10 Centralized Dispatch and Communications System. Communications are critical to the function to the Trauma System.

- (1) The Alabama TCC will be staffed 24-hours-a-day by personnel with specific in-depth knowledge of the Trauma System design, function, and protocols.
- (2) It will be primary responsibility of the Alabama TCC to coordinate the Trauma System activities by maintaining, providing information and recommendations whenever needed to the field staff and hospital personnel in providing care to patients meeting the trauma system entry criteria. Oversight of day-to-day operations of the Alabama TCC will be responsibility of the Alabama TCC Operations Director.

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975*, §22-11D-1, et seq.

History:

Approved by STAC 12/03/2008

Approved by SCPH 02/18/2009

420-2-2-.12 Quality Assurance/Quality Improvement. Quality Assurance and Quality Improvement (QA/QI) activities are a vital component of the Trauma System. They are used to document and foster continuous improvement in performances and the quality of patient care. In addition, they will assist the Department in defining standards, evaluating methodologies, and utilizing the evaluation results from continued system improvement. The department shall develop guidelines for the state and regional level trauma staff in regarding QA/QI activities.

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975*, §22-11D-1, et seq.

History:

Approved by STAC 12/03/2008

Approved by SCPH 02/18/2009

420-2-2-.13 Confidentiality

- (1) State and Regional Trauma QA/QI members shall be provided access to all information, reports, statements, or memoranda reviewed by or furnished to the State and Regional Trauma QA/QI workgroups members; and any discussion, findings, conclusions or recommendations resulting from the review of the records by the State and Regional Trauma QA/QI workgroups are declared to be privileged and confidential. All information, reports, statements, or memoranda reviewed by or furnished to the State and Regional Trauma QA/QI workgroups shall be used only in the exercise of proper functions and duties of the State and Regional Trauma QA/QI workgroups.
- (2) All information furnished to the State and Regional QA/QI workgroups shall include pertinent safety and health information associated with the case summary. All identifying patient information will be removed before preparing case summary.
- (3) All information and records acquired or developed by the State and Regional Trauma QA/QI workgroups shall be secured and have restricted access and shall be destroyed when no longer of use.
- (4) Statistical information and data may be released by the State and Regional Trauma QA/QI as long as no identifying patient information is provided.

Authors: John Campbell, M.D., and Choona Lang

Statutory Authority: *Code of Alabama, 1975*, §22-11D-1, et seq.

History:

Approved by STAC 12/03/2008

Approved by SCPH 02/18/2009